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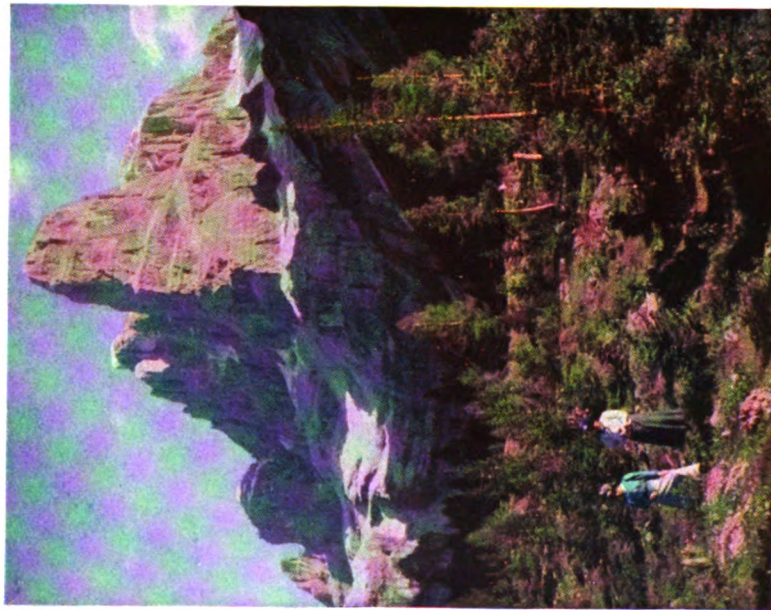
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BOCCA DI BRENTA.
(Morning Light.)



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CROZZON DI BRENTA.
(Afternoon Light.)

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(No. 199.)

UNFREQUENTED VALLEYS IN THE BRENTA, ENGADINE,
BREGAGLIA, MASINO AND SOLDA DISTRICTS.

BY W. INGLIS CLARK.

(Read before the Alpine Club, December 9, 1912.)

IN presenting to the Alpine Club the following rambling notes I am well aware that I have but little new and nothing exciting to relate. I deal with the relatively little things in the Alps, and with such as are practicable for an unguided party, my wife and daughter, my son and self. But although these cannot compare with the great expeditions which are generally described in papers before the Alpine Club, I trust that I may be of slight service in directing attention to the lovely districts even yet little known. My title refers to 'Unfrequented Valleys,' but I wish to qualify this. I should rather have said 'Valleys unfrequented by the British Climber.' Nothing has impressed me more in my wanderings among the Eastern Alps than the immense number of huts and the army of climbers in districts the very names of which are almost unknown to many of us. It is fortunate that the lower Alps are not one whit behind the higher Alps in beauty, for there the lover of the mountains can continue his explorations long after the higher peaks are beyond his powers. In illustrating these districts with photographs I have exercised considerable latitude in introducing colour pictures of the charming neighbourhood as a setting to the sterner pictures of the mountains.

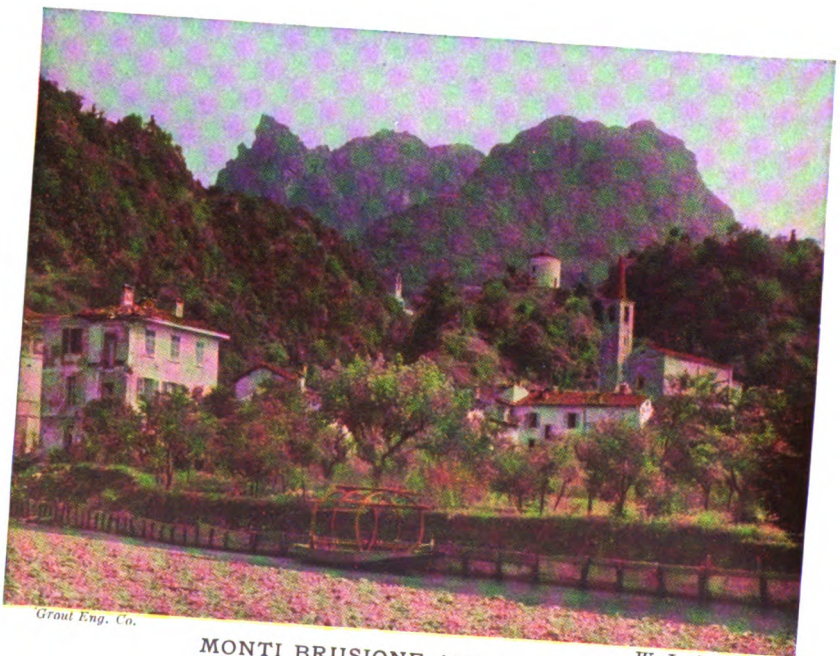
The traveller from Lugano to Lake Como by Porlezza cannot fail to notice on the N. shore the artistic villages of Gandria and San Mamette. The former of these, on a steeply sloping hillside, rises in terraces, its picturesque churches and campaniles giving the impression of a succession of palaces. San Mamette, on the other hand, crowds down by the lake side, and barely penetrates into the rugged gorge which gives exit to the waters of the Val Solda. But attractive though these villages are, the mountaineer has his eye drawn away and upwards to the circle of finely shaped peaks which shut in the Val Solda on the N. So far as I know these peaks are not referred to in the 'Alpine Journal,' and it was at the suggestion of our fellow member, Dr. Henri Hoek, of Freiburg, that I resolved to visit them in the disastrous weather season of 1912. He had explored them geologically in 1901, and a short account is to be found in 'Oester Alpen-Zeitung,' August 8, 1901. He recommended them to me as a resort when the higher peaks were impossible owing to weather conditions. They will hardly attract the young and active climbers, for their height rises as a maximum to 6040 ft., Mt. Fojorina, being the highest of the group. No glaciers stream down their sides, and in nearly every case the summits can be reached without real difficulty. But with these deductions allowed for, a few days spent in the Val Solda will be found repaying in the highest degree. The valley can only be called a valley in so far as the river has cut a deep cañon for itself, the precipitous walls of which are overhung by lovely and natural trees. The valley itself might better be described as a corrie rising steeply to the peaks above, but with sufficient hollowness to admit of vineyards, and cultivated patches, and a number of little hamlets, picturesque to a degree. High above the river cañon, and perched on a precipitous rock, is the village of Castello, presenting the appearance of an ancient castle and from the S. inaccessible. All these features form a foreground, either looking up to the mountains or down from them, of entrancing beauty. The cobble paths which lead up to a great height facilitate the climbing, but are a pitfall to mountaineers with hobnailed boots when descending. We had a big programme for the few days at our disposal, as our plans included the crossing of the peaks to the distant hamlet of St. Nazzaro near the head of the neighbouring valley (Val Cavargna) and the traversing of the entire circle of peaks from M. Menone to Cima la Grona, N. of Menaggio. But our plans were never to mature.



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**CROZZON DI BRENTA.
(Morning Light.)**

W. Inglis Clark.



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**MONTI BRUSIONE AND PIZZONE.
(From Mamette.)**

W. Inglis Clark.

Enticed out at an early hour on two mornings, and with heavy rucksacks, laden with equipment for several days, we were rewarded on each occasion by thunder and rain storms of exceptional violence, which forced us to return to San Mamette instead of proceeding to Val Cavargna. The mountains of Val Solda are of triassic dolomite, not indeed resembling the 'modebergs' of the Rosengarten or Ampezzo districts, but still with dolomitic weathering to delight the eye and furnish needles of sufficient difficulty to the climber. Although of but medium height the forms of the mountains are of alpine character. The most striking peak is Pizzone, rising as it does from the water's edge; in steep inaccessible walls to a height of 4343 ft. From the W. it appears as a beautiful steep cone, an object of remark from the passing steamer. We were under the impression that Dr. Hoek had reached its summit from the E., and proposed therefore to climb it by its W. ridge, making a traverse and taking our heavy rucksacks to St. Nazzaro. One of the charms of this ascent is the wealth of wild flowers which in succeeding zones bedeck the ridge and almost accompany one to the top. Looking steeply back on the now tiny village of Mamette the eye is enchanted with the panorama over the Salvatore and the W. mountains. Of difficulty there is but little. A few deep-cut gullies intersect the ridge, and here and there dolomitic walls or needles are met with, and may either be climbed or avoided. As we approached the summit a thunderstorm drew near, and we hastened to the edge to pick out a route ere the clouds enveloped us. Nothing but a fathomless abyss met our gaze, and after vainly attempting to force our way in the growing storm we retreated down the ridge and sheltered in a cave for an hour, while the lightning played around in splendid style. A deluge of rain succeeded, and forced us finally to descend as we had climbed. A later inspection showed a vertical cliff of about 600 ft. with no evident line of weakness, and from Dr. Hoek's account he had not climbed this, the W. peak, but only the E. one.

Our attack on Mt. Torrione (6033 ft.) and Fojorina (6040 ft.) met with a similar rebuff, for a furious storm of wind and rain came on 1000 ft. below the summit, and, although we persevered and reached the tops, any attempt to descend into Val Cavargna was deemed unwise. The cobbled footpaths made the return trying, and the cataracts of water, running down each, added considerably to their slipperiness. To the lover of the picturesque the Val Solda has many attractions.

In recent years the Val Bregaglia has come several times before the Alpine Club, although even yet it may be considered an unfrequented valley as far as British climbers are concerned. The valuable papers by Dr. Claude Wilson and Major Strutt and others drew my attention to it, but it was my friends, Messrs. Raeburn and Ling, who urged me to visit the district last summer. We were a guideless party—my wife, son and daughter, and by ascending from the Val Masino hoped to get some slight knowledge of the granitic summits, especially as they present their more vulnerable sides in that direction. Moreover, the convenient huts, Volta, Badile, Allievi and Cecilia were more accessible than the huts on the N. side of the ridge. Our programme was sufficiently ambitious, extending along to the Disgrazia, but it was destined to sad curtailment. After visiting the Val Solda, we motored to Chiavenna and up to Castasegna, with the intention of studying and photographing the peaks from the vantage ground of Punta Duana, a 10,000-ft. mountain on the northern side of the Val Bregaglia, but the weather was unfavourable and we made our way back to Colico, and thence to Ardenno. Here the imperative gestures of the villagers directed us to a bye-road across the Adda and along a narrow mountain track on the N. side of the river. At places the space between the walls hemming in the road was so narrow that the mudguards of our motor car rubbed on either side so that retreat was impossible. At one place an ox-cart was met, and not until it had been lifted across the ditch by the aid of some peasant women could progress be made. The climax came when two Italian cars with our own met an Austrian one, the owner of which declared that the next piece of road was impossible to a car of our width. But by filling up the ditch with stones we managed after much manoeuvring to get through, and only then discovered that the main road on the S. bank had been washed away by the same storm that had enveloped us on Mt. Torrione. The road up to Bagni Masino is now completed for motor cars, but near Martino we also found the effects of the storm, and had to cross the river bed on a temporary wooden erection. At the Bagni we left our car, and, furnished with the large key, ascended to the Capanna Badile. We had provisions for some days, and were assured that as a new hut was being built there would be no want of firewood and blankets. We arrived as the sun set, and dense clouds hung over the mountains. On reaching the hut we found it open, and in the possession of the builders of



W. Inglis Clark, photo.

Swan Electric Engraving Co., Ltd.

NAMELESS PEAK IN MURAIGL GROUP, FROM MUOTTAS.



W. Inglis Clark, photo.

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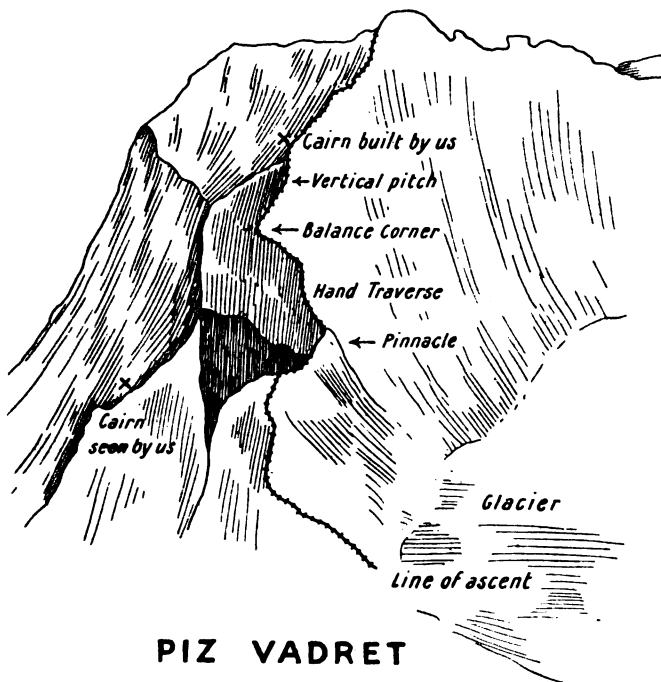
VAL SOLDA, FROM L. LUGANO.

the new hut, who, only after considerable pressure, agreed to vacate three of the bunks for our party. A glance inside was enough to daunt one, for bags of cement covered half the floor, and the mattresses were dirty with gravel and other objectionable material. To descend was impracticable, to sleep under the rocks impossible without blankets, and we decided to accept the three bunks and make the best of it. My son and daughter soon produced an excellent supper, and in the gaiety of the scene the evening passed rapidly. We discovered a pleasant party of Italian climbers camping in gipsy tents on the rocks above, and these added to our company at supper time. About 11 p.m. the secretary of the Italian Club arrived and shared one of the bunks with my son, his guide lying on the floor. It was no wonder that dawn was wearily awaited, but only to find the clouds down to the hut, and the mountains invisible. The Italian party kindly agreed to accompany us up Piz Cengalo, the highest of the peaks, and we had an interesting excursion together. First ascending an uncrevassed glacier to the rocks, a steep snow gully was negotiated, and a col on the skyline reached. The rocky ridge to the right was followed for half an hour, when a slight descent on the S. face was necessary. Steep rocks now led up to the snowfield extending to the summit. The whole expedition was made in dense mist, and afforded an enjoyable scramble of moderate difficulty. As the workmen refused to allow us to stay another night, we descended to Bagni in increasing gloom, preparatory to the storm which broke on us next day. All further attempts were abandoned, and motoring to the main valley we left our car at Tirano, and made for Samaden in the Engadine, which we reached in a downpour of rain. Seizing a bright interval, two of us made a pilgrimage to Soglio some days later, in order to photograph the Bregaglia peaks, in colour, from that splendid point of view. Alas for our hopes, another storm was coming on and only fugitive glimpses of the magnificent Sciora aiguilles hemming in the Val Bondasca were obtained. But the expedition is one of entrancing interest, and is to be highly recommended.

To the S.-E. of Samaden and N.-W. of Pontresina lies a group of peaks of no great height, among which is included the well-known Piz Languard. Less known than this, but on the same ridge, is, to the N.-W., the Piz Muraigl, a favourite excursion from Pontresina. Due N. from this, and separated by the Fuorela Muraigl is the Piz Vadret. From this Fuorela the Val Muraigl runs N.-W. to Muottas Muraigl, the terminus

of the funicular, and a well-known view-point. As the higher peaks were impossible, owing to constant snow-storms, we turned our attention to this group of mountains, and made Muottas Muraigl our headquarters. The ridge above Pontresina commences (to the N.) with the Schafberg, easy of access; then (going S.E.) follow 'Las Sours,' a couple of rocky peaks, the second of which falls steeply to a col on the ridge. Still further is a defiant aiguille, marked 3134 in the Topographical Atlas of Switzerland. Further to the S. is Piz Muraigl itself. From Muottas, peak 3134 m., stands up nobly and soon attracted our attention. Following a footpath up the valley, we skirted along the tongue of the glacier in a westerly direction, and going up a short distance on the easy slope of snow to the W. of the unmistakable N. buttress, had an interesting scramble on the buttress itself, and reached the ridge at a point between Las Sours (W. peak) and peak 3134. From here the summit rises very steeply for several hundred feet. The climbing, if not really difficult, is always sensational and gradually leads round to the S., finishing with a chimney on the S.-W. corner. My daughter led throughout. In spite of a short snow-storm which struck us near the top and obliterated the landmarks on our return journey, we soon reached the buttress, glissaded down a steep snowslope, and later down the uncrevassed glacier, well repaid for our short day's excursion.

The Piz Vadret, 10,573 ft., lies about $1\frac{1}{2}$ miles N.E. from Punta Muraigl, being situated at the head of the Val Champagne, which runs in a S.-E. direction from the River Inn, a mile from Samaden. A reference to the map will show that the main ridge runs N. and S. in a curved direction, but that a ridge at right angles runs due W. for about $\frac{1}{4}$ mile from the summit and of practically equal height. Indeed the difference in height does not exceed 100 ft. From the end of this ridge, an exceedingly steep buttress drops to the glacier some 500 or 600 ft. below. To ascend Vadret by this buttress was the endeavour of my son and daughter, the former (a member of the Alpine Club) leading. Seen from below, this buttress bifurcates into minor arêtes (see diagram). The true left arête B. was taken and the direct edge of the buttress followed practically to the top. Comparatively easy scrambling for half an hour, over indefinite ground, brought them to a small col, formed by a rock outstanding from the cliff. From here began the real difficulty. A sloping handhold, formed by a crack in the huge rockplate, afforded a traverse up to the left for about 15 ft., there being no footholds whatever and an



immense drop below. A small stance now gave breathing time. Then followed a very sensational traverse to the left, this time with good footholds but a great paucity of handholds. The next difficulty was a sloping siabby ledge rising some 12 ft. to the right, and with but two small handholds and sloping footholds. This was by far the most difficult part, and taxed the skill of the climbers to the utmost. A small cairn was built when this pitch was overcome. Above this, good climbing over steep and difficult pitches led right up to the cairn on the top of the ridge. A descent was made by the N. glacier, and rounding the foot of the buttress, the ridge running down to Muottas was followed. The ascent was not made easier by occasional showers of snow.

The valleys of the Brenta can hardly be called unfrequented or unknown. Readers of the 'Alpine Journal' know that the beauty of this region has been praised by Tuckett, Ball and Mr. Freshfield; and a visit to Campiglio di Madonna will make one realise that, so far from being unfrequented, this is one of the most crowded spots in the S. Tyrol. Even in the mountains the excellent huts Stoppani, Tuckett, and Tosa, are filled with an eager enthusiastic throng of mountaineers and tourists. But withal the number of British climbers is a very small one. Indeed, I only met two in the course of two visits. And yet the pioneers here, as often elsewhere, were British. The Brenta group is one of the most pictorial in the Alps, form, colouring, rock and snow combining to present numerous mountain pictures. The peaks may be roughly divided into the Northern, Central and Southern. The N. section is but little frequented with the exception of Pietra Grande, which rises above the Stoppani Hut. The Central Brenta group is not only the most attractive but the most easily explored. Three great passes intersect the mountains from W. to E.: Passo Groste, with the Stoppani Hut (C.A.T.), above which, on the N. rises Pietra Grande, 9786 ft., and, on the S. Cima Groste, 9656 ft.; Bocca di Tuckett, a glacier pass in the centre below Cima Brenta, 10,521 ft.; and Bocca di Brenta, a wild glacier pass between Cima Brenta and Cima Tosa, 10,577 ft.

My knowledge is entirely confined to the central portion and is, after all, but limited. The ascent of Cima Groste from the Stoppani Hut presents no difficulties and is hardly worth the trouble unless a traverse is made to the Valesinella peaks to the S. These are, however, better included in a day's excursion from the Tuckett Hut. On one occasion, staying at the Stoppani Hut, we threaded our way through the maze of broken

rocks to the foot of the Vedretta di Vallesinella, an easy glacier flowing N.W. from the upper fields of the Vallesinella. The glacier is hemmed in by striking rock walls, and is finely terminated by the Dente di Sella, an easy peak, overlooking the Bocca di Tuckett. Striking due N., an interesting narrow ridge, with sharp rocks, leads to the Campanile and Rocca di Vallesinella (Cima Falkner). This peak, the highest of this section, is usually ascended by a gully on the W. side, but the traverse of the ridge as described is quite interesting and affords excellent scrambling. Going N. from Cima Falkner, a steep descent into the Bocchetta Alta leads to the fine Campanile dei Camosci. As we did not know if a descent could be made to the N., we retraced our steps and spent a long time on the precipitous E. face, abseiling at one place into a rotten gully and traversing numerous narrow ledges before reaching the screes at the foot. Looking back, no trace could be seen of the route of descent. Hence, an easy, though stony, walk took us to the Stoppani Hut. On another occasion we visited the Tuckett Hut, which is a favourite rival to the T.A.C. Hut, within a stone's throw. This, finely situated on a ledge above the wilderness of screes below the Brenta Glacier, is the starting point for many repaying excursions. One of the most attractive to the rock-climber is the Castelletto superiore, a rock tower rising from the upper snowfields of the Vallesinella Glacier. On this side it appears to be impregnable though but little more than 250 ft. high. On the S. it descends in a vertical drop of 1000 ft. to the glacier below. Being in ignorance of the route, we spent some time on the N. and E. faces, but finally following a band on the S., climbed an exceedingly rotten wall which led to the foot of a difficult chimney with a sensational prospect to the glacier far below. My son led in this ascent.

The Cima Mandron is a repaying excursion. This beautiful peak, 10,143 ft., is easily reached by the upper Brenta Glacier. On the occasion when my daughter and I ascended, bent on photography, snow lay down to near the level of the Tuckett Hut, and the easy glacier led up to practically the summit. The views are of exceptional beauty, embracing to the S. the Cima Tosa, and to the E. the Cima Brenta, Spallon Mazzodi, and Pizzo Molveno. The distant dolomites of the Rosengarten, the Ortler group, and the Adamello make a fine background to the nearer peaks.

The traverse of Cima Brenta, 10,566 ft., from the Tuckett to the Tosa Hut must conclude these incomplete remarks on these picturesque mountains. The lower Brenta Glacier leads

up practically to the very summit of the peak, but on the other hand steep but easy rocks border the glacier from the Bocca Brenta. This striking and beautiful mountain was first climbed by Messrs. Freshfield and Tuckett in 1871. The route followed was, I believe, practically identical with that already described for Cima Mandron. The more interesting traverse is best made from near the Bocca Brenta. Ascending the easy glacier for some distance we took to the rocks. Turning on to the N.-E. face the route up the rocks presented no difficulties, and the summit was reached over snow. The view is similar to that from Mandron, but embraces a far grander survey of the E. peaks and faces of the Brenta. In descending we struck due E. to where a corrie or hollow leads down to the S., and not far from the W. summit. At first progress was rapid down snow or easy rocks, but lower a steep face was encountered, only descended after wanderings on narrow ledges and steep chimneys requiring caution. It was a relief to reach the Vedret dei Brenta, lying in the corner between Spallon Mazzodi and Cima Brenta. My impulse was to turn the N.-W. ridge of Pizzo Molveno, and skirting the Fulmini Glacier at once descend into the upper regions of the Val Brenta, and so reach the glacier of Bocca Brenta and the Tosa Hut. But, having made up on my wife, who had been in advance with a guide, we were prevailed on by him to ascend the Fulmini Glacier in order to descend the steep Bocca di Armi and so arrive directly at the E. side of the peaks, and thus reach the Tosa Hut. Before leaving the Brenta Glacier we were passing below a great cliff, when my wife said, 'See, there are lots of mineral water and wine bottles, we must be close to the hut.' A casual glance gave this impression, but on inspection we found (to us) a new variety of ice pyramid, the cause of which was not quite apparent. The bottles ranged in height from 6 in. to 18 in., were practically cylindrical, and with rounded shoulders and neck. To complete the illusion, some were black, and all of them were apparently corked. They formed a group perhaps 12 ft. in diameter and stood in a hollow depression of the glacier. On close examination the apparent corks were found to consist of bits of stone, some round, some flat. The cliff, about 900 ft. above, overhung, and my theory is that dripping water melted away the ice except where protected by the stone, and so the ice bottle gradually grew and grew till it presented this extraordinary appearance. The spot faced the North, and would be much protected from the sun. Leaving

the bottles we realised that the hut was still far distant, and pushed on for the Bocca Armi. The guide who had gone on in front, on reaching the top of the Bocca, refused to go down till he had tied on to our party, and insisted on going first, remarking that he felt safer. The couloir, which is generally easy, was in bad condition, a very thin layer of snow lying on ice. The guide refused to cut steps, depending on those behind holding him up. My son and daughter, recognising the precariousness of the foothold, not only cut steps but made every use of ice-axe hitches, and we cautiously descended. After about 200 ft., as I was leaving my anchorage, the snow suddenly shot away, and in a twinkling I fell against my daughter, pulling away her ice-axe with my foot and dragging her along with me. My son was well hitched, with foot against a rock and ice-axe deep into the ice or hard snow. The rope was taut round the axe, but the weight of two persons snapped the axe in two, and but for my son's presence of mind the whole party would have gone. The guide meanwhile was lighting his pipe, his ice-axe under his arm, and quite unconscious of what had happened above. After this experience we were not sorry when we reached the Tosa Hut, 16 hours after leaving the Tuckett Hut. No doubt the time taken was excessive, but being unguided we often failed to hit the best line of descent. An unusual experience in the Bocca Brenta may conclude this paper. For special reasons, I had to descend to Campiglio alone, and glissading down the uncrevassed Bocca Glacier, I made my way to the snout where an assemblage of boulders fill up the gorge. These ranged from 4 to 10 ft. in diameter, and were wedged tightly between the rocks on either side. I jumped from block to block, when suddenly there was a rumble, and a settling down of the boulders. I felt my foot caught, and saw that a huge rock was only prevented from falling into the depths below by the sole of my left boot. It was a case of 'the devil and the deep sea.' Fortunately the solid wall was within reach, and, holding to a projecting pinnacle with my left hand, I tried to pull out my foot, but in vain. I then endeavoured to take my foot out of the boot, and after perhaps five minutes, had nearly succeeded, when I heard a sound of tearing leather and the boulder fell down to the bed of the stream. I sprang on to the solid side wall, while the moving rocks settled down below me. An inspection of the boot showed that twelve nails on the outer side had been torn out and relieved me from a dangerous and awkward predicament.



R. I. G. Irving, photo.

THE GRAND PARADIS, from the North.

Swan Electric Engraving Co., Ltd.

MONT HERBETET FROM THE WEST, AND OTHER
EXPEDITIONS NEAR COGNÉ.

By H. E. G. TYNDALE.

IT had been cold on the peaks, but the genial afternoon sunlight of 1911 was once more triumphant at the Victor Emmanuel hut. The Italian tourists had left for Dégioz amid a buzz of chatter, and there was no sound to be heard except the steady click of Madame Dayné's knitting-needles. Now and then a stone descended on my head, to note the fact that the small son of the house had made another new route to the hut roof; otherwise I was free to meditate on the morrow, for we planned to ascend the Herbetet from the west.

Our party was composed of R. L. G. Irving, G. H. L. Mallory, and myself.

We started shortly before sunrise. Our way led due north over rough slopes—one of those delightful spaces of neutral ground between snow and pasture, where you pick your way between clumps of blue gentian and dark pink saxifrage. As we crossed the rounded back of the Cima di Moncorvé Mont Blanc lay already in full flood of sunlight, but the long reaches of Valsavaranche were still wrapped in the haze of early morning. We roped at the edge of the Lavetiau glacier and crossed many snow-bays towards the Col du Grand Neiron; but before we reached that col we had already made three passages of the glacier, for the photographer's enthusiasm led to absence of mind, and a rucksack containing the wealth of the party had remained on the moraine. Consequently we were already a full hour and a half late when we scrambled up the first easy rocks on the western buttress of the Herbetet.

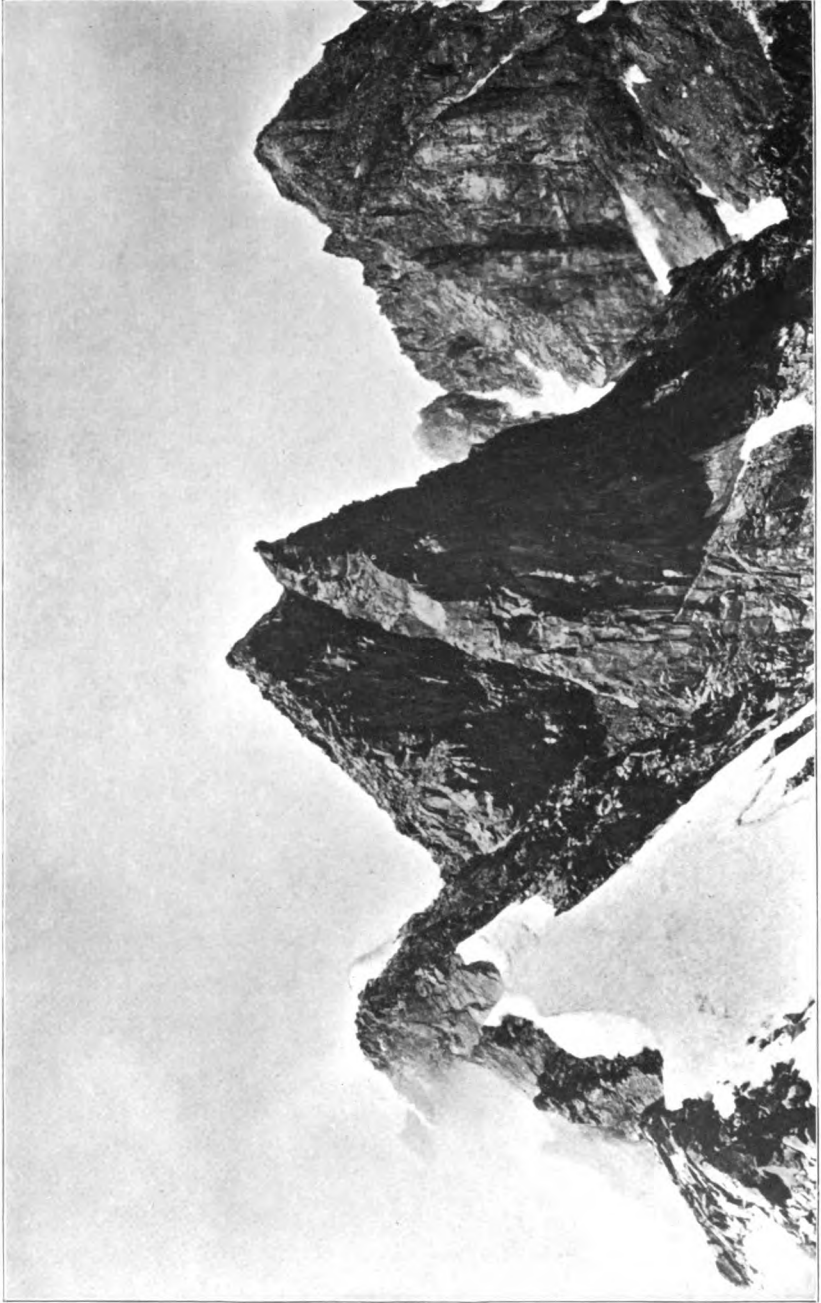
Three hundred feet above the col the buttress grew much steeper. So far we had climbed chiefly on the broken S.W. face, and from the point where a prominent rock overhung we could have crossed easily to the S. ridge at the foot of the Great Tower. However, we hoped to regain the western buttress immediately above the overhang, and therefore decided to follow a narrow rock-ledge which ran some distance across the northern slope. The melting snow-patches above had formed a veneer of ice, in places thick enough for the cutting of steps. The leader, using one arm for the axe, cut downwards to a small nose of rock, behind which the

rope could be passed. Beyond, the coating of ice was thinner, and already beginning to melt. We were moving towards a broad ice couloir which cut deeply into the western face of the mountain. The leader edged round a bulging corner of rock and went out of sight. For some time I remained passing the rope behind a splinter, and watching the fragments of ice running merrily down towards Valsavaranche. Then, in answer to a faint shout, I wormed my way round the corner into the sunlight, and saw above me the broad couloir with its line of steps, and the leader's head alone visible in a deep hollow below an island of rock. From here another staircase was cut to the point where the ice gave way to a rock-gully. The rocks were smooth, and covered with a fine dust which rendered the sloping handholds slippery; one great boulder lay marvellously balanced on a steep slab in the bed of the gully. Higher up matters improved. We left the gully by a vertical chimney, and suddenly I found myself looking down on the flat Dzasset glacier and the Monei pastures beyond. We had struck the S. ridge just at the foot of an immense overhanging gendarme, some distance to the N. of the western buttress.

Two hours of the S. ridge still lay between us and the summit. It is surprising how rarely this route is taken. The rock throughout is of a singularly firm quality, the difficult places frequent but never long. A tremendous precipice plunges to the Dzasset glacier, and across this face a narrow ledge, broken at one point, forms a natural pathway round the overhanging gendarme. Immediately below the summit a mantel-shelf of rock projects into space; there is need of the friendly shoulder, and when the others had passed over the mantel-shelf by means of a vigorous push from my head, I found myself alone with an assortment of rucksacks and axes to be forwarded above. As the burden started on its upward journey an axe fell out—providentially as it happened, for the shapeless monster stuck long at the overhang and was only freed by strenuous prodding from below. ‘Do be quicker than the rucksacks,’ came a distant voice. Decidedly; so I ascended after the manner of the dreaming Gerontius:

As though I were a sphere, and capable
To be accosted thus, a uniform
And gentle pressure tells me I am not
Self-moving.

The afternoon sunshine was warm on the summit, and



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ONDEZANA, from PUNTA SCAIGLION.

R. L. G. Irving, photo.

we lay long watching the clouds sailing across a Lotus-land of green hills between us and Mont Blanc. Then we ran down the N. ridge, and towards dusk found ourselves in Valmiana. Cows were not at hand, but a gnarled crone haled the nearest goat for our benefit. We proposed to drink at once, but at that the old woman threw up her hands in dismay and reeled off a string of diseases which would infallibly attend our incontinence—

For this, be sure, to-night thou shalt have cramps,
Side-stitches that shall pen thy breath up—

and she disappeared into the bowels of the earth, returning soon with a great steaming bowl. Twilight was fading as we set out for Cogne down the beautiful Valnontey. Nowhere is the path so free from stones, nowhere do pine wood and open lawn mix so pleasantly as in this valley; but I was not sorry when the stream fell noisily away to our left, and we crossed the meadows of St. Ours, heavy with the smell of new-mown hay, towards the village lights.

Cogne is an ideal resting-place, and we returned in 1912. The meeting of four valleys and the wide expanse of meadow temper the bright sunshine with a perpetual draught of cool air. Mont Blanc is to be seen in the W. The village itself is full of life. Early in the morning the goatherd passes up the street with his horn, and the goats run out of the front doors to meet him. Another notable figure is the hotel dog, who, if not engaged in digging up other people's potatoes and generally removing his neighbour's landmark, will show you the way to the Monei chalets, and brush past you on the inside in the narrowest places. But when you have outwitted the dispenser of bad money over the way, and talked the local scandal with the village shopkeeper (the priests, wise in their generation, have started a rival hotel, which many regard as a stumbling-block), it is time to think of another expedition. Irving and I decided to explore the Valeille.

The Valeille runs southward from the main valley half an hour to the E. of Cogne, and a fine hunting-path leads gently upward through a wilderness of desolation. The way is rich in memory. Here the foolish take a short cut, and regain the path through mire and clay; here you may gather quantities of the yellow wolf's-bane; here at last opens out the view of the upper glacier; and here the photographer again forgot

his rucksack, and gave his companions a delicious early morning rest on the col which leads to the Ciardonei glacier. The upper snows of this glacier, surrounded by splintered rocky peaks, are quite free of crevasses, and on the far side the twin Uje di Ciardonei make a fine show against the low sun. The glacier soon curls over out of sight, and beyond lies a tumbled mass of low green hills dipping down into the plain. It is good to follow the ridge southward from the Col des Sengies; narrow at first, and difficult in places, it broadens out near the Scatiglion, but everywhere falls in steep icy couloirs to the Valeille glacier on the right; then cross the Ondezana to the Col de Teleccio. But it is better from the first col to push on to the ridge of the lesser twin, from which we looked directly down upon the smiling plain.

Mr. Yeld, whose friendly interest in others' climbs and unrivalled knowledge make a stay at Cogne so attractive, had suggested that this corner needed further exploration; he had also hinted that the rocky Punta di Valsoera, which runs southward from the lesser Uja and divides the two branches of the Soera glen, was yet to be ascended. Thus it happened that we found ourselves this last August on the Ciardonei glacier in two parties. While the Piccola Uja was ascended by Mr. Yeld and his two burly henchmen from Valtournanche, we skirted that peak to the foot of the Colle dell' Uje, between the twin peaks, reached the ridge by a slope of ice and rock, and made our way up a series of steep chimneys to the flat summit ridge of the Grande Uja. Our unascended point still lay before us, on the far side of a small nameless glacier. From every aspect he had presented a bold front, and he now gave us a delightful half-hour. First we edged a way between a large coating of ice and an overhanging wall, then climbed a vertical chimney and crawled through a cave on to the ridge. We slid down slabs into a deep cleft, round a bulging rock into a shallow gully, and, scrambling through a window, gained the two vast boulders which form the summit. An easier descent was on the S. side, and we recrossed the Colle dell' Uje to the Ciardonei glacier. Later that afternoon we reached the Teleccio Alp, where we fell into the hands of a herdsman with a misleading knowledge of English, on whose advice we ascended a cascade for several hundred feet, and at sunset made a burglar's entry to the Piantonetto hut.

A fortnight later we set out early from Cogne, hoping to follow the ridge from the Col Bonney southward over the three intervening peaks to the Grand Paradis. The morning



R. L. G. Irving, photo

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**PUNTA DI VALSOERA,
from the Colle delle Uje**



R. L. G. Irving, photo

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**UJE DI CIARDONEY, and GLACIER DI CIARDONEY,
from gap N. of Punta Scatiglion.**

dawned fine, but soon after sunrise a biting N.W. wind sprang up, driving a dull wrack of snow-laden cloud across the peaks. We cowered under shelter of the Col Bonney for a long time, listening to the wind roaring through the crags of the Punta Budden. About eleven o'clock the wind appeared to have moderated its force, and we climbed up the rocks towards the lower summit. For so small a peak the Punta Budden is a tough fellow. At one point you climb clean through the mountain by a 20-foot passage; between the two summits the ridge is very narrow, and the highest point is a big boulder pointing upward. On the far side lies the Fenêtre de Dzasset, beyond which the Becca di Montandayné rises in a long rock-ridge, with a steep snow-slope falling to the Dzasset glacier. We found good snow, and kept throughout just on the Valnontey side of the arête, but the latter itself provides a good rock staircase, should ice be present. By the time we reached the summit it was well after two o'clock. Nothing could be seen of the descent to the S. by reason of the clouds which still raced past us. A sudden break showed us our route and the pinnacled ridge of the Petit Paradis looking black and forbidding beyond. We climbed down a steep, narrow crack on the S.E. face, which falls in great rocky steps to the Tribulation glacier, and in thirty-five minutes from the top stood in the Bocchetta di Tsassetta. It was too late and the wind far too cold for us to think of crossing the remaining portion of the ridge. To reach the Victor Emmanuel hut the shortest way led due W.; but a steep couloir filled with glistening ice promised hours of step-cutting to the Lavetiau glacier. Of the descent to the Tribulation glacier nothing could be seen until a wing of cornice had gone down before the axe; and, behold! there lay a gully, filled with deep snow such as delights the heart. Down we went, first facing the mountain, with great arms of the cornice stretched out over our heads, then racing forward. We pushed on to the hut over the Col de la Lune and the Col du Grand Paradis, hoping to complete our traverse on the morrow.

Next morning we were up with the hens that live in the abode of darkness below the sleeping-room, and ascended the Grand Paradis. After yesterday's fearful buffeting it was pleasant to lie in the still air, looking down on the vast expanse of plain with its winding streams, and Turin like a toy city in the distance. On the N. ridge the snow lay deep as far as the rocky gendarme. The ice-slopes fell very steeply on either side of this, and the direct traverse was none too easy, as

16 *Mont Herbetet from West, and other Expeditions near Cogne.*

the ice thickly covered many holds. Further on a tremendous cornice hung out over the Tribulation glacier,

whose ample field
Shone glorious as a silver shield.

From the gap between the two peaks the Petit Paradis is quickly gained, but the ridge runs level beyond, cut up into great teeth, or, like blind Gloster's fiend, 'horns whelked and waved as the enridged sea.' The climbing was nowhere easy, and powdered snow had fallen deeply in places, but we rarely left the ridge. One traverse I remember well, as I dropped my axe into a snow-bed while descending an ice-filled chimney. On the left of the chimney a wonderful shelf of snow was plastered against the face of the cliff, unsupported by rock, across which we crawled. It looked wretchedly infirm, but the holding was excellent and the shelf remained intact. The last pinnacle looks very truculent. We descended to a shoulder on the E. face, beyond which steep snow lay thin on rock and ice, then back to the ridge through deep firm snow, and after a short piece of step-cutting in very sticky ice we stood once more in the Bocchetta di Tsassetta. We descended in our previous tracks to the Tribulation glacier, kept close beneath the foot of the Passo Frassy, and took off the rope near the point where the snout of the Dzasset glacier almost joins the Tribulation. A first-rate descent leads down the hillside not far from the icefall, and saves a laborious walk on the side of the boot to the Herbetet châteaux. As we went down the Valrontey, clouds gathered round the summits, but no storm came before we reached Cogne.

Three days later we started for the Col de Grandcroux on as evil a morning as man can wish to see. Rain was falling heavily, and snow lay as low as Gimillian. However, two hours after sunrise the hurricane, which had blown all night, swung round to the north, and the clouds swept away southward before it. The Grandcroux glacier has no serious icefall, but rises rather in a succession of waves, and in the hollows between these the fresh snow lay deeply. The wind hardly worried us, though now and then a fierce gust would rush up from an unexpected quarter; but we could hear it raging along the ridge, and see the clouds of driven snow whirled off the Becca di Gay. The final slope held our crampons well, and we reached the pass in five hours from Cogne. On the S. side we found peace and warm sunshine, but nothing can soften the savage nature of the Losa glen. It is a wilderness



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THE N RIDGE OF THE PETIT PARADIS.

R. L. G. Irving, photo.

of bare rock and scanty herbage, given over to marmot and chamois, denying all distant view, and friendly only in its broad hunting-path. At the Bruna Alp we left the Noasca track, and turned westward for Ceresole, crossing a low pass to the basin called Gran Piano, in which stands a Royal shooting-box. The king could hardly have chosen a more beautiful camping-ground. The turf is wonderfully green, watered by the clearest of streams, which flows through a series of rocky pools. The glen above is closed by the crags of the Tresenta and Grand Paradis, and below a broad grassy bluff dips out of sight towards the orchards of Val d'Orco, 4000 feet below. But the glory of the walk lies beyond; for when you have rounded the shoulder of the Punta Ciamosseretto, you will find a grassy terrace encircling the whole lower Vallone del Roc. The path runs level for 5 miles to the Colle di Sia, whence it descends quickly into Ceresole. Where the Broglio torrent crosses the path there is a small lake, shut in by the cliffs of the Becca di Monciair and its companions, but opening to the S. on the whole length of the main valley and the plains beyond. The view becomes wider towards the Colle di Sia, and at length every peak on the ridge stands clearly outlined, from the Grand Paradis to the Roccia Viva. Then, as the sun went down behind the Levanna ridge, which we were to cross on the morrow, we descended to Ceresole.

THE CALL OF THE ABRUZZI AND OTHER APENNINES.

By W. CECIL SLINGSBY.

FROM MONTE CASSINO TO ROCCA SECCA OVER MONTE CAIRO.

THE sight of a huge building perched on the top and edge of a high crag or steep rocky hill always attracts the close attention of the passer-by, whether it be a church, a castle, a monastery, or an ancient heathen temple. How often too our eyes are gladdened and our imagination aroused by such sights in Italy, but how seldom do we respond to the call?

The most prosaic globe-trotter travelling between Rome and Naples can hardly fail to be impressed with the view of the Monastery of Monte Cassino towering more than 1500 ft. above the railway station. When I first saw it some years ago

brilliantly lighted with evening crimson and gold, backed by purple-tinted mountains, subtle rather than beautiful in outline, it was lovely, and I determined to visit Monte Cassino at least on the first opportunity. During the spring of 1910 my wife, daughter, and I spent many enjoyable weeks in Rome, but the whole time the call of the hills was strong. Occasional trips to the Alban Hills and the traverse of the whole serrated ridge of Monte Soracte—a most interesting expedition—did not satisfy the call. I remembered Monte Cassino and the hills behind. Baedeker showed that Monte Cairo, 5424 ft., was occasionally climbed from the monastery, and a large scale map revealed the fact that a long, relatively flat and narrow ridge pointed towards the town of Rocca Secca. This suggested a mountain traverse. As Monte Cairo is the highest of a group of mountains and is at a respectable distance from its equals, I felt sure that my French Baedeker was right in saying, 'La vue qu'on a du sommet est de toute beauté.'

In due course I stood before the great gateway of the convent and was soon admitted. The description of this most interesting and enormous monastery—its grand library, the beautiful but modern church richly decorated with precious marbles, the cell of St. Benedict, the Founder of the Benedictine Order, the shrines of the saint and of his sister Santa Scholastica—does not come within the province of this paper. After spending a good hour in looking round under the guidance of one of the monks and hearing that now-a-days, as a result of the partial secularisation of monasteries, these magnificent buildings only contained about forty monks and some two hundred students, I could not help a feeling of sadness.

Formerly the site was occupied by a temple of Apollo. Dante considered the worshippers to be 'a deluded folk and ill-disposed.'

'Quel monte a cui Cassino è nella costa,
Fu frequentato già in su la cima
Dalla gente ingannata e mal disposta.'

Par. XXII. 37.

An active young man was provided to act as my guide to Monte Cairo the following day and my interview with him was amusing. I showed him my map, which he quite understood, and told him that I wished to climb the mountain by the ordinary way and then to descend to Rocca Secca. The guide apparently thought this proposal to be highly unorthodox.

'When any persons climb the mountain they always return here.'



VIEW FROM THE CASTLE OF SAN TOMMASO.
at Rocca Secca.



W. C. Slingsby, photo.

Swan Electric Engraving Co., Ltd.

SUMMIT AND NORTH FACE OF MONTE CAIRO.

'Have you ever been to Rocca Secca?'

'Yes, but by the road in the valley and never over the mountain.'

'You shall guide *me* up to Monte Cairo; I will then become *your* guide and will take you along the ridge and then down to Rocca Secca. You shall carry my rucksack the whole way.'

One of the Fathers was much interested in this project and examined the map carefully. Indeed, if he had not been required to teach the students in the morning I think he would have joined me.

After an excellent dinner, which I shared with a phlegmatic Neapolitan, I went early to my cell. I was called at 4.30 and provided with a good luncheon basket and a bottle for water. Coffee before starting would have been welcome, but naturally did not appear.

At 5 punctually we went through the ponderous gate and turned to a paved footpath through an ilex grove. Black-birds and thrushes, and occasionally a nightingale, filled the air with song. The stars disappeared one by one, the most meritorious—from our point of view—remaining to the last. About a couple of miles along the flat we came to a farm and an old church. The latter, turned into a barn, told its own sorrowful tale. We left the mule path and skirted a hill on a mountain footpath. This led us to a gap and a little hamlet.

Here we sat down, our mountain full in view though foreshortened, while a lad filled our bottle with water from a deep well. I was glad to see long tongues of snow in the gullies on the mountain, which promised some pleasure and fun.

For an hour we followed a pretty footpath leading to Terelle. Then we took to a dry stream course which was very pretty. This brought us up to a rocky ridge. A bed of withered fern close to our first snow suggested lunch; and iced water and oranges were delicious for the day was hot.

My guide, wearing soft leather sandals, wished me to take a line parallel to, but much below, the ridge, in order to avoid the snow. Here, however, was my chance. My nailed boots had been a great nuisance on the paved paths where my companion had no difficulty. Now the tables were turned, and each took his own way. The snow was very hard and now and then steep, but I felt quite at home. Meanwhile my man was skipping about very merrily, sometimes 300 or 400 ft. below me, but managed to reach the snowy crown which formed the summit.

On the north side a beech forest reached the crest, but though

the trees were very rank they rarely had the hardihood to peep over to the south or the sunny side. In many places in the Apennines I have found beeches growing on the north and east faces of mountains up to 7,000 feet, but never so high on the south or west. The view was really superb. Snow mountains glistened in the bright sun of a perfect day. Especially beautiful was Monte Bianco 'East' which led the eye to the higher summits of Monte Miletto. The coastal ranges across the Liri or Garigliano valley were very pretty and have a more beautiful outline than is usual in Central Italy. Away to the north-east the snowy Sabines, and I thought also Monte Velino, beckoned to me to come. Crag-perched villages, not many years ago the homes of brigands, all added to the interest. Now, owing to wise government and a prudent administration of justice, brigandage is at an end, and one can wander at one's own will amongst the wildest valleys as safely as in the Scottish Highlands.

I now took up the post of guide. After a delightful snow-ridge walk, where I had many little glissades, much to the alarm of my companion who tripped along below, we turned northwards down a steep hill into a pretty but waterless glen. I had looked, I must say sorrowfully, down three or four places where there were clear lanes through the beeches, and where a properly equipped mountain party could have safely glissaded nearly a thousand feet. A steep crumbly hill-side was but a poor alternative, but as I was now acting as guide, and burdened with responsibility, I merely explained the joys of a glissade and took the duller and for me the more difficult way.

At 4 o'clock we reached a village. Here was our first stream—a half-inch iron pipe bringing water to the laughing washer-women.

A steep descent on a paved footpath led to several falls on my part, but I succeeded in believing that the ease with which I had traversed the hard snow ridge, and the glissades which I made, more than justified the use of nailed Alpine boots.

At last a wide and dusty road took us to the new Rocca Secca.

We found an inn. Albergo Svizzero I think. We entered a large dark lofty room like a barn. On one side only and near the top of the wall were two small windows. When my eyes became accustomed to the gloom I saw a corner, walled off and used as a kitchen. Two long tables with forms completed the furniture. The host at first looked upon me with suspicion, but

was reassured by my companion. After rejoicing together in cool red wine my guide left for his long valley walk back.

My dinner of soup, bread, maccaroni, and kid was capital. Soon after I sat down a family of hens and a cat came in and pecked at or scratched my feet. I took the hint and had rare fun watching the scramble for maccaroni, which the cat liked as much as the hens.

Two swells from the town came in. One knew about four English words and half a dozen French, which he fired off alternately at me. I gathered that he was complimentary, but on the whole I found that conversation with his companion went to rather greater depths. We drank wine together and they smoked. In fact we enjoyed each other's company.

After dinner I set out to see the old town, principally called San Tommaso after St. Thomas Aquinas who was born there. The town is built on a steep narrow crag, the western termination of the Monte Cairo range. Several self-appointed guides offered their services, but, as the way was obvious enough, I declined them, and wandered where I liked, leaving a minute exploration for the morrow.

A clean bed was found for me in another house. Here I got coffee and rolls in the morning and then set out for San Tommaso. I engaged a bright intelligent lad to come with me, and spent several hours in this most romantic old town, whose interest is entirely centred upon St. Thomas Aquinas. His church in the old town has been secularised, and the paintings there which illustrate the principal incidents of the life of the saint are, I am sorry to say, in bad preservation.

I can strongly recommend a visit to Rocca Secca. There is a railway station on the main line, only two miles away from the town. I can still more strongly recommend the walk which I took from Monte Cassino, over Monte Cairo, and down to Rocca Secca. The name of the town is apt enough, as the hills and rocks are indeed dry. It has, however, an excellent supply of water, the outcome of clever engineering. Here ended my first snow mountain expedition in Southern Italy.

A WALK FROM SUBIACO OVER MONTE TARINO TO THE ABRUZZI.

Another year had rolled by, and early in 1911 my wife and I found ourselves again in Rome. This time there were especial family attractions which drew us there.

In spite of the exhibition, the hills pulled harder than ever, and on April 23, my wife, daughter, son-in-law, and I took an

early train to Subiaco. Here we spent a few happy, but all too short, hours. The interests in and around Subiaco are great, and many excellent descriptions and historical writings connected with them are available. I need hardly remind my readers that much of the scene of 'Il Santo,' by Antonio Fogazzaro, is connected with the various monasteries of Subiaco, the valley of the Anio, or Aniene, and the little mountain town of Jenne.

At Subiaco too, as at Monte Cassino, are scenes most closely identified with St. Benedict and his sister, Santa Scholastica.

On the advice of two members of the Roman Section of the Italian Alpine Club, Professor Alfonso Favale, and Signor Avv. Ludovico Silenzi—the Hon. Secretary—I had arranged to walk from Subiaco to Vallepietra, a favourite resort of the Club. At 3.45 I parted from my companions at the monastery of Santa Scholastica. I walked quickly up the gorge of the Aniene, whose quick-running and clear waters suggested trout. A stream such as this is a delightful feature amongst the thirsty Apennines, where the waters, when not tapped by ancient aqueducts, carry to the extreme limit the principle obtaining in limestone countries of running underground.

The crags bounding the gorge are in many places grand, and here and there are red in colour, which harmonises well with the olives. Primroses, red cyclamens, and violets grew abundantly.

After a two hours' walk, I reached one of the numerous *sorgenti* or river sources 'at the foot of the slope of Jenne, on the gravel of which shallow rivulets streak, flowing down to the river from the grotto of the Infernillo.'*

I found some boys here, and as I learned from them that Vallepietra, where I had intended to sleep, was still three or four hours away, I decided to stop at Jenne.

After a three-quarter hour's walk up the steep dry hill, I reached the quaint huddled-up town. I was directed to a little *albergo* kept by Toselli Ugo, a general shopkeeper and wine merchant. Here I was welcomed by an old Garibaldian who had fought in two campaigns, and so had helped on the great cause of the Unification of Italy. He was a man of strong opinions, a powerful partisan, and most interesting. Formerly a great believer in Mazzini, and a republican, he had become a loyal supporter of the Monarchy and Unity. Above all, he

* 'The Saint,' Fogazzaro. English translation, p. 167.

was a most fervent admirer of Fogazzaro, whom he had often met in the little room where I had my frugal meal, and I feel sure that he had derived much good from intercourse with him.

Everyone at Jenne seemed to have known Fogazzaro, and all spoke of him in terms of deep regard and affection, and it seemed to me that some persons confused Fogazzaro with 'Il Santo' himself. The innkeeper's wife, while setting the table for me, spoke of the great man with tears in her eyes.

There is a lovely view from the old castle, now a church, of the Anio, and also of the Sacro Speco in the distance. As I wanted a boy to carry my rucksack and to guide me over the hills the next morning to Vallepietra, I asked my host to provide a *ragazza* for that purpose. The *ragazza* duly appeared—a middle-aged woman, the cook at the inn. I dare say that a *ragazzo*, or boy, would have turned up had I asked for him.

A late start, a long distance to go, for Tagliacozza was the place which I wished to reach that day. Yes, at 8.15 we set off over high rolling well-cultivated, but intensely dry, uplands. Amongst the bushes were great quantities of oxlips. I asked the cook what was the Italian name. Her answer, of course in Italian, was, 'They are not violets but only herbs.' We came to fine oak-woods through which snowy mountains could be seen. At last through an opening we saw below us bright green meadows, a country lane, a sparkling little river, one of the two principal branches of the Anio, called the Simbrivio river, which gives its name to one of the most lovely glens in the Sabine mountains, and whose waters, all in good time, help to form the grand waterfalls at Tivoli. We were soon in the valley itself, and, so far as the river, its banks and bridges, were concerned, I might have been in a limestone Yorkshire dale. The village of Vallepietra perched on a rocky hill is picturesque enough.

Before making the last turn on the little road my 'guidess' took off her sandals and produced from somewhere about her head a pair of boots which she promptly put on.

At 11.15 I turned into the Osteria Manilio Urbani, a place well known to the Italian Alpine Club, and was soon ensconced in a fine large room. Here I had grand views of Monte Autore and Monte Tarino, which latter towered over a beautiful conical wooded hill. The valley is almost a cul-de-sac, and would really be so in most countries. Italy is, however, and for many centuries has been, the land of good roadmakers and the

land of monasteries and other religious houses. On the face of Monte Autore is a broad ledge on a limestone rock face. Here is the Santuario della Santissima Trinità. The road up to this is carried to a great height from which the ascent of Monte Autore is a simple matter.

In Rome I had been advised to climb this mountain, 6080 ft. in height, and to descend either to Subiaco or to return to Vallepiaetra. I, on the contrary, as a result of much map-study, preferred to climb the more lofty Monte Tarino for two reasons. First because its greater height and more commanding position should enable me to see the high mountains of the Abruzzi. Secondly, as I love to see the source of a river, I thought we might perhaps cross a small spur and so gain the S. basin of Monte Tarino and see the Sorgente dell' Aniene.

After a good lunch, and with some regret that I was not returning to this fascinating place, I started with a septuagenarian guide, a tall strong man named Lorenzo Mercur, for a route which everyone tried to make me abandon, but which would take us to the cul-de-sac and thence up Monte Tarino. I had given up the notion of crossing the spur; so it was a case of mutual concession after all.

At 12.40 we sallied forth up the central of three little valleys. Soon we passed the electrical power-station belonging to the city of Velletri, 30 miles away as the crow flies, but very much more actually. The pipe which brings the water direct to the turbines is of course not an object of beauty, but this installation proves that the citizens of Velletri, who claim a greater antiquity for their city than Rome itself, still possess the enterprise of their Volscian ancestors.

Turning E., and with our backs to Monte Autore, we followed a bonny beck to its source, which Lorenzo called Fonte di Aniene.

Steep grew the slopes, more abundant the flowers, and more lovely the scenery as we ascended. When we reached a gap overlooking an ancient beech forest, on the N.-E. side of Monte Tarino, we found a lovely green sward dotted over with grape-hyacinths and crocuses.

Following a broad ridge, here and there steep, we soon reached the snow. Rocks appeared, which we turned on the S. side. Far below us we saw the main branch of the Aniene, a little below the place where it gushes out of the rock.

When climbing some easy rocks, not half an hour from the summit, a storm of heavy rain and hail broke upon us without

warning and we were glad of the shelter of an overhanging rock. Thunder and vivid lightning then took their turn, and we naturally had our lunch. We were over 6200 ft. and it was cold. It was then 4.40, and Lorenzo said plaintively, 'Surely now you will go back to Vallepietra?' 'No, we will go as far as we can in the direction of Tagliacozza.' I met his wishes thus far in that I agreed to abandon the ascent though so near, and really it is a pretty rock peak. At 5.10 we started down the steep slopes of the beech forest on the N.-E. side. As in the case of Monte Cairo, the trees barely peeped over the ridge. The snow was horribly deep and soft, and Lorenzo, with his long legs, had an advantage over me.

After descending perhaps 1200 ft. or so, we came upon a wooden shed where a man and a boy were deftly splitting beech logs for strong crates, pails, and baskets. Some of the trees felled by them had boles of 5 to 6 ft. diameter. We drank melted snow out of a pan. We were in a high dry valley varying from 4800 to 5150 ft. Leaving snow behind us, we went for miles through beautiful pastoral country, where we met a man with a dog and gun looking for hares.

Crossing a low hill, we passed many huts of woodcutters and charcoal burners and several acres perfectly white with large-flowered snowdrops, which recalled Old England.

A short descent brought us—so says my map—to the Valle di Campo Rotondo, still at a height of 4600 ft. Here were lovely woods on both sides. On the one were nightingales shouting for joy; on the other were owls hooting for greed. This two-part concert went on vigorously and long.

At 7.5 Lorenzo brought me to the top of a pass overlooking the valley of the Liri, and soon lights began to appear in the villages.

I cannot say much about the descent, except that we were on a path that usually, but not always, was sandy and that the old man knew his ground, at least by day.

At 8.45 we strolled into a little Abruzzo town with the Eastern name of Cappadocia. We passed a wine-shop and at first thought of going in, but feared to disturb the noisy merriment inside. Lorenzo then took me through dark passages into a huge lofty room where a man and his wife were sitting over a bright wood fire which seemed cheerful enough. What appeared to me to be aimless chatter was carried on for a long time, of which I could only understand a word now and then. I ventured to ask, as civilly as I could, whether we could get anything to eat

and beds. The lady of the fire seemed annoyed, saying that her house was not a *trattoria*.

Finally, we went out and entered the wine-shop, which was as noisy as before. A small low room, at one end a bar, behind which were bottles on shelves; at the other end a strong table at which seven men were card-playing and drinking wine. At our entry some of them got up, bowed, and said a few words. The host found a small table and two chairs, and I asked for wine. As this was some time in appearing one of the card-players came to me and offered me his glass, just refilled. The necessary refusal required diplomatic treatment, and with my small knowledge of Italian in general, and of the Abruzzi dialect in particular, it was not an easy task. Hat taking-off—fortunately we all had our hats on—bows and smiles worked until our wine, and passably clean glasses, appeared. Then I drank toasts and clinked glasses with my generous friend. Food was the next question. Bread was named, also eggs. ‘Si, Signor.’ After long waiting, to my surprise, the lady of the fire appeared with a huge loaf. Two eggs were produced from somewhere. Alas, they were uncooked, and I am not an American. Lorenzo thought I was mad, so he tackled the two. Meanwhile, though the coarse bread and wine were good, I still wished for variety and mildly suggested meat of some sort to the landlord. He poked about on a shelf and produced what I believed to be cold tripe. I am not over dainty. I tried it. The result was that Lorenzo had an excellent supper and he put at least half a loaf into his wallet for the next day. The bill 1.10 was not excessive.

We sat nibbling our bread and sipping our wine for a long time, amusing ourselves with watching the card-players whom the host had joined. At last I got up and said something about bed. My friend who had offered me his glass got up and asked us to follow him. He took us down a narrow street, into a house, and to my intense surprise and satisfaction showed us into a large clean bedroom with two equally clean beds. After lighting candles for us he wished us good night. I asked to be called at 6, and for coffee if possible.

The room, though large, was rather stuffy. There were two windows. I opened one. Lorenzo shut it again and jumped into bed. ‘I’ll bide my time,’ thought I, and so I did. He slept soundly, and musically too. Very gently I got up, opened the window like a professional burglar and let in the breath of heaven. Just as I was slipping into bed again, up jumped the valiant old man. The window was closed. I had

mercy on him then. At threescore years and ten a man can hardly be expected to learn much about hygiene.

Fortunately the hero got up at 5 and soon left. Then, for a time all too short, I had my way and breathed fresh mountain air. At 6 delicious coffee and rusks appeared and I was happy.

When ready to go, a woman came, so I asked her what I should pay. The provoking but common answer was given, 'What you like.' I replied 'Cinque centesimi?' This feeble joke was not appreciated, and she in turn asked a little too much. This I paid cheerfully. The clean bed was worth it.

I was sorry to part with Lorenzo, but though the agreement made between us was that he should accompany me to Tagliacozza, I thought it would be ungenerous to keep him, as that town was still 7 miles away, and in any case he would have a long walk home. Though I cannot say that we had met with any special mountaineering difficulties beyond ascending and descending deep soft snow, we had had a delightful walk together of which I have many, very many, happy memories.

Cappadocia is beautifully situated, 3500 ft. above sea-level, on a rocky mountain spur. On one side of this is the water-worn gorge of the Liri which gushes tumultuously out of the rocks. I only saw this *sorgente* from a distance, but by going thus far I missed the diligence which runs to Tagliacozza. This was well.

I left at 7.30. When about half-way, a notice-board on the roadside directed me to a 'Grotta' close at hand. I went down a steep bank on short slippery grass and soon saw a deep hole, and though the bottom was invisible I could hear water.

My cave-exploring instincts were thoroughly awakened. A few steps took me down to the innocent-looking stream which, apparently, rises out of a meadow not a quarter of a mile away. It soon tires of sunshine, why I know not, and then runs through an arch of rock straight into a dry colourless low limestone mountain, where almost immediately it falls into a shallow pothole which has two openings to the air. I climbed down the sides of both as far as I dared, and wished for the companionship of friends of the Yorkshire Ramblers' Club well equipped with torches for cave exploration.

I have since learnt that not far away is the famous Grotta di Verrecchie, in which are beautiful stalactites and stalagmites. The total length of the cave is said to be 2000 ms. The history of Beatrice Cenci is partly connected with this cave. There is much to interest the adventure-loving in this

rocky and cavernous country between Cappadocia and Tagliacozza.*

I entered Tagliacozza at the top of a hill and followed the one long street down to the plain. It is a picturesque old town, deriving much interest from the fact that most of it is built alongside or overlooking a clear swift-running little river, which emerges out of the face of a great rock about a mile above the flats.

Cornmills and workshops, all interesting and none really ugly, derive their power from the river. Laughing girls are hard at work washing clothing in wooden troughs to which water is conducted. The town is bright and cheerful and the fountains of sparkling water are most exhilarating during the heat of the day. There is a fine piazza with some grand old houses.

Of course I went to the place where the river issues from the rock, and imagined that I recognised, in this larger river, the smaller stream which a couple of hours earlier I had seen entering the other side of the hill not very far away and which had received, in the heart of the mountain, some watery additions. I do not know whether this is the case.

The view from here and the setting altogether are superb. In addition to the lovely scenes close at hand, the great features are the snow-clad Monte Velino and her sisters, glistening in bright sunshine with strong yet gentle outlines. These mountains in April certainly make the most of themselves in their spotless white garments by rising boldly out of the plain, formerly the Lago Fucino, now mostly drained.

A capital lunch and a train to Rome brought this most enjoyable visit to the Sabines and to a most interesting part of the Abruzzi to an end.

A TRAVERSE OF MONTE GRECO IN THE ABRUZZI.

Before leaving home I wrote to Mr. Freshfield for advice and information about the Gran Sasso d' Italia.† He gave

* For further particulars I refer my readers to the excellent *Guida dell' Abruzzo*, by Dr. Enrico Abbate, which to my mind is the best guide-book I have ever seen on any country. My copy is of especial interest and value to me as it was given to me on leaving Rome by Prof. A. Brunialti, the president of the Roman Section of the Italian Alpine Club, on behalf of the Club, in recognition of a small service which I had the good fortune of being able to render to them.

† To any mountaineer who wishes to see the Abruzzi country I cannot too strongly recommend Mr. Freshfield's delightful paper on "The Gran Sasso d' Italia," *A.J.* vol. viii.

me this, and recommended me to pay a visit to the mountain town of Scanno and then to go to the Maiella, a range of fine mountains overlooking the Adriatic.

When in Rome, I received corroborations of Mr. Freshfield's recommendation from members of the Italian Alpine Club, who suggested that I should take advantage of the special railway facilities connected with the exhibition year and see the alpine railway between Sulmona, Roccaraso, and Caianello.

How I succeeded and where I failed I will now relate. I took train first to Avezzano, where I slept, and where I was awakened by the most terrible alarm clock I have ever heard. This enabled me to take a very early train on the Rome and Sulmona line and to see in broad daylight some really glorious scenery. The peeps of the mountains, especially up the gorge of Celano, were fascinating. Lovely and wholly unexpected views of mountain villages, castles towering upon crags, the great plain of the drained Lago Fucino, kept me on the *qui vive* owing to the inevitable tunnels which revealed, so often unexpectedly, fresh valleys and glens. An almost bird's-eye view of Sulmona and of the Maiella above were a fitting climax to this grand railway journey just before I left the line at Anversa. Here the railway is carried over a deep gorge on a grand viaduct of two tiers of arches, and at the same time it has a beautiful curve. I walked the couple of miles to Anversa, a quaint old town finely situated above the river Sagittario. Here I lunched on bread and wine and waited for the diligence to take me to Scanno.

The great natural attraction of Anversa is the Gole del Sagittario, where the road has been constructed partly along a natural terrace but mostly cut out of the rock. It is certainly a fine limestone gorge, and when the river is in flood it must be a grand sight, but I could not help feeling that it needed yew trees and ivy to give variety and brightness as well. Ruskin, writing about the Northern Apennines, says: 'The Apennine limestone is so grey and toneless, that I know not any mountain districts so utterly melancholy as those which are composed of this rock when unwooded.'* This is more true of the Northern than it is of the Southern Apennines; but still one feels it to some extent in the latter. Indeed, most limestone mountains are weak in colour, and if we expect to find the variety and beauty of colour or of form in limestone ranges such as what can be seen in those of granite or any volcanic rock or of slaty

* *Modern Painters*, vol. iii. chap. xv.

formation, we shall be disappointed. No! I am not forgetting the Dolomites.

It is about 9 miles from Anversa town to Scanno and the road goes through a pretty and well-wooded subalpine country. The Lago di Scanno is a lovely mountain lake reminding one of similar lakes in many other countries. The well-wooded shores and promontories and the little Santuario all' Annunziata add much beauty and interest to the scene.

A sharp rise brings us to Hotel Pace. The proprietor, a most obliging man, has been in America and is very go-ahead.

The situation of Scanno is fine, and it is a favourite resort in winter and early spring for ski-running members of the Italian Alpine Club. It is 3380 ft. above the sea-level.

The costume of the women is very quaint. They either wear a sort of turban on their heads, or roll their hair in bands of bright-coloured cloth into little ropes. When they walk or work outside, they draw up their skirts to their knees by tying a broad strap round the gathered-up skirts. The upper folds hang down and give a barrel-like appearance. As a festa was going on, I went into the church and saw there the women each one sitting on her fold of cloth on the floor.

Dr. Abbate thinks that the folk of Scanno have an Eastern origin. He states too that the Scannese dialect is a mixture of Greek and Latin.

As the electric light had only been installed in the town a few days, the most generous use was being made of it that I have ever seen. A motor omnibus made its first journey from Anversa Station to Scanno in the evening and the driver and officials had a great reception.

My host provided me with a guide to take me up Monte Greco and to descend to Roccaraso.

Monte Greco, the highest of the Monti Marsicani group, is 7490 ft. in height and undoubtedly possesses the most commanding position of them all, rising as it does with magnificent precipices of nearly 5000 ft. above the Sangro river South.

Barring the possession of an excellent pair of 8-lire Scanno mountain boots, my guide could hardly be termed a mountaineer. He talked a good deal to me about 'Paradiso,' and as apparently it was so easy to get there the question of directing my steps thither was at least worthy of consideration. Yes, but it turned out that there was an excellent mule-path from Scanno to Roccaraso over Monte Paradiso. When I learnt this my thoughts became worldly yet once again, and I told my friend that I preferred Monte Greco.

At 6.10 next morning we got under way. We had some miles of lovely glen scenery with green meadows, woods, and bright waters, where I looked, but looked in vain, for the kingfishers and water-ouzels which would have been present had it been in Yorkshire. It was so very like a Yorkshire dale too.

Up a steep hill, where we lost our stream, past some farms and a mouldering castle ruin. Beech-woods then came, and as it was hot I remembered the line of Virgil and we did sit for a few minutes 'sub tegmine fagi.' A cattle path led us through the forest to the treeless uplands. Here, on our right, the fine range of Monte Scalone suggested many snow and rock problems, some of which I fancy would be difficult to solve. We had Monte Greco, as a grand white beacon beckoning us to come, straight in front.

It was not easy to imagine amongst all this present snow that, in a few weeks, shepherds would be occupying the little huts which we saw on the shores of the frozen Lago Pantaniello. These rolling uplands and the mountains rising out of them reminded me of the Norske fjelde, the haunt of the wild reindeer.

We soon got on steep snow in good condition, and found a small cairn on a rock. My man at once understood it. Carefully removing a stone or two, a natural basin of pure water appeared, and this helped our good red wine. The basin was again covered up and we proceeded.

Up, and ever up, and the rustic went better than I. Steep here and there but always good snow. At 1.20 we gained the top.

And what a view too! Il Gran Sasso, 52 miles away, showed as a group of mountains, but there seemed to me to be no real monarch in the group whose supremacy none could dispute.

The Maiella were fine and certainly are a very attractive range. I had hoped to have seen the Adriatic over the valley of the Sangro, but looked in vain, as in that direction it was rather foggy. West were the finest snow mountains, but there too it was hazy. By far the most interesting feature was the bird's-eye view into the deep valleys and the thoughts which those views inspired. Amongst others were thoughts of the armies marching to victory or defeat in far-gone days, and in modern times as well. The Sangro river and the grisly towns Alfedena and Castel di Sangro seemed only the distance of the throw of a cricket-ball by a giant, so steep was the angle.

Yes, we have seen towns and villages from the Jungfrau, Mont Blanc, the Grand Combin, and from many another fine

mountain, but these views gave a different, yes, and in one sense, a higher inspiration, probably because the human element was less in evidence actually and in thought when on the great snow mountains in the Alps than when looking down into valleys so rich in historical interest as on a mountain such as Monte Greco, this great southern outpost of the Abruzzi.

Only once have I felt in the Alps the sentiments that the summits of the Apennines inspire. This was when walking, a few years ago, with my eldest daughter from Molveno, in the Brenta district, along a broad ridge from which we descended to Mezzo Lombardo. From this ridge we had, first of all, a marvellous view of the Adige valley, but, the great point which impressed us so deeply was 'the gate of the hills' below the Brenner, through which imagination pictured barbarian armies marching from their northern wilds to conquest in sunny Italy, or Roman legions on their way to the north.

There was a large snow cornice on the E. side of Monte Greco, but I saw in profile a projecting rock which I could reach quite safely and easily, and where I wished to take a photograph of the cornice. I started for it, but my guide rushed at me and pulled me back. I mildly explained that it was quite safe, and tried again. Upon this he invoked not only the Deity and the Blessed Virgin, but called to his aid such a long string of saints that to please him I abandoned my project. He shook both my hands and thanked me, I am sure with sincerity.

A steep snow-slope continued for many hundred feet below this corniced ridge. There were several rock ribs where a descent could easily have been made to snow suitable for a glissade, but, though we both had good alpine boots, I only carried a walking-stick and my companion a 6-ft. pole cut in the forest, so we went down the broad S. ridge. I found two places where a safe descent could have been made, but my guide, who I suppose firmly believed that he had already saved my life, would have nothing to do with them.

We must have walked a half-mile down the ridge and have descended several hundred feet when a perfectly obvious line appeared. I pointed it out, jumped on the snow, and had a merry glissade down. My friend plodded, face outwards, down a broad ridge and we soon joined forces. He professed that he knew the way to Roccaraso from the high plateau where we then were. I disputed his suggested route, but as I had not then a good map my argument fell flat. We got, as I feared, much too far S.E., and sudden^{ly} found ourselves on the top of a steep slope of hard-frozen snow, 700 or 800 ft. in



SUMMIT RIDGE OF MONTE TARINO.



W. C. Slingsby, photo.

Swan Electric Engraving Co., Ltd.

TOP AND EAST FACE OF MONTE GRECO.

height. With ice-axes this would have taken hours to descend. Up again, and, to my surprise, my guide crossed a steep snow gully where great care was essential. It could have been turned, but this would have involved much hard work. I said nothing, but followed. After weary hill turnings, I got a long glissade, and, in consequence, a well-timed rest, while my friend came laboriously down a scree slope.

This brought us to a great grass plain, Piano Aremogna, where were shepherds' houses but no water on the surface. Plains like this are very common in the Apennines. This was a most interesting and an ideal place for a review of troops. Over a hill on which a trickle of water lost itself in the sand, then through a copse bright with spring flowers, and at 7.40 we try to get into an hotel at Roccaraso. It is empty. We try two others, both locked and shuttered up until the Roman folk come in early summer to breathe good air and to make mountain excursions. The town seems empty. At last, an old dame tells us to go to a house near by, one which in the season takes some of the overflow from the hotels. A fine old man and his wife place five bedrooms at our disposal. We take two. An impromptu dinner is served which, for the most part, begins at the wrong end. It matters not.

The old lady, thinking that my stockings must be wet, insists upon my wearing a pair of hers, white upon which gaudily embroidered patterns had been worked. Slippers to match are provided, and I begin to think that I must have done something heroic to have earned this distinction. After racking my brains I fail to remember anything to justify the dame's recognition.

The bill next morning shows that Roccaraso has learned something from the tourists.

No doubt we had made a new route down Monte Greco. How often novelty, and distinction as well, are attained as the result of ignorance!

My guide was very easy to understand. Possibly he spoke good Italian as a foreign language acquired at school, in the same way as the Highlanders in Scotland, who speak Gaelic at home, use most excellent English when speaking to Englishmen.

He set off early on his journey through Paradise. I took the train to Caianello and by so doing passed through a most romantic country but little known to Englishmen and, for that matter, to the Italians themselves. As Caianello is on the Rome and Naples line it worked well.

The descent by marvellous curves from Roccaraso to

Alfedena; the wild and beautiful country abounding in surprises between Castel di Sangro and Isernia and the rich lands of the Volturno valley, combined to make this railway journey one of the most interesting I have ever had.

My small experience in Abruzzi, beginning at Cappadocia, provided me with much interest and many happy memories. I liked the people, who seemed to me to be full of grit, and of humour as well. They are a fine handsome race, and the number of tall men and women whom one meets is very considerable.

If anyone knowing the Alps wishes to make his own comparison between them and the Apennines, I strongly recommend him to go to the Abruzzi country. All mountains have their own particular charms and characteristics. No one loves the Alps better than I; but still I have room for appreciation of other mountains, and I do both admire and appreciate the Apennines and hope to climb before long Il Gran Sasso d' Italia by a remarkably fine rock ridge.

Yes, the Call of the Hills now includes a strong call to me from the Abruzzi.

LA POINTE ISOLÉE OF LES DAMES ANGLAISES.

By GEOFFREY WINTHROP YOUNG.

I JOINED H. O. Jones and his wife at Chamonix in the beginning of August. They had been spending their honeymoon in attempting some training climbs, preparatory to crossing to Courmayeur to carry out a long programme. But the weather had discouraged all efforts, and apart from a sensational crossing of a subalpine col, involving two attempts, in the effort to call upon Mr. Urquhart at his chalet, and an ascent with Truffer of the Aiguilles de l'M and Petit Charmoz, they had been able to accomplish nothing but valley walks. We had been hardly more fortunate. Knubel, Truffer, Arnold Lunn, and myself had managed to get up the Mönch after two days' waiting in the Bergli hut, followed by a 7 hrs.' snow wade down the Ewige Schnee-feld. Subsequently, with Mallory, Hugh Pope and Porter, Knubel and I had crossed the Col d'Hérens. In the course of this traverse in a fog we lost our way elaborately, contrived some dangerous and prolonged contours, and experienced a number of singular mist phenomena, the explanation of which gave Jones some

Aig. Joseph Croux
10,386 ft.

L'Inclité.
Dames Anglaises,
11,821 ft.

Aig. Noir de
Peuteret,
12,398 ft.



Direction
of Mont Rouge.

Dr. Preuss, photo.

Swan Electric Engraving Co., Ltd.

**THE FRESNAY SIDE OF THE AIG. NOIRE DE PEUTERET,
AND THE DAMES ANGLAISES.**

hours of interesting speculation subsequently at Chamonix. Leaving the energetic guideless party at the Bricolla alp, designing the magnificent climb which they carried out a week later on the E. wall of the Dent Blanche, I descended alone, for the second time in twelve years, the valley to Evolena, revolving many memories of the time when A. M. Mackay and myself, after a desperate crossing of the Viereselsgrat, had left the guides asleep in the Ferpèche hotel and descended, alike in our enormous appetites and dissimilar in our snow blindness, on the startled natives of Sion.

It was an interesting walk, in surroundings that recalled the impressions of an earlier climbing phase. One of those solitary rambles when the mind records the changes of time and balances the account of personal profit and loss. The first ten years of alpine mountaineering had closed on a margin of nothing but happiness. In the second five pleasure and pain might have been accounted evenly balanced. It was to be only a few days before the mountains opened the third page with the first of the series of tragedies that no later half of life could hope to redeem.

It was a very light-hearted and amusing company at Chamonix, for all the weather. Success in public recognition and private happiness had accumulated so rapidly for him in a few months that, as 'H. O.' remarked to me later in the Gamba hut, it would take him thirty years of normal life to live up to it. In such surroundings it proved impossible to realise to the full the news of Archer Thomson's sudden death, whom we had been expecting to meet at Courmayeur. Of the death of the third and last member of that famous climbing rope which during the last few years carried out a very remarkable series of explorations of the Welsh cliffs, H. O. was never to hear. The premature death of Leonard Noon, the brilliant young doctor who sacrificed his life to his researches, was a loss to science, to Cambridge, and to the mountaineering in which they both excelled, only second to Jones' own.

The Joneses were anxious to get to work, and gladly accepted a suggestion to cross without delay direct to Courmayeur, by the Col du Géant. The day was a long one for Mrs. Jones; but it proved delightful. We were able to inspect at leisure the cliffs of the Grépon, which we had not seen since we ascended them the year before. They were now all coated with ice and snow. The glacier fall was easy and the sun intensely hot, persuading us to a very restful progress. We waited at the Rifugio until the shadows fell, and then ran

down to Courmayeur. As we approached the village H. O. strode ahead, delighting to point out to his wife his familiar haunts and gîtes and short cuts. His reception by the people must have shown her still further how much this was to him a real home country.

The very next day, the Sunday, they determined to ascend to the Gamba hut, which had not yet been officially opened, under the Punta de l'Innominata. Besides the two guides we took up a porter with provisions. The hut is magnificently placed in the centre of the great amphitheatre of the S. face of Mont Blanc, and it is likely to be the starting-point in this region for a whole series of splendid new expeditions.

When we arrived there were only two mattresses, a few blankets, and no stove. To warm ourselves, Knubel and I used the sunset for a scurry across to the Fresnay Glacier, to prospect a way through the séracs for the morrow. In the previous year it had been impossible to get on to this glacier at any point. While I was climbing along the rim I came on the remains of an old ladder. There had been, until last year, so few visitants to this glacier that I knew it must be a relic of the search party for Professor Frank Balfour.

The short night on the damp boards was the coldest I have known; and we were ready to start early. H. O. and I were anxious to cross the glacier principally for the sake of exploring the W. wall of the Peuteret Ridge, which had never yet been ascended anywhere between the upper basin of the Fresnay and the gap to the S. of the Aiguille Noire. We also had a hope that we might be able to force a way somewhere on to the Dames Anglaises, by a couloir just S. of the Aiguille Blanche.

Thanks to our exploration we got through some very cranky ice at the edge of the glacier by candlelight, and slanted across on the line of least crevasses to the base of the Aiguille Noire. There, as we had partly foreseen, we encountered an hour of the wickedest ice of our experience while ascending two big waves on to the upper basin. The heavy snow summer had only half repaired the clefts of the previous hot year, and the ice was domed and balanced to a degree that tested nerve and skill to the utmost. One last passage remains in the memory; a traverse on an ice ledge round a perpendicular sérac, thence across a 15-ft. ice suspension-bridge, and up a vertical face of 40 ft., the last few steps on a flake that rang hollow. Its danger was not so much in its own fall as that any sudden shock might produce a general chaos in the crazily balanced walls, towers, and domes about us and below our feet.



THE SLAB.



H. O. Jones, photo

Swan Electric Engraving Co., Ltd.

THE SECOND CHIMNEY.

Above this, it was easy going to the foot of our couloir. Here we breakfasted, and stamped a zig-zag up its easy angles, still uncertain whether we should attack the isolated point of the Dames Anglaises above us on the left, or the Northern of the three grouped points on our right. Both of them we knew to be unvisited.

The sun shining on the peak on our left decided us, for the slabs on the other point remained cold and icy, and were evidently rarely exposed to a more genial warmth.

Soon after, the base of the peak began to rise above the couloir in great precipices on our left, and in order to force a way on to a rather hopeless-looking W. arête, that seemed to lead up to the summit, we jammed ourselves up a crack in the S.-W. wall. For 200 ft. it was steep and cold and difficult. Then Knubel announced that it would go no further, and I was glad to be able to give the word for a retreat : it had been altogether too unpromising. As I now reached the bottom first, I led straight up the couloir, keeping close to the wall on our left, in the hope of meeting the sun on the Col, and of at least having a look round on the top. We reached the Col between the Northern point and l'Isolée in deep wet snow. The sun brought us delicious warmth, and we had a magnificent view of the whole ridge and out over the Brenva Glacier. It was interesting to have our judgment confirmed, as to the right side to attack any of the points of this ridge, by the sight of the avalanches beginning all along down the face of the E. wall, while snow and stones remained silent and firm on our W. wall above the Fresnay Glacier. We stood on a very minute notch. On the S. the slabs rose steeply and frostily, flaked with ice and fresh snow, to the northern of the Dames Anglaises. The ascent would have been feasible, but it looked unattractive. As a matter of fact, as so often happens in the case of these sensational-looking aiguilles, their needle-like appearance is confined to the side views from E. and W. From the N. they look a tumbled broad-shouldered mass, with a number of projecting spikes. Only the quaintly shaped summit of the central peak sat like an ill-cut champagne-cork on the top of the group. From our point of view, undoubtedly, it looked the only point worth climbing.

But on our N. the sweeping lines of the isolated peak sprang suddenly and darkly above our heads in very finished *aiguille* fashion. For the first 40 ft. the wall looked an overhang. But the rock was sound and dry, and Knubel,

somewhat to my surprise, expressed himself as absolutely confident that we could reach the summit.

He started very cheerily, and Truffer followed to back him up over a delicate-looking stretch of overhang about 20 ft. up. After the first 40 ft. the angle eased off, and we found an easy traverse in to our left. There followed two right-angled chimneys with very little hold, each some 30 ft. in height. Then a broken crest of rock, with snow on its rough surface, gave a comfortable approach of 80 ft. on to a small, almost level, snow-covered shoulder just under the final peak. This shelf held a huge rock, for a belay, and gave us a thoroughly sound take-off, of the British type, for our last and most formidable stretch of climbing. It is just possible that a traverse round the hidden angle to the N. might have offered an alternative route, but it never occurred to us at the time. The temptation of the 'slab' was too great. This slab rose straight from our feet, almost sheer, to a slight notch in the skyline, about 40 ft. above us. The first 12 ft. seemed to offer no hold at all; but Knubel clung up them in some extraordinary fashion, until he could get the point of his axe into the lower end of a threadlike crack that split the slab, from the shoulder downward, for half its height. He pulled himself up, got the axe fixed again somewhat higher in the crack, and stood on its head. Thence he pulled out over an overhanging block that choked the wider top of the crack. From an excellent stance he hoisted Truffer after him; under whose less delicate tread the axe slipped down till it caught again in the bottom of the crack. We followed with desperate struggles, and from the nick found an easy little ascent on to the diminutive summit, where Knubel was already sitting. In all the height from the last snow shelf must be about 80 ft.

The grouped Dames Anglaises looked even less interesting from this point, lost against the magnificent precipices of the Aiguille Noire. We were able to confirm a number of speculations and designs as to possible new routes in the great amphitheatre of Mont Blanc: a satisfaction, as this had been our primary object in undertaking the ascent.

The day clouded in, and chilled the rocks with unpromising snow. We altered the order for the descent, Knubel and myself going last. It was not entirely easy, though Knubel made little of the descent of the slab on a doubled rope. We were back on the Col in about the same length of time as it had taken us to ascend. The lower couloir, which had never been

Alg. Noire de Peuteret.

1

Central (and highest)
summit of les Dames
Angaises.



VIEW SOUTHWARD, FROM L'ISOLEE.



H. O. Jones, photo

Swan Electric Engraving Co., Ltd.

THE SUMMIT, FROM THE LAST SHOULDER.

out of shadow, had only softened sufficiently to make an easy trot of the descent to the glacier. We had been at pains, on the summit, to trace out an easier traverse of the Fresnay than we had followed in the morning; and had decided to cut straight across to the foot of the Col de l'Innominata, so as to come down on to the hut from between the Punta and the Aiguille Joseph Croux. The traverse was not difficult, with the exception of the problem of keeping the line chosen near the far edge; and here H. O.'s memory and instinct proved of excellent value in bringing Truffer back from several tempting lines of less momentary resistance. The ascent of the Col itself, in fog and fresh snow, was the most unpleasant portion of the day, and Knubel came in for much, probably undeserved, abuse for following a loose and icy chimney that was no doubt as good as any other alternative.

We met Mrs. Jones at the hut, and H. O. and she joined in a laughing declaration of pleasure that nobody could now say that their marriage had interfered with serious climbing.

It was a very fine expedition, a continuously interesting day of splendid icework, crowned by a sound and thoroughly delightful rock climb of first-class order. H. O. left the naming of the point to me, and after due thought I adopted an unconscious suggestion by Joseph Croux given while we were discussing the climb in Courmayeur. Anyone who knows the view of the peaks from the E. will recognise the appropriateness of the name l'Isolée for the solitary summit holding itself apart, in a drapery of heavy dark rock-folds like widow's weeds, from the company of its three more fantastic-looking sisters.

Times, from a record by H. O. Jones:—

Hut left at ..	4.30	A.M.	Summit	10.55
Fresnay Glacier ..	5.10		„ left	11.30
Top of Séracs	7.10		Col	12.45
Foot of Couloir ..	7.30		Foot of Couloir ..	1.15
(½-hour halt)			Col de l'Innominata	2.45
Top of Col	9.45		Hut	3.30

I should like to leave the story as I left my friends, in a moment of happy assurance that the past was repeating itself, of realisation that good comradeship with the hills and with one another had only been cemented by change. But there has been so much foolish writing about the accident that followed, that I think it right shortly to restate the facts as we know them. That evening Dr. Preuss, who was making his

first acquaintance with big mountaineering conditions, came up to the hut, and we amused ourselves with erecting the stove and with watching the guides porting huge blocks for its pedestal; little Knubel, whose strength is unaccountable in so slight a frame, being an easy first. The snow fell all night, and in the morning of Tuesday, as it lay well below the hut and there could be no prospect of climbing, I decided to descend, to meet letters and act as a base for any future campaign. The Joneses, after some debate, decided to stay up for another day, undisturbed in the quiet of the camp life and of each other's company. I reached Courmayeur in the most drenching, tropical rain I have ever known, down paths racing with black flood-water. Knubel even gave out on the way and sheltered for 2 hrs. under a rock. The next morning early I got a note by the porter from H. O., saying, to my surprise, that they had determined to stay up yet another day. That morning, Wednesday, it cleared, and in the afternoon I sent back the porter with a note to H. O. that I was ready, if he could let me know in time, to start that night, join him before dawn, and proceed for the great climb which we had in prospect. There was in fact no time for an answer, and I sat all the evening watching a frosty, starry sky, and undecided whether or not to start and walk all night. But Knubel and common sense prevailed. Early on Thursday morning I got another note from H. O., written before he started from the hut. He left it to me to settle whether we should attempt our climb on Friday, though he thought the condition of the mountain advised a wait until Saturday. If, however, I came up, I was to be at the hut before four, as he intended to make a small ascent on the Monts Rouges, and, unless they met me, to descend with his wife from the hut in the afternoon. She would not climb that day as she was not well. He added an urgent hope that I should come. Dr. Preuss could not understand English. He tells me that the day before they had done some scrambling in mist on the Innominata, and in the afternoon, in bright sunshine, had lain out and enjoyed the views from the Châtelet. Mrs. Jones had sung to them all the evening. Apparently, after the letter to me had been sent off, it was decided that she was well enough to accompany the party on the Monts Rouges. They crossed the Fresnay Glacier slowly, Dr. Preuss preceding them unattached, as was his wish, to search out the best way.

They rested for a long time on the slopes of the easy Col north of the Monts Rouges, the passage between the Glacier Fresnay and the Fauteuil des Allemands. The N. arête

of the Monts Rouges, not previously ascended, is deeply indented, and it was decided to avoid most of the towers by traversing low down on the W. face, regaining the arête nearer the summit. Dr. Preuss told me within a few hours of the accident that in view of H. O.'s far greater experience he had not ventured to make suggestions to him about the order adopted in roping, but the point arising in conversation at one of the halts, H. O. explained that, as they would have to be 'traversing' during the greater part of the ascent, he preferred to put his wife between himself and the guide. The arrangement, of his own choosing, by which Dr. Preuss went unroped ahead, as it searched out the route, further recommended this order, as it relieved H. O. of much of the responsibility of directing the line. In the matter of the order H. O. had to select one of the two common alternatives, the weakest last or the weakest in the middle, between which, in traversing difficult rocks, it is the practice of rock-climbers to decide according as they have reason to expect more 'traversing' or more 'ascending.' It is easy, after the event, to say that the choice of the other alternative might have averted the full consequences of the accident from some at least of the party. H. O. made his selection after full consideration of the climb before him, and the selection seems to have been justified by the nature of the climbing during the greater part of the day. I have yet to meet the mountaineer whose judgment, in a choice that must always be largely influenced by what is in sight at the moment, could be considered so superior to H. O.'s that it would entitle him to criticise this decision. At the moment of the fall, Truffer was climbing out over the left edge of an easy chimney, just returning to the arête. Mrs. Jones was a few feet below, and inside him, on a wide platform of grass and rock, where, as Knubel reported to me later, there was room to have pitched a tent. H. O. was standing rather outside her, and immediately below Truffer. Dr. Preuss had been doing a quantity of up and down climbing in order to find the easiest route. He was watching the party from just above, and was in communication with H. O., who informed him that he had decided to follow him up this corner. Only Truffer was visible at the moment. Truffer had been climbing, as usual, very carefully, testing all the holds; it is probable that he also tested the small knob of rock on the edge, which Dr. Preuss had used, and which afterwards gave way. But being a heavy man and a rougher climber, he probably altered the direction of the pull of his hand as he raised his weight on to the corner. The knob broke

away, and his left foot, as was afterwards seen, slipped on a sloping foothold below. We have reason to believe, from the account of the positions in falling, that he fell directly on to H. O., knocking him head downwards from his holds, and consequently releasing the rope from any belay round which H. O. may have secured it to protect Truffer's ascent.

Dr. Preuss acted with the utmost nerve and decision, the more remarkable in so young a climber. Believing the hut to be uninhabited, he descended rapidly and directly, by way of the Fauteuil, to Courmayeur. On the way he met my porter bringing up provisions after me to the hut.

Knubel and I had left the hotel early, and raced up to the hut in just over the 2 hrs., expecting to find Mrs. Jones alone. We at once examined the Monts Rouges, and were surprised not only not to see the party, but even more not to hear their voices; for the great amphitheatre of the S. face is a whispering gallery for sounds, and, previously, Mrs. Jones had been able to hear our voices during almost the whole day of our far more distant tour upon the Dames Anglaises. I soon persuaded myself that they had decided to descend on the far side through the Fauteuil, and that H. O. would come round later, or send me word by the porter. But Knubel was thoroughly uneasy, with some curious instinct, and ran in and out all the afternoon examining all the possible faces of the nearer aiguilles. At about six we heard the porter shouting half an hour below us, on the path from the valley. Through the telescope I could see that he still carried the sack, so I reassured Knubel; but sent him down to relieve him in case he was protesting at the weight. Through the telescope I watched them talking with the usual freedom of gesture. First the porter swept his arm outwards, indicating the far side of the Monts Rouges (Dr. Preuss' descent?) and I knew all was well; but his second gesture swept up and down the great precipices of the nearer wall; and Knubel had little to tell me when he rejoined me half an hour later.

Knubel and I crossed the séracs that night by the failing light, and we found them with some little difficulty, enclosed, on the far edge of the glacier, between the slabs and a surrounding semicircle of shattered ice-crests. It was dark when we got back to the hut, and met Dr. Preuss with the party sent up by Mr. Eckenstein. I left Knubel and Dr. Preuss to superintend the descent the next day, and reached Courmayeur by ten o'clock. The authorities kept the telegraph open for us, and gave us every possible assistance. The

guides and residents showed unforgettable evidences of their sympathy and affection for the friends who in their summer life, and still more now in their death, had chosen this village as their second home.

SCRAMBLING IN THE CARRARA MARBLES.

BY L. S. AMERY.

WHEN the last hope of fair climbing weather in the Dolomites was dissipated by a week of snowstorms, there recurred to my mind a rumour I had once heard of real climbing to be had in the mountains above Carrara. My guide, Zagonel, had heard the same from a climber, Dr. Vanzetti, the year before. I wired to Dr. Vanzetti and, equipped, by his courtesy, with all the necessary information as to the best point of attack, we—that is myself, my brother, Captain Amery, and our guides Z. Pompanin and B. Zagonel—left San Martino on September 14 for Massa, on the line from Genoa to Pisa. From Massa we walked up, past countless marble cutting works, to the village of Resceto, and thence, duly provisioned and accompanied by the local guide, to the Rifugio Aronte, the Italian Alpine Club's hut in this region. The hut is primitive, but beautifully situated at a height of some 5600 ft., with a view down the Resceto valley over the Mediterranean to S. and W., and across the valley of Carfigliano, with its woods of beech and chestnut, to the long ridge of the Apennines to the N.E.

The mountains of Carrara, or Apuan Alps, form a small group quite distinct from the Apennines, from which they also differ markedly in their bold rocky outlines. They include roughly a dozen peaks—Monte Pisanino, Monte Cavallo, Monte Grondilice, Pizzo d'Uccello, Monte Sagro, Monte Tambura, Alto di Sella, Monte Altissimo, Monte Pania, &c.—rising to a height of from 6000 to 6700 ft. and spread over an irregular area some fifteen miles long with a width of five or six. Up to a height of 5400 to 5800 ft. practically the whole mountain mass appears to be solid marble. There is a quarry level with the hut whence huge blocks of many tons in weight are lowered by easy stages by the steep footpath all the way down the valley. At several points, more particularly on the Carrara side, the marble continues right up to the summits. But most of the main peaks of the range are, for the last few hundred feet, composed of sundry varieties of limestone, in some places not unlike dolomite, in others much more shaly and treacherous. On some of the peaks there are grass slopes right up to the summit; others are all rock and scree. A few, most notably Pizzo d'Uccello, the 'Matterhorn of the Apuans,' have a truly Alpine boldness of

contour. All of them can be ascended, on one side or another, with little more than ordinary pedestrian agility.

Our first impression was one of disappointment, and we were inclined to come to the conclusion which Freshfield and Tuckett, I believe, reached a generation ago, and which nobody seems to have disturbed since, that there was nothing really worth attempting from the point of view of the climber. A day's scrambling on Cavallo and a reconnaissance from the summit of Monte Tambura, however, revealed the fact that there was no difficulty in inventing routes which might offer first-class rock work, and during the next few days we worked out and proved some half a dozen such routes, without by any means exhausting the possibilities of the range. A brief note of these routes may be of interest to readers of the Journal.

Monte Cavallo from the E.—A very steep rock-face of 600 feet or thereabouts. The climb starts in a chimney directly below a large white patch of rock under the summit. The first 250 to 300 ft. are chimney work, some of it distinctly interesting. A short steep wall is followed by a series of traverses to the left on a very exposed face, after which a comparatively easy stretch of rock leads direct to the top.

Monte Cavallo from the S.E.—This is a rather artificial route, but offers, possibly, the best bit of scrambling in the whole range. A steep and difficult bit of wall, immediately above the hut, leads to a slanting chimney offering a variety of interesting features, though marred in places by tufts of grass, for a length of some 200 ft. or more to the ridge. A second still more interesting chimney some 80 ft. long, overhanging and beautifully devoid of definite holds of any kind for the last 10 ft., and a sporting little wall, steep but well provided with holds, complete the actual climbing.

Grondilice from the E.—A straightforward rock scramble of 350 ft. or so with one or two interesting bits. We descended by a chimney on the S. face which would make a good alternative route.

Pizzo d'Uccello from the E.—This looked very promising, as the mountain on this side presents bolder and longer rock arêtes than any other of the group. Unfortunately the 'Matterhorn of the Apuans' shares in a marked degree the rottenness of rock which characterises its great namesake, and I cannot describe the route we took as very satisfactory. Safer and much more interesting would be an ascent by a narrow crack, followed by a broader and fairly sporting chimney on the S.E. by which we descended.

These descriptions may serve to indicate that there is quite good rock climbing to be found in the Apuans, at any rate for those who look for it. I do not mean to suggest that they offer an alternative to the Alps, the Rockies, or the Himalayas. But they are

well worth a visit by any mountaineer who may happen to be within range, while for residents in Central Italy they should afford not only a splendid training-ground, available practically all the year round,* but a mountain resort with a very genuine and distinctive charm of its own.

I might add that we found the local guide, Giovanni Conti, a most obliging, useful fellow, a bold and active cragsman, and most willing to learn from our guides how to manage a rope. A very full and interesting guide to the Apuan Alps, giving a complete historical, geological, and botanical, as well as a mere topographical account of these mountains, was published in 1905 by the Ligurian section of the Italian Alpine Club.

RIDGE WANDERINGS IN THE CENTRAL GRAIANS IN 1912.

(1) The frontier ridge between the Grande Sassièrè and the Rutor.

The whole length of this ridge does not offer any serious obstacle. During the first day we were much delayed by being obliged to take shelter from violent thunderstorms.

<i>Aug. 21.</i>	3.5 A.M.	Leave Hôtel Moris, Val d'Isère.
	9.30	Grande Sassièrè.
	11.10	Petite Sassièrè.
<i>Aug. 22.</i>	12.30 P.M.	Pointe des Pattes des Chamois
	2.25	Becca di Suessa.
	4.0	Plan Chalets.
	4.30 A.M.	Leave Plan Chalets.
<i>Aug. 23.</i>	7.35	Archeboc.
	9.10	Ormelune.
	11.15	Col du Mont.
	2.0 P.M.	Bec du Mont.
	4.0	Chalets de La Sachère.
	4.20 A.M.	Leave Sachère Chalets.
<i>Aug. 24.</i>	9.0	Vedette.
	9.55	Pointe de Loydon.
	2.0 P.M.	Leave Chalets de L. Sachère.
	3.55	Sainte-Foye.

(2) The frontier ridge between the Pointe de Galise and the Tsanteleina.

The Point de Calabre was ascended by what may be a new

* In winter, and usually at Easter, snow and ice are there in abundance to add interest to many climbs which might seem comparatively dull in summer.

46 *Ridge Wanderings in the Central Graians in 1912.*

route, *viz.* from the Col de Rhême Calabre by the S.-E. face, joining the E. arête, a few minutes from the top, between the top and a little peak which is slightly lower a few yards along the ridge to the E.

Aug. 27. 3 A.M. Left Val d'Isère.
 7.30 Roc de Bassagne.
 10.35 Pointe de Calabre.
 12.40 P.M. Pointe de Bazel.
 2.15 Lower Cime de Quart Dessus.
 2.40 Higher Cime de Quart Dessus.
 5.30 Arrive at Val d'Isère.

(3) The ridge of Mont Pourri.

Aug. 29. 3.55 A.M. Leave Marais Chalets.
 9.10 Dôme de La Sâche.
 11.50 Col Puiseux.
 1.5 P.M. Mont Pourri (in 1 hour's actual
 going from the Col. Puiseux.)
 4.25 Aiguille du Saint-Esprit.
 4.50 Grand Col.
 7.45 Silvin's Inn, Nant Croix.

(4) The Bellecôte Ridge.

Leaving Nant Croix on August 29 at 2.30 A.M. we climbed the Sommet de Bellecôte and along the ridge to the Aiguille du Midi. Descending we crossed the Col du Palet to the Lake of Tignes and reached Val d'Isère at 6.15 P.M.

(5) The ridge between the Tsanteleina and the Bec de l'Invergnan.

Sept. 3. 2.45 A.M. Leave Val d'Isère.
 6.0 Col de Bailletta (the Col de
 Rhême would have been better).
 9.5 Col de Tsanteleina.
 9.35 Pointe de La Goletta.
 10.24 Col de Goletta (14 minutes from
 the Pointe).
 12.23 P.M. Pointe de Bassac Déré.
 2.15 Mont Bassac Sud.
 3.10 Grande Traversière.
 4.35 Mont Bassac Nord.
 7.15 Reach the inn at Fornet in Val-
 grisanche.

All the above times include halts. Pierre and Justin Blanc were the guides except for the Pourri and Bellecôte. On these latter climbs Justin came along with me. All this country is peculiarly well suited to ridge rambling. The rock specialist, however, would find little to satisfy him.

C. F. MEADE.

IN MEMORIAM.

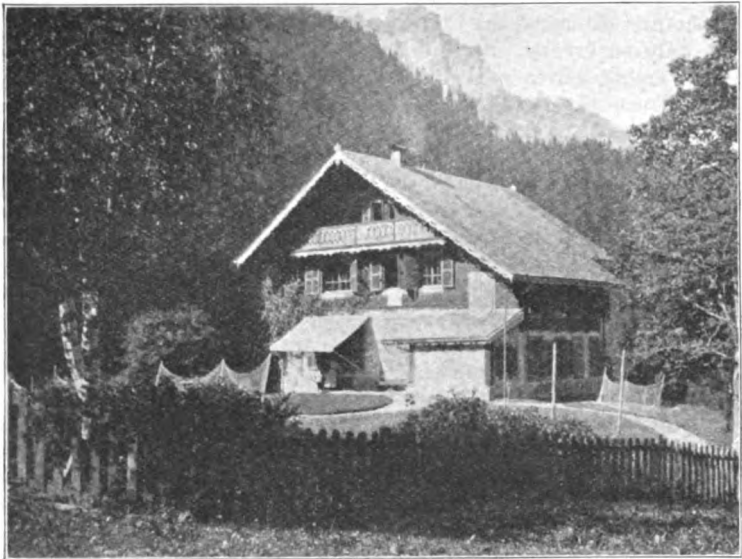
RT. HON. SIR ALFRED WILLS.

THE year that has just closed has been singularly and sadly marked by the loss of several veterans of the Club, among whom must be named Sir Alfred Wills, Mr. R. Walters, Mr. Clinton Dent, and the Rev. H. A. Morgan, Master of Jesus College, Cambridge. Speaking in reply to the toast of our 'Founders and Early Members' at the Jubilee Dinner of the Alpine Club in 1903, Sir Alfred mentioned that out of a number of some five-and-twenty who fifty years ago had met at the first dinner of the Club in 1858 himself and Mr. Walters were the only survivors. Both of them have now passed away—Wills in his eighty-fourth year, on August 9 last, while by a melancholy coincidence the death of R. Walters was announced as having occurred only a day, perhaps two days, later. Of the original members of the Club, therefore, not one at this present survives. The thought carries us back to days when the High Alps had been but imperfectly explored, and when mountaineering in the modern acceptance of the term was in its initial stages, practised by few and with more of mystery and awe attached to its pursuit. An undiscovered world of ice and snow was revealed to the early pioneers of the Alps; a world new to them, but so inexhaustible in its grandeur and variety that there seemed ever new ground vacant for successive generations to explore, some new combinations of peak and pass, some hitherto unassailed pinnacle to vanquish.

This is not the place, nor are we indeed qualified, to give an account of Sir Alfred Wills' public professional career, but a few leading facts relating to it and to his early life and education may be stated before, in accordance with the more appropriate function of this journal, speaking at greater length of Wills in his long connexion with the Alpine Club, of which he was the third President, 1864–1866. And it must be remembered that his constant visits to the Alps were after all but holiday interludes, earned, and often hardly earned, by months of heavy labour at the Bar and on the Bench.

Alfred Wills was born on December 11, 1828. His father, William Wills, J.P., was a solicitor of high standing and reputation at Birmingham, well known also in the profession as the author of an essay on the 'Principles of Circumstantial Evidence,' of which there have been several editions, the last two of which, the fifth and sixth, were carefully revised by his son, and were completed and brought up to date by the addition of a large number of cases with valuable annotations and explanations. In the edition of 1912, in the preparation of which much thought and labour were expended, the great advances in the method of detecting crime and criminals which have recently been made are pointed out. This edition was, indeed, published on Wills' eighty-third birthday. As the entrance to the Public Schools

and older Universities was then practically barred against one who came of an old Unitarian family, the choice for Wills was more limited than it should have been; but he was educated with excellent results at the Birmingham and Edgbaston Proprietary School and at University College, London, taking his degrees afterwards with high distinction at the University of London in the faculties both of Arts and Law—1849, 1851. Wills was called to the Bar by the Middle Temple, November 1851, and joined the old Midland Circuit, on which he went regularly for some years, but later, on a readjustment of the Circuits, he elected for the North-Eastern as it was then



THE 'EAGLE'S NEST,' IN THE VALLEY OF SIXT.

constituted. He took silk in 1872; was a member of the Council of Legal Education, 1876; Recorder of Sheffield, 1881; and in July 1884 was appointed by Lord Selborne to a seat in the Queen's Bench Division of the High Court of Justice. To some it seemed that this promotion had been slow in coming, but there is reason to believe that the delay was caused by an impression, surely not justified by the event, that his health could not be depended upon and might prove unequal to the work. It is true, indeed, that some years before, in 1871, his health, owing to obstinate insomnia, had broken down, but a long voyage to the East, with several months on his return to Europe in the spring of 1872 spent in the open air at the 'Eagle's Nest,' had effected a complete recovery, and he was never again constrained to absent himself from work. He held his position as Judge for twenty-one years, and on his retirement in 1905 was made a



Savioz, photo (Chamonix).

Swan Electric Engraving Co., Ltd.

ALFRED WILLS AND AUGUSTE BALMAT.

(Chamonix, August, 1857.)

member of the Privy Council, on the Judicial Committee of which he sat occasionally when summoned. Character made Wills a strong judge. He was just, patient, courteous, firm in the discharge of his duties, scrupulously careful in weighing his sentences, yet always full of pity, making large allowance for the fallen. Nor did he lose sight of their future. He was deeply interested in the Royal Society for the Assistance of Discharged Prisoners, attending its meetings whenever he was able, and assisting with his advice both before and after his retirement from the Bench.

In 1846 we have the first records of Wills' visits to the Alps—visits which with few interruptions were continued yearly almost to the close of his life. Upon these earliest journeys space does not permit us to linger, but Wills' notes upon them recall, what few can now remember, the very different conditions under which Switzerland was then approached. A week might well be consumed over a journey now comfortably accomplished in twenty-four hours. Long hours in the 'interior' of a cumbrous diligence half smothered in dust was often the portion of travellers in the middle of the last century. And then the inns! Of these it can only be said that when they were good they were occasionally very good, but when, as was often the case, they were bad, they were horrid, very horrid! 'Wanderings in the High Alps,' one of the most charming as it was one of the earliest examples of modern Alpine literature, was published in 1856, and a second edition was called for in 1858. The subject of the book was attractive in itself, and Wills was well qualified for its interpretation by his enthusiastic admiration of natural scenery, of Alpine plants and flowers, and by his interest in the study of glacial phenomena. He deprecated the notion of being a scientific botanist, but he had certainly acquired a thorough working knowledge of the science as the rare collection of exotics and other ferns which he afterwards gathered into his greenhouses at Esher would have testified. Among other various expeditions described in this volume a vivid account of an ascent of the Wetterhorn is included. This mountain was said to have been ascended once before by two guides, but the authority for this is somewhat vague, and Wills was certainly the first who can be said with any confidence to have stood upon the real highest peak of the Wetterhorn proper. A climber in those days, it must be remembered, had many difficulties other than natural to encounter, owing to the oppressive Trade-Union regulations among guides at the various centres, especially at Chamouni. There the first man on the rota, however incompetent or ignorant, had to be engaged for an unknown, and what might prove to be a dangerous, expedition. The number of guides, often excessive, and at exorbitant charges, to be taken was strictly prescribed, and thus the cost of an expedition might be run up to a prohibitive amount. With the assistance of his old friend Auguste Balmat, Wills managed on occasion to circumvent these hindrances, but they were a continuing annoyance till some years later, when the system was reformed and relaxed.

In August 1857 Wills first saw the Plateau des Fonds as he was descending from the Buet with Balmat and an English friend. 'The scenery struck us as uncommon in character and unique in beauty, and as we stood at the edge of the level ground it passed through my mind what a glorious site it would be for a Chalet.' A second visit having strengthened the impression, Wills proceeded to make inquiries as to the price and ownership of land in the neighbourhood. The land, it appeared, belonged to the Commune of Sixt, subject to extensive rights of the pasturage and wood-cutting which might be exercised by every proprietor of land in the Commune. An entertaining account of the negotiations which ensued with the Commune is given in the 'Eagle's Nest' and is still of interest. Briefly it may be said that a strong opposition, headed by Monsieur le Curé, stood out against the sale; there would, it was urged, be a Protestant crusade in the valley; domestic purity, religious orthodoxy would suffer; the mountain would be cut up into building patches. It was nonsense to talk about a place for summer recreation, no doubt a vein of gold-ore had been discovered, and their forests were to be made fuel for smelting furnaces, etc., etc. On the other hand, there was, as it proved, an equally strong party in favour of the sale, and fortunately Wills received valuable help from the Intendant of the Province of Faucigny, Count d'Elia. This was all, of course, before the annexation of Savoie to France. When the matter came on for the decision of the Council of the Commune, there was a long and stormy sitting. Fourteen out of fifteen counsellors were present, and when the vote was taken the numbers were equal—seven to seven. By law, however, the Syndic, or Mayor, had a casting vote. This was given in favour of the sale, which was therefore carried by the casting vote of the Chairman.

In the autumn of 1858, when he went to take possession of his property, Wills naturally felt nervous as to the reception which, under the circumstances, he would receive. But his fears were soon dissipated, for on reaching Samoens, about a two hours' walk from Sixt, he was waited upon by a deputation from the Council of Sixt, who had been sent, very much to their credit, to assure him in the name of the Commune that a hearty welcome would be given to him by all parties. That he had been opposed honestly on public grounds, but now the matter was settled their only wish was to receive him as a friend and to offer him every facility for carrying on his operations. To this spirit the Council uniformly adhered. Friends and opponents vied with one another as to which could serve him most effectually.

In his early wanderings in the Alps his wife, a daughter of Mr. George Martineau, had been his constant companion; together, too, they had worked out the plans for the construction of the Chalet 'of which she was the only architect: the very details of the building were hers.' On September 29, 1858, they planted with their own hands the stakes which were to mark out the limits of the building,

and then Wills, with Balmat, laid out a beautiful winding path leading from the bridge over the Giffre through their own property up to the Chalet. As they left the plateau for the last time that season, his wife said to him 'I wonder whether we shall ever be here together again.' They were not; she died after a sudden illness. But we cannot intrude upon these privacies. His volume, 'The Eagle's Nest in the Valley of Sixt: a Summer Home among the Alps, together with some Excursions among the Great Glaciers,' 1860, is dedicated to her memory.

The 'Eagle's Nest,' for so the Chalet had been named, was an ideal home for mountaineers, an ideal school of mountaineering. The formidable precipices of the Buet, the savage ledges of the Tinneverges, the couloir of the Pointe de Salles, afforded famous grounds for climbers. Wills himself, light, active, steady, was a first-rate mountaineer, excellent alike on rock and ice. The air off a glacier seemed to fill him with fresh life, to renew his youth; and, although the 'Eagle's Nest' stood at an elevation of over 4000 ft., he used often to say that he was longing for glacier air. Hither, then, as soon as the Circuit was over, he resorted year after year with his wife and children—born mountaineers. Wills had married again, a daughter of Mr. Taylor, of Starston, Norfolk, a gracious lady, whose husband's friends were her friends, and who presided over the overflowing hospitalities of the Chalet with a loving kindness and attention that left a tender memory with those who had the privilege of sharing in them. Among the friends of elder date may perhaps be named in passing—but only named—Welby Heath, the companion of many early excursions; Adams Reilly, who was largely by Wills' persuasion and encouragement induced to make his beautiful map of Mont Blanc; Loppé, the artist; L. Sturge; H. Pasteur; Arthur Milman. Wills loved, indeed, to gather in succession his friends about him that they might share his enjoyment and learn something of the beauties of the district in which he himself so much delighted; and which were otherwise by no means easy of access. Occasionally, indeed, a friend fresh from the Temple would be taken rather aback when invited for an afternoon stroll up what to inexperienced eyes looked a very unsurmountable precipice. As years went by, Wills acquired in truth a most intimate knowledge of the district far and near; no glen, couloir, or point of vantage escaped his notice or was left unvisited. Nor did he confine himself to his own particular neighbourhood. Long excursions were made to other remoter parts of Savoy and Switzerland, and few had ultimately a wider acquaintance with the Alps than he.

His predilection, however, led him oftener perhaps to Chamouni than elsewhere. There is no finer walk in the Alps than from the 'Eagle's Nest' to Chamouni by the Col d'Anterne, the Val Dioza, and over the Brévent. The view from the Col d'Anterne on a clear day is in truth superb. Mont Blanc is suddenly revealed towering

in unsullied majesty over the Brévent, which serves in the mid distance as a scale by which to measure the height.

Of Mont Blanc Wills made several ascents. 'Let no man,' he wrote, 'who has health and strength be deterred from the expedition by the idea that it is commonplace, beneath his notice, or too well known to excite his curiosity. I believe no parallel can be found in the glacier world to the ice scenes between the Grands Mulets and the foot of the Corridor.' A striking account of one ascent made under peculiar circumstances with Professor Tyndall in 1858 is given in the 'Eagle's Nest,' pp. 221-243. Balmat had mentioned to Dr. Tyndall in the previous year that he thought of placing some self-registering thermometers on and near the summit of Mont Blanc for the purpose of ascertaining the minimum of external temperature and the depth to which such cold penetrates beneath the surface of the ice. Circumstances prevented Balmat from carrying out his intention, but in the following season Tyndall, having in the meantime procured from the Royal Society a small grant for the purpose, proposed to Balmat to make the ascent and plant the thermometers. Balmat was at the time engaged to Wills as guide, but, at Tyndall's request, Wills waived his claim and gladly accepted the invitation to join the party which Balmat was to lead. It was late in the season, towards the end of September, before the expedition could make a start, and the weather for some days previously had been so hopelessly bad that the difficulties which had to be encountered were unusually severe. We cannot enter into details. The summit was indeed attained, and the porters with vigorous exertion painfully succeeded in digging a hole three or four feet deep in which the thermometer was immured; but the situation became a miserable and dangerous one. Dry frozen snow was hurled in clouds against the summit; a furious wind was raging with driving mist and snow drift. Wills began to get uneasy; his head and feet were without feeling; Tyndall's feet were senseless; the men were livid. 'Let us be off,' Wills exclaimed, 'or we shall have some serious accident.' Then Balmat came up to him and said quietly, 'Je crains que mes mains sont gelées.' They were perfectly black from finger-tips to knuckles. His sufferings, as severe probably as human nature can endure, were borne with a manly fortitude which made a deep impression upon Wills and was never forgotten. And all the time Balmat was not less thoughtful for the safety and comfort of everyone else than when he was in the height of health and personal enjoyment. Auguste Balmat was an old and honoured friend—a tried and faithful companion—to whom Wills had dedicated his 'Wanderings in the High Alps' with feelings of hearty respect and affectionate regard. Balmat was in truth a man of considerable attainments and much refinement—modest, courageous, disinterested, a model guide. He died at the 'Eagle's Nest' in the autumn of 1862, where he had undertaken the local management of Wills' property in the Val des Fonds. Another ascent of Mont Blanc with



From *Charles Fitzroy's B.P.*

SIR ALFRED WILLIS (at *Edwards Nest*) 1894
Presiding 1894-1895

J. C. W. White

Milman and Whately was made in 1866 by the Aiguille du Gouter and the Bosses de Dromadaire, bivouacking at the long-deserted hut under the Aiguille, which they found choked with ice. His last ascent was made September 30, 1873, the party consisting of Wills, his daughter, and Lady Wills, with M. Loppé and a daughter. It was late in the year and Mademoiselle Loppé unfortunately suffered severely from the cold.

Years passed, and each successive year only increased Wills' attachment to the 'Eagle's Nest.' He was always busily occupied within or without doors. A 'Dépendance' was built to meet the growing calls upon the accommodation of the 'Eagle's Nest,' other improvements were made, and one or two lovely paths were cut or cleared on the mountain side. But the main features of the place were, and could not but be, unchangeable. No more lovely sight can be imagined than the view from the Chalet, looking down the valley with light fleecy clouds stealing up from the depths or gathering round the Pointe de Salles. Often the 'Eagle's Nest' would remain for days bathed in brilliant sunshine, while the lakes and low ground had, it was heard, been lost in impenetrable mist.

Years passed with their inevitable accompaniment of loss and sorrow. Age began to tell, and Wills had gradually to wean himself from his more adventurous and fatiguing expeditions. Long ascents were unadvisable, later impossible. Still his love for the place knew no abatement. He was content to enjoy all that was within easier reach, and of the views from his windows and terraces he was never weary. In 1904 he made a gift of the 'Eagle's Nest' to his daughter, Mrs. Edward Norton, whose property it now is. After Balmat's death the stewardship of the estate was entrusted (about 1860) to Claude Gurlie, an old chamois hunter, shrewd, capable, full of character, and it has remained in the same family ever since; Claude Gurlie's great grandson now manages it for Mrs. Norton. During the last years of his life Wills resided at 'Saxholm,' a house which he had taken at Basset, near Southampton. But even here he did not really rest. Among other self-imposed obligations he gave much time and attention to the affairs of the Hartley University College, Southampton. He had succeeded the Duke of Wellington as President of the college and held the post for about two years, through a very trying period when the question of the financial support of the college by the Southampton Corporation and the policy of the Board of Education caused him great anxiety and much work. His influence is understood to have been most useful while it lasted, but increasing deafness, with the troublesome nature of the business, compelled him to resign office before the new arrangements could be completed. He was also busily engaged, as has been already said, in getting out his final edition of 'Circumstantial Evidence,' a work of considerable labour and anxiety. True to his old tastes, too, he spent many hours in his garden, improving and laying out what was at first rather a rough bit of ground. He made a beautiful

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rosary at Saxholm. It was a great interest and solace to him to linger over the cultivation of his roses when his heart was too worn out to allow him to walk to any distance.

Wills had a genius for friendship and was generous almost to a fault. His heart was open alike to old and young. As his children and children's children gathered around him his ready sympathy brightened to meet them. There were circles within circles, keeping him in touch with the present and his interest alive in the future. But he never forgot an old friend. Few of them are now left. No distance seemed to diminish his affection, and he keenly felt the penalty of old age when faces once familiar faded and were lost to sight.

Speaking as a friend to friends, it may perhaps be allowable to say, simply, in conclusion :

‘ He was a man take him for all in all,
We shall not look upon his like again.’

A. M.

HENRY ARTHUR MORGAN.

IN the Rev. Henry Arthur Morgan, D.D., Master of Jesus College, Cambridge, who died on September 3, 1912, the Club has lost a member who was elected in 1863, but one of the oldest in years, having been born on July 3, 1830. He came from a good Welsh stock, his father the Rev. Morgan Morgan, being Vicar of Conway, North Wales, but his mother was the daughter of John Nonnen, Liseberg, Gothenburg, and partly a Hungarian by descent. He was educated at Shrewsbury School, and after attending King's College, London, began residence at Jesus College, Cambridge, in 1849, and took his degree, as 26th Wrangler, in 1853. He became a ‘Ley’ Fellow in 1858 and a Foundation Fellow in 1860, having been ordained deacon in 1859 and priest the following year. His appointment as Tutor in 1863 called him to the work of his life, and in 1885 he was elected Master. Three years before that date he married Charlotte Linda, daughter of Henry Barnes, of Annfield, Liverpool, who survives him, with one son and four daughters.

From his schooldays Morgan was a lover of active exercise. He delighted in rowing, having taken part, it is said, in over a hundred eight-oar races, and in walking, at which his pace was remarkably quick. On one occasion he, Leslie Stephen, and two other friends walked from Bedford to Cambridge—just thirty miles—in six hours and a half, halting 43 minutes for refreshment at St. Neots. His first visit to the Alps was in 1862, when Stephen asked him to join him in trying to cross the Jungfrauoch. On inquiring what this might be, he was told that it was said to be a joch which could not be done, and therefore it must be done. J. F. Hardy and Robert

Liveing joined them, and after stretching their legs on the Titlis, which proved laborious from the condition of the snow, left the Wengern Alp on July 20, together with H. B. George and A. W. Moore and six guides. Stephen has told the story in this JOURNAL (vol. i. page 97); how they were stopped on the first attempt by a great crevasse; how they came back next day with a ladder, and in due course reached the summit, from which George and Moore descended to the Eggischhorn, while the others returned to Grindelwald by the Mönch Joch. He represents Morgan as animating the party by the songs of his native Wales, but accuses him of speaking very disparagingly of the Wengern Alp in comparison with Pen-y-Gwryd, admitting, however, during the higher part of the ascent from it, the view to be not unlike that above Llyn Llydaw, though the quantity of snow rather spoiled it. Probably, however, Stephen was then sowing his historical wild oats as a preparation for the 'Dictionary of National Biography.'

Morgan then ascended Monte Rosa, and after meeting his friends again at Vienna, visited Buda Pesth, Dresden and Berlin. For some years afterwards he was often on the Continent, frequently visiting Italy and returning several times to the Alps, especially to the Pusterthal district. He used to tell of one expedition where the party was benighted on a *névé*. The wind was keen, so the guide set to work to dig some holes in the snow, where he assured them they would be *ganz bequem*. Very soon his axe broke through into a hidden 'schrund.' After that they thought it better to move on. In 1861 he, with two friends, crossed Sweden from Gothenburg to Stockholm, and thence by St. Petersburg to Moscow. A small volume, called 'The Northern Circuit,' gives Morgan's impressions of the journey. It is characterised by his usual humour, and many terse but felicitous descriptions.

His greatest work, however, was done for his College, since the Cambridge system, if I mistake not, affords a tutor of exceptional qualifications greater opportunities of raising that than the Oxford one does. He found Jesus a comparatively unimportant society; he left it much increased in numbers and reputation. His great aim was to stimulate his pupils to do something well, whether in physical or intellectual contests. He had his finger on the pulse of the College, could detect as by intuition the slightest symptom of disorder and decay, was ever willing to give time, trouble, and sympathy to pupils, and not to them only, for, as the friend and colleague whom I am quoting wrote after his death,* he was 'one of the most sympathetic men I have ever known.' He had the rare gift of making everyone feel that he was interested in what stood first in the visitor's mind. In short, whether young or old, he 'put himself in the place of the other man and did his best for him.' Thus,

* Dr. Foskes-Jackson, *Cambridge Review*, Oct. 17, 1912. I have also to thank Mrs. Morgan for kind help in regard to some particulars.

though decidedly in favour of College and University reform, in the days when supporters of this cause were a rather unpopular minority, he was liked and trusted even by his opponents. During his mastership 'the old order yielded place to new,' but his influence prevented bitterness and promoted harmony. He kept in close touch with the Fellows and the undergraduates. To the latter especially his hospitality was unrestricted, and the Master, with his wife and family, as they grew up, made them feel that the Lodge was a home rather than a dignified icehouse.

Morgan had rare social gifts. His sense of humour was keen, his memory was retentive, his fund of amusing stories seemingly inexhaustible. He was also an admirable raconteur and mimic. Forty or fifty years ago there were more 'characters' in Cambridge than at the present day. Morgan could so reproduce these that one could have fancied the men themselves to be behind a screen. But he was, as already intimated, more than this. There was a pathetic side to his life, fortunate though he was in his home circle. Deafness began to trouble him soon after he became Master, and for several years of his life he could hear nothing without an ear-trumpet, and latterly, even thus only with great difficulty. A serious illness about four years ago, left him with broken health and strength, so that he became increasingly helpless. These must have been heavy trials to the man who had delighted in bright talk and athletic exercises. Yet no visitor ever saw him with a melancholy face or heard him murmur, but was always welcomed with a sunny smile and a cheerful greeting, followed before long by some quaint remark or humorous story. Painful as it was to old friends to see him in his decline, though happily of body only, Morgan's patient endurance of burdens which would have crushed men of weaker fibre was a lesson which they can never forget.

T. G. BONNEY.

CLINTON THOMAS DENT.

b. December 7, 1850. *d.* August 26, 1912.

In spite of the sadly frequent loss of one after another of its older members, the Alpine Club has, so far, remarkably preserved its general character and tone. Nor does there appear reason to fear lest this continuity should be broken, for it is mainly due to the strong common interest, a love of mountains and mountaineering, which laid the foundations of the Club, which has animated the founders and their successors, and which is in its nature genuine and enduring. To great extent, however, this healthy continuity is also due to the more or less consciously pursued policy of unity and sympathy between senior and junior men in matters of club management and guidance. And, in this respect, naturally, the seniors have played a leading part. Among them, no one man

has more used his influence than Clinton Dent, in whom there was something which appealed to both young and old, and helped to link them together. And it is right that the *JOURNAL* should contain some especial record, however inadequate, of so vivid a personality. He will be missed by all; and to many of us his loss must indeed seem irreparable.

Clinton was a son of Mr. Thomas Dent, and was educated at Eton (Yonge's), where he won 'Throwing the Hammer' in 1869; and at Trinity College, Cambridge, taking an ordinary M.A. degree. He first saw the Alps in 1865; when a guide near Ragatz is reported to have said of him, speaking more truly than perhaps, guide-like, he fully meant, 'that he would become a good mountaineer, because he always took great care not to take up one foot until the other had got a good hold.' By 1870 he had already spent five or six seasons in Switzerland, during the first two of which he had never set boot on snow-slope. 'There had' (he writes, referring to this fact), 'always seemed to me, from the first, so much absolutely to learn in mountaineering.' He lost no time however: was up the Matterhorn, Schreckhorn, and other good peaks, before he came of age; and was elected to the Club on April 9, 1872 (proposer Douglas W. Freshfield, seconder F. Barlow). His Alpine expeditions can mostly be found in the *Journal*. It is enough here to mention the following:—First ascents—Sudlenzspitze, 1870; Portiengrat, 1871; Ruinette (by a partly new route), 1872; Rothhorn from Zermatt, 1872; Bietschhorn (new route), and Aiguille Dru at the nineteenth attempt, 1878. Other notable work includes four visits to the Caucasus (1886, 1888, 1889, 1895), the second being the memorable one in which Donkin and Fox lost their lives after he himself had been compelled by illness to leave them: no one who has read it can forget his story of the search expedition in the following year. In these journeys the two principal new ascents were, in 1886, Gestola, 15,932 ft., and, in 1895, Tsiteli, 13,930 ft.; but there were also included several new and difficult glacier passes, which threw much light on the orography of the range.

Dent was undoubtedly a good climber: but he was also something much more—he was a thoroughly sound mountaineer with a good eye for country: and he was an active and persistent explorer. He was one of the earlier discoverers of the joys of winter in the Alps, when the mixed crowds which now flock there had not yet learnt the way. He himself was not fond of crowds in his old haunts. He loved mountains of all sorts, for themselves, at all times; and his varied tastes and wide knowledge made him the best of companions. In England he was fond of lecturing upon mountain subjects, especially to young or popular audiences. At Eton (three times), Winchester and Cheam, at the Royal Victoria Hall, the Working Men's College and St. George's Hall, at the Royal Institution and the Society of Arts, at the Royal British

Nurses' Association and at Woolwich (to the Royal Artillery Institution), at Newcastle (to the Tyneside Sunday Lecture Society) and elsewhere, he delivered addresses, generally with lantern slides, upon climbing, the making of mountains, the Alps in winter, the Caucasus, the art of travel in mountainous countries (from a military point of view), the influence of science on mountaineering, mountain myths and legends, and other subjects.

He was a fertile and most interesting writer on Alpine matters. His contributions to this JOURNAL are too numerous to state here; but it may be mentioned that he also wrote papers, among others, for the Austrian A.C. on the Alps and Caucasus, and the Distress-Signal; on Alpine Scenery ('Art Journal,' 1890); on the Possibility of Ascending Mount Everest ('Nineteenth Century,' 1892); Physiological Effects of High Altitudes ('Geographical Journal,' 1893); Mountain Photography (Camera Club, 1893); Alpine Distress-Signal ('Badminton Magazine,' 1895); Fine Art and Mountaineering ('Art Journal,' 1890); and Modern Mountaineering ('Edinburgh Review,' 1897).

In addition to his published works, he had in the later nineties made some progress in the preparation of a book on the Caucasus. He went so far as to select a title, 'On the Verge of an Empire' (quoted in the Bibliographical Appendix to Freshfield's 'Exploration of the Caucasus'), and to arrange the illustrations, a series of drawings by his friend Mr. McCormick. These, and a certain amount of the MSS., are still in existence, and possibly available for use. He had also quite recently become the possessor of A. W. Moore's full manuscript journal of his Alpine tour in 1865, and he was purposing to print and edit it as a companion volume to Sir A. Kennedy's edition of 'The Alps in 1864.' It is to be hoped that this task may be accepted by some competent hand among our younger members.

Dent was, as a rule, a singularly effective speaker. It is said that in lecturing to hospital students, or nurses, he was not always easy to understand, probably because he saw all sides of a case, and was too honest to simplify propositions by ignoring or minimising considerations of conflicting nature. But as we, of the Club, knew him, no such reservation need be made. He was practically always delightful, and in touch with his audience. Lantern-slides did not put him out, nor make his discourse tedious: in fact, he used to drop apparently unintentional remarks about them in a most diverting way, and always made even his descriptions clear and interesting. Indeed in all his Club speeches, informal and formal, particularly at the Winter Dinner, he was admirable, making his points tell, sometimes with direct force and sometimes with a kind of detached unexpectedness which was all his own. In writing he had a terse, vigorous style, shot with strains of humour more or less elaborate, often somewhat in the manner of Dickens, with whose works he was extraordinarily familiar. The following passages illustrate his playful turn, *e.g.* (on a Caucasus expedition),



Clinton D. West

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Willard A. Dy Abbott

Lucas Electric Engineering Co.

Clinton DeWitt

'The little donkey, which was christened "Garlic," on the ground that it was very strong, and that a very little of it went a very long way,' or (on the 'mountaineering instinct,' controverting the usual theory that early familiarity with Alpine conditions must necessarily make Swiss peasants superior to amateurs), 'The youthful peasants' high mountaineering activity is usually limited by the climbing ambition of the ruminant to which they are temporarily attached,' or (on a certain incompetent guide) 'Sent away with a flea in his ear—an almost unnecessary adjunct, as anyone who had slept in the same tent with him could testify.' Such extracts could be indefinitely multiplied; but this would be misleading. For his serious writing was equally characteristic and arresting, whether in narrative or description. Nor was another element absent. In his own words 'Humour was born a twin: and her sister was christened "Pathos."' And he was a master of restrained pathos. Space forbids examples. But a doubter may be referred to chap. VIII. of 'Above the Snowline.'

Probably the most solid piece of literary work that he did in relation to alpine craft was the editing of the volume on that subject in the Badminton Library. It is moreover a monument to his sound mountaineering experience. Most of the chapters were written by him, and he took pains over the smallest details.

His services to the Club were considerable. He was elected on to the Committee in 1874; Hon. Sec. 1878-1880; Vice President 1884-1886; and President 1887-1889. Indeed, whether as an elected member, as an officer, or as an extra member under Rule 30, he had a seat at the Committee table for twenty years. He was for many years the secretary and centre of a small and unofficial dining-club known as the A.D.C., where perhaps he will be missed more than in any other Alpine circle. He materially helped to develop the artistic side of the Club, and did much to promote the Picture and Photograph Exhibitions. He aimed always at maintaining and strengthening cordial relations with foreign and colonial clubs, a congenial task which his knowledge of men and languages made easy to him. He was an honorary member of the Swiss A.C. and of the New Zealand A.C.; and he was until his death President (the first) of the Association of British members of the Swiss A.C. He gave valuable assistance in the matter of the Britannia Hut. He was prime mover in elaborating and establishing the system of Alpine Distress-Signal, which has now been accepted by Alpine Clubs all over the world, and deserves to be adopted for all distress emergencies, whether Alpine or not.

But it was to the old Club itself that he gave his chief allegiance. His extraordinary knowledge of its inner history for many years, of its rules and procedure both in their origin and in their application, and of its ideals and standards as they had been conceived and developed, was always available, and was always given with fervour and conviction. Generally he got his way. Sometimes, as in the case of the Club Button and Colours, he did not. But

under no circumstances was his mind biassed or his action inspired by personal or sectional considerations.

No account of him, however, would be complete without a word as to his real work in life. Having ample means, he was not under the necessity of earning his living; and he might have been a man of leisure, though it is scarcely possible to imagine him enjoying even leisure otherwise than energetically. The line he chose was surgery. Some details of his professional career can be found in the 'British Medical Journal' of September 15, 1912, which gives a long list of his lectures, pamphlets and treatises,* and bears generous witness to his skill as a surgeon, his wisdom in council, his oratorical powers, and his force of character. Here, in barest outline, it must be enough to state that having entered St. George's Hospital Medical School in 1876, he became in due course assistant surgeon of the hospital, joint lecturer on physiology for a time, and ultimately (in 1895) full surgeon. At the time of his death he was senior surgeon, and chairman of the Medical Sub-Committee. He was thus in close connexion with his hospital for over thirty-five years, and in full work to the last, a long period of exacting and devoted labour, in the wards, in the operating theatre, in the school, and in the boardroom. Nor did he lose touch with his other *Alma mater*; for he examined in surgery at Cambridge for many years, and was made an Hon. M.C. in 1899.

Outside the hospital he was equally active. He was Secretary from 1901 to 1904 to the Royal Medical and Chirurgical Society; President of the Surgical Section of the Royal Society of Medicine; Secretary and Vice-President of the Medical Society of London; and senior Vice-President of the Royal College of Surgeons (Fellow in 1877; Court of Examiners, chairman latterly, 1902-1911; Hunterian Lecturer, 1905; Council since 1903). It is regrettable that by his early death he just missed the almost certain honour of the Presidentship.

For many years he held the honorary rank of lieutenant-colonel in the R.A.M.C. Territorial (General Hospital) Force; and in earlier days he had for some time been surgeon to the Artists' R.V.

In 1899, during the war, he went out at his own expense to South Africa, where he did good service as surgeon unattached, and accumulated valuable experience.

Last, but not least, he was in 1904 appointed chief surgeon of the Metropolitan Police. Indeed, this appointment, which he held at his death, suited him well, and he threw his full energy into it. For any medical man, whose attention is of necessity constantly focussed upon the sick, the maimed and the inefficient, it must be invigorating to be acting at the same time as a highly-placed officer of a large public force composed of healthy, efficient individuals.

* Besides these, he left a quantity of valuable unpublished surgical manuscript, chiefly his own work.

But the post was no sinecure, and took the best he could give it by night and by day ; not the easiest of his duties being to ensure the harmonious working of all the divisional surgeons in the Metropolis. In this respect, one of his first steps was characteristic. He called a meeting of them, some 150 in number, a novel departure, for the discussion of their future relations with their new chief. It is pleasant to know that the result justified the proceeding. In fact, he gained the respect and affection of the whole force, which was fully represented at his funeral at Kensal Green, hundreds of officers and men attending voluntarily, besides the official representatives. The formal circular issued on August 27 by the Chief Commissioner speaks for itself :

‘ A singularly able man, he devoted to the Metropolitan Police, from the time of his appointment in 1904, his whole-hearted efforts. The Police Medical Service has been greatly improved under his care and guidance, and those who have been brought in touch with him by sickness will long remember the personal and kindly interest he took in every case. The Commissioner feels that he has lost an able and fearless counsellor in all medical questions affecting the well being of the Force.’

Another professional, and charitable, piece of work in which he took a deep interest was the Belgrave Hospital for Children, of which he was the consulting surgeon, and mainspring, for many years. He always loved children and young folk ; and this particular form of hospital specially appealed to him. The institution had long been carried on under considerable difficulties in very inadequate premises (two or three converted residences in Gloucester Street, Pimlico). Considering the conditions, it did good work ; but it was hampered by lack of funds as well as by unsuitable accommodation : and the death of the Duke of Westminster removed one of its principal supporters. Nevertheless, owing chiefly to Dent's persistence and power of getting things done, the decision to move the establishment to South London, which was ill-provided with beds for sick children, was taken and acted upon ; and in course of time the present fine building, though incomplete, was opened in the Clapham Road, where we may hope that it will long perpetuate his memory.

As to his private practice, it is not easy to speak. He did not seriously lay himself out for such work : and he must have given much advice and treatment for little or no remuneration. Nevertheless, many people leant upon him, and he was a man to lean upon, in times of sickness, accident or trouble. It is indeed a big gap that he leaves in private as well as in public life.

A few words must be said, in conclusion, about the man himself as he will always live in my own memory.

From one point of view, his salient characteristic was his thoroughness. This showed itself in all that he did where his interest was aroused, and he had an exceptional capacity for becoming interested in whatever he undertook.

I have known him under many conditions. As patient, when he

saved my life twenty years ago ; and as father of a patient when, eighteen years afterwards, he performed a similar operation, happily at a less critical emergency, upon my son ; as colleague on committees ; as comrade upon the hill-side ; collaborating with him as illustrator of the Badminton book ; playing cricket (indifferently), and golf (worse), with him, and bridge (sometimes to weariness), I never found his untiring thoroughness desert him.

In the case of the Badminton, he persuaded me to go out and meet

*a female figure in the
camp ' What wd Mrs
Grundy say ?*



him in Switzerland, in 1891, on purpose to study and re-study everything on the spot. Every illustration was discussed and criticised, beforehand and in draft, many of them being inspired by him down to small details—a thing which he was well able to do, for his artistic imagination was strong, and he might easily have become a draughtsman himself, as appears from the sketch above (which was his reply to a suggestion of mine that we might introduce a lady climber into the bivouac picture (' Rest after toyle.')

We photographed, and I drew, rocks, ice and snow, guides and amateurs, in all kinds of places and attitudes (about half of mine never 'came out,' it is true, owing to my often omitting to set

properly the shutter of my Luzo camera for exposure, an omission incomprehensible by him).

Every sentence in his chapters was carefully weighed and debated, verbally or by letter; indeed his correspondence about the book during the incubation period must have been enormous; he sometimes wrote me two, and once even three, letters in a day, besides what he must have been doing with others whom he consulted.

Yet he was not a man to lose himself in detail. He was eminently a capable man and a man of judgment. In the words of a writer in the 'British Medical Journal':

'To employ the expression "a right judgment in all things" may be strong language in the case of any human being, but it may be truthfully averred that in a delicate or difficult question the greatest respect was invariably paid to Dent's judgment. His opinion never failed to carry weight, because it was universally accepted that he never spoke at random or expressed an opinion without careful consideration of the point in debate.'

Again, he was markedly single-minded and in earnest. No one could ever suspect him of being influenced by petty or private considerations; the only thing he cared for was rightness of object. His whole strength, when he had made up his mind, was always put into getting the thing, whatever it was, done in what seemed to him to be the best possible way. Of course he might fail; and one might disagree with him. But if he failed, he would go on to make the best of the result; and if he succeeded he was careless who got the credit. And in disagreement, he was always open to conviction: while, if he remained unconvinced, it was rather one's own fault than his.

This leads me to another trait, his dislike of ostentation or self-advertisement. Few men, perhaps, have been so successful as he was, or have deserved success so well, and yet have been so indifferent to the outward marks of success in the usual meaning of the word. It was, I think, the presence of a kindred spirit in mountaineering as properly practised, which formed, for him, one of the chief attractions of that pursuit. It is significant that in all that he wrote in the Badminton book—a treatise not written for mountaineers alone, but intended to interest all readers and to instruct them in the science of mountaineering—individual climbers are rarely mentioned by name, and never as performers of exploits: individual expeditions are never described: and even the words 'Alpine Club' cannot, I believe, be found, except in connexion with the Club Rope. I can testify that this course was not accidentally adopted.

This consideration makes one anxious not to claim too much for him, and so commit the fault which he eschewed. I only want to paint a true portrait. Yet though to some eyes the colours may seem too bright, it is difficult to tone them down. Of course, like other men, he had his peculiarities, which may have jarred occasionally, but they were superficial. As a talker, among his peers, it would be hard to name a better. He was however sometimes inclined to

pursue his own line of thought, and had not always the ear of a ready listener. His solitary home life, for after his younger sister's marriage he lived much alone, perhaps conduced to this habit, which seemed rather to grow upon him. Nevertheless it did not affect his manner in practical discussion, where he was always attentive to argument, and as already mentioned never spoke at random. Indeed, he was somewhat diffident in talking about things with which he had no practical acquaintance, and would often sit silent; although he was apt to throw surprisingly new lights when he did offer a remark upon a subject unfamiliar to him.

Again, his fondness for games as a relaxation became something phenomenal, at times almost tiresome to others not made in the same way. In holidays, or week-ends, he would spend hour after hour in golf, croquet, billiards, cards, or chess; from morning till late bedtime, if he could get anyone to play with. This was probably a reaction from his normal life, crowded when at work, and lonely when at home. Anyone meeting him under such circumstances, however, and not knowing his wide interests, his omnivorous reading, his knowledge and love of art and music, his extensive and intimate acquaintance with men, languages and countries, might possibly have formed a much mistaken opinion of him, and have imagined that he was disproportionately addicted to games. He certainly played them keenly, but there was more in it than this, for his knowledge of the history and theory of games was great; and he also played them so as to get the best out of them, and with an interest in his opponents' game as well as his own.

From yet another point of view the spirit of the artistic connoisseur, if not of the actual artist, was strong in him. He was a good judge of pictures; and in sculpture he took the additional especial interest of the skilled anatomist. In photography he was really first-rate. Some of his photographs of the Alps, or of English spring foliage and blossom, are as fine as anything that has been done, and he made some excellent portraits too. Nor was it all play, for he employed his camera at the Hospital to good purpose, securing and preserving valuable records of a professional kind. The theatre he loved, and music, though he could neither play nor sing. His last journey abroad was in July, to Bayreuth, with his niece (Mrs. Perceval), a friend (Miss Fielden), and my daughter. They reached London on their return on July 25, only a month before his death. The following week-end he spent in Sussex at Douglas Freshfield's, where he seemed in more than his usual vigour and good spirits. A fortnight later he got a chill playing cricket in the wet at Ayot, a house in Hertfordshire which he had taken each summer for the last two or three years. He at once developed symptoms of blood-poisoning, and came up on August 12 for advice and treatment to town, where he immediately went into a nursing home. Everything possible was done for him, but the disease rapidly took a serious turn, and although he himself

continued for more than a week to speak confidently of his recovery he went on losing ground, and after a few trying days of semi-consciousness he died quietly on the evening of the 26th. We ought not perhaps, to regret, but it is cold comfort, that he was spared the risk of senile decay. Many men have kept their youth into a good old age, and he might well have done so. Yet, at any rate, we shall always have the recollection of him in full vigour. His strong, shrewd, kindly face, with its faint freckles; his crisp hair and short-cropped beard; his capable, sinewy hands; his large, bright eye; his loose, long stride; his quaint little tricks and habits; his deliberate voice, which at one time would almost drawl, and at another hit like a hammer; his powerful humorous understanding and vivid caustic talk—all these will live in our minds.

But what we loved most in him was not his physical characteristics, and what we most looked up to was not his artistic or intellectual qualities. It was something indescribable in the man himself. His sympathetic insight; his extraordinary power, so well used, of inspiring confidence; and, chief of all, his reserved warm heart, which irresistibly drew out affection to meet affection—these were the sources of the influence which we felt to be one of the best parts of our own lives.

H. G. WILLINK.

December 1912.

ROGER GASKELL.

By the death of Roger Gaskell, which occurred on September 15 last, the members of the Alpine Club have lost one more colleague of the old accomplished sort. Though not actually one of the advanced guard of climbers, the pioneers who made mountaineering a 'world-sport,' he came with the first reinforcements, and his fealty to the Alps was received by Monte Rosa as long ago as 1868. Seven years later he joined the Club, though he only became a member of the Committee in 1885.

Born in 1846, he went up to Cambridge from the Cholmieu School at Highgate in 1864. Subsequently he became a foundation scholar of Trinity, graduating as nineteenth Wrangler with honours in classics in 1868. In the same year he visited Switzerland, and in this first season ascended Monte Rosa and a good many of the Zermatt peaks. Each of the fourteen years which followed his initiation found him climbing in some district or another, and frequently in more than one. For the year 1869 the Bernese Oberland was his hunting-ground, a district which he revisited ten years later, repeating many earlier climbs. Next he was at Pontresina, and after climbing the Bernina over the seracs he went on to the Ortler region, then turning downwards to Botzen he crossed the Schlern, winding up at Caprile and Cortina and the Antelao. In 1874, in company with Winterbotham, he 'perused' the Pyrenees

from end to end. Afterwards, in the same season, he endeavoured to appease his insatiable appetite by transferring himself to the Dolomites, climbing the Cristallo and the regular Cortina summits, including the Pelmo, discovering on this ascent a useful variant of the customary route, by which the late Mr. Ball's 'eccentric obstacle' is wholly avoided. In the Pyrenees at that date, probably the worst food and lodging in the world were to be found. Winterbotham, his companion on that expedition, has kindly furnished me with a vivid account of these numerous climbs, and of their almost equally numerous battles with men and insects. But no day however hard, no night however horrible, could slacken his enthusiasm or ruffle the serenity of his temper. In the interest of noting an item of geological interest, in the joy of finding a rare silene or saxifrage, all was forgotten and forgiven. In 1877 his climbing with Holzmann commenced. Holzmann was a perfect Moltke at mountaineering strategy, and I well remember listening, with a kind of awe, while, with the aid of the very imperfect maps of the time, he set out the details of a Dolomite campaign, in which, as it seemed to me, there was an incredibly small allowance for off days. But these plans always worked out perfectly. The weather sometimes failed Holzmann, but Gaskell never. The partnership lasted for four seasons and part of a fifth; during which they climbed sixty named peaks and crossed twenty high passes. As a climber Gaskell was exceedingly fast up hill, and, as Holzmann was equally speedy down hill, they were always making records and 'bagging' two or more mountains—*e.g.* the Mönch and the Jungfrau—in a single day. In the Dolomites their average was, if I remember rightly, six peaks in eight days; that is, of course, in places where peaks were available.

Gaskell's indifference to dangers, great or small, was phenomenal, and, I think, constituted the one weak point in his mountaineering equipment. It led at least to one accident on the Langkofel, when he nearly lost his life, and on the Tschingel to one in which he quite lost his temper. On the descent of the Langkofel they came to one of the nasty bits where the rope is almost invariably used. Alexandro Lacedelli of course proposed to put it on, but his offer was summarily rejected. Gaskell stayed behind to look at a plant, while the others rapidly descended. He thus lost sight of the exact position of the few and precarious footholds that exist. But he hurried on in his usual fearless fashion, missed his footing and fell. In his fall he bumped on the smooth rock, then turned a complete somersault in the air, landing full twenty feet below fortunately on some jagged rock which held him. On the Tschingel they were coming down the precipitous but easy slope, broken into a succession of ledges, each held up by a little cleft of shale, which leads to the Ober-Steinberg. They were a large party laughing and talking as they went, when Gaskell, carelessly turning round to answer or ask a question, fell down one of the little precipices. Everyone except Gaskell was startled, but before anyone could ask if he was hurt, he was up and

crying out in real anger 'Confound the thing, I have put my cigarette out.' This, I believe, is the only occasion on which the matchless serenity of his temper is known to have been seriously ruffled.

His marriage in 1882 dissolved the climbing partnership with Holzmann, but his passion for the mountains remained unabated. After eight years of a flawlessly happy married life he was left a widower, and with characteristic energy sought solace by throwing himself into public work. When the great blow fell and he found himself attacked by hopeless and ever-increasing paralysis, he set himself at once to study the character of his malady, the course it was likely to take, and how best it could be fought. Nothing, indeed, could be more superb than the serene uncomplaining courage with which he faced the malady, which, as he perfectly understood, was ending his life. It overtook him in the midst of the most multifarious public activities. The list of these is long and to detail them would be tedious. He was a member of the Hornsey School Board. He was on the committee of the East End Emigration and the Children's Country Holiday Funds. He was treasurer of the People's Concert Society and of the Ophthalmic Hospital, and a governor of the Cholmley School on the nomination of the University of Cambridge. He was also on the committee of the Charity Organisation Society and chairman of its St. Pancras Branch, and when he resigned this office he made the pathetically significant announcement that it was the twenty-fourth and last office which his increasing infirmity had forced him to relinquish.

He was besides a man of the most varied accomplishments. That a near kinsman of the authoress of 'Cranford' should have a genuine feeling for literature goes without saying, but Gaskell, in addition, had more than a bowing acquaintance with science, and he was an expert botanist. He was a musician too, and an ardent lover of painting and sculpture; and, so long as he could be dragged to a seat in a concert-room or wheeled round a gallery, he contrived never to miss a single new manifestation of the arts which he loved. More than this, until speech failed him he remained eager to discuss every one of these subjects, and did so with an intellectual vigour in painful contrast with his bodily helplessness.

The great qualities that made all this possible were no doubt largely congenital. Is it too much to claim that they had been strengthened and vivified by his long apprenticeship to that Alpinism of which, to the end, he was a whole-hearted devotee?

R. H.

HERBERT WILSON.

HERBERT WILSON, who succumbed to the results of a gun accident during the past summer, was one of three brothers who have been members of this Club, but of whom only one now survives. He began climbing when a schoolboy, and was elected a member of the Alpine Club in 1883, while still an undergraduate at Cambridge.

He went, in 1885, with his brother, Dr. C. Wilson, and the writer, to Norway, where he took his share of the work, and proved his capacity by leading the party up Knutshaltind from Knutshüllet—an expedition which has been only twice repeated, and the merits of which have been recently acknowledged in these pages ('A.J.' vol. xxv. p. 754). He visited the Alps many times since then, and joined in various expeditions both with and without guides, though of late years his cosmopolitan sporting tastes led him to seek exercise and recreation more in other channels. A fair golfer, a fair shot, an angler, a polo-player, and a keen rider to hounds, he never lost his interest in the mountains and was often to be seen at the meetings of the Club.

R. L. H.

CONTE FRANCESCO LURANI-CERNUSCHI (1857–1912).

By the death of Count Lurani, the Alpine Club loses one of its greatest and most distinguished foreign members. Lurani was far more than a mere climber, he was a profound and thoughtful mountaineer. Born May 22, 1857, he was one of the earliest of Italian explorers, and at a youthful age had made a great name for himself on the southern slopes of his own 'Italian Alps.'

The following is a brief summary of his principal *new* expeditions, all accomplished in districts which, despite their apparent lack of 'height,' entail serious mountaineering knowledge in its best and widest sense: 1877, Monte Gleno (Bergamasque group), first ascent from the E.; 1878, Monte Disgrazia, first ascent from the W. by what has since become the favourite and best route; 1880, Piz Badile, when he reopened the present ordinary route first accomplished thirteen years previously; 1881, Pizzo Ligoncio, first ascent by travellers, Monte Spluga (Masino), and Corno Bruciato, highest summit; 1882, first exploration of the Campanile group (Lago di Como), Western Pizzo Torrone, by a route apparently never since repeated; 1884, Pizzo Sterla, first ascent by travellers, Piz Timun (Pizzo Emet); 1887, Cime del Calvo; 1889, Fermeda Thurm, by a new route; 1893, Cima Sant' Anna and Pizzo Camerozzo; 1895, Cima del Barbacan; 1896, Cima di Castello, first ascent from the S. He had also climbed much in the Pennine and other ranges, his invariable companion being his faithful guide and friend, Antonio Baroni of Val Brembana (died 1912). Count Lurani's retiring disposition did not allow him to *publish* much concerning his many and important expeditions, but his delightful little pamphlet or monograph, 'Le Montagne di Val Masino,' issued in 1883, remains one of the best imaginable articles of this description; the map contained in it is still far in advance of anything since published, and may be described as absolutely faultless. The Splügen group, concerning which an interesting note appeared from his pen in one of



COUNT LURANI.

the earlier numbers of the 'Rivista,' and, in a still greater degree, the mountains of Masino were his favourite resorts, his knowledge of these latter being probably still unequalled; his copious carefully kept notes and photographs were always at the disposal of his friends; and, but for his labours, the subsequent more elaborate Italian and English guide-books could hardly have been published. His name, given to one of the most beautiful and convenient passes between Switzerland and Val Masino, will for ever bear conspicuous tribute to his devoted explorations and honoured reputation.

Elected to our Club in 1892, he was unfortunately known to but few of the members; those who have enjoyed the privilege of his friendship or acquaintance will always cherish the memory of a splendid mountaineer and a very perfect, highly cultured Italian gentleman. A sad family bereavement had much weakened, during latter years, both his health and his climbing powers, but he maintained to the last his great interest in the Alps, and the picturesque Val Malenco, adjacent to his own Val Masino, was the scene, quite recently, of many of his tremendously long walks.

He died at his country residence, Cernusco Lombardone, November 9, 1912. 'He was only taken seriously ill on October 31,' so writes Count Lurani's great friend, Signor Enrico Ghisi, 'and on the morning of November 4 he was still reciting Dante's "Divina Commedia," which he knew by heart, and Juvenal in Latin. He translated the latter into Italian for the benefit of those around his bedside; all this, when his mind was so far gone that he was unable to ask even for a handkerchief by its proper name. . . . He was more than a friend, a brother to me . . . a good man. . . . Perhaps I may mention to you that we have decided . . . to have a memorial tablet put up to him at San Martino or Bagni del Masino next summer when we . . . inaugurate our new Badile hut. . . . The old hut will still be kept in order . . . to remind us of its founder, Francesco Lurani.'

To the Contessa Lurani, whose name—*Passo Cecilia*—the mountains of Masino also happily commemorate, to his family, and to the C.A.I., the Alpine Club expresses its deep and respectful sympathy.

E. L. S.

J. M. ARCHER THOMSON.

UNTIL a few years ago Archer Thomson's name was comparatively unknown to alpine mountaineers. It was only the publication of the Climbers' Guides to North Wales, and the appearance of a few articles extracted with difficulty by his friends, that forced on him a more general recognition. But the neatly formed initials 'J.M.A.T.' under some few words of bare record have been familiar to Welsh climbers since the famous first ascent of Twll Du in the early nineties, and for many years those who climbed in the region he had made peculiarly his own had learned to look upon him as the fountain of all information and the origin of almost all achievement.

He was one of the originators of the modern school of rock climbing in Britain. Beginning as a walker and explorer of the hills round his home, he was among the earliest to emerge from the early tradition of 'the line of least resistance.' At a later stage he led the escape from the 'Gully epoch' that so long restricted climbing in both England and Wales, and headed the venture on to the ridges and steep slabs. Adapting his style to the Snowdon cliffs, he evolved the somewhat specialised type of climbing which has been principally responsible for the extraordinary advance made in the standard of difficulty during recent years; the slow controlled movement, depending on a fine balance rather than grip, and identical in pace and security upon easy crags or on the hardest passages. To follow him on a climb was an education in itself. It was a rare privilege, for he shunned any form of acknowledgment, and only recently and unwillingly could be induced to believe that anybody but himself could be really interested in the British mountains or, consequently, in his achievements upon them.

It would be impossible to enumerate his explorations. They include practically every first ascent of importance made in North Wales during the last two decades. And it is worthy of more than passing mention, as a record of unrivalled athletic performance, that, in spite of the immense advance made in the standard of rock climbing, especially during the last ten years, he remained to the end admittedly among the finest, if not the finest, as well as the most imaginative cragsman of his time, one with whom younger men might be compared, but whom none could be said to surpass.

The Alps he visited frequently, and made many guideless ascents, but his specialised style allowed him less scope for original work in their larger field. Perhaps the most remarkable illustration of what can be accomplished by the perfecting and adaptation of a climbing technique might be discovered in his last season in the Alps, when, at a time when he was already approaching his fiftieth year, he made some ascents, including two crossings of the Matterhorn in three days, with Josef Knubel and H. O. Jones, and was so much impressed by the possibility of combining speed with climbing grace and security, that when he subsequently led a notable series of first ascents in Skye, he was able to alter his whole tradition, and climbed at a pace, and with a finish and safety that his companions maintain they have never seen approached upon difficult rock.

J.M.A.T. was more than the most consistently good rock climber of his time. He was a man of wide and cultivated interests, and, as his writing revealed, of considerable literary gifts. He was familiar with every legend that related to his peculiar hills; he perfected his climbing skill primarily as a means to reach their most intimate recesses; and he loved every stone, bird and flower, with an artistic absorption as silent as it was profound. Many of us knew him only as a recluse and a poet, a romantic and occasional





S. C. Barasford, photo.

Swan Electric Engraving Co. Ltd.

H. E. Jones

appearance with an unrivalled skill in performance and a generous sympathy and store of knowledge always ready for younger climbers. He led the exploration of the great cliffs in North Wales from start to finish, and he did not long survive its completion. It is difficult to imagine the district without his presence or without the opportunity of reference to his appreciative judgment. For a number of us the cliffs of Snowdon, and more especially the incomparable precipices of Lliwedd, of which he knew every ledge and cranny, will be haunted, and almost consecrated, by the memory of his figure, solitary and smoking, crouched on some picturesque and inaccessible shelf, or moving with extraordinary lightness of foot along the scree, or most characteristic of all, leaning easily outward with half his body free, in the middle of some gaunt and holdless slab, his feet and knees attached to the rock on some principle of balance all his own, and gazing upward with a smiling intentness that seemed half critical examination and half remote and contemplative pleasure.

G. W. Y.

HUMPHREY OWEN JONES.

THE premature death of Humphrey Owen Jones has meant for the country the loss of one of its most distinguished scientists, and for his University the loss of a brilliant teacher, a master of research, and an admirable organiser in many spheres of activity. It is not the place here to enumerate his distinctions, public or academic, or attempt an appreciation of his work. For us, as Alpine climbers, the death of 'H.O.' has meant the disappearance, almost at the beginning of his career, of a mountaineer in many ways unique.

Commencing his climbing somewhat late, he set himself with the thoroughness of a highly trained mind and the enthusiasm of a Celtic nature to master every detail and aspect of mountaineering, and in the space of only a few seasons had won his way, by force of sheer intellect, helped by remarkable powers of endurance, technical skill, and an inexhaustible vitality, into the very front rank of mountaineers. His first season or so in the Alps was without special distinction. It was primarily in his own mountains of Wales that he discovered his peculiar powers, and took up the study of mountains and climbing as a science. He is responsible for much original exploration on the Welsh cliffs, and was the leader on what is now considered the severest of all the great Lliwedd climbs, the 'Paradise Route.' With J. M. Archer Thomson, whose death only preceded his own by a few weeks, he practically discovered and explored the great Clogwyn yr Ddysgl cliffs, those also on Craigiau Gwynion, on Llechog, and elsewhere. But it is with the Italian face of Mont Blanc that his name will always be associated. From 1908 until the year of his death he spent his vacation time, with an occasional excursus on to the Chamonix Aiguilles or the Zermatt peaks,



H. C. Farquhar, Photo.

Dean Electric Engraving Co. Ltd.

H. C. Jones

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in this region of fascinating exploration. Of his climbs, most of them new, full notes have already appeared in this Journal. In 1907 he climbed the little Dru, the Charmoz, etc. In 1908, the Aig. de la Brenva, the Aig. Noire de Peuteret, and a long exploration of the Brouillard Ridge of Mont Blanc, including a guideless ascent of the Col Emil Rey. In 1909 he traversed Mont Blanc, by Mont Maudit and Mont Blanc de Tacul, did some further exploration of the south face, and made, with Laurent Croux, the first ascent of the Aig. Blanche de Peuteret from the west, this last a brilliant piece of route-finding. In 1910 he made ascents of the Dent du Géant, Grépon, Tour Ronde, etc., and some new ascents on the Rochers de Mont Blanc, on the Rouges de Triolet, etc. 1911 was his greatest season. It included a new ascent of the Dôme de Neige with traverse of the Ecrins; a record traverse of the Meije; the culmination of his explorations on Mont Blanc in the first ascent of the Brouillard Ridge; the first ascent of the Grandes Jorasses by the west ridge and the first descent of the east ridge; another traverse of Mont Blanc by the Dôme route, and the first ascent to the summit of the Grépon by the west face. He finished the season by ascending the Täschhorn, and by twice crossing the Matterhorn in three days, with Archer Thomson, the second time by the Zmutt Ridge. This was followed, in the autumn, by a series of fine first ascents, with the same companion, in the Island of Skye. In 1912 his programme was almost as considerable, and he took especial pleasure in the prospect of introducing his bride of a few days to Courmayeur and his own chosen region. After crossing the Col du Géant, his party went up at once to the new hut under the *Innominata*, where, in spite of the unfavourable weather, they stayed for their four remaining days of very complete happiness. On the first of these we made the first ascent of the Isolated Peak of the Dames Anglaises, in company with Knubel and Truffer, a splendid climb on which all his mountaineering qualities had full scope, and on the last he started for a comparatively easy traverse of the Mont Rouge de Peuteret, and was killed, together with his wife, as the result of an accident, the breaking away of an apparently firm rock hold under the hands of the guide who was leading.

Truffer was a sound and reliable climber, as well as an attractive personality. He was climbing on that day, as we know, with his usual care. It is profitless, and presumptuous, to attempt to assign causes or affix responsibilities for the effects of occasional chance to which we are all liable. The only lesson is the old one, never completely learned, that of the necessity in mountaineering of equal care, in every movement, at every moment.

As a mountaineer, Jones's endurance, skill and calculating courage were only equalled by his sound judgment of rock, ice, or weather, by his cool decision in every variety of emergency, and by his self-control and unflinching sense of humour.

The exhaustive study of mountains and their craft and the

reasoned devotion of his best energies to this somewhat remote form of self-realisation were in his considered opinion more than repaid. He recognised the risks involved. He faced them, and the effort, with all caution but full assurance; not only because he had learned to love the mountains and their study as much as life itself, but also because he was aware that they served to develop and refine in himself powers of observation, enthusiasm and sympathy, which lent to his life's work as teacher, research student and administrator anything that, in his own modest estimate, it possessed of force or individual value.

He believed that life, to be worth living by the race or by the individual, must be lived, both as an example and as personal realisation, at the fullest exercise of vitality and manhood. He accepted, for himself as for others, the necessity involved in so stringent a code of the occasional sacrifice of the individual life.

No notice would be complete without some mention of his wife, who shared his work, his enthusiasms, and his death. His follower, if not his equal in scientific research—she was the only woman as yet elected a Fellow of the University of Wales,—she was also his rival and companion in love of the mountains, and was as consciously determined to live their joint life only on the same unrelenting terms. That death should not have separated them, at a moment when every form of public recognition and success and every promise of private happiness seemed to have combined to celebrate the beginning of a very perfect comradeship, is the consolation that remains for their friends.

G. W. Y.

THE ALPINE CLUB PHOTOGRAPHIC EXHIBITION.

THE Annual Photographic Exhibition was held at the Alpine Club in December last, the Committee having decided that the Exhibition of Paintings which is generally held at this time of the year would be seen to better advantage in May, and there are few, we imagine, who will find fault with the Committee's decision.

In spite of the disappointing season of 1912, which certainly did not lend itself either to photography or to climbing, there was no lack of exhibits, while the number of people who attended the Exhibition gave eloquent testimony to the popularity of these exhibitions.

Before we refer to any pictures individually, we should like to make a few general comments. And first of all, a word or two about the framing of the exhibits. We do not wish to attach too much importance to this point, but there is no doubt that a carefully chosen frame and mount add a great deal of attractiveness to almost any picture. On the other hand a badly framed photograph—however good it may be in itself—is often passed over much too

hurriedly merely because the setting as a whole produces a disagreeable impression on the spectator. A little more thought in this respect may easily enhance the interest and value of these exhibitions.

Again we would like to refer briefly to the size of some of the pictures. A considerable number of quite small exhibits were shown this time, and though these are excellent when looked at in an album, yet for exhibition purposes it is a little difficult to appreciate their true value, unless they are produced on a somewhat larger scale. We noticed also that there were one or two pictures which erred in an opposite direction, and were over-enlarged, which again rather detracted from their value, so that the happy medium in this, as in all other things, is what should be sought for. A few pictures lacked what we may call 'the life' or 'spirit' of the mountains, having rather a dull and flat appearance. We were glad to see, however, that this time there were not so many 'stereotyped' views as is usually the case. We do not, of course, in the least object to pictures of well-known views and mountains, but as every mountain has more than one side to it, it would be interesting to see a little oftener than we do the less well-known sides of some of these peaks.

And just one more word before we look at our pictures in detail. The standard at these Exhibitions has always been a very high one, and everybody will wish to see this high level maintained. Therefore we were sorry to notice that in one or two instances the prints were none too well finished off. Superfluous edges and uneven printing are surely things that could easily be remedied.

The Exhibition was undoubtedly of great interest, one of its chief features being the large number of Himalayan pictures seen for the first time. Major Bruce was chiefly responsible for these, contributing no fewer than twelve large views of the Kulu-Lahoul range. His view of the 'Zanskar Cone' was a particularly charming picture, while that of 'The North Banghal Ridge of Weisshorn,' showing great clouds of snow blowing off the ridge, was another very pleasing one. He was very happy, too, in giving an idea of the length of some of these Himalayan valleys. The view of 'Damphu Nullah and Gaftan Peak' looking up the whole length of the valley was delightful, while that of the 'Patseo Valley' was almost equally good. Of his other pictures we can only mention for want of space that of 'The Little Kakti Glacier,' which gave one an impression of the extent of a Himalayan glacier.

Mr. C. F. Meade also showed a fine series of Himalayan views, in another part of that great range, the Garhwal district. Undoubtedly his most striking contribution, if not the most striking picture of the Exhibition, was that of 'Kamet and the 24,000 feet Satellite,' showing a tremendous panorama of peaks and giving a better idea of the extent of the work to be done in that part of the world than we yet remember to have seen. Another most fasci-



Tempest Anderson, photo

Swan Electric Engraving Co., Ltd

RIDGE OF LE PETIT FLAMBEAU,

COI DU GÉANT

nating picture was Tibet from Highest Camp, while that of the 'Satopant Glacier' was beautifully soft and refreshing.

Mr. Kellas and Lieut. Minchinton also showed Himalayan views. The former only sent two pictures, also in the Garhwal district, but both of them made up in quality for the lack of quantity. Lieut. Minchinton also sent three charming winter views of the Alps, that of 'The Saleinaz,' which was very soft and delicate, being perhaps the best.

Dr. Tempest Anderson sent in some beautiful pictures and more than kept up his reputation as an Alpine photographer. His rendering of snow is the most perfect we have seen. When we remember that the whitest object imaginable seems almost dirty against clean snow, we shall appreciate more fully Dr. Anderson's exquisite photographs. The 'Petits Flambeaux' was a superb piece of work, the lights and shades on the snow being especially nice, while there was no more striking picture in the room than 'La Vierge.' Even the somewhat strong contrast between the rocks and the snow here could not detract from the beauty of this picture. Another most interesting picture was his 'Glacier Garden at Lucerne.'

One of our most successful exhibitors is Miss Sophie Nicholls, and we are always glad to welcome her pictures. Her telephoto view of the 'Mischabel' was one of the best pieces of work seen, the distance being admirably rendered and showing what great possibilities there are in telephoto work. Her 'Desert Hills of Judaea' conveyed a good impression of the country it depicted.

The Pyrenees were represented by a couple of pictures by Mr. Gatty. His large view of 'The Bridge at Boucharo' was very pretty.

Most of the other exhibits were views of different parts of the Alps. Mr. Morrish showed some excellent work of the Dolomite district, his 'Langkofel Group' and 'Fünffingerspitze' in a warm brown tint being especially nice. More striking perhaps was his picture of 'The Guglia,' but this was somewhat spoilt by a rather hard sky.

Mr. Alfred Holmes sent several interesting pictures. His 'Mont Blanc from the South' was very good, both as regards technique and detail, and moreover had the additional interest of showing the route over the Picco Luigi Amedeo which recently formed the subject of a paper read before the Alpine Club by the late H. O. Jones.

Mr. Woolley only sent one view, 'Hahnen, Engelberg, in Winter,' and we should like to have seen more. It was one of the most beautiful and delicate of pictures it is possible to imagine, and must have fired many people with the wish to visit the Alps in winter.

Undoubtedly one of the finest enlargements in the room was Mr. E. de Q. Quincey's 'Storm on the Jungfrau.' The clouds were perhaps a little bit unreal, but altogether it was a very impressive picture. 'The Reichenbach Falls' was also an extremely clever and unusual piece of work.

Mr. Larden again sent two most interesting frames from his collection of 'Hausinschriften,' and these pictures left nothing to be desired.

The Dauphiné was represented by pictures by Mr. Gover and Sir Alexander Kennedy. The former gentleman sent three excellent views, typical of the Dauphiné, which should inspire our younger members to visit these parts a little oftener. Sir Alexander Kennedy's view of 'The Mont Aiguille' was a very artistic piece of work. But why should a mountain with such a particularly flat top be called an Aiguille? Is there any legend attaching to it? His 'Road in Dauphiné—The Grand Veymont' was also a very happy piece of composition.

Mr. Sydney Spencer sent in several exhibits all showing great merit. Among them was a beautiful picture of 'The Bietschhorn,' whose pyramidal peak was admirably shown off by a circular frame. Another excellent picture of Mr. Spencer's was 'The Laquinhorn and Weissmies' with their fluted ice slopes.

Two very impressive enlargements were sent in by Mr. C. Thurston Holland, 'The Aiguilles Dru, Verte et Moine,' and 'The Aiguille de Pierre Joseph.' Both of these were really beautiful.

Excellent work was also sent by Mr. Atkin Swan. His pictures, although of views very well known to mountaineers, did not seem at all commonplace, owing to their excellent technique and the sense of reality which they conveyed. That of his 'Dents Blanches' however lacked just a little something. A ray or two of sunlight would have greatly improved this picture.

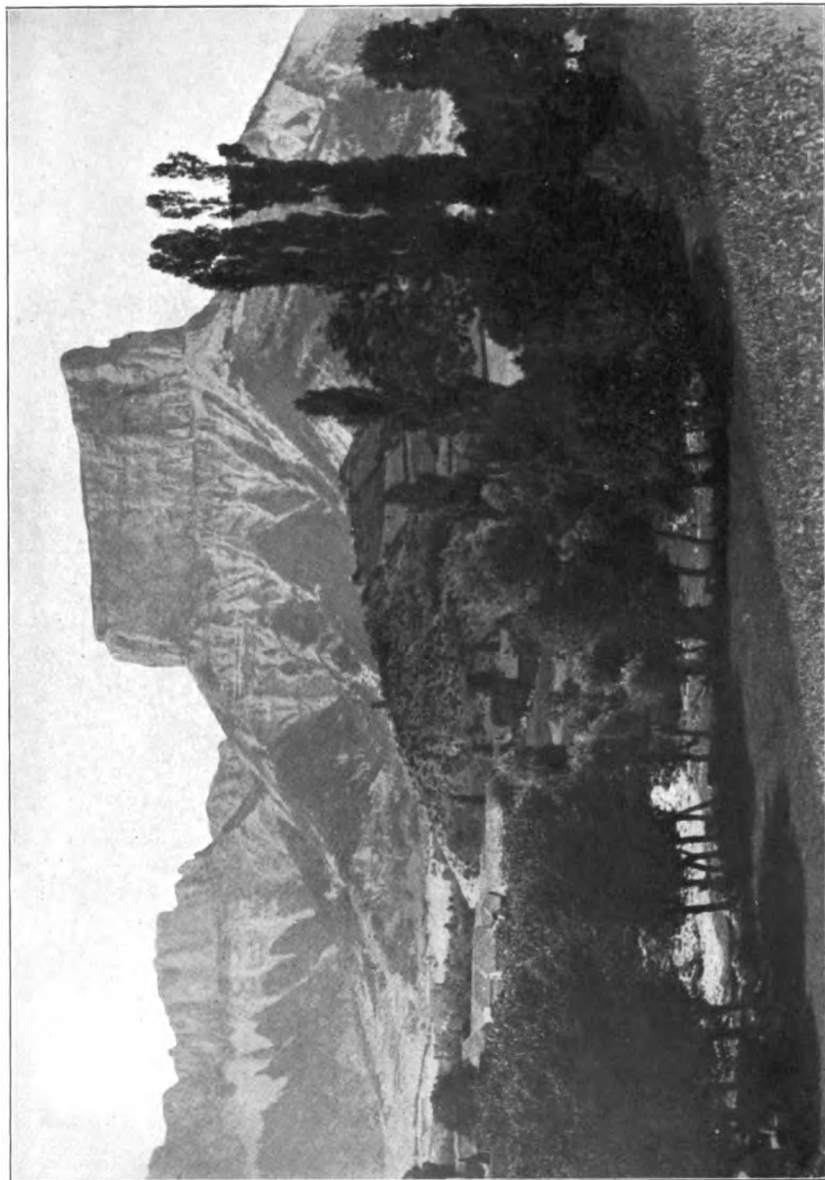
Mr. Nevill again showed some fine work. His 'Pigne d'Arolla and the Icefall of the Zigiorenove Glacier' was a beautiful example of photographic art. His 'Mont Blanc de Seilon' was also very impressive, but we are inclined to think that the sky was over-corrected and gave one a false impression.

Mr. Tucker's 'Matterhorn from Schönbühl' was exceedingly striking. No other picture conveyed the idea of height so well. Moreover it showed in unmistakable fashion what kind of weather it was last year, the precipices being plastered from top to bottom with snow.

Other interesting work was shown by Mr. Irving and Mr. Hugh Roger-Smith, though the latter's 'Traverse on the Cinque Torre' was hardly true to life, and photographically left a good deal to be desired. One would imagine that the camera must have been pointed downwards.

Mr. George W. Smith showed some excellent exhibits, his portrait of 'Louis Felley' being most delicate and soft. In fact it might almost have been a pencil sketch and was very happy in composition. His 'Grande Dent de Veisivi' and 'The Lower Summit of the Petite Dent' were also very fine, and gave one an admirable impression of these little rock peaks.

Mr. Neville Done, who has always shown good work, sent two



R. S. Morrish, photo.

THE MONT AIGUILLE,
S. FRANCE.

Swan Electric Engraving Co., Ltd.

large exhibits, both pictorially beautiful, though to most people his 'Zinal Rothhorn' was most attractive, the various tints in the snow being very well rendered. His other picture, 'The Esterels on Christmas Eve,' conveyed a great sense of quiet and repose.

Of sub-alpine scenery there were no better pictures than those of the Rev. James E. Dawson. 'The Grand Combin from the Lac de Champex' was a really very artistic piece of work, and 'The Orgues de Bovine' was another very pretty view. His panorama of 'The Mischabel' was also excellent.

Mr. E. H. Stevens showed several pictures, but by far the best of them was 'The Lago Ghedina.' This was very pretty and was almost like a crayon drawing.

'Antelao, with Flowers,' lent by Mr. Broome, was another very pretty picture and showed a wealth of flowers in the foreground which was delightful. Mrs. Corning's 'Campanili di Val di Roda' was also very nice.

Other sub-alpine views were sent by Miss Margaret King, Mr. E. R. Taylor, and Mr. G. F. A. England, all of them quite excellent.

But it is impossible to go through all the pictures individually. Mention must however be made of Dr. Williamson's very fine view of 'Monte Rosa from the New Weissthor' and Colonel Capper's view of 'Mont Collon' from Arolla, both of them excellently rendered.

A very pretty and artistic little picture was the 'Dent Blanche from the Bricolla Hut,' shown by Miss Capper. Mr. E. Douglas Murray was responsible for half a dozen very excellent exhibits, amongst which were two really charming studies of Swiss peasant children.

Among other exhibitors were Miss Tiarks, Miss Bailey, the Rev. O. W. Harries, Mr. Benson Lawford, the Rev. Walter Weston, and Mr. W. M. Roberts.

Mr. Mumm was the sole representative of the British Isles and sent a very fine view from the Coolins, 'The Inaccessible Pinnacle.'

The Rev. A. E. Murray sent three interesting views of Iceland, that of 'Siglufjord' being perhaps the finest. The effect of mountain, cloud and sea was very pleasing.

Norway was represented by a solitary picture, a view of 'Store and Veste Skagastolstind' being lent by Mr. Raymond Bicknell.

Such parts of the world as the Canadian Rockies and the New Zealand Alps were entirely neglected.

Quite a number of autochromes were sent by Mr. E. de Q. Quincey, Mr. Hugh Roger-Smith and Miss Sophie Nicholls. They were all excellent in their way, but this line of photography has by no means yet reached its zenith.

An interesting set of lantern slides of the Dauphiné district was also shown by Mr. Gover.

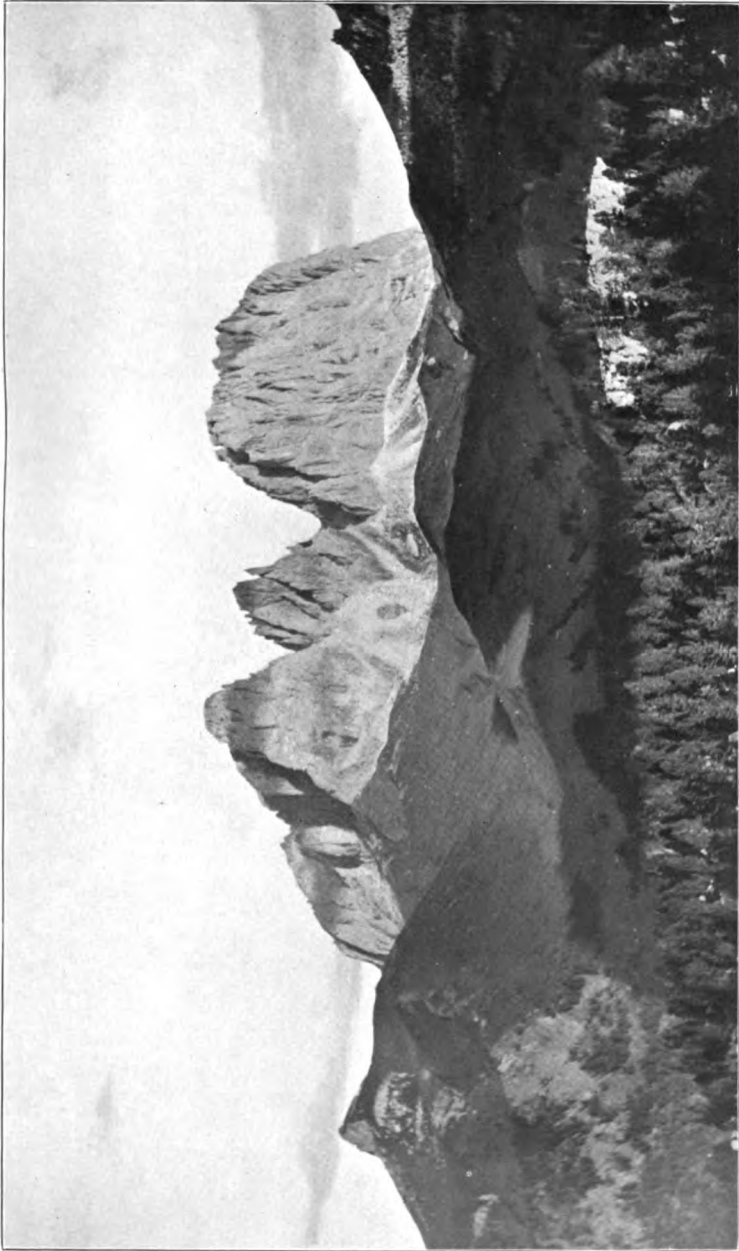
In conclusion the thanks of the Club are due to Mr. Sydney Spencer for all his trouble in arranging the Exhibition, and we congratulate him on the result of his labours.

THE ALPINE CLUB LIBRARY.

The following additions have been made to the Library since November :—

Club Publications.

- Akadem. Alpenklub Innsbruck.** 19. Jahresbericht 1911–12. 1912
9 × 6 : pp. 88.
Contains, pp. 5–13, *O. P. Maier*, In der Melzerwand : and among 'Neue Touren' :—*O. P. Maier*, Kaskarsp. ü. d. N.-Wand : Eiskarsp. ü. d. Spitzkarlkopf : Waldersunderkopf ü. d. S.-Wand ; *H. Menger*, Gruberkarsp. ; *W. Hammer*, Ausserer Bäumbartkogel v. S. ; *H. Schmiderer*, Muhriturm, Ankogelgruppe ; *H. Kees*, Campanile di Canali, Primörgruppe ; etc.
- Appalachian Mountain Club.** Bulletin, vol. 5. 1911–12
7½ × 5 : pp. 130.
- C.A.F. Section Lyonnaise.** Revue alpine. Revue mensuelle. Claudius Joublot
Rédacteur en Chef. Lyon, 1912
9½ × 6½ : pp. xv, 342 : plates.
Among the articles are the following :—
G. Rey, La Tour de Winkler.
H. Ferrand, Premiers voyages à Chamouni. Relations de Windham et de Martel.
E. Fontaine, Pointe Durier et Pointe Mieulet.
H. Mettrier, Un éloge peu connu de la montagne au xviii^e siècle, Pierre-Clément Grignon.
Todhunter, La première ascension du Grépon par le versant de la Mer de Glace.
E. Henssler, Une traversée du Bietschorn.
P. Güssfeldt, Le col du Lion.
M. Mayer, La première ascension des arêtes de la Meije par la muraille sud.
- Club Alpino Espagnol.** (Memoria.) (Madrid, 1912)
10 × 7½ : pp. 212 : ill.
This well-illustrated and interesting Year Book—the first published by the Club—contains, among other articles, the following :—
En los Picos de Europa.
M. de Amezua, El macizo occidental.
P. Pidal, El macizo central.
A. Prast, El macizo oriental.
J. F. Zabala, Sierra de Gredos.
P. A. de Alarcon, Sierra Nevada.
Sierra de Guadarrama.
Fundacion del C.A.E.
Estatutos.
Various articles on winter sports, fauna, etc.
- D.u.Oe.A.-V. Mitteilungen.** N.F. Bd. xxviii. Redigiert von Heinrich Hess.
11 × 8½ : pp. viii, 310 : ill. München-Wien, 1912
Among the articles are the following :
M. Mayer, Die erste Durchkletterung der Lalidererwände im Karwendelgebirge.
Dr. Hörtnagl, Bemerkenswerte neue Turen des Jahrs 1910 in den Ostalpen.
Otto Langl, Von Norden auf die Dreischusterspitze.
H. Menger, Die alpinen Unfälle des Jahrs 1911.
C. Arnold, Die Hochalmspitze, ihre Zugänge und Anstiege.



Sir A. B. W. Kennedy, photo.

**LANGKOFEL GROUP, from PORDOI PASS.
(Evening light.)**

Swan Electric Engraving Co., Ltd.

- E. Christa, Die Berge des Heiterwandgebiets.
 F. Hohenleitner, Die Nordwand der Busazza.
 P. Preuss, Die Nordkante des Grossen Oedsteins.
 Die Feier des fünfzigjährigen Bestandes der Sektion "Austria."
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 K. Müller, Das Alpine Museum, München.
 A. Durig, Turistisch-medizinische Studien.
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 L. v. Hörmann, Genuss- und Reizmittel in den Ostalpen.
 W. Fischer, E. Platz, O. Schuster; Zwischen Terek und Ardon.
 Kaukasusfahrten im Sommer 1911.
 H. Pfann, Der Montblanc.
 E. Christa, Das Gebiet der Heiterwand.
 K. Blodig, Die Bergwelt des Cromertales.
 F. Benesch, Aus dem Toten Gebirge.
 Hanns Barth, Die Adamello- und Presanellagruppe.
 H. P. Kiene, Die Puezgruppe.
 G. Dyhrenfurth, Aus der Ofenpassgruppe.
 L. Patéra, Bergfahrten in der Cavallogruppe.
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 This contains :—
 G. Ledormeur, Pyrénées ariégeoises et catalanes. Maubermé, Pic de Commengé, Crabere, Tuc det Bouc.
 Rapport de la Commission de toponymie.
 P. Soubiron, Le Pic d'Endron.
 Légende de tous les cols, ports et passages qui vont de France en Espagne, vi^e partie.
 H. Beraldi, Les tours d'horizon pyrénéens de Schrader.
 G. Cadier, Les approches du Marmuré.
- Fell and Rock Climbing Club of the English Lake District.** Annual Report. 1911-12
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 — List of members, rules, meets, etc.
 8½ × 5½ : pp. 10.
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 H. B. Lyon, New Scrambles in Mosedale.
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 L. J. Oppenheimer, Climbing in the Buttermere Valley.
 H. S. Tucker, First traverse of the Rateau.
 G. S. Sansom, Climbs on Scafell Pinnacle.
 S. W. Herford, Traverse of Scafell Crags.
 G. S. Turner, Climbs near Grasmere.
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- The Mountaineers.** The Mountaineer. Second Rainier number. Grand Park and Summerland. Vol. 5. Seattle, 1912
 11 × 7 : pp. 107 : plates.
- Nederland, Alpen-Vereeniging.** Kalender. 1913
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- Oester. Alpenklub.** Nachtrag I zum Katalog der Bibliothek. Dezember 1912.
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 C. Jacot-Guillarmod, L'altitude du Cervin.
 R. Fontannez, Traversée des Drus.
 H. Balavoine, J. J. Rousseau et la montagne.
 M. Kurz, Notes-itinéraires sur les montagnes situées entre la Drance et Ferrex, etc.
 E. R. Blanchet, Deuxième ascension de la cime de l'Est.
 E. D'Arcis, Inauguration de la Cabane Britannia.
 A. Bally, Au Mont-Blanc par le chemin de l'école.
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 E. Walder, Greina, Jorio, Muretto.
 R. Beck, Besteig. d. Mönchs v. Norden.
 H. Kempf, Ferientage am Eigergletscher.
 Pfarrer Gottfried Strasser, portrait.
 Der Besuch der Clubhütten.
 In 1911 42,446 names were entered in the books of the 74 huts as compared with 26,452 in 1910 : i.e. 573 per hut, as compared with an average of 904 for each D.u.Oe.A.-V. hut.
 Inauguration du refuge Campo Tencia.
 Die Einweihung der Britanniahütte am Hinter-Allalin.
 W. Dürrenmatt, Das Balmhorn über Wildelsigen.
 This periodical is concerned chiefly with official notices.
- **Clubführer** durch die Glarner-Alpen. 2., im Auftrag d. Zentral-Komitees d. S.A.C. durchgesehene und ergänzte Aufl. verfasst von Dr. Ed. Naef-Blumer. Zürich, Tschopp, 1912. M. 2
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 Large folio sheet.
- Sierra Club.** Bulletin, vol. viii. 1911-1912. San Francisco, 1912
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 Among other articles contains :—
 C. B. Bradley, Stevenson and California.
 S. L. Foster, Ascent of Red Peak.
 F. W. Foxworthy, Mount Kinabalu.
 J. Grinnell, Early summer birds in the Yosemite Valley.
 F. E. Matthes, Studies in the Yosemite Valley.
 M. R. Parsons, Mazama outing to Glacier Park.
 R. M. Price, With the Sierra Club in 1911.
- Ski Clubs ;—**
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 8½ × 5½ : pp. 64 : plates. London, Horace Marshall, 1912. 2/-
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 A. Lunn, Three climbs with Crettex : Forno, Eiger and Gspaltenhorn.
 E. Tennant, The Lauterbrunnen Breithorn.
 W. Larden, Hints for middle-aged beginners.
 A. H. Dauks, Skiing in Derbyshire.
- Foreningen til Ski Idraettens Fremme.** Aarbok for 1912.
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 J. S. Hertzberg, Sørlandsvinteren.
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 S. H. L., I snestorm gjennom Trolldheimen.)

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Schweiz. Ski-Verband. Ski. Jahrbuch d. Schw. Ski-Verbandes. VIII. Jahrg. Bern, 1912

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F. W. Sprecher, Alpiner Skilauf u. Lawinengefahr.

M. Karz, Entre Saas et St. Nicolas.

G. Bilgeri, Ziele d. militärischen Skilaufs.

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Paule Collet, La Tour Carrée de Roche-Méane.

A. Coutagne, Deux courses d'hiver en Tarentaise.

J. Roux, Sous les sapins de Chamrousse.

E. Chabrand, Essai de synthèse toponymique.

V. Hulin, Les avalanches.

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59. E. A. Martel, L'hydrologie souterraine aux Etats-Unis.

60. F. Mazauric, Recherches spéléologiques dans le Gard.

61, 65. L. Briet, Barrancos et cuevas.

62. E. Fournier, Recherches spéléologiques et hydrologiques dans le Jura franc-comtois.

63-4. N. A. Siérigès, Les Katavothres de Grèce.

66. L. Briet, Sous la Peña Montañesa.

67-8. J. Maheu, Exploration et flore souterraine des cavernes de Catalogne et des Iles Baléares.

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A series of fantastic tales of the powers of nature over man's mind, weird and somewhat strained but also with a certain truth and power.

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- Chase, J. Smeaton.** Yosemite trails. Camp and pack-train in the Yosemite region of the Sierra Nevada.
London, Unwin, 1912. 8/6 nett
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The literature of camping among the mountains of the Western States of N. America is extensive and full of charm. This new work is among the most delightful of the books of the kind. The kind of life described and the scenery have evidently a great fascination for many writers, and all can more or less vividly convey their impressions to their readers. Mr. Chase allows his readers to share his keen enjoyment of the life and surroundings.
- Clément-Grandcourt, Cap.** Quatre jours aux manœuvres de montagne dans les Alpes suisses (18-21 septembre 1907).
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- Couché, Jules.** La Suisse, II. La Suisse française et la Vallée de Zermatt.
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- de Filippi, Fillippo.** Karakoram and Western Himalaya 1909. An account of the expedition of H.R.H. Prince Luigi Amedeo of Savoy, Prince of the Abruzzi. With a Preface by H.R.H. the Duke of the Abruzzi.
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Journey in 1911 towards Kangchenjunga and Kangchenjhau.
pp. 280-294: A. G. Ogilvie, Some recent observations and theories on the structure and movement of glaciers of the alpine type.
December: pp. 615-620: Mrs. Workman, Some notes of my 1912 expedition to the Siachen or Rose Glacier.
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- Gordon, Seton.** The charm of the hills.
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A delightful work, descriptions of nature, of bird and of animal life, in the Cairngorms, by day and by night, in summer and winter. Very good and numerous plates from photographs: perhaps the most interesting being those of the golden eagle.
- Gos, Charles.** Prés des Névés et des Glaciers. Impressions Alpestres. Ouvrage illustré de douze dessins à la plume par Albert Gos. Préface de

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 Première neige, L'automne qui meurt, La chapelle sous la neige;
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- Hegi, G. u. F. Tösstal und Tösstalbahn. Wanderbilder, no. 282-285
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- Kronecker, H. Il mal di montagna. In La clinica contemporanea, vol. xi.
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- Lance, Max. Eine Kibo-Besteigung. In Zeits. f. Erdk. Berlin, no. 7. 1912
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- The Englishman in the Alps. Being a Collection of English Prose and
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- Mariani, Prof. Ernesto.** Sulle recenti oscillazioni del ghiacciaio del Forno nell' Alta Valtellina. Reprinted from Riv. Mens. di Sc. nat. "Natura," vol. 3. Pavia, Fusi, 1912
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- Paganini, Pio.** Rilievi fotogrammetrici nella regione del Karakoram eseguiti dalla spedizione di S.A.R. il Duca degli Abruzzi. Estr. d. Boll. d. Soc. geogr. ital. fasc. viii. 1912, pp. 820-840 e fasc. ix. pp. 947-965. Roma, 1912
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Pfann. Bilder aus Tirol
 Pleasing sketches of architecture in picturesque Tirolese villages. They are strongly and clearly drawn, giving charming pictures of the delightful and artistic village buildings of Tirol with a background in some of them of mountain scenes. The pictures are of:—Kastelruth, St. Anna bei Kastelruth, Mariastein, Sterzing (3 views), Hall (a delightful street corner with statue, ironwork, and projecting windows), Klausen (2 views), Kollmann (a great gate and towers), Andrian in Etschtal, Tramin, Neumarkt, Rattenberg (6 views, of streets, river, bridge, and general view of the town), Brixlegg, Neumarkt. Altogether a set of views of value to anyone knowing the district or interested in Tirolese architecture.
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- Raymann, Arthur.** Evolution de l'alpinisme dans les Alpes françaises. Thèse pour le doctorat d'Université. Brunswick, 1912. Fr. 25
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- Roget, F. F.** Hints on alpine sports. London, etc., Burberrys (1912)
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- Rumney, A. Wren.** The Dalesman. Kendal, Wilson, 1911
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- Schober, A.** Die Uralpen Oberkärntens. Spittal a. d. Drau, Liebl, 1909
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- Shelley, Lady Frances.** The diary of Frances Lady Shelley 1787-1817. Edited by her grandson Richard Edgcumbe. London, Murray, 1912
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- Spender, Harold.** In praise of Switzerland being the Alps in prose and verse.
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- Steinitzer, Alfred.** Der Alpinismus in Bildern. München, Piper, 1913 [i.e. 1912]. M. 20
12 × 9 : pp. x, 482, 680 : ill. and 8 col. plates.
A remarkable, most interesting and most valuable collection. Reproductions of book illustrations, drawings, paintings, advertisements, etc. from the earliest to present times. Short introductions to each portion are given, such as: Der Präalpinismus: Der klassische Alpinismus: Der moderne Alpinismus: Skilauf: Der Militärische Alpinismus: Alpinismus und Luftschiffahrt: Karikatur, Reclame, u.s.w. The book represents a vast amount of work and trouble, well directed to a very excellent result.
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- Thirring, Dr. Gustav.** Führer durch Sopron (Oedenburg) und die ungarischen Alpen. Sopron, Dunantuli Turista-Egyesület, 1912. K. 3
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- Thomann, M.** Alt-Engelberg Zürich, Orell Füssli, 1912
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- Tischler, Ernst und Viktor Wilke.** Ski-tourenführer durch die östl. Beskiden von der Weichsel bis zur Waag. Im Auftrage des Wintersportklubs Bielitz-Biela zusammengestellt. Bielitz, Selbstverlag, 1912. M. 1
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- Whymper, Edward.** Escalades dans les Alpes de 1860 à 1869. Nouvelle édition, traduite de l'anglais . . . et considérablement augmentée. Genève, Jullien, 1912. Fr. 5
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V. Sohm, Zur Bindungsfrage.

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23 × 26.
A large coloured plate, representing two men by the cross on the summit
of the Grosse Glockner touched by the morning sunlight, the sky above
a very deep blue.
- London and North Western Railway.** Large coloured poster, entitled
'Mountaineering in the Lake District.' 1912
- G. Holub.** Alpenrosen. Autogrävure.
Wien, Angerer & Göschl, Ottakringstr. 49: 1912. Kr. 20
19 × 14: coloured.
A very fine reproduction of a most effective picture, a large bunch of
alpenrosen standing in a brown jug on the corner of a wooden table.
Background, a green meadow. Altogether a very good piece of work.
- Platz, Ernst.** Im wilden Felsgebirg, Kaltwasserkarspitze im Karwendel.
Künstler-Steinzeichnung. Leipzig, Merfeld & Donner, 1912. M. 5
21 × 30.
A boldly drawn and finely coloured plate.
- Morgensonne an der Crast 'Aguzza. Künstler-Steinzeichnung.
34 × 22. Leipzig, Merfeld & Donner, 1912. M. 5
A very finely drawn and well coloured picture, representing two figures
crossing a glacier slope with the mountain top catching the first rays
of the rising sun.

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NEW EXPEDITIONS IN 1911 AND 1912.

Graian Alps.

BECCA DI GAY, FIRST SUMMIT (? 3600 m. = 11,808 ft.) FROM THE COLLE BARETTI.—Leaving a bivouac at the foot of the Ghiacciaio di Rocca Viva on July 9, 1912, Mr. A. Stuart Jenkins, with the guides Jean Bournissen of Hérémece and Jean Gaudin of Evolena, reached in 1 hr. 45 min. the Colle Baretti, where they found a cairn and whence they followed in 2 hrs. the arête to the first summit of the Becca di Gay (weather uncertain and cloudy). The rocks were at first loose, but sound afterwards and were generally difficult, reminding one of the Chamonix Aiguilles. No cairn was found on the summit, but one was built. The descent was made to Cogne by the Colle Baretti and the Gh. di Monei.

A fortnight or so later Signor Ettore Santi and a friend repeated this expedition, and continued to the highest summit of the Becca di Gay.

Mont Blanc Group.

TÊTE CARRÉE (3752 m. = 12,307 ft.)—AIGUILLES DE TRÉLATÊTE (3875 m. = 12,710 ft., 3899 m. = 12,789 ft., 3911 m. = 12,828 ft.)—AIG. DE L'ALLÉE BLANCHE (3705 m. = 12,152 ft.)—COL DES GLACIERS (3098 m. = 10,161 ft.).

August 17, 1912, Herren L. Kraul, Eduard Mayer, Dr. Wilhelm Martin, Dr. Richard Weitzenböck.—'Ö.A.Z.' 1913, p. 15.

No previous traverse of the arête between the Tête Carrée and the Central Aig. de Trélatête and between the Col de Trélatête and the Col de l'Allée Blanche appears to be recorded.

The party left the hut on the Col de Miage (reached the previous day from the Pavillon de Trélatête via the Aig. de Béranger and the Dôme de Miage) at 3.20 a.m., followed the arête S.W., then traversed S. to a reddish-brown rock point (4.45), whence they descended to the Col Infranchissable (5 to 5.10). They followed the arête to the Tête Carrée (6.55 to 7.35), and continued to the N. Aig. de Trélatête (3875 m., 8.35 to 9.10). There follows a bit of snow arête, then two gendarmes are climbed (difficult), and so the snow saddle reached at the foot of the Central Aig. de Trélatête. From here traverse to the right or W. on steep ice to the rocky rib and gain by this (steep but not very difficult) the main arête and in a few steps to the right the summit (3899 m., 10.55 to 11.5). Descend to the snow ridge (cornices) and gain without difficulty the S. Aig. de Trélatête (3911 m., 11.20 to 11.40). Return to the Central peak and to the gap at its N. foot (12.10 to 12.45), then to the W. down the steep glacier which breaks off below, and bear to the left along the snow slopes above the Allée Blanche Glacier, the upper plateau of which is gained over easy snow, whence a level traverse (W.) leads to the Col de Trélatête (3498 m., 1.30 to 2). Now follow the ridge over several gendarmes (tolerably difficult, interesting work), finally over snow to the Aig. de l'Allée Blanche (3705 m., 3.25 to 3.35). Turn the Aig. des Glaciers on the W. (time did not permit its ascent), and descend to the Col des Glaciers (3098 m., 5.20), then N.W. down the crevassed glacier to the Trélatête Glacier and to the Pavillon de Trélatête. The expedition is described as long and tiring, but not anywhere difficult, and as offering the most commanding views of the Miage side of Mont Blanc.

Bregaglia Group.

Piz BACUN (3249 m. = 10,660 ft.; *S. map*), by the S.-W. arête. Miss Rosamund Botchford and Signor Aldo Bonacossa, July 9, 1912.—From the Albigna Club hut the first party followed the route of the Casnil Pass to a well-defined spur of Piz Bacun's S.-W. arête about 1000 ft. E. of the gap between the Pizzo del Päl and point 2850 m. Up the right, E., slope of the spur, which supports a snow slope about half-way up, to a hole in the spur, through which one must crawl, then above by means of ledges, somewhat below and on either side of the spur, progress continues in an E. direction. When the ledges become too hard, by the interesting rocks of the crest itself, or by narrow cracks on the S. slope, climbing a tooth by a chimney on the S. side; another tower is turned by snow and loose boulders on its N. slope. [A. B. had previously, 1910, reached this spot, by a far worse route.] The arête now rises in precipitous steps; at first on the N., then on the S. slope, by smooth clefts, finally on the crest itself. Savage teeth soon interrupt further progress, so again by narrow ledges on the S. slope—a very long traverse—to a basin-like hollow, filled with rotten rocks, some

160 ft. below the crest. Then diagonally by more ledges to a smooth cleft attained over a short wall, then easily to the crest and along it to a snowy gap, descended with difficulty thence to a deep notch. Now on the S. slope for about two ropes' lengths, up and down, to a narrow chimney about 90 ft. high, which is climbed direct to the crest of the arête—the most difficult bit of the ascent. Then along the crest, rocks no longer so firm, till above the deep gap, where a broad snowy gully bifurcates from the one leading up the S.-E. face route of the peak; route 2 of the 'Climbers' Guide.' Up bad rocks, overhanging in one place, to another gap, cut off in all other directions by appalling precipices, then again by the S. slope to where A. B.'s 1908 route ('A. J.' xxv. p. 176) by the N.-W. face falls in, and by this to the top.

'We took 15 hrs. to the top, but 8 to 10 hrs. should suffice for subsequent parties. Expedition is very long but of the greatest interest. Rocks are generally very firm. Weather fine, but heat very great.'

ALDO BONACOSSA.

Eastern Alps.

NEW ASCENTS IN 1911.—The 'Mittheilungen des D. und Ö.A.V.,' 1913, pp. 5-7 and 19-20, contain a very careful summary, prepared by Dr. Franz Hörtnagl of Innsbruck, of the principal new routes in the Eastern Alps which were opened in 1911. The summary is divided into groups and gives the necessary references to published accounts of the various expeditions.

The 'Oesterreichische Alpenzeitung,' 1912, pp. 397-406, also contains a similar detailed summary, compiled by Herr Fritz Hinterberger of Vienna.

These summaries bear eloquent testimony to the almost over-elaboration of treatment to which the various districts of the Eastern Alps are being subjected.

Among New Ascents in the Dolomites (including the Brenta) are mentioned: the N. face of the Cima Tosa; the N.E. face of the Crozzon; the N. face of the Winklerthurm; the W. face of the Rosengarten; the N. face of Piz Popena.

Eastern Alps—Dolomites.

CADIN DEL MALQUOIRA (2406 m. = 7892 ft.), BY THE N. FACE.—On August 22, 1912, Dr. R. G. Rows and I, with the guides Zangiacomì Angelo and Pompanin Florindo, also Messrs. J. P. Millington and T. Picton, with the guide Tobia Menardi, started at 7.30 A.M. from Tre Croci in misty weather for a first ascent of the Cadin del Malquoira by the N. face. We went down the Pfalzgau path as far as the little stream running N.E. and crossed the bridge, then cut up obliquely through scrub to the screes between Cadin del

Malquoira and its southerly unnamed neighbour, and having reached there, turned E. along top of scree and over scrubby firs, and then ascended to the Einstieg. Here we put on scarpetti, sending the porter round with boots, &c., to meet us at the summit, and ascended through scrub to the big cleft which runs vertically almost to summit of mountain. This we crossed obliquely, and then entered a big chimney running parallel to it, in which we climbed for about 100 ft., then climbed out to the right over the arête to a broad platform, running E.S.E. and N.N.W., overlooking Tre Croci. From the platform we ascended over the grat, bearing rather to the right over very steep rock to a grassy arête running N. and S., which continued into a chimney, full of very rotten rock, running N. and S., and leading to an easy arête which we followed for 40 or 50 yards, then descended on W. side and traversed W. on the rock face. At end of traverse we turned sharp E. and up grassy slopes to the summit.

This little climb is very interesting and not difficult, but distinctly dangerous owing to falling stones, and being a party of seven our times were necessarily very slow, as we had to wait a good deal on this account. We took about 4 hours from Tre Croci Hotel, but 3 hours should be enough for a small party. It is an excellent training climb, and being so close to the hotel can be done on a doubtful day.

The return was made down the grassy slopes on the S. side of the mountain, and crossing over the shoulder we rejoined the Pfalzgau path where we left it.

HUGH ROGER-SMITH.

Eastern Alps—Hohe Tauern.

GLOCKNERWAND (3730 m. = 12,234 ft.) FROM THE N. August 9, 1911, Herren Richard Gerin and Pitschmann. ('Ö.A.Z.' 1912, pp. 357-360.)—The party gained the foot of the N. face at the lowest rocks directly below the Unt. Glocknerscharte, crossed the bergschrund and reached under a hail of stones the beginning of the striking band which traverses the N. face diagonally to the right and leads to the junction of the corniced arête N. of the Hofmannspitze and the arête of the Glocknerwand. This band is well seen on the reproduction of a fine oil-painting by Gustav Jahn which accompanies the article. They followed this band, still at times endangered by falling stones, to the next secondary rib. They kept along the band, sometimes crawling in the gap between the rocks and the ice, to a little shoulder in the rib leading to the second tower of the Glocknerwand arête. From this point the view on to the great N. precipices of the Glockner was very striking. They followed the band to the next secondary buttress, and then struck straight up the icy rocks of the face to the crest of the (?) before-mentioned main buttress, and up this to the

rocky base of the second tower of the Glocknerwand. Traversing to the right below the overhanging wall, they gained, at 11.45, the col between it and the Hofmannspitze (about 7 hrs. from the Oberwalderhütte). The summit of the Grossglockner was reached at 6.30 P.M. by following the arête of the Glocknerwand to the Unt. Glocknerscharte (3.30) and turning the Teufelshorn on the S.

GROSSGLOCKNER (3798 m. = 12,388 ft.) FROM THE N. August 11, 1911. Same party. ('Ö.A.Z.' 1912, pp. 360-362.)—The party gained the foot of the Pallavicinirinne by keeping along the rocky face bounding the Innerer Glocknerkar on the left, and thus avoiding the icefall and the bergschrund. The route was, however, not safe. They crossed to the rock island at the lower end of the Rinne (9.30 A.M.) and in an hour cut across the Rinne to the rocks of the arête bounding it on the N.W. Up these and short ice arêtes they kept as far as the next pitch. They eventually gained after great difficulty, mainly up a buttress, the N. arête of the Glockner (1 P.M.) just above its vertical pitch. This very steep crest was followed to the top of the tower standing out most to the N. (Stoneman built 1.30 P.M.).

The following part of the arête consists of a series of teeth which were climbed and which end in a cleft tower before a gap. Then follow a short ice arête and the summit (3 P.M.). The difficulties of the upper part of the arête are about equal to those of the well-known N.-W. arête.

Central Caucasus.

A full report of the 1911 expedition * of Herren Dr. Walther Fischer, Ernst Platz and Dr. Oscar Schuster is contained in 'Ö.A.Z.' 1911, pp. 326-8.

The party left Dresden on July 8 and reached Wladikawkas, via Kalisch, Warsaw and Rostow, on July 12.

On July 14 they drove to Kobi on the 'Grusinian Highroad' (8 hrs.), where they picked up their two Grusinian packers with four donkeys whom they had hired for the whole journey.

On July 15 the party reached in 6 hrs.' walking, by a difficult and at times, owing to the lateral torrents, dangerous path, the small village Resi (2309 m.) in the Upper Terek Valley. They procured a tolerably decent room here, and made the village their headquarters for the next two weeks.

On July 16, with the President of the Commune, Michael Gabulow, they went up the Resi Valley and reached in 4½ hrs. the Salagan Pass (about 3700 m.). This is marked 'Pass' on the Merzbacher

* See *A.J.* xxv. 462-4, for the report of their 1910 expedition. Names and heights are taken from Merzbacher's maps. The times do not include halts.

map and lies N.W. of Resi-Choch and N.E. of Point 3661. They descended into the Dsaramasch Valley by the unnamed glacier, which they crossed, aiming for the ridge which bears the cotes 3397 and 3711, on the E. slopes of which, at a height of 3300-3400 m., they bivouacked.

On July 17 they left their bivouac at 3.25 A.M. intending to ascend Sirchu Barson (4156 m.).

To get an insight into the topography they mounted scree slopes to the crest of the ridge behind their bivouac, whence they were able to see that a very long arête led to their summit. They followed the ridge for a time and then traversed its E. flank to the saddle in the W. arête of Zariut-Choch. Even from here they failed to see enough of the very long and much broken arête leading to Sirchu Barson to decide as to its going. Accordingly, as the hour was advanced and the weather uncertain, they (Fischer and Schuster) contented themselves with making in 20 mins. the **first ascent of the rock peak W. of the pass** (about 3900 m.).

This point is the junction of the buttress, 3397-3711 and the main arête between Sirchu Barson and Zariut-Choch.

From the saddle they descended direct over snow and screes to their bivouac and returned the same day to Resi.

On July 19, with Gabulow, they followed the Terek Valley past Siweraut so as to gain the S. lateral valley (unnamed on map but called Rabin Valley) lying between the N.-E. arêtes of the Wainkpars-Tau and the Kalasan-Tau. To avoid the tiresome crossing of the torrents it is best to follow for a while the main path to the Trsi Pass and to keep to the left bank of the Rabin stream.

About 1½ hr. from Resi is a good ferruginous mineral spring.

Pitched tent at about 2700 m. on the W. side of the valley on the last grass ridge before the moraine.

July 20, wet. July 21, wet; returned to Resi.

On July 22 they sent the packtrain to the tent in the Rabin Valley, whilst they themselves made, in 6 hrs., the laborious but perfectly easy ascent of the Wainkpars-Tau (3566 m.) by its N.-E. arête. At first steep grass slopes, then scree. Glorious view, especially of Kalasan-Tau and Silga-Choch and the Tepi group. Splendid insight into the Western valleys.

On July 23, left for **Kalasan-Tau (first ascent)**. They followed the moraine to the glacier, which they crossed, bearing E. to the W. face of the mountain. On this is a steep glacier with a tongue of pure ice. To avoid this they cut up a steep snow couloir on the N. of the glacier until, at a well-marked Felskopf (clearly visible from the tent) on the ridge dividing the glacier from the couloir, they were able to take to the glacier, by which they gained, in 4 hours from the camp, the summit of the **Kalasan-Tau**. On the Merzbacher map the summit is shown too much to the N. Fine views down into the Terek Valley. The S. precipices of the Kasbek group magnificent.

Descent, partly in rain and thick mist, by the very rotten N. arête crowned with a few towers—then over scree and snow to the moraine and back the same way to camp (3 hrs.).

On July 24 Fischer and Schuster—Platz taking advantage of the fine day to paint—bore W. to the glacier covering the N. side of the Silga-Choch massif and cut up its left proper edge (danger from stones) to the basin of Firn between the rock W. summit (3854 m.) and the Firn-covered **E. summit** (3864 m.) of the **Silga-Choch**, which they ascended (**first ascent**) 3½ hrs. from camp. Splendid weather; magnificent view. On the descent they kept rather more to the W. to avoid the danger of stones. Return to Resi same day.

On July 25, with porters, they ascended the Resi Valley to the Resi Pass (about 3700 m.). Best way is to keep rather to the right—E.—of the line of the pass and only traverse to the left high up (4 hrs.). From here they followed the softened Midagrawin Glacier in one hour to the rock-island Chizan-Choch (see report on their 1910 expedition, 'A.J.', xxv. 464). In thick mist they crossed the Midagrawin Glacier to the foot of the Seigalan-Choch and followed below its S. slopes the right lateral moraine, bearing E., to the highest moraine slopes. Bivouac.

On July 26—driving mist and cold wind—they ascended into the Glacier bay between Schau-Choch and Gimarai-Choch, whence by continuous arduous step-cutting up steep slopes of Firn they gained the arête connecting the two mentioned summits (4 hrs.) which they followed for 50 mins. to the summit of the **Schau-Choch** (**first ascent**). The Merzbacher map gives the height as 4371 m., but it is probably about 4500 m.

Descent by same line to the Chizan-Choch. It cleared up in the afternoon.

On July 27 Fischer and Schuster—Platz again painting—made for the Resi Pass, turned, however, towards the **Central peak of the Resi-Choch**, which they gained in 2 hrs. 10 mins. (**first ascent**). They followed the arête for 15 min. to the **Northern peak of the Resi-Choch** (**first ascent**). They continued along the ridge N., and after the next prominent gendarme turned down scree slopes to the Midagrawin Glacier, and returned to the Chizan-Choch.

On July 28 in 2 hrs. to the Resi Pass and back to Resi.

On July 30 with the packtrain to the Trsi Pass (2½ hrs.). Splendid view of the Kasbek-, Tepli-, and Adai-Choch groups. Descent into the Sakki Valley to Nok-kaw (2108 m.).

On July 31 down the Sakki Valley past Nar (overpowering view of the Adai-Choch group) to Unter-Saramag. Primitive but quite good pension in the 'Nomera Krepost' kept by Nikolai Makajew at the grave of the Csar George.

On August 1 Fischer and Schuster—while Platz made excursions for painting—ascended the Zmiakom Valley (fine flowers) past the romantic village of Toborsa (Goworsa of Merzbacher's map), and pitched their tent on the left bank of the torrent at a height of

about 2500 m., between the end of the path shown on the map and Point 2787.

August 2, thick mist.

August 3.—Followed the stream and gained in 2 hrs. 20 mins. an apparently often used hunter's pass near Point 3551. From here, at first by the E., finally by the S. arête, with a few traverses, they gained without difficulty in 2½ hrs. the summit (4136 m.) of the **Zmiakom-Choch (first ascent)**. Storm and driving mist—otherwise the view all round must be very fine.

Descended by the same way—thick mist; returned to Saramag.

August 5.—With the packtrain past Ober-Saramag and Katsakt, up the N. lateral glen of the Saramag Valley which leads to Point 3202. Pitched tent above a grassy rise, about 2800 m. Fine view of Chalaza, and of the Sikara- and Brudsawseli-Tau.

August 6.—Rain and mist; ascended rocky summit about 3300 m. W. of the camp.

August 7.—Weather still bad. Returned to Saramag and drove down the Ossetian highroad through the wild Kasara gorge to St. Nikolai, where they found good accommodation in the Engineer's house.

August 8.—To Alagir; uninteresting little town, but several good provision shops.

August 9.—To Wladikawkas via Ardonkaja and Archonskaja. Dresden was reached on August 12.

This journey is well worth carefully following on the map. The report is a model of conciseness and clearness.

Herr Dr. Oscar Schuster has also written a very interesting and instructive paper on the Midagrawin Pass, which is accompanied by a fine view of and from the pass from the master-pencil of Herr Platz ('Ö.A.Z.' 1911, 369-74). This paper contains much recent information about porters, means of communication, &c.

His other well-illustrated articles in the 'Zeitschrift des D. and Ö.A.V.' 1911 and 1912, and in the 'Deutsche Alpen-Zeitung,' 1911, should also be consulted.

Attention has already been drawn ('A.J.,' xxvi. 352-3) to the same author's short but admirable Itinerary of the Kasbek group in 'Ö.A.Z.' 1912, 145-148 and 165-172.

A short report by Herr Max Winkler of a very interesting journey in Central Caucasus, made in 1912 by himself and four other Munich climbers, Herren W. Gruber, Dr. Alexander Lechner, Alexander Thal, and Rudolf Wandel, appears in 'Ö.A.Z.' 1913, pp. 45-47.

The party, leaving Munich July 27, reached Pjätigorsk on July 31. Here they bought provisions, entrained for Kotljarevsky on the Wladikawkas line, whence they drove across the Steppe to Naltschik where they picked up a Russian-speaking Tartar with two baggage animals whom they engaged for a month.

Other transport animals were engaged locally as required.

On August 6 the caravan crossed the Lutschat Pass (1500 m.) to the Bezingi Valley, and reached Bezingi next day.

The first standing camp (9-18 August) was pitched on the Misses-Kosch (2550 m.) behind the S.-E. moraine of the Bezingi Glacier (cf. Afanasieff, '100 Kaukasus-Gipfel,' pp. 78 and 85, and for picture, Freshfield, ii. 26).

On August 12, from a bivouac at about 3610 m. on the right proper bank of the Misses Glacier (gained by mounting a scree couloir about 2500 ft. high), an ice couloir and a ledge of rock on the unimportant Misses-Tau led to the gap (about 4400 m.) whence the W. summit of Dych-Tau (5198 m. = 17,050 ft.) was gained by the, at times, sharp N.-W. rock arête (5 P.M.). Deep fresh snow on the upper part impeded progress. Two of the party regained the bivouac; the others slept out on the ledge of rock referred to (4300 m.).

On August 16, from a bivouac at the head of the Bezingi Valley (2900 m.), the party did the traverse* of the Guestola (4860 m. = 15,941 ft.).

They followed at first the route to Katuin-Tau, first a standing-out rib of rock, then a steep glacier, which with relative safety lead up the Bezingi ice wall, 14 kilometres wide and 2000 m. high. A bergschrund at the foot and, higher up, deep snow impeded progress. From the gentle saddle-bay (4500 m.) between Katuin and Guestola they reached by the S. arête the summit of the latter at 7.30 P.M.

After a bivouac in the W. flank of the summit-pyramid (about 4700 m.), without any protection from the raging S. wind, they followed the N.-W. arête, crossing a shoulder of Guestola and turning the next Tête by the steep névé slopes on its left, to the summit of Lialwer (4350 m. = 14,268 ft.).

They made the (first) descent by the steep icy N.-E. flank to the Bezingi Glacier, reached close to the Zanner Pass.

On August 18 and 19 they returned to Bezingi, and on the 20th, with all their transport, crossed the Mukol Pass to Bulungu in the Upper Tschegem Valley.

On August 22 a reconnaissance was made up the Göchü-Tau (3208 m.) and the Boldoschke-Tau (3202 m.) in order to get a view over the little-known Adür-su group. The standing camp was pitched (23-28 August) in the Dschailik Valley at about 2500 m.

* They state that this is the first traverse, but Afanasieff's Guide quotes Freshfield, ii. p. 255, for an English ascent from the N., and A. A. V. München, xi. p. 82, for an ascent from the W.

On August 24 they made the **first ascent of Dschailik-Basch** (4535 m. = 14,875 ft.). Leaving at 2.30 A.M. a bivouac on the N. moraine of the N. Dschailik Glacier (3200 m.), they gained the Donkin Pass (4200 m.), which separates the Tschegem-Basch on the N. from the Dschailik-Basch to the S., the latter being on the ridge dividing the N. and S. Dschailik glaciers. The fine picture accompanying Herr Winkler's report shows the two summits as quite distinct with the Pass between them, so that the hitherto accepted position of these peaks as being so close together as to form one with a double or alternative name would appear to need revision. From the Donkin Pass they followed the N.-W. rock arête, turning some of the gendarmes by the right flank. Occasionally difficult granite rocks. The highest point is the second rock-tooth on the last névé arête. Summit 1.30 P.M.; stoneman built. Descent to the standing camp (10 P.M.).

To get a further insight into the topography of the group, and especially of the Tiuti Glacier, the party, on August 26, made the **first ascent of Kentschat-Basch** (4171 m. = 13,681 ft.). From their camp (6 A.M.), up the stony Kentschat Valley and the glacier of the same name they gained the Col between 4066 and Kentschat, whence by a corniced ice arête and alternating rock and névé they gained the summit (2.30 P.M.; stoneman built). Overpowering view. Camp 6.30 P.M.

Fresh snow compelled them to turn their attention to a fresh district. While two of the party accompanied the transport down the Tschegem Valley, over the Kilimezon Pass (about 2300 m.) and up the Baksan Valley to Urusbieh (August 28 to September 1), the three others crossed the little known Baschil district. Their intention was, following the directions of an English expedition, to cross the Baschil-*ausu* Pass into the Adür-su Valley which leads to Urusbieh.

On August 29, from a bivouac near the tongue of the Baschil Glacier (2400 m.), they only gained the Col at 3 P.M. after 11 hrs.' work, two icefalls taking much time to get through. There seems however to be some confusion in the position of the Pass, as to their astonishment the party found themselves on the Suanetian side of the main chain.

They decided to bivouac at the foot of Ullu-Tau-tschana (3160 m.) on the splendid Leksür Glacier. Next day (August 30) they crossed the Mestia Pass (3760 m.) to the Adür-su Valley, their line of descent from the pass leading them into unexpected difficulties. They reached Urusbieh on the 31st and the transport column turned up next morning.

On September 4, from the hamlet Terskol at the head of the Baksan Valley, they reached the sleeping place (3650 m.) on the Terskol arête (*cf.* Afanasieff, '100 Kaukasus-Gipfel,' pp. 14-15). Leaving soon after midnight, with moonlight and perfect snow, they reached the W., or highest, summit of Elbruz at midday and were back at the sleeping place at 3 P.M.

They now discharged their transport man, as so late in the season snow on the Passes might stop the horses returning. They engaged a man with a donkey and crossed with him the Dongusorun glacier Pass into the uninhabited Nakra Valley (fine timber) and through this and the Ingur Valley reached Betscho and Maseri, whence they sent their man home to Urusbieh by the same way.

They themselves bivouacked at the head of the Dolra-tschala Valley (2150 m.), whence an easy day (September 13) led them over the Betscho Pass and down the Jusengi Valley back to Urusbieh. Two days later the man and donkey duly arrived.

On September 16 and 17 they journeyed by ox-cart to Ataschukino, and on September 18 drove across the Steppe to Pjätigorsk. This very instructive journey deserves the closest study on the map (references are always to Merzbacher's map), but it cannot be properly appreciated without referring to the magnificent illustrations in Mr. Freshfield's great work on the Caucasus. The party covered a lot of ground and are to be warmly congratulated on their careful plans. Their success is due in some measure to their practice of cutting loose from their baggage and letting it follow round, but they displayed throughout great energy and enterprise.

J. P. F.

New Zealand Alps.

MT. DAMPIER (11,267 ft.), 31 March, 1912.—Miss Freda du Faur with the guides Peter Graham and C. Milne.

The following particulars are extracted from an account of the ascent published in the *Otago Witness* and received from Miss du Faur.

‘On Friday, March 29, 1912, I set out from the Hermitage with Peter Graham and C. Milne, intent on conquering Mount Dampier, which is the third highest peak in New Zealand, its height being 11,267 ft., only 200 ft. lower than Mount Tasman. Owing to its position immediately beneath the high summit of Mount Cook, its height is considerably dwarfed, making it look but an insignificant rocky mountain, with a sharp snow cone. . . . I believe in 1909 Mr. Earle, A.C., thought of climbing it from the Hooker side, and while camping at the Mount Cook bivouac went over to look at it, on to find he was cut off by the large schrund at the junction of rock and snow. This is, so far as I know, the only attempt ever made upon it. . . . Like Mr. Earle, I would have much preferred to climb it from the Hooker side, where it offers some interesting rock work, but owing to the rocks being heavily coated with snow and ice it was impossible to think of it. . . . I have always said that nothing would induce me to climb by the long, tedious route up the Linda Glacier, which was the only route possible at this season. Mr. Chambers had given me a good idea of how wearying it could be when describing his ascent of Mount Cook made by this route in

- Mt. Cook
12,340 ft.

- Mt. Dampler
(11,267 ft.)



F. du Faur, photo.

Swan Electric Engraving Co., Ltd.

MT. COOK AND MT. DAMPIER,
with the LINDA GLACIER in foreground.
(From the summit of Mt. Tasman.)

February last. However, as there was no other route by which we could climb we made up our minds to see it through. . . .

'We arrived at the Haast bivouac early on Saturday morning, and after a few hours' rest the guides set out to tramp steps over the plateau, as this always means such a saving of time and effort next day. We could only count on thirteen hours' daylight; but fortunately the moon was at the full, and its light would help us considerably. The guides returned about 5 P.M., reporting the snow soft, but the route as far as they had been able to see quite feasible. . . . By 3 A.M. we were roped together and ready for the start. The way up to Glacier Dome was by now all too familiar after our two trips to Mount Tasman the previous week, and the long, long snow slope on which I had counted 1400 steps, loomed before me like a nightmare. It is such a waste of energy to spend one's first hour . . . in climbing 1000 ft. and then immediately descend them again, which is the sad fate of anyone who climbs from the Haast bivouac, and has to gain the Hochstetter Plateau. On reaching the plateau we turned to the left and traversed the slopes at the base of Mount Tasman. We followed the previous day's steps through deep, powdery snow, and had to cross the remains of a large avalanche which had evidently descended from the rocks just above us (4.30). . . .

' . . . Just about daylight we found ourselves among the large crevasses, where Graham took the lead. . . . We at last emerged out of the region of broken ice and began toiling up the steep snow slopes at the head of the Linda. The sun now began to beat down upon us with its full force, and as we toiled desperately on in the soft snow Geoffrey Young's verse struck me as distinctly appropriate :

Choked with the grit, and dust of barren ranges,
Parched with the pitiless snow,
Heavy with sleepless night, and strident changes
From frost to furnace-glow.

All that is left, monotony of faring
On sullen stumbling feet
Along the interminable glacier, glaring
With white uneasy heat.

It about expressed all our feelings. . . . At last . . . we reached the edge of the large crevass which runs straight across the Linda about 600 ft. from Green's Saddle. We crossed this without much difficulty, then traversed to the right and gained the rocks on the eastern face of Dampier. . . . Fortunately the rocks were pretty good. Shortly we found a good snow-filled couloir, up which we climbed until we reached the ridge. . . .

'The ridge before us looked . . . very steep and jagged, and much covered with ice and snow. . . . Our progress was slow and careful, the glazed ice in places making every precaution necessary. . . . Fortunately most of the loose stones were frozen tight. . . .

We climbed over and around sharp rocky teeth for something like two hours, and at last a shout from Graham, who was leading, announced that the summit was in sight. A steep and narrow snow ridge led up to it, one of the three arêtes of Mount Cook, La Perouse, and Mount Tasman, which have their culminating point in Mount Dampier. . . .

'We reached the summit at 12 noon, after just nine hours' hard going. . . . I have no doubt the rocks would have been most enjoyable and interesting if we had not had such a weary plug before reaching them. . . .

'We rested for an hour, taking photographs and admiring the view. The west was, as usual, under white billowy clouds; Mount Cook towered above us, shutting out most of the view to the south-east; while Tasman occupied the foreground.

'At 1.30 we began the descent. . . . We attempted to follow the ridge down to Green's Saddle . . . but we found the ridge so jagged and icy that we concluded it would be quicker to follow our old route down the couloir, which we did without any mishap, arriving at the schrund on the Linda at 4.30 P.M. . . . About 6.30 the full moon rose grandly in front of us, lighting our weary footsteps over the great plateau and up the toilsome slope to Glacier Dome, only forsaking us for a few moments just as we neared the bivouac at 7.30 P.M.'

MT. NAZOMIE (9850 ft.), March 14, 1912. Miss Freda du Faur with the guides Peter and Alex Graham.—'The peak is a sharp double rock cone immediately below the low summit of Mt. Cook. It had never been attempted until about a fortnight ago, when Mr. Hugh Chambers and myself, with Guides Clark and Murphy, set out for it. . . . We became involved in difficulties very early in the day, and after eight hours' steady climbing we arrived at the ridge leading to the summit, only to find it was impossible to proceed further. Time would not allow us to try a fresh route, so we had reluctantly to give up the attempt for that day.

'On March 14 I set off again with Peter and Alex Graham as guides. . . . We left the Hooker hut at 5.30 A.M., and followed the Hooker glacier as far as the last rocks on the right, at the foot of the ice-fall. From there we climbed straight up the Noeline glacier, which leads round to the base of the last rocks of our peak. The Noeline is a particularly fine and impressive glacier, running back for about a mile and a half to the base of the Mt. Cook arête. . . . The head of the glacier is an amphitheatre walled round on three sides; on the left the low peak of Mt. Cook towered above us. . . . In the middle stood our peak of rugged red rock, square at the summit, from the right of which a jagged red ridge leads down, broken by six fine aiguilles, then a perfectly straight ridge for perhaps 80 yards, and another series of aiguilles leading down to the Hooker glacier. . . . We found the rocks very steep at the beginning, but

Mt. Dampier.

Lower peak of
Mt. Cook.

Summit of
Mt. Cook. (12,349 ft.)

Mt. Masomie.
(9,850 ft.)



F. du Faur, photo.

Swan Electric Engraving Co. Ltd.

Noeline Glacier.

THE SUMMIT RIDGE OF MT. COOK AND MT. DAMPIER.

(Taken from the saddle to Mt. EUREKA on the HOOKER or W. side of Mt. COOK.)

they improved as we progressed. The chief drawback was the wind. . . . Fortunately, it was at our backs, or we could hardly have fought against it.

'We reached the summit at 12.30, but were not able to enjoy the glorious view for long on account of the icy wind. The aneroid registered 9850 ft., which makes this about the third highest hitherto unclimbed peak in New Zealand. We had a particularly fine view of the low peak of Cook, of which we took several photographs. Mt. Sefton also was very fine, towering high above everything else. The sea on the W. coast was hidden by a wonderful bank of yellow clouds like a tremendous breaking wave. The Grahams considered this a very bad weather sign, saying that on the only occasion on which they had seen it before two days' rain and snow followed upon it. We had also an extensive view N., from the head of the Tasman glacier to far beyond Lake Pukaki in the S. . . . Peter Graham was rather anxious to traverse the peak and join the previous route on the Mona glacier, so he went off to have a look at the S. arête. On his return he reported it excellent as far as he could see. However, we decided to return as we had come, mainly because on the ascent Peter's ice-axe had been smashed close to the head by a falling stone. . . . We reached the Hooker hut at 7 P.M., having been out just 13½ hours. . . . The wind had risen, and was roaring round the hut. . . . We sought our bunks and knew no more till early morning, when we awakened to rain and snow, which proved my guides to be excellent weather prophets as well as mountaineers.'—Miss du Faur in the *Otago Witness*, received from the author.

VARIOUS EXPEDITIONS IN 1912.

Pennines.

GRAN BECCA DI BLANCIEN (3680 m. = 12,070 ft.).—On June 28, 1912, Mr. A. Stuart Jenkins, with the guides Jean Bournissen and Jean Gaudin, left Chanrion at 1.30 A.M. Going slowly they reached the E. Col de Blancien at 7.20, whence, up easy rocks, they gained the summit of the Gran Becca di Blancien in 40 mins. The view was magnificent. Descent to Prarayé by the Combe d'Oren, *via* the Col di Sassa, which, when free from snow, must be a nasty place for stones in the afternoon.

Reverting to the note, 'A.J.' xxvi. 342-4, Mr. Stuart Jenkins suggests that possibly the above point was that gained by Mr. Foster in 1866, and that the Sciasa seems too far off and possibly does not stand out enough to offer a good view.

New Zealand Alps.

MT. TASMAN (11,475 ft.), March 24, 1912.—Miss Freda du Faur with the guides Peter and Alex Graham.

In 1895 Mr. Fitzgerald, with his guide Zurbriggen, and Clark, then in his first year at the Hermitage, made the first ascent of the Silberhorn and Mount Tasman. . . . In December, 1910, the Grahams and I set forth for the Haast bivouac, filled with high hopes that after its remaining untouched for fifteen years we, too, might conquer the great snow peak. Our hopes were doomed to disappointment. Everything went well with us until we reached the summit of the Silberhorn, and from there got our first close view of the great Tasman arête. I think we all caught our breath just a little and wondered if it were possible to climb that sheer knife-edge ridge, towering straight above us for 600 feet. . . . We started soberly up the ridge to the first obstacle, a great schrund. After some difficulty we managed to cross this, and started up the arête. We had hoped for snow on which we could easily chip steps . . . ; instead we encountered solid ice. To the left of us the arête sloped sheer down at about 70° to the Balfour Glacier. On the right it fell away to the edge of the great schrund which seams the E. face from end to end. The ridge was just wide enough to stand on. For two hours Peter cut steps up, and we progressed about 200 feet. . . . Clouds drifted over from the W., and an icy wind commenced to blow. The worst was still ahead of us, and at our present rate of progress it would take us 4 hrs. to reach the summit. . . . We decided to give it up. . . . We reached the bivouac at 7 P.M., having been out just 16 hrs. . . .

On March 22, 1912, we set forth once more for the Haast bivouac, not very hopeful of success, as it has been impossible all this season to get more than two consecutive fine days. . . . When the alarm went off at 1.30 A.M. we found the whole ridge was enveloped in a dense south fog, and it had also been snowing lightly during the night. About 3 A.M. it began to clear rapidly. . . . It was 4.30 by the time we set forth by lantern-light. Up and up we went, our course over a seemingly endless white slope. . . . I counted 900 steps. . . . At last we reached the top, rested, and began the descent into the great snow plateau, three miles long, that forms the basin at the feet of Tasman, Lendenfeldt, and Haast, and empties itself out on to the Hochstetter icefall. . . . As we crept up the opposite slopes the wind began to rise, and drift-snow showered down upon us from the Silberhorn ridge. . . . We went on for another half-hour, and sought what looked like a sheltered spot. The shelter proved *non est*. . . . After one look at the windy ridge above us, we turned tail and made for home. . . .

The following morning was beautifully fine, and we set off in great spirits at 3 o'clock. We gained an hour on our previous time by having our steps to follow to the Silberhorn arête. . . .

Except for several schrunds to cross and one steep ice slope to traverse we had no difficulty upon the Silberhorn. We reached the summit at 8.30 A.M., and looked once more round the W. ridge at Tasman and once more we were appalled at its steepness. . . . An icy wind swept up La Perouse. . . . Our meal finished, reluctantly we braved the wind, of which we received the full force as we skirted to the W. of Silberhorn and joined the Tasman arête. It was so cold that in five minutes one of my gloves was frozen to a solid ball of ice at the finger tips. . . . But not far off I saw sun on the E. side of the ridge, and hoped for shelter from the wind. . . . So we went in the teeth of the wind and across the ridge. . . . We were soon beautifully warm. . . . It was clearly impossible to attempt to ascend by the arête. The only alternative was to traverse round to the E. face and try there where it was sunny and sheltered from the wind. Alex went the length of the rope and reported it might be possible, but could not be sure until we went further, so off we all set once more, and soon traversed the awkward corner that cut off our view, and found ourselves beneath the great schrund. The upper lip ran back, forming a beautiful cave about 100 feet wide and 70 yards long. Great icicles hung from the roof, and the whole was coloured an intense clear blue. . . . Our first problem on leaving the cave was to cross on to the upper lip of the schrund, and it was not an easy one. Finally we settled on a spot where it was about 8 feet high. Peter climbed on Alex's shoulders, and drove an ice axe firmly into the snow slope above, which was fortunately just in the right condition to hold it, neither too hard nor too soft, and pulled himself into safety. . . . I arrived above safely enough, and then Alex managed to haul himself up by aid of ice-axe and rope. . . . The snow soon turned to ice, and the slope became steeper and steeper, and it was necessary to make very large "soup-plate" steps to ensure safety in the descent. The Grahams took turn about, and Alex got the worst of the bargain, as his turn came at a very nasty traverse beneath an overhanging wall and round a steep corner. It was solid ice, which came away in great flakes, like shale, and made steps very difficult to cut. He also had to cut finger grips, as the grade was so steep. We were about half an hour negotiating this corner. . . . When we got round we saw we were only about 100 feet from the ridge leading to the summit, and the icy conditions were changing for the better at every step. . . . Fortunately for us, the ridge sloped gradually at the last, and we crossed it and made our way quickly up the W. side; but, quick as we were, we were frozen once more when we gained the top, which was a small triangular plateau sloping gently downward, and afforded us some shelter from the worst of the wind. It was 1.30 P.M., so it had taken us just 5 hours to climb 600 feet—as long as the whole ascent of the Silberhorn, when we accomplished 4196 feet in 5½ hrs. . . . The view was magnificent, though unfortunately the whole of

Westland and away to the N. beyond the Hochstetter Dome was a mass of floating clouds.' . . .—*Otago Witness*.

The descent was made by the same route and the Haast bivouac reached at 7 P.M.

ALPINE NOTES.

'THE ALPINE GUIDE.'—Copies of Vol. I. of the new edition of this work, price 12s. net, and of 'Hints and Notes, Practical and Scientific, for Travellers in the Alps' (being a new edition of the General Introduction), price 3s., can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C.

'THE ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes those portions of Switzerland to the N. of the Rhône and Rhine valleys.

'THE ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes 'those Alpine portions of Switzerland, Italy, and Austria, which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige.'

THE ALPINE CLUB OBITUARY.—Arthur Milman (1859).

THE FIRST ASCENT OF THE RIFFELHORN.—Reverting to Mr. Morse's note in 'A.J.,' xxvi. pp. 470-472, Dr. Coolidge has kindly pointed out that in the article by Forbes in the 'Quarterly Review,' No. 202, April 1857, on 'Pedestrianism in Switzerland' (reprinted in Dr. Coolidge's edition of Forbes' 'Savoy'), the following reference occurs: 'At length some boys tending goats found a passage by first descending upon a rather sloping ledge of rocks.'

Upon this may possibly be founded the legend of the wild goat-herd.

The legend of skeletons on mountain tops is not confined to any one part of the Alps. I remember in 1881, from the then very primitive village of Sanmaun, setting out to attempt the first ascent of the Stammerspitze. We were warned against it, as 'Geister' lived there, and that whenever a chamois felt his end approaching

it was to the top of this mountain that he retired to die, and that consequently we should find stacks of bones. We certainly did find on the top evidence of the visits of chamois, but not in the form of bones.

J. P. F.

THE JÄGERJOCH.—In 'A.J.' xxvi. p. 363, an allusion was made to a passage of this Col in 1876. It would however appear that the hitherto unrecorded second passage was actually made on September 4, 1874, by Messrs. G. W. Prothero and J. H. Pratt with J. A. Carrel. 'We started at 2.15 A.M. [from Macugnaga] with the idea of getting up the Nordend, if we could, but the weather turned bad, so we diverged to the right or N. and came over the Joch, reaching the Col at 11.15. I have just looked up my diary, but find only a note of these times.' It will be remembered that the Nordend from the Macugnaga side was not ascended until two years later, viz. in 1876 (*cf.* 'A.J.' xxvii. pp. 422-428).

CLIMBER'S GUIDE TO THE CAUCASUS.—A very handy and practical little book has just made its appearance (in German) with the title '100 Kaukasus Gipfel,' by R. Afanasieff (Munich: J. Lindauer), price 4 Marks. The author gives details of the routes that have been made up 100 of the principal Caucasian summits; thus Elbruz, Ushba, Tetnuld, Dych-Tau, Koschtan-Tau, Adaichoch, Kasbek, and Ararat are now fully treated in a handy compass from the strictly climbing point of view. The references to the fuller original reports are given with each route, the 'Alpine Journal,' of course, coming in for frequent mention. The corresponding sheets of the 1-verst map are also indicated.

The author expresses his obligation for assistance to Dr. Oscar Schuster, a précis of whose admirably concise report of his 1911 Caucasus journey appears in this number.

A similar guide-book to the Caucasian passes is promised.

Anyone interested in the Caucasus will find the present book quite indispensable, as it saves the endless hunting up of accounts of previous expeditions that lie hidden away in Alpine literature. Of course the magnificent books of Freshfield and of Merzbacher must be consulted for details.

Several German and Italian parties have visited the Caucasus during the last three years, and it is to be hoped that English mountaineers will once more turn their attention to this easily reached magnificent mountain district.

WINTER ASCENTS AND CONDITIONS IN 1912-13.—'The winter of 1912-13 will be memorable not only for the extraordinary scarcity of snow, but also for the long spell of settled weather early in January throughout the Alps, which has rendered conditions for climbing a great deal better and safer than at any time during last summer.

'Quantities of snow fell last summer on the mountains, and a great deal more fell in the months of October and November, so that

the crevasses on the glaciers have almost all been well filled in and bridged over. I never remember the Aletsch Glacier, either in summer or winter, presenting so smooth and unbroken a surface as at present. The other day I believe I could have driven a Russian troika from Jungfraujoch to the foot of the slopes leading to the Concordia Hut. The snow was frozen so hard that neither my guides nor I needed snow rackets.

‘I never remember any winter when I saw or heard of so few avalanches and when the conditions in general were so favourable for high ascents. . . .

‘In the Bernese Oberland in particular the ascents of certain of the highest peaks have this year been made much easier by trains on the Jungfrau Railway being run to Jungfraujoch, the present terminus. . . . It would even be possible now to leave Grindelwald early in the morning, climb the Jungfrau that day, and return the same evening to Grindelwald just in time for dinner—that is, supposing Grindelwald were left at 5 A.M., a special train taken from Eigergletscher Station at 9.30, Jungfraujoch left not later than eleven, the summit of the Jungfrau reached about two, the descent made in one and a half hours, and another special train taken from Jungfraujoch about a quarter to four or four o’clock, so that Eigergletscher Station would be reached again not later than five. Thence it is a quick descent of two hours to Grindelwald.

‘As it happened, I left Grindelwald, to be exact, at 6.10 in the morning, reached Eigergletscher at ten o’clock, waited till nearly twelve for a train, left Jungfraujoch at 1.30, reached the summit of the Jungfrau at 4.45, left it at 4.55, and arrived back again at Jungfraujoch at 6.30. These times, of course, include halts.

‘The Monk and the Finsteraarhorn can also, in favourable circumstances, be now ascended in one day from Grindelwald, but for the latter peak ski would have to be used from Jungfraujoch. On the day when I was on the Jungfrau, and the following day, when I was on the summit of the Monk, the view was of an extent and the atmosphere of a clarity rare even in mid-winter. If a storm be encountered, as happened to me on the Jungfrau summit, the cold may certainly be very severe, even this mild winter; but in general the cold this season is nothing compared with what it usually is in winter in the Alps.

‘Among the other ascents carried out in the Bernese Oberland this winter have been those of the Great Schreckhorn, the Finsteraarhorn, the Fiescherhorn, and the Eiger by a route seldom taken in winter. . . .’—Mr. Julian Grande, F.R.G.S., in the *Pall Mall Gazette*.

MONT BLANC was ascended on New Year’s Day by the Dôme route and in January at least once from the Chamonix side.

· PIZ BERNINA was ascended on January 1 and Piz Palü on January 2. The start in each case was from the Boval Inn, and the time taken appears to have been less than the average summer time.

THE JUNGFRAU RAILWAY, which now reaches the Jungfrauoch, was announced to be kept open until the end of February. A daily train each way and a large heated waiting-room on the Col were available.

DR. H. DÜBI ON PACCARD AND BALMAT.—We welcome the publication of this long-expected work. The price is 6s.

THE AGO DI SCIORA.—A correction should be made in line 16, page 211, of 'A.J.' vol. xxvi. in the sentence 'When near the Bochetta we ascended diagonally to the right'—the word *right* should be *left*.—E. B. HARRIS.

THE TRAVERSE OF MT. COOK.—Mr. Claude A. Macdonald kindly sends the following very interesting news. Miss Du Faur of Sidney with Peter Graham and a porter succeeded on January 10, 1913, in traversing Mt. Cook from W. to E. across the whole of the three peaks. They camped at about 10,000 ft. at the head of the Hooker Glacier, started at 2 A.M., and reached the Haast Bivouac on the W. side at 10 P.M. This exceedingly fine feat involved the passage of the very long arête between the first and second peaks.

BILAPHO PASS.—We have received the following note from Mrs. Fanny Bullock Workman :

'In "Alpine Journal" for November 1912, vol. xxvi. p. 441, in a notice from the *Morning Post* re my 1912 Karakoram expedition, the term "Bilapho Pass" is used, which you evidently intend to correct by placing in footnote "Saltoro Pass." I have passed a part of two seasons in the region of the Bilaphond Glacier and Pass and of the Rose Glacier, and as an explorer may be supposed to have good reasons for adopting the names Bilaphond La for this pass. I shall later, in treating of this part of the Eastern Karakoram in a geographical and historical way, go into my reasons for thus calling the pass. For the present, and until I see proper grounds for changing my opinion, I consider the term Bilaphond La or Pass to be the correct one. As your Journal is read both in England and on the Continent, and as, by said footnote correction, I may be judged by your readers to be ignorant of my subject, I would ask you kindly to insert this note in the "Alpine Journal."'

WILDSTRUBEL.—While traversing the Wildstrubel on July 20, 1912, with Mr. E. G. Oliver, I took a clinometer observation of the Gross-Strubel (3253 m., S. map) from the Central Summit (3248 m.). The observation showed the Central Summit to be the higher of the two, thus confirming the opinion of Herr Purtscheller, quoted in the 'Climber's Guide to the Bernese Oberland,' vol. iii. p. 103. The angle of depression was twenty-five'; this makes the difference in height about 15 metres.

The S.W. summit (3251 m.) seemed to be the same height as the Central Summit.
S. L. COURTAULD.

REVIEWS AND NOTICES.

The Building of the Alps. By T. G. Bonney. With 48 illustrations. London: T. Fisher Unwin. 1912. 12s. 6d. net.

IN this stout volume Professor Bonney has given us his mature views on certain scientific questions connected with the origin and development of the mountains, valleys, and glaciers of the Alps.

The title is perhaps hardly comprehensive enough to give a real idea of the exhaustive way in which the various interesting problems presented by the Alps are treated.

Thus, in addition to the subjects which the title can be reasonably considered to include, we have also chapters on Alpine meteorology, the vegetation of the Alps, the wild animals of the Alps, the Alps in relation to man, and fifty years' change in the Alps.

The style in which the book is written is rather that of a personal narrative than an up-to-date scientific treatise on the Alps, and in this fact we have the principal charm of the book. There is a direct and obvious sincerity about it which is compelling in its appeal to the reader.

In the first two chapters we find an account of the igneous, sedimentary, and metamorphic rocks of which the different portions of the Chain of the Alps are composed. Attention is called to the fact that the highest peaks, those over 13,000 ft., are, with the exception of the Eiger, all formed of the more resistant crystalline rocks, the sedimentary rocks, consisting of limestones, dolomites, sandstones, and conglomerates, seldom attaining 12,000 ft. The author then proceeds to discuss the origin of the crystalline rocks and their geological age. The oldest rocks of the Alpine Chain are apparently the gneisses and mica schists into which have been intruded masses of granite probably at various subsequent periods. On these denuded surfaces of fundamental rocks were laid down the 'stratified schists,' although occasionally another set of gneisses is found intervening between the two, as in the St. Gotthard district, the Pennines, and elsewhere. Mixed up with the mica, hornblende, and garnet, and other varieties of schists, we find crystalline limestones, dolomites, and calc-mica schists. In addition to these, there occur also a series of 'green' schists in most districts, many of which the author considers to have originally been intrusive basalts and dolerites, subsequently altered by pressure. Intrusive greenstones are represented by diorites and peridotites, the latter usually altered to serpentine in the central and western portions. These latter have been specially studied by the author and described in a series of papers during the last thirty years, and it is chiefly to him that we owe our knowledge of the detailed structure and mode of origin of this group of rocks.

The author then reviews the distribution of the Alpine representatives of the various geological formations, and we gather

the following interesting facts. The lower Palæozoic rocks are practically absent from the main chain of the Alps, but representatives of the Silurian and Ordovician do occur at the east end of the northern range, over a part of the Carnic and Karawanken Alps, while Devonian rocks are also found in Styria. Rocks of Carboniferous age are found over a wider area, as in the Eastern Alps, the Tyrol, and the Central Alps, one strip passing to the S. of Mont Blanc. Over most of this area they yield plant remains only, showing that the present site of the Alps was still a continental tract late into Carboniferous times. After this, earth movements twisted these rocks into numerous folds, while denudation planed down the surface ready to receive the deposits of the Secondary period. Beneath the latter lies the red Verrucano conglomerate chiefly of Permian Age in the Western, Central, and Tyrolese Alps, while, around Botzen, we find lavas of this period, together with the lavas of lower Secondary Age, were also poured out over the area between Meran and Trient and the Val de Non and Primiero. In the overlying Triassic period the sea returned, submerging the south-eastern portion of the district and depositing the massive dolomites of the Eastern Alps, while shallower water deposits were laid down in the central and western districts. The succeeding Jurassic deposits are far more extensively developed and mark a long period of submergence, for they can be traced on both the northern and southern sides of the crystalline axis throughout the length of the Alpine chain. During the succeeding Cretaceous period the sea became shallower, and the deposits vary when traced into different areas; thus, while the Untersberg marble was being deposited in the Eastern Alps, the sandy Flysch was being laid down in the central and western portions at progressively later periods. Above these the early Tertiary rocks were laid down, often without a break, and then the true building of the Alps began, and the nucleus of the present chain was crumpled and puckered into a continental tract.

This period of mountain-making was followed by a period of denudation during middle Tertiary times. It was then that the massive pebble beds of the Rigi and the Speer, 6000 ft. thick, were deposited by rivers draining from the South. Towards the close of this period another epoch of mountain-making began, and the process was continued into the close of the Tertiary period. The author then attacks the very difficult question as to whether the great masses of crystalline schists are all of Pre-Cambrian Age, or whether some of these may represent altered palæozoic or even mesozoic rocks as has been suggested by certain writers. To this question the author has devoted much attention, and his opinion in this matter, though differing from that of several eminent continental geologists, is entitled to very serious consideration. We may sum it up in his own words.

‘Thus the crystalline schists, whatever may be their geological age, are far older than the beginning of the Mesozoic era, and the rocks belonging to the latter never contain either garnets or stauro-

lites, except as fragments derived from the former. These minerals have not been "developed (as now) in places that have undergone crushing," nor have "even Liassic slates with fossils been converted into garnetiferous mica-schists," nor has "the boundary between the old crystalline schists and real sediments in the Alps been obliterated by such processes of dynamic metamorphism and the proper character of the rock altered so as to render recognition impossible." Facts, not personal opinions, contradict these statements, which have no better foundation than mistakes in elementary mineralogy.

In chapter iii. we find a general review of the growth of the Alpine system, and a detailed discussion of the chief series of folded troughs and ridges. Interesting as the discussion of this subject must always be, it should be remembered that, to paraphrase the description of elegantly printed poetical works, a narrow river of facts here meanders through a meadow of speculation. For even acknowledged authorities on Alpine evolution, such as our author and Professor Lugeon, differ fundamentally even regarding the origin of the rock masses forming the Préalpes of Switzerland. For, whereas Professor Lugeon, Dr. Schardt, and others, considered the rocks of districts like the Chablais to have been brought right across the Pennine Alps as a series of huge flat folds from the neighbourhood of Locarno and Torea in post-Miocene times, Professor Bonney maintains that, 'with the exception of a slight deviation in the neighbourhood of Mont Blanc, the watershed of the Miocene Alps was substantially identical with that which is still in existence.'

Passing on to the description of Mountain Forms, the author follows Ruskin's division of Alpine rocks into four chief groups: namely—compact crystallines, slaty crystallines, compact coherent, and slaty coherent. As an example of a mountain mass carved out of the first of these we may cite the Adamello, while of those formed of the slaty crystallines 'no better example can be found than the Aiguilles of Chamounix and the great horse-shoe of ruined fastnesses which form the High Alps of Dauphiné. Among the former, owing to the combined effects of cleavage and jointing, the "pinnacle" shape is dominant throughout the range. It asserts itself in the huge pyramid of the Aiguille Verte and the wedge of the Jorasses; it produces the serrate crests of the Charmoz and Grépon, the Blaitière, and Les Plans; it culminates in the immense obelisk of the Dru and the tooth of the Géant.'

Though rigidly precise in his account of the geological origin of the mountain forms, we meet with passages like the following which show that a practical acquaintance with earth anatomy has not dulled the author's sense of the poetical and the picturesque. 'As I was travelling by railway from Dijon to Mâcon, my eye was caught by a mysterious cumulus cloud low down on the horizon. Gradually some darker spots resolved themselves into far-off ridges of rock, seaming the primrose-tinted snows, and I became aware that I was gazing at Mont Blanc from a distance of hardly less than 120 miles.'

I watched it from time to time as I passed on southwards, till its snows first glowed with the flush of sunset, then turned to a death-like pallor, and at last the Alpine giant faded like a ghost into the darkening summer night.'

In chapters v. and vi. we find an account of the snowfields and glaciers of the Alps, and here the majority of the members of the Club will probably feel more at home. The account of the geographical distribution of glaciers in the Alps is rather in the nature of a catalogue, and, as the publisher has seen fit, for reasons best known to himself, to issue the book without any map, it is almost impossible for the reader to profit by this account without having a good atlas before him.

The succeeding fifty pages are devoted to a consideration of the sculpturing of the Alps, and the author goes fairly fully into the somewhat vexed question of the relative and absolute effects produced by ice and water in the formation of the characteristic scenery of the Alps, *i.e.* the origin of cirques, hanging-tributaries, rock-steps, and lake-basins. Many readers will be familiar with the author's views on these questions from his published papers in the *Alpine and Geographical Journals* and from his presidential address at the last meeting of the British Association. Those who are not acquainted with these will find a list of the author's papers, dealing with this and other subjects, in the Appendix at the end of the volume. We may sum up the author's views on this head by quoting the following paragraph. 'All that I have seen since the journeys undertaken to obtain the evidence embodied in the papers published from 1871 to 1874—and it has not been a little—has confirmed me in the view then expressed, that the work of glaciers is, as a rule, not more than abrasive, and is erosive only under special circumstances.'

Chapters viii. and ix. deal with the work of rain, avalanches, and floods. In the former we meet with an account of glaciers, mineral springs, and the distribution of minerals of commercial value. In his description of the cave ice the author ascribes the characteristic prismatic structure to contraction, adding however, naively, that this explanation is not easy to understand. It would seem more probable that this prismatic structure resembles that described by Arctic travellers as occurring in snow bogs found in flat plains, where no movement is taking place, by alternate melting and freezing of snow and water into a crystalline mass, resembling the ice of a pond, which, unlike that of a glacier, is prismatic and not granular.

Under 'Alpine Meteorology' the author discusses the phenomenon of mountain sickness, and shows, as has often been asserted in the 'Alpine Journal,' that the human barometer, in this connexion, is even more unreliable as an index of height than the fickle aneroid.

Chapters xi. and xii. give a summary account of the vegetation and of the wild animals of the Alps, and contain interesting notices of the author's own experience, *e.g.* when speaking of the orange lily (*Lilium bulbiferum*), 'of which I saw more than ever before in July 1911, on the way from Airolo to the Val Piora.' The fox is more

common (than the lynx), but is rarely met with. I have only once seen it, in the year 1900, and that was a fine specimen. It was sauntering along the bed of the glen leading from Arolla to the Pas de Chèvres. As I happened to be on a path some couple of hundred feet up the slope, and about as many yards away, the animal did not see me, so I watched it at my leisure till it passed behind a rock. It appeared to me slightly stouter in build, and greyer in colour, than its English representative.' Chapter xiii. treats of 'The Alps in relation to man,' but probably to many readers chapter xiv. will be found exceptionally interesting. It is entitled 'Fifty Years of Change,' and in it the author gives us many details of his personal experience beginning with 1856, when he first saw the Alps, to 1911, when he visited Airolo and Grindelwald. He gives us contrasts between the old and new state of things, *e.g.* 'The modern hotel is more luxurious, but it is possible to fare over-sumptuously even on an Alpine tour; and being number 144 in a caravanserai is a very different thing to the homelike feeling of an inn which was not too large for host and guest to know something one of another. Old mountaineers look back regretfully to such friends as the Seilers at Zermatt; their beaming faces and cordial clasp of the hand when they met you at the door, the kindly farewell when you went away; and, if it was over a mountain pass, the provision sack always proved to contain some fruit or a little bottle of choicer wine than had been charged in the bill.'

While grateful to the author, we cannot congratulate the publisher on the way in which the book is produced. It is only fair to say that the book is light and the type is good, but the illustrations leave a very great deal to be desired. No less than ten are from more or less worn blocks previously used by the publisher in works he has already published. Most of these have little or nothing to do with the text and are scarcely referred to by the author. The most crying piece of parsimony, however, is the total absence of maps of any description, a fact which renders a large portion of the book quite unreadable for anyone who is not seated in a library with a large-scale map of Switzerland in front of him, thus rendering it impossible for the book to be read in holiday time abroad. It is a great pity that a valuable book should have been shorn of half its value by the parsimony with which it has been produced in this respect.

Karakoram and Western Himalaya, 1909. An account of the expedition of H.R.H. Prince Luigi Amedeo of Savoy, Duke of the Abruzzi. By Filippo de Filippi. With a preface by H.R.H. the Duke of the Abruzzi. Put into English by Caroline de Filippi *née* Fitzgerald, and H. T. Porter. Illustrations from photographs taken by Vittorio Sella. London: Constable & Co., Ltd., 1912. Price, 63s. net.

Is mountain sickness going out of fashion? Or is it like seasickness—a very real terror to some, but merely a matter for heartless jest on the part of others? Some such thoughts must suggest themselves to readers of Dr. de Filippi's delightful account of the

recent expedition of H.R.H. the Duke of the Abruzzi to the central knot of the great Karakoram range.

Though there was interesting and at times severe climbing around K2, it is the Duke's assault on Bride Peak, 25,110 ft., narrated in Chap. 17, to which mountaineers will turn with the greatest interest. This campaign began on July 1, when the Concordia base camp was left behind. On the 3rd the ascent of the upper icefall was commenced, over which it was expected two days would be expended. As a matter of fact it cost eight of the hardest. The weather was vile. On July 10 camp was pitched on Chogolisa Saddle, 20,784 ft. The Balti coolies 'had performed the work of real Alpine porters, coming up over the seracs with full loads of luggage, and had lived in camps on the snows without fires and contrary to all the habits of their normal lives, all of which proved how much they had been able to adapt themselves, and showed the influence we had gained over them.' This alone is a really great achievement. Future climbers will have reason to bless the Italians. It is especially binding in the mountain regions of Asia that travellers should assist and not retard their successors by the reputation they leave behind, for without the local coolie the mountaineer is absolutely helpless in many districts. There remained 4326 ft. vertical distance to the summit. But with deep soft snow letting the party in up to the waist, a one-day dash to the summit was sure to end in failure. On the 11th the Duke, with Petigax, Henri and Emil Brocherel, camped at 21,673 ft. after a terribly fatiguing grind. On the 12th they set out on a warm, misty day. At 23,000 ft. they changed their snow shoes for crampons. Step-cutting followed, but at 23,458 ft. mist finally stopped them. They returned to Chogolisa Saddle, reaching camp in a snow-storm which lasted four days.

On the 17th two Mummery tents were pitched at 22,483 ft., the highest strictly authenticated camp to date, though Rubenson and Monrad-Aas perhaps camped as high on Kabru. -At 5.30 A.M. on the 18th the same four started out for the final assault. In the first hour they made over 500 ft. In ever denser mists they mounted a steep arête, sinking as much as two feet into the snow, the axe sliding in to the head. 'They breathed quickly but not laboriously, and their fatigue was not very great, despite the steep grade, the heaviness of the snow, and the lifeless air.' At 11 they reached steep rocks at 24,278 ft. (over 300 ft. per hour). 'Directly they had to climb with hands as well as feet great difficulty in breathing became apparent.' At such an altitude breathing is practically a *voluntary* process and requires all one's attention. Nevertheless in two hours the highest rocks were reached at 24,600 ft. (160 ft. per hour).

The Duke believed himself to be on the final crest. But a steep corniced slope still stretched vaguely into the mist. They waited here about two hours, but the mist never cleared, and it is too risky to walk along a Himalayan cornice under such conditions. At

3.30 they turned back and, descending at the rate of only about 500 ft. an hour, reached Chogolisa Saddle at 8 P.M. The Duke climbed to within 510 ft. of the summit, and the author is justified in saying that, given only clear weather, they would have attained it by 3.30. It was sheer bad luck. When this happens in the Alps we can try again: in the Himalaya we can't. But a clear margin of over 600 ft. above all possible competitors is matter enough for congratulation. Records do count for something in spite of our protestations to the contrary.

Doubtless there is a limit, different for each one of us: a point of atmospheric rarefaction beyond which we cannot venture without the risk of sudden collapse, which under the circumstances will probably be fatal. The Duke's barometer stood at 12.35 inches. A further drop of 1.6 inches brings us to the top of Everest. The writer has been unable to find any grounds for the belief that this slight additional degree of rarefaction can in itself contribute an insurmountable barrier. Only the route must be easy, and the climbers of a prodigious courage and toughness. In this connection Dr. de Filippi records that the average rate over the whole climb was 292 ft. per hour, while on Trisul the rate was 595 ft. per hour. This is generously accounted for by the difference in the conditions of weather and snow experienced. But it is obvious that Bride Peak is distinctly harder than Trisul even under the best conditions. Everest will not be climbed unless there is an easy route up it.

These volumes are not merely a record of mountaineering. Every chapter raises and discusses points of great interest in many branches of natural science. There is no self-advertisement, and the work of other explorers in the same field is constantly and generously referred to, so that the book constitutes an invaluable work of reference to the region described. The style is good and the translation well done. As to the photographs, Sella has surpassed himself. The panoramas are advisedly supplied loose under a separate cover, so that they can be constantly referred to while reading the text, and an extraordinarily vivid idea of the country is placed before the reader. In spite of their high price, these volumes are a very good investment.

ALPINE ANTHOLOGIES.*

WHEN Palgrave, with the help of Tennyson, brought out his first 'Golden Treasury' the little volume was universally welcomed and acclaimed. The Victorians all bought it and carried it about with them, for it combined the two merits essential in

* *The Voice of the Mountains*. Edited by E. A. Baker and F. E. Ross. London: Routledge, 1905. *The Charm of Switzerland*. Compiled by N. C. Brett James. London: Methuen & Co., 1910. *In Praise of Switzerland*. By Harold Spender. London: Constable, 1912. *The Englishman in the Alps*. Edited by Arnold Lunn. Oxford University Press, 1913.

such a work: its contents had been chosen by a high standard, and it fell easily into a side pocket.

The fashion thus set naturally found many imitators. It has spread until nowadays we suffer from an annual avalanche of anthologies. Many of them hardly pretend to any literary standard. There is no subject, no period, which is not dealt with by compilers whose fitness for the task is not always as obvious as their readiness to undertake it. The public has presented to it a shelf-full of superior tit-bits, collections of passages made with very little regard to their intrinsic merit, and held together by the most various links; extracts which readers may welcome because they are interested in an individual author, or in a particular town or district, or even in some special form of adventure or sport. So we come to find on our table no fewer than four Alpine Anthologies.

The true anthologist, we venture to think, should be a person of somewhat nice, if catholic, taste, able to discriminate broadly between flowers and weeds, and not too easily carried away by the taste of the day. We allow him some indiscretions—or what we hold to be indiscretions—but these must not be so frequent as to bring down the general level of the book. He must not adopt as his motto Martial's apology—

'Sunt bona, sunt quaedam mediocria, sunt mala plura.'

We have put down the titles of the volumes under review in the order of their publication, but it must not be taken in any sense as the order of their merit. From that standpoint we might be inclined to reverse the procession, and to give Mr. Arnold Lunn the precedence. For he starts with a simpler and a more definite aim than his rivals. There is, he suggests, a natural division in the literature of the Alps. On one side lie the writings which express the feelings created in the mind of the passing traveller who looks at the heights mainly from below; on the other those which record the adventures and emotions, the experiences physical and spiritual of the mountain climber. So far as feelings are concerned the two branches necessarily overlap. Wordsworth and Byron, Shelley and Tennyson, find a place in Mr. Lunn's volume because, being poets, they discovered the Alps without climbing them. But Mr. Lunn's first object—and it brings him into closer touch with our Club than his predecessors—is to furnish specimens of the best of the literary product of the explorers of the High Alps. With the exception of Ruskin—and he was a poet who could not write verse—the bulk of Mr. Lunn's prose contributors are writers who have climbed 'above the snow level.' By this motive, and by the double restriction that his extracts are taken only from English writers and with very few exceptions—one or two poems of Mr. Young and a passage from Mr. Freshfield's 'Caucasus'—are directly connected with the Alps, this volume attains a unity which its rivals miss. Mr. Lunn has also been well advised in placing prose and poetry in separate

sections, and limiting the latter. In the other volumes before us the line of merit zigzags too abruptly between the adjacent extracts. 'Juxtaposition is great,' but it may, however flattering, prove fatal for some of us! Mr. Lunn arranges his authors with a dexterity worthy of Madame Tussaud: Hinchliff, Hardy, Tuckett, Ball, and Wills form a goodly company that may recall the old Clubrooms; Moore and Dent, Freshfield, Mummery and Conway make an appropriate group. The pages of this Journal have been ransacked to good account, and we have no call to feel ashamed of the result. Mr. Lunn is particularly to be congratulated on having been able to republish such large selections from Leslie Stephen's uncollected articles. As models of how an Alpine writer may combine descriptive power with sentiment and humour they should be widely appreciated. We should have liked something more from Tyndall and Forbes.

The seventy-five pages of poetry have on the whole been discreetly selected, though Browning might have appeared more than once, and we might have been given what Leslie Stephen calls 'Mr. Myers' charming little poem on the Simmenthal.' Fourteen pages, on the other hand, seem a liberal allowance for a verse-writer so recent as Mr. Geoffrey Young. Mr. Lunn, it is true, hails him as 'the first poet-mountaineer to catch the authentic note.' This is a bold verdict. For us, Mr. Young's point of view, however sympathetic, is too personal to give quite 'the authentic note.' His muse, most eloquent when simplest, lapses at times into vagueness or obscurity. Thus we read—

' He cleaves the blue precipitate stair -
 [Up the white domes of frozen air.'

If this means anything it means that climbers cut steps in clouds! And heaven forbid that we should be called on to take our 'midnight rest' at the bottom of 'mystical wells.' Even the most crowded Clubhut would be preferable. These it may be said are the technical criticisms of a miserably prosaic mind. Yet to describe scenes, or depict feeling, in words so fit that the reader naturally recollects and adopts them—in a phrase, to be quotable—is one stamp of 'the authentic note,' and we recognise it only at intervals in these selections from 'Wind and Hill.'

The printer's work has been well done, but Sas Maor should have a third 's,' and the 'Gallensback' is a new peak!

Next, in recentness of publication, comes Mr. Harold Spender's 'In Praise of Switzerland.' His sub-title, 'The Alps in Prose and Verse,' is the more accurate, for many pages of his book are devoted to Mont Blanc and Chamonix; and Chamonix, as we all know, is in Savoy. Then we have prose and verse mixed, climbers of all dates, from Bourrit and De Saussure to Matthews and Mummery, jostling with poets of all time—the inevitable Wordsworth, Shelley, Byron, and Tennyson. It seems, perhaps, a trifle superfluous to

quote so much about poor Marguerite from Matthew Arnold's one love-poem for the sake of the Alpine descriptions in it ; and it was certainly a cruel emendation on the part of the printers to substitute *doomed* for 'domed Vêlan' ! We note some further misprints that have escaped revision : *Kelly* for Reilly (p. 195), *Chapin* for Clapier (p. 224), and *honours* for horrors (p. 254).

Mr. Spender in one of his connecting notes seems hardly fair to Albert Smith. He writes : ' It struck him a climb of Mont Blanc might make a great show.' Edmund Yates in his ' Memorial Notice,' printed with the later editions of Albert Smith's book, tells us : ' Almost in his childhood he imbibed a veneration for the grand old mountain and its traditions. . . . While yet a boy he compiled a descriptive lecture on the ascents of Mont Blanc as made by Dr. Hamel and De Saussure, illustrated by a few rough pictures in distemper.' Again, Mr. Spender says he has printed his narrative from ' The Story of Mont Blanc ' (1853) ' practically as it was published, correcting only the most glaring errors.' The edition before us is undated, but the only discrepancy between it and Mr. Spender's version, the only ' glaring errors ' corrected, are Flüelen for ' Fluelyn,' a we for ' he,' and one or two circumflexes.

A great deal of space is given to Dumas' version of the first ascent of Mont Blanc, but, warned in time, Mr. Spender has not fallen into the trap, fatal to so many of his foregoers, of endorsing the tale told to Dr. Paccard's discredit by that prince and model of interviewers, Alexandre Dumas. Since this book was published the legend has been finally refuted by the curious discoveries recorded by Dr. Dübi in his ' Paccard wider Balmat ' (Bern, 1913).

In one matter we marvel greatly at Mr. Spender's courage. He has ventured to assert of one of our countrywomen, who does not stand nearly on the apex of the pyramidal arrangement of ladies who climb, published not long ago by an illustrated newspaper, that she ' is the most distinguished living lady climber.' What will America say ? Mr. Spender does not eschew sensational incidents. ' Alpine Tragedy ' is the title of one section of his book, and the story of the Matterhorn accident is retold in some detail, and followed by other disasters. The volume is hardly an anthology, but it includes much well-chosen and interesting matter and may introduce to its readers several novelties. Its obvious defect is its size : it is for the shelf, not the pocket or the pack.

Had we space we might have some argument with Mr. Spender on his Preface. But with two more volumes on our hands, we will only suggest that a ' range ' can hardly be said to ' comprise huge plains,' and that ' botanist ' is an odd term to apply to De Saussure. No doubt he began life as a botanical student under Haller's and his uncle Bonnet's influence, but his lifework was to lay the foundations of modern geology and Alpine exploration.

' The Charm of Switzerland,' by Mr. Brett James, is, like Mr.

Spender's volume, in bookshelf form, and has considerably less excuse for its bulk. The standard is lower, the mountaineering element weaker. We find too much that is at best second-rate, too much Rogers; too many quotations from Cheever, Talfourd, and other more or less forgotten authors; too many little scraps of description which, separated from the context, scarcely justify themselves. Then we have a long and poor ballad of Sir Walter Scott's about the Battle of Sempach. Here we remember with awe the rebuke administered in our hearing by Mrs. Oliphant to a youth: 'You dare call anything Scott took the trouble to write poor!' But what else can one say of such a stanza as this?—

'The gallant Swiss Confederates there
They prayed to God aloud,
And He displayed His rainbow fair
Against a swarthy cloud.'

And if we want the whole of 'The Prisoner of Chillon' we go to Byron for it.

Mr. James quotes a few bits from old writers, but in a very imperfect and disorderly way. None of our anthologists has done this part of their work systematically. Leonardo da Vinci and Petrarch have been quite forgotten by all our compilers. A satisfactory chapter of extracts from writers prior to De Saussure and early climbers of Mont Blanc has yet to be compiled.

We come last to the first in order of publication of the quartette, Messrs. Baker and Ross's 'Voice of the Mountains' (1905). This takes a broader scope, deals with mountains generally, and does not limit its choice to English, or even modern, writers. Compact in form, it bears witness to the wide reading and good taste of its editors. We find some pieces we have missed elsewhere; for instance, Tennyson's 'The Voice and the Peak,' written at sunrise in the inn at Ponte Grande in Val Anzasca. By the bye, 'Love in the Valley' is the title of a famous poem by Meredith, and should not be, as here, misapplied to 'The Alpine Idyll' from Tennyson's 'Princess.' We had noted that nothing of Emerson's, who supplied Tyndall with so many appropriate headings for his chapters, appears in these volumes. But in Messrs. Baker and Ross's book we recognise eight lines, without his name to them. They also quote the letter in 'La nouvelle Héloïse' in which Rousseau—the reputed author of the 'Love of the Alps,' who never took the pains to go to Chamonix—describes a trip to the upper Valais. They might have added Sir H. Taylor's pretty description of the Lake of Como which used to figure in many editions of 'Murray.' Byron's and Shelley's Letters might also have afforded some suitable passages. But on the whole, this is the volume that provides us with most surprises, and they are, as a rule, pleasant surprises. For instance, none but an intimate of Charles Lamb would have credited him with this charming *confessio amoris*. It refers of course to the Lake Hills, not the Alps. 'I shall

remember your mountains to the last day I live. They haunt me perpetually. I am like a man who has been falling in love unknown to himself, which he finds out when he leaves the lady.' Lamb's passing affection—other passages from his letters bearing witness to it might have been quoted—was no doubt but an *amour de voyage*. Still, it may serve as an evidence of the irresistible charm exercised by mountains on the modern spirit, even in the case of an inveterate townsman. We may add two remarkable sentences from an even more unexpected witness, Dr. Johnson, which do not appear in any of these volumes. 'Scrambling I have not willingly left off; the power of scrambling has left me. I have, however, been forced to exert it on many occasions. Boswell will praise my resolution and perseverance. . . . Here are mountains I should once have climbed, but to climb steeps is now very laborious, and to descend them dangerous, and I am content with knowing that by scrambling up a rock I shall only see other rocks and a wider circuit of barren desolation.' *

PROCEEDINGS OF THE ALPINE CLUB.

THE Annual General Meeting of the Club was held in the Hall, 23 Savile Row, London, W., on Monday evening, December 9, 1912, Sir Edward Davidson, *President*, in the chair.

The following candidates were balloted for and elected Members of the Club:—Messrs. Aldo Bonacossa, Nevile Savage Done, Alan Greaves, Cyril Hartree, Reinhold Richter, George Sang, Arthur Morris Slingsby, and Sidney Young.

The President, in accordance with the provisions of Rule 29, declared the following gentlemen to be duly elected for 1913:—

As President: Sir Edward Davidson, K.C.M.G., C.B., K.C.

As Vice-Presidents: Mr. E. A. Broome and Mr. George H. Morse.

As Honorary Secretary: Mr. C. H. R. Wollaston.

As Members of Committee: Mr. H. C. Bowen, Mr. W. A. Brigg, Dr. H. D. Waugh, the Rev. G. Broke, Mr. C. Cannan, Mr. W. N. Ling, Capt. E. L. Strutt, and Mr. R. W. Lloyd, and Dr. O. K. Williamson.

Mr. A. L. MUMM proposed, and Mr. HERMANN WOOLLEY seconded, the proposition that Messrs. Richard L. Harrison and E. B. Harris be elected Auditors, to audit the Club accounts for the current year. This proposal was carried unanimously.

The PRESIDENT said: I am sorry to have to announce the death

* It had escaped our reviewer's notice that Messrs. Baker and Ross's volume had been previously noticed in the 'A.J.' vol. xxii. But we think his treatment of it in comparison with its more recent rivals may interest our readers.

of Count Francesco Lurani, who was elected an ordinary member of this Club in 1892, of which he has, therefore, been a member for twenty years. Count Lurani was one of the best known of Italian mountaineers. He was the first Italian explorer of the Masino Valley, and was a great topographical photographer. He was the author of a most excellent monograph entitled 'Le Montagne di Val Masino,' and his map still remains the best one of that district and is practically perfect as far as it goes. He was a very good friend to all mountaineers who visited the district which he had made specially his own, and an especial friend to all English members of this Club, to which he was proud to belong. He made a number of admirable and difficult first ascents which I will not now enumerate, but of which a notice will appear in our JOURNAL later on. I regret extremely to have to announce his death.

I might also mention that Antonio Baroni, Count Lurani's guide for many years past, died earlier in the year.

The Rev. W. C. COMPTON said: Mr. President, with your permission I should like to make a suggestion with reference to your remarks reported in the ALPINE JOURNAL (No. 197, p. 358) with regard to 'Ball's Guide.' It was suggested by you that members should purchase copies of the book, as by so doing they would be getting excellent value for their money and at the same time would be helping on the finances of the Club. I am quite sure we should all like to possess complete copies of 'Ball,' but I would ask the Committee to consider the question whether it would be possible to allow members of the Club to purchase it at a reduced price. I think I am right in saying that the book is the property of the Club collectively, and therefore I think this is a case where the price to members of the Club might be considerably reduced. I am sure we may consider ourselves an 'Approved Society,' and, therefore, one whose members may reasonably expect to get '9d. for 4d.' I submit that the suggestion may be worth the consideration of the Committee, for 12s. is rather a stiff price for a guide to a part only of Switzerland. Personally I intended to get a copy last summer, but when I was reminded of the price I decided to go without.

The PRESIDENT thanked Mr. Compton for calling attention to this matter, and said that the Committee would give careful consideration to the suggestion he had put forward.

Dr. W. INGLIS CLARK then read a paper entitled 'Some Unfrequented Valleys—Masino, Solda, Bregaglia, Brenta, &c.,' which were illustrated by lantern slides, mostly in natural colours.

The PRESIDENT said: I am sure that there must be several members here to-night who know these parts. I do not know whether Mr. Freshfield, who was one of the earliest visitors to and explorer of some of these districts would like to say a word or two.

Mr. FRESHFIELD said: The paper read this evening carried my memories back nearly fifty years, to 1864, when on my tour 'From Thonon to Trent' I visited for the first time the Brenta and Val

Masino districts. I do not, of course, mean to suggest that I was the first member of the Club to visit them. Here, as in so many other places, our precursor was John Ball, whose 'Central Alps' had then just come out. Mr. Tuckett and I ran a close race in further exploration. We first met in Val Masino in 1864, when his guides took our party, as we passed in the dawn the chalet in which they had slept, for smugglers and begged tobacco of us. In the following year we went together to the Brenta and to Adamello.

I still think after considerable experience that these two districts have peculiar charms equal to those of any in the Alps. The last time I was in the Brenta district was with Clinton Dent, when we made a delightful traverse by an easy ledge across the precipices between the Bocca di Brenta and the Bocca called after Tuckett—and Dent took some of his most striking photographs. My only regret to-night has been that Dr. Clark did not visit the eastern flanks of the Brenta range, and provide us with pictures of the romantic landscapes of the Lake of Molveno, where there is now a good hotel. Stenico from the gorges of the Sarca would also furnish very attractive subjects. He will also, I hope, in better weather than that of this year (1912) visit Soglio (a favourite haunt of the Italian artist Segantini), and present to our eyes the two grey giants of Val Bondasca, the granite peaks of the Tschingel and Badile, rashly pronounced by Mr. Ball to be inaccessible, and hence a keen excitement to their early admirers.

The miniature reproduction of glacier tables pictured by Dr. Clark might of course be produced either by dripping water, as he suggests, or by solar action. If they are in perpetual shade his explanation is doubtless correct.

Mr. A. H. TUBBY said: I am sure we are all very pleased with the views Dr. Inglis Clark has shown us this evening. I have often visited the Albula district and well remember that in the year 1901, as one of those who had undertaken the work necessary for the revision of 'Ball's Alpine Guide,' I accompanied the late Rev. L. S. Calvert in the ascent of the Piz Vadret, then as now a peak seldom ascended. So far as I can gather from the pictures shown we ascended the mountain from the other side to that described by Dr. Clark. We engaged a guide who was said to be one of the finest mountaineers in the district, and who we were told was acquainted with every foot of the mountains. After crossing the Griatschouls and Vadret glaciers in the early morning we worked our way up until we eventually came to the base of the final peak, and noted that the ascent lay up a steep and rocky couloir. The local guide coolly turned round and said he did not know that side of the mountain, and further that it was most dangerous and that we ought to go back. Happily we had with us a good Saas guide, who hitherto had been the last on the rope. He peremptorily ordered the local guide to change places and we climbed the last 1000 feet. There is no doubt from the pictures we have seen to-night that from the summit we looked

down upon the face shown in Dr. Clark's picture, and I must congratulate him on his ascent of the difficult north face.

Dr. INGLIS CLARK said: In regard to Mr. Freshfield's remarks on the formation of the glacier tables, a photograph of which was thrown on the screen, I might say that the place is in an absolutely sheltered spot, that no sun can reach there, and that they are more probably formed by the freezing of the drops of water which drip from the cliff above, and, as a matter of fact, I actually saw the water dripping down.

The PRESIDENT said: As no other member wishes to say anything I should like to move a very hearty vote of thanks to Dr. Inglis Clark for his most interesting account of his travels last year and for the pictures which he has thrown on the screen. The last time I was in the Brenta district was about twelve years ago, and I think I arrived a very few days after the Guglia di Brenta had been ascended for the first time by Messrs. Ampferer and Berger. There was considerable excitement about this ascent, which was then considered the last word in gymnastic rock climbing, but now it has become a not infrequent excursion for ambitious cragsmen visiting the district. I also climbed the Cima Tosa and Crozzon di Brenta, a most interesting expedition, and the Presanella by what was probably—at any rate in part—a new route. This is a very beautiful mountain and commands a specially fine view. Dr. Clark has not shown us a picture of it, or of the lovely Val di Genova to-night, and I hope that he will return next year and add them to his collection.

I am sure that you are all anxious to join in according a most warm vote of thanks to Dr. Inglis Clark for his lecture.

The Winter Dinner of the Club was held at the Savoy Hotel on Tuesday, December 10, 1912, at 7 P.M., Sir Edward Davidson, K.C.M.G., C.B., K.C., President, in the Chair. Three hundred and forty-three members and guests sat down, among the latter being the Earl of Desart, K.C.B., Sir Kenneth Muir-Mackenzie, G.C.B., K.C., the Rt. Hon. Lord Justice Buckley, the Rt. Hon. Lord Justice Hamilton, Sir Alfred B. Kempe, D.C.L., F.R.S., T. E. Holland, Esq., K.C., D.C.L., LL.D., F. F. Urquhart, Esq., etc.

An Exhibition of Alpine Photographs was held in the Hall from Tuesday, December 10, to Tuesday, December 31, both days inclusive. Tea was provided on the afternoon of December 10, on which occasion between 600 and 700 visitors were present. The Exhibition was attended by about 1400 visitors altogether.

CAMPS OF THE ALPINE CLUB OF CANADA AT LAKE O'HARA AND ROBSON PASS IN JULY AND AUGUST 1913.

THE Alpine Club of Canada extends a hearty invitation to members of the Alpine Club, England, to the number of twenty-five, to be its guests at the two camps that will be held during the year 1913 : one at Lake O'Hara, along the line of the Canadian Pacific Railway, and one at Robson Pass, along the line of the Grand Trunk Pacific Railway.

The Lake O'Hara Camp will be held during the last two weeks of July and the Robson Camp during the first two weeks of August. Each camp will be for ten days, not including the time of travel from and to the railway.

Should the number specified above not be filled by members of the Alpine Club, the Canadian Club will be very pleased to receive as its guests any persons recommended by its London Committee.

The Canadian railways will give transportation from all parts of Canada to the railway station nearest the respective camps at a one-way fare for both going and returning (inclusive).

From such railway stations the Alpine Club of Canada will provide transportation to the camps.

Members to whom the above invitation may appeal will kindly communicate with the Director of the Alpine Club of Canada.

Full information concerning the nature of the camps and the attractions of the alpine beauty-spots where they will be held may be obtained from A. L. Mumm, Esq., Secretary of the Alpine Club of Canada's London Committee, 4 Hyde Park Street, London, W., to whom they are well known. Mr. Mumm should be notified of the intention to attend one or both of the camps.

Complete details of the arrangements have not yet been elaborated, but fuller information can be had on application to the undersigned.

This will be the first camp of the Alpine Club of Canada held in the vicinity of Mt. Robson. Its attendance will be limited in number owing to the difficulties of establishing a large camp at Robson Pass. The spot selected is one of the most fascinating of the entire Rocky Mountain system and has, as yet, been visited by very few. It is hoped that the Alpine Club, England, will collaborate with us in the first camp beneath the shadow of Mt. Robson.

ARTHUR O. WHEELER,

Director, Alpine Club of Canada,
Sidney, Vancouver Island,
Canada.

The steamer fare, first-class, (C.P.R.) from Liverpool to Montreal is £18 10s. each way. (£11 by one-class boats.)

The cost of return tickets, first class, from Montreal to Laggan

(C.P.R.) for the Lake O'Hara Camp is £13. The extra charge for a berth in the sleeping car is £6 for the double journey.

The cost of return ticket, first-class, from Montreal to Mt. Robson Station (G.T.P.) for the Robson Pass Camp is £14. The extra charge for a berth in the sleeping car is about £6 10s. for the double journey.

The time occupied by the journey from Liverpool to Mt. Robson or Laggan Station is 10 to 11 days, whence the camps can be reached in one long day.

Steamer and train fares are paid by each accepting guest.

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A FOURTH VISIT TO THE SIKHIM HIMALAYA, WITH ASCENT
OF THE KANGCHENJHAU.

By A. M. KELLAS.

(Read before the Alpine Club February 4, 1913.)

‘He who first met the Highland’s swelling blue
Will love each peak that shows a kindred hue.’

BYRON, in this peculiarly happy couplet, has indicated the attraction exerted by the lesser mountains in a manner which probably appeals to many of us.* But the poet’s generalisation is not wide enough. If one has experienced the attraction of the lesser mountains, then that of the great snow and rock peaks—the greater mountains—will probably be as powerful, and if exploration be possible, as in the case of the Himalaya or Rockies, the call of the mountain land becomes almost irresistible.

If one were asked to give in a few words a justification of our glorious pastime, one might venture to say with all due humility, as belonging to what ought to be a fraternity, *Mountaineering* in its widest acceptation is *the most philosophical sport in the world*. I do not intend to enter into an elaboration of that important truth—you will find excellent and eloquent arguments adduced in its support in the writings

* Ruskin’s expression, ‘inferior mountains,’ one ventures to consider misleading, as there is no inferiority from the æsthetic point of view. (Cf. *Climbing on the Himalaya, and other Mountain Ranges*, p. 215.)

of certain veterans of the Club—but will merely remark that, being a philosophical pursuit, it presents innumerable fascinating problems.

The problem which I had set myself for solution in the past summer is one of extraordinary interest, namely an examination of the Northern and Western ridges of Kangchenjunga, with an exploration of the approaches; but I must state at the outset, that, although I obtained a little fresh information, I failed to thoroughly elucidate this problem, the weather being in a hopeless condition for such explorations.

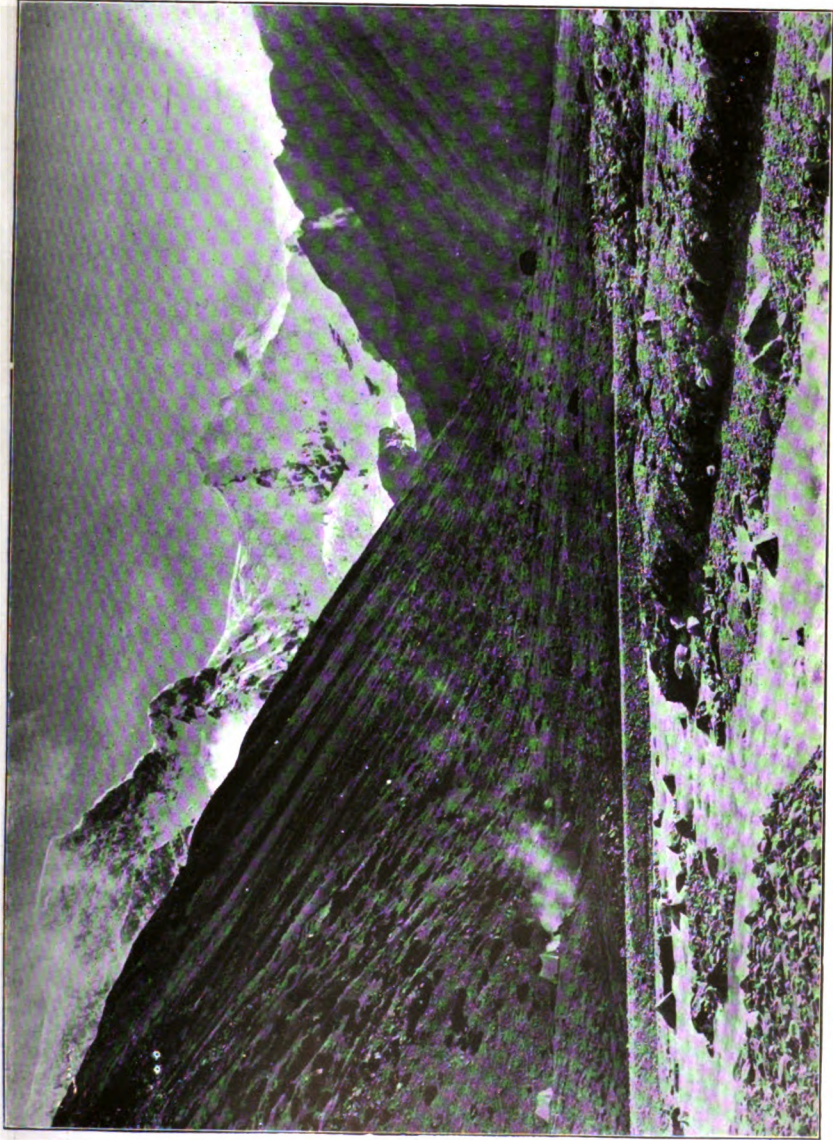
Leaving London on July 4, Darjeeling was reached on the 22nd, and my first inquiry was naturally with regard to the Sherpa Nepalese coolies who had been with me in 1911, and especially as to the whereabouts of the chief men, Tuny and Sona. I was informed that the latter two men were away in the depths of Nepal, and therefore quite inaccessible, and that only two of the men with me previously were in Darjeeling. They at once agreed to come, and on July 24, with thirty-one coolies, I left Darjeeling, reaching Lachen (pronounced Latchen), 110 miles to the N., on the 31st. At Lachen I met Mr. Dracott, the Sikkim State Engineer, who gave me the interesting information that he had just returned from superintending the construction of a new coolie track to Lhonak, *via* the Lhonak Chu Glen. This I calculated would probably save us a day on the return journey. As a matter of fact, it nearly caused me to be detained in India for an extra week.

The weather on the way up to Lachen was generally bad, with heavy rains, and it occurred to me that Kangchenjunga might be quite unassailable, and therefore that it would be advisable to avoid an absolute defeat, by attempting some easy mountain as a preliminary. The Kangchenjhau (22,700 ft.) seemed most suitable, as it was only two days' march to the N. of Lachen, and had been carefully examined in 1911, as detailed in my last paper.* The S. face as seen from near the Sebu La seemed practicable by ascending a greatly crevassed glacier to a col at about 21,000 ft., and thence by a steep snow and rock slope to the top. Continuous mist had prevented this route from being followed in 1911. A much better route from the N. had, however, been detected while descending from Chumiomo, when the mist lifted for a few minutes. This route was steeper than the other, but seemed comparatively uncrevassed. Ice-cliffs showed through the snow in many

* *Alpine Journal*, 1912, p. 132.

22,700 ft.

21,800 ft. 22,300 ft.



A. M. Kellas, photo.

Swan Electric Engraving Co., Ltd.

No. 1.—View of part of the S. face of the Kangchenjunga (22,700 ft.), from camp at 15,000 ft.

places, and therefore presumably the rest of the face was icy, and, unless the snow were in good condition, would require prolonged step-cutting. I showed this way up to Sona, but that pessimist lugubriously shook his head, and gave it as his opinion that such a route was far too steep and dangerous, and that he did not want to try it. After consideration I now determined to attempt this northern route, the southern one being obviously impossible under monsoon weather conditions.

Seven Sherpas and fifteen Lachen men were therefore despatched north-westwards towards the Green Lake by the Zemu Glacier, while two Sherpas and three Lachen men came northwards with me to attempt the Kangchenjhou.

The reader who cares to follow the route accurately must be referred to the map accompanying the previous paper (*A. J.* 1912, p. 142). The Green Lake lies 25 miles W. by N. of Lachen—considered 5 days' march—while the Kangchenjhou lies about the same distance to the N. In the latter case a good pony-track, which continues into Tibet over two easy passes, is available, so that the west buttress of the mountain is only two days' march from Lachen as already mentioned.

Our first day's march took us to Thango (12,400 ft.); the route is beautiful, many of the hill-sides being clothed with dense forests. On the way I was under the impression that we crossed several terminal moraines, but I cannot pretend to have taken time to investigate the matter. If so, an enormous glacier must in a Himalayan glacial age have swept southwards from the Chumiomo and Kangchenjhou ridges, to join perhaps the great glaciers, which, according to Prof. Garwood, came down from the Zemu and Lhonak districts. If the main elevation of the Himalaya really occurred in the Tertiary Epoch, this might seem to indicate that there was a Himalayan glacial age approximately contemporaneous with our own.

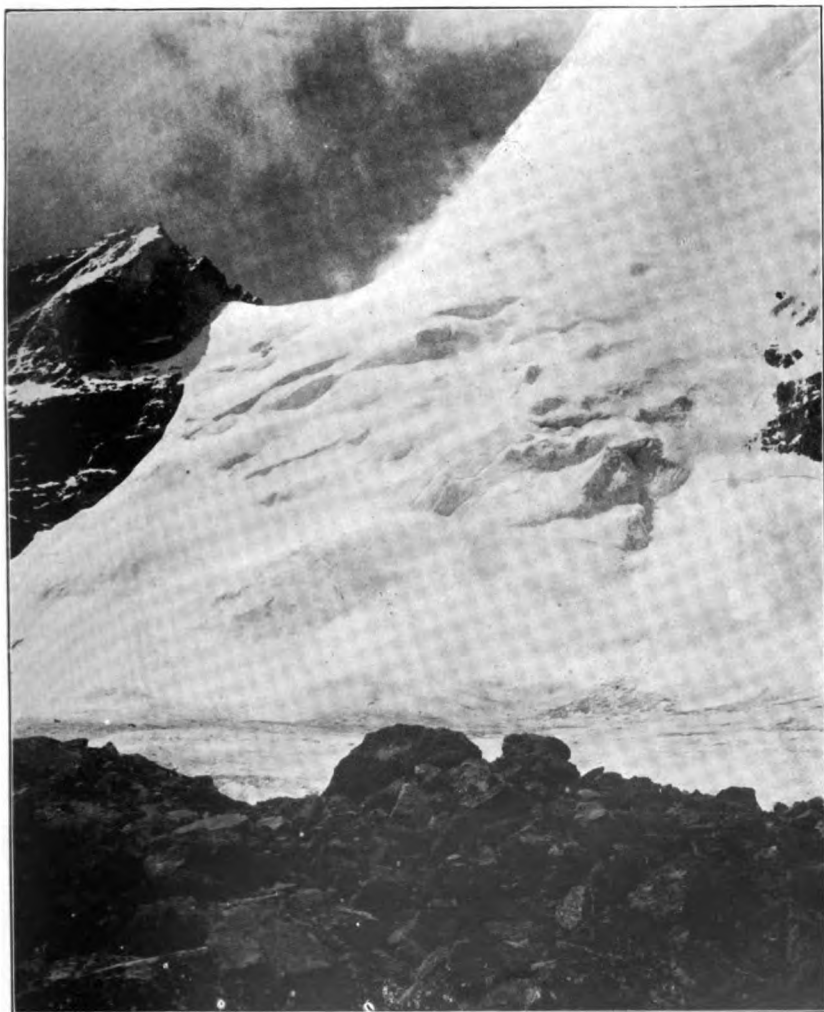
Above Thango the valley is bare and rocky, but beautiful Alpine plants are present in such profusion that one is kept interested and delighted, and usually makes a resolution to increase one's botanical knowledge regarding mountain flora. In fine weather the scenery is of a high order, as the peaks of Lhachenkang (21,600 ft.), Chumiomo (22,430 ft.) and the Kangchenjhou (22,700 ft.) are all visible.

On the third day after leaving Lachen we passed to the N. of the Himalaya between Chumiomo and the Kangchenjhou, and, turning eastwards, proceeded up the lower stony slopes

of the latter mountain. The Lachen men had from the first shown their inferiority to the Sherpas, and were now far behind—in fact one of the Sherpas, sent to investigate, declared they must have gone back to Lachen. In about an hour, however, they appeared over the top of a higher ridge very blown and tired. They wished to camp at once, although it was not 2 o'clock, because one of them had a 'bimmer' (*i.e.* was sick). It was a case of a man in bad training over-exerting himself, and there was nothing for it but to camp. An old traveller told me on my first visit to Sikkim that the great secret of successful Himalayan travelling was embodied in the rule:—'Keep behind your last coolie, and have a good sharp stick to prod him with.' Although I don't agree with the latter part of the advice, which was probably not meant seriously, I am bound to confess that most of my troubles in the Himalaya have resulted from disobedience of the former part. If these Lachen men had only followed our easy route, there would have been no trouble. The camp was pitched, and the man put to bed and given hot soup—a never-failing panacea for coolies when out of sorts. Both the terms 'mountain lassitude' and 'mountain sickness' will have to be retained for convenience. The former seems normal above 13,000 ft., the latter abnormal.

Going for a short exploration in the afternoon I found that we had merely to cross a low ridge to reach a valley leading straight to the bottom of the ice-slope we were to ascend. Next morning was beautiful, and had we only been at the foot of the ice-slope, we might have ascended the mountain that day, and thus saved a couple of days, which might have prevented the comparative failure of the expedition. The sick coolie, although better, said he could not carry a load, so that I left him with one tent, and with the other four men proceeded to the foot of the ice-slope, pitching our camp on rocks about 250 yards from its base. We reached this place about 10 A.M., and having sent back the Lachen men, the two Sherpas and I started at 11 A.M. to ascend to the col, in order to ascertain whether the snow was in passable order. Our ostensible goal, so far as the coolies knew, was the summit of the mountain. The first 400 ft. was easy, compacted *névé* over ice, in which steps could readily be cut, but above became steadily more difficult up to a few hundred feet from the top. The angle increased from 40° to about 70° on a small ice-cliff ascended about 1000 ft. above the camp, where we had to cut our way up particularly hard glossy ice, hand-holds

22,700 ft.



A. M. Kellas, photo.

Swan Electric Engraving Co., Ltd.

No. 2.—View of part of the North face of the Kangchenjhou (22,700 ft.),
from camp at 19,000 ft.

being required. The ice was so hard that each step took several minutes to cut, and although we only halted once, it was 4.30 P.M. before we reached the col, the height of which I estimated at about 21,000 ft. The height of our camp was 19,200 ft. according to a hypsometric calculation, so that we had taken about 5 hrs. to climb 1800 ft., excluding the halt.

When descending we took a much easier route close to the rocks on the E., which I had recommended on the ascent. Both coolies were against me, however, and I gave in for two reasons: firstly I was uncertain as to whether stones might come down from the rocks above, and secondly I thought that the ice would be good practice for the coolies. We found that the col we were on was not that visible from the Sebu La, but apparently lay to the N. of it across a deep valley. The map seems incorrect, but mist prevented any verification of the actual position of this southern col.

I was well pleased to find that the coolies were anxious to proceed to the top even at that late hour, although mist had long covered the upper ridges. They were under the impression that the summit was right before us at the top of the rocks, but I knew from photographs that it must be at least 500 ft. higher, and to go on in the circumstances would probably have meant frost-bite. We therefore descended, keeping close to the precipices on the E., from which no stones seemed to have fallen during the ascent. The first 1000 ft. gave us some trouble, taking nearly 2 hours, but the lower half was glissaded in a few minutes down two pitches of 400 ft. each.

We were to start early next morning, but it snowed all night, and up to 3 P.M. next day. We therefore had to postpone our ascent for a day. About midnight on this second night there was a tremendous crash up aloft, followed by a cascade of stones which continued falling for a minute or two, but that was the only serious rock-fall during our three days' stay at that camp.

Next morning we started at 7 o'clock, and, keeping close to the rocks, reached the col a few minutes after 9, a speed of over 1000 ft. per hour, excluding the single halt. The previous day's snow had frozen firmly to the ice during the night, and the going was easy. At the col we turned to the W. up the final ascent, which consisted of steep snow at an angle of 45° to 60°, with a belt of rocks (angle 60° to 80°) showing through about 1000 ft. above the col. The summit ridge was in mist, but as there seemed to be a chance of its rising, we

proceeded. For the first 150 ft. the snow was so soft that we could kick steps in it, but above that was compacted *névé* with icy surface in places, the S. wind having blown all the fresh snow off this exposed face. There was no difficulty in making steps, and we reached the base of the rocks about 11 o'clock, $1\frac{1}{4}$ hours after leaving the col. The coolies wished to proceed straight up the rocks, which were glazed with ice, but I had already decided that it would probably be better to keep round to the N. of the rocks, and zigzag up a steep snow-slope. For about 200 to 300 yds. the route looked rather dangerous, because if the snow avalanched away we would certainly have slipped down 3000 ft. on to the glacier below, but I do not think that there was any real danger. The ice axes could always be driven in up to the hilt. Nema, an extraordinarily cautious coolie, was a trifle nervous over this portion, and protested several times to Anderkyow, who merely responded with a laconic 'Sahib mahlum' (*i.e.*, Sahib understands). One could hardly be certain that one did understand thoroughly, for Himalayan snow conditions are more variable than Swiss, but we were as cautious as seemed reasonable. Once round the rocks there was no difficulty, and we proceeded slowly to the top, up a steep slope of deep snow, this side of the mountain being protected from the prevailing S. wind. No zigzags were required. The Sherpas indicated clearly that they were more rapid climbers than myself above 21,500 ft. Above 22,000 ft. they were certainly 20 per cent. better. At 1.10 P.M. we stepped on to the summit plateau.

A cold wind blew continuously, and dense mist enveloped us for over half an hour. After that, however, the mist broke now and again, and we had magnificent views to the W., N., and N.E. Chumiomo was conspicuous to the N.W. The S. and E. remained obscured unfortunately. A great river of mist seemed to be moving northwards up the Teesta valley. The average height of the tumbled surface of this mist stream was about 22,000 ft., but peculiarly shaped columns rose in places 5,000 to 10,000 ft. above this floating sea, and therefore high enough to cover the summits of the loftiest mountains. The chief ridge of the Kangchenjhau runs E. and W., and consists of a great dyke—using the term in its geological sense—which shows fine precipices to both N. and S. From the eastern end of this main mass other ridges radiate in different directions, and probably there are about a dozen summits in all. We had hoped to be able to walk along the summit plateau—

which is a few hundred yards broad—to the W. summit, a distance of about 2 miles, but this portion of the mountain remained persistently in mist.

After remaining on the summit plateau for $1\frac{1}{2}$ hours, during the greater part of which we wandered about in order to keep warm, we started to descend at 2.40 P.M. We proceeded leisurely down to the col, which was reached at 4.30 P.M. The coolies declined to glissade from below the rocks to the col, although it could easily be done. The soft snow already mentioned as being at the bottom of the slope would effectually have prevented one from pitching over the edge of the narrow col to one side or another. I was comparatively indifferent and asked their opinion from curiosity. On the way down we were fortunate enough to obtain passable photographs of the N.E. ridge, which culminates in a beautiful peak about 21,900 ft. high, which would be easily assailable from the N.

It became evident when on the col that our route up the mountain was not the best. A much preferable way would be from the S. side of the col. This side could be reached by proceeding 3 miles to the E. of the stream flowing from the glacier by our camp, and then striking S.W. along the N.E. Kangchenjhou Glacier, which would lead direct to this S. side. It would be possible to camp on that glacier at over 20,000 ft., whence the summit might be attained *via* this saddle. This route would render the ascent comparatively easy.

When we started our descent from the col, we found that the condition of the ice-slope had entirely altered since morning. Except when on the summit, the sun had been very powerful, and the snow on the slope had almost vanished. This caused us great trouble, and our progress was very slow. We were slightly tired and felt lazy, and the ice was extremely hard. Anderkyow led, with Nema next him, I being last. Anderkyow's steps were rather unsatisfactory, but I thought—and, as it proved, quite wrongly—that these two men were fairly safe not to slip, and I therefore contented myself with improving the steps for my own use. Only one man was allowed to move at a time. About 300 ft. from the top, we halted on an extremely steep part of the face to discuss how to proceed. The Sherpas, acting in their usual way, wished to take to the rocks on our right, but as they seemed glazed with ice, and as all the ledges dipped downwards, I demurred. A slip on such rocks might have been serious. A zigzag a few yards to the left would relieve the strain somewhat, but would take us directly over an ice-cliff, and as I have found that the angles of zigzags

are the most likely places for a slip, I decided not to risk a deviation in that direction.

About 200 ft. below us a great many stones seemed wedged in the ice; most of these seemed to have come down in the great fall we had heard at midnight, because I had not noticed them on the previous ascent, and when ascending in the morning, we had found the fresh snow round these stones powdered with innumerable spicules of rock. This caused me to think that a descent close to the rocks involved unnecessary risk of falling stones, but such a course would undoubtedly have been easier than ours, which lay 150 yds. from the rocks.

I was re-examining the ice-slope to the left, when suddenly, with a startled exclamation, Anderkyow slipped from his steps. Nema seemed to move practically simultaneously, and I certainly did not hold them for even one second. Within a few moments of Anderkyow's slip we were whizzing down that ice-slope with the speed of an express train.

Probably most climbers have wondered what their mental impressions would be if they fell. I have myself speculated as to whether an epitome of one's previous life could possibly pass through one's brain, and as my conclusions were decidedly against that idea, perhaps they are worth recording. Immediately afterwards I carefully noted every thought which occurred to me, however trivial, from the instant the slip occurred until our wild career was checked 800 to 1000 ft. lower down. I am afraid that this can only have a very mild scientific interest, but nevertheless I venture to give it here in full. In the fraction of a second between Anderkyow's slip and my being pulled down the following four thoughts occurred to me: Firstly, these two men on their backs look exactly like that picture of the accident on the Matterhorn in Whympers' 'Scrambles among the Alps'; next, 'I think I could hold one man, but am doubtful about two'; thirdly, 'Now you will have the novel experience you have speculated about'; and, lastly, 'What should we do with our axes—should we keep them or throw them aside?' These latter two thoughts occurred at the instant I started moving.

During the descent I was conscious of two tremendous jolts. The first one, which seemed to occur immediately we fell, must have been due to one of the stones already mentioned, about 200 ft. below where we slipped. The impact threw me on my side with my length almost at right angles to our direction of motion, and for a critical second my feet were slightly higher than my head. By an extraordinary effort

I managed to turn back into the normal glissading position, and, almost immediately after, a second jerk threw me on my back, so that the snow nearly enveloped me, some getting into the breast pockets of my coat, and also down the back of my neck. A few seconds thereafter we slowed down, and the coolies and I simultaneously half rolled, half scrambled, out of the accompanying avalanche before it packed, and anchored ourselves as best we could.

I felt flushed and exhilarated, and on rising up and looking round, was astonished to find that we were at the top of the lowest pitch of the slope, only 400 ft. above our camp. This meant a descent of about 1000 ft. if my estimate of the height of the col be correct—800 ft. as a minimum—and, speaking for myself I was quite puzzled to account for such a long descent in such a short interval, for the time to me did not seem more than 10 to 15 seconds. Probably this can be explained by the fact that the predominance of one idea—namely to keep upright—as well as the struggle necessary for that purpose, interfered with the computation of time.

If the vertical height of our involuntary glissade be taken as 1000 ft., and the average angle of slope 45° , the length of our slide would be approximately 1400 ft.; and if the time of our descent occupied 20 seconds our average speed would be about 50 miles per hour; if the time taken were 25 seconds the average speed would be about 40 miles per hour. Making allowances, our average velocity was probably between 40 and 50 miles per hour, and an expert with ski might have calculated it approximately. It follows that, for the inexperienced, computation of time is interfered with during such a rapid descent. It might be remarked that a vertical fall of 1000 ft. would take only 8 seconds, an average velocity of 85 miles per hour.

For the latter portion of the descent, I am inclined to think that we were moving nearly parallel to each other, and a few yards apart, but the spindrift of snow which enveloped us prevented me from seeing anything definitely. We certainly ended the course in this position—Nema to my left, and Anderkyow to my right, and as we scrambled out to my left Anderkyow was the one most nearly caught in the snow as it packed. About 30 ft. of rope wound round him had become unloosed, and the last 10 ft. were caught in the compressed snow, from which it was only removed with considerable difficulty.

Except for a few trivial bruises we were fortunately quite unhurt, but we had all lost our hats and ice-axes. Within an

hour we had recovered all the hats and two ice-axes, and as it was now about 6.30 P.M. we glissaded down to the camp. I was a few minutes before Nema and Anderkyow who had gone farther up to look for the missing axe, and I found awaiting me near the bottom of the slope the best of the Lachen men. He, never having seen anyone glissading before, seemed doubtful how far the descent was intentional, and suddenly, with outstretched arms, kindly prepared to field me. Fortunately for both I managed to wave him aside.

Of course I accept full responsibility for the accident described above, which was essentially due to my not insisting that Anderkyow should make exceptionally large steps. I am glad to be able to state definitely, however, that I only passed the steps because we were keeping along a route which should probably not involve very serious effects even if we slipped, and I had actually decided to risk a glissade from about 350 ft. (vertical) below where our rapid movement started. My error of judgment was conducted to by the fact that I had on four previous occasions managed to hold one man on icy slopes, once even when he swung round on the rope from the angle of a zigzag, and I therefore overestimated my capacity for holding on. In none of these cases was there any very serious danger. As indicated in my previous paper, one has to be particularly cautious when with coolies. I think it well to clearly indicate that, as regards effect, there is no comparison between the pull exerted by two men slipping practically simultaneously, and that produced by the slip of one man, so far as an opinion can be formed from a single experience. It is true that I was quite off my guard, and had no time to brace myself; but I am doubtful whether I could have held them, sitting as I was with my back to the slope. Standing with my face to the slope would, I think, have enabled me to hold them for a short time, but I am quite uncertain on this important practical point, and would like information about it. Many members of the Club must have far greater experience than myself in ice-work.

I would like to point out also that we should not have halted on such a steep portion of the slope. We were, however, as already mentioned, somewhat tired, and probably mountain lassitude had something to do with our indifference to danger, so that it is hardly fair to be hypercritical in such a case. Dr. Longstaff has pointed out to me that probably mountain lassitude blunted my susceptibility to danger on Longridge Pass when I was struck by a stone, as detailed in my last

paper, and I quite agree with him. This carelessness induced by mountain lassitude is a factor which climbers in the Himalaya would do well to keep in view.

I am afraid that some members of the Club will consider this incident over-elaborated, but it could hardly be understood without full details of the circumstances, and complete descriptions are sometimes instructive. I have merely acted as it seems right that one should do in the circumstances. If one frankly relates such incidents, even at the risk of misunderstanding, someone might benefit, and I know that I would like others to reciprocate. After all, the incident might be described as an involuntary glissade, and my mental equanimity was probably derived from a subconscious confidence in our route: regarding that I am uncertain. For my own part, I consider that I learned a great deal, and some points might be worth summarizing.

(1) A climber should preferably take one man rather than two along with him, on such steep, uncrevassed slopes, if both men could be classed as slightly doubtful.

(2) Such slopes are not so dangerous as they look, provided one can avoid ice-cliffs, and that there is not sufficient snow to cause a large avalanche. The snow which accompanies one in such a case acts as a buffer to stones of moderate size.

(3) While one man can be held without extreme difficulty for about half a minute on steep slopes, the pull exerted by two men is apparently irresistible. In connexion with this statement, as no direct information seems obtainable, a few practical experiments on a short, steep ice-slope, with a heap of loose snow at the bottom, would be interesting.

The sequel to this accident is peculiar and worth relating. After dinner I told Nema and Anderkyow to go up early next morning, when the snow would be in good condition, to look for the missing axe, taking the rope with them, and not to trouble about the usual early cup of tea. They could then come down to breakfast, and if the axe had not been found, we would make a further search together. Next morning Nema brought 'Chota haziri' (*i.e.* petit-déjeuner) as usual at 6 o'clock, and told me that Anderkyow and the Lachen man had started off at 5.30. On my asking whether they had taken the rope, he replied in the negative. About an hour later I was in my tent getting my cameras in order, when, hearing a hubbub near, I flung back the tent flap and was horrified to find Anderkyow standing outside, with his face and hands and the upper part of his grey woollen coat covered with blood,

He had evidently fallen down the slope. Nema, who accompanied him, on being asked to bring hot water, said that there wasn't water of any kind, and that it would take a long time to procure some, as the glacier streamlet was ice-bound, and tendered a large pan of nearly boiling tea, which, in his agitation, he had carried over with him. Being the only liquid available there was nothing for it but to bathe Anderkyow's wounds with the hot tea, which I proceeded to do. I found that matters were not so bad as I feared, but he had lost nearly half the skin from his face—curiously enough, from both sides almost equally—and there was a large oblique cut about $2\frac{1}{2}$ in. long on the top of his head. His hands were also badly wounded. I was afraid that his right eye was injured, as it was closed up and painful. He had been given a well-nailed pair of new boots a couple of days before, and I naturally looked to see whether he was wearing them, and was annoyed to find that he had on a pair of camp boots, with thin, polished soles like dancing slippers, without a nail in them. They might have been guaranteed to slip readily on any smooth surface. This sort of behaviour is typical of the happy-go-lucky coolie. He dislikes being taken into danger, and yet, left to himself, will not take rudimentary precautions. I learnt afterwards that, shortly after finding the missing axe, he had slipped and pitched headlong down the slopes, losing both the axes and his hat. The axes were with some difficulty retrieved from where they had fallen, by the Lachen man, but the hat was finally lost; I was able to give him another.

Turning from what had at first looked like tragedy, to see what the Lachen man was doing, I had a little comedy enacted for my sole amusement. The coolie was at the head of the last pitch, 400 ft. above the camp, and I could see by the glass that he had the three axes. Sitting down, and gathering them under his left arm, he proceeded to descend by one of our old slides, although he might have chosen a much less steep route. He started off quite well, but before he had gone many yards, one axe flew out to the side, and the second and third followed in quick succession. His speed then rapidly accelerated, and, whirling round, he came down head first, and shot into the heap of snow at the bottom. He was so long in rising, that I was afraid that he had hurt himself, and was just starting to go to his assistance, when he slowly extricated himself, shook his clothes free from snow, hunted for his hat, and, without looking towards the camp, started laboriously to ascend the slope. No one could have accused him of want of

caution, for it took him about half an hour to reach the first axe, after which his progress was better. Profiting by experience, when he reached the second axe he pitched it down the slide, and similarly with the third. He then started to glissade down a place where there was a maximum of loose snow, and although he did end the performance spread-eagled on his back, it was certainly a great improvement on his previous attempt. This lower slope was merely compacted *névé* as already mentioned.

A few hours afterwards, when Anderkyow had recovered from his shock, we descended to the valley near Gyamtshona *via* our old camp. The coolie who had suffered from mountain sickness was now quite strong again, and it was arranged that Anderkyow should have no load, or merely camera or knapsack for the next week. In a few days his right eye was nearly better, and his other wounds healed with remarkable rapidity. Every morning they were smeared with vaseline or lanoline.

Near Gyamtshona we found a small Tibetan encampment, and although I pointed out to the coolies that we would be bothered by dogs, they were anxious to camp alongside, but as a compromise we camped 200 yards off. Coolies get milk and cheese from Tibetans in exchange for biscuit tins. Sometimes they get huge lumps of doubtful-looking yak meat, the most potent cause of mountain sickness among coolies that I have ever met with. A woman and three children seemed to be the only occupants, but in the evening a man and the inevitable dog appeared. It seems to be a matter of principle with Tibetan dogs to bark as long as a stranger is within a few hundred yards of them, and they therefore belong to that rather large class of badly trained animals, which are a nuisance to all but their owners. Some of them not only bark, but are prone to attack, and must be kept off with stones, which they are adepts at dodging. Sure enough that dog barked all night, first round one camp and then round the other, making sleep impossible for our party. Two nights later, at some distance from another encampment, a young dog barked all night except during the very short intervals—about two minutes—when it was recuperating after having barked itself to a standstill. To avoid annoyance to the traveller, and inadvertent cruelty to animals, it is best to camp at least a quarter of a mile off from Tibetan encampments, preferably to leeward and out of sight.

Our next object was to reach the Green Lake—about 40 miles off—with maximum rapidity. There were four easy

passes between us and the Lake, and we crossed one pass on each of the four following days.

On August 9 we crossed Chumiomo La (18,800 ft.), the first slight depression in the ridge to the N. of Chumiomo. As on the occasion when near here in 1911, I looked vainly for the Mount Everest group. There were some beautiful combined snow and rock mountains to the S.W. of the lofty snowpeak called Kanglingen, but they all seemed to be E. of the Arun River. On August 10 we crossed the Nago La (18,186 ft.), on the 11th the Thé La (16,752 ft.) and on the 12th the Tang-chung La (16,933 ft.), pushing on to the Green Lake plain the same day. We arrived soaked to the skin in a dense mist about 8.30 P.M., after leaving the Lachen men in camp a few miles off.

An unusual incident which happened to the N. of the Thé La is worth mentioning as a warning to travellers. The Langpo Chu—usually nearly clear and moderately easy to cross—was a brown torrent in heavy spate, and we had difficulty in finding a ford. I knew there was one about a mile off, but we were in a hurry. While I was trying to cross at one place, four coolies managed to force their way through at another, taking arms and placing themselves at right angles to the direction of the stream. My route was impossible and I hastily followed the coolies when they were about half-way through. Before I had gone a third of the distance, however, I got into difficulty. The dash of the water was extraordinary, and I found that I had little purchase on the bottom, but, knowing that I was practically at the deepest part, I decided to persevere and put my left foot forward. The sensation experienced was peculiar. I seemed to be floating, the pressure of the water almost balancing my weight and my purchase on the ice-axe. It was obviously time to turn back, but this would necessitate putting oneself broadside on to the river, which would almost certainly mean being swept off one's feet. It appeared easier to go on, so that I drew up the right foot level with the left, and felt at once that I had a slight purchase. By edging forwards a few inches at a time, so as to keep a minimum surface of contact with the water I managed to get through, but it was certainly a narrow escape. I am not relating it as such—one could easily, by a little carelessness or clumsiness, get into as dangerous a position in any London thoroughfare—but rather impersonally as a warning. I was under the impression that I was taking every precaution.

The coolies had by this time reached the bank, and on see-

ing me rushed into the water, but I was already out of danger. Probably one could have swum to the bank at that place, but one would prefer not to be forced to make the attempt. All the coolies went back to convoy Anderkyow, which vouches a little for the exceptional conditions. While drying our clothes on the bank, it occurred to me that an important difference between the coolies and myself while crossing, excluding their mutual support, was the fact that they were carrying 60-lb. loads, which would undoubtedly give them a better purchase on the bottom. My inconsiderate deduction that where the coolies could cross, an unloaded man could go, was therefore incorrect.

The peculiar floating sensation experienced was similar to that felt when bathing in the sea up to one's armpits, with a slight swell coming in, and quite different from the hypnotic effect readily produced by the swirl of water of these Himalayan torrents. This hypnotic effect is easily obviated by not fixing one's gaze on any particular place, and by keeping what might best be described as a mental control.

The coolies are astonishingly good at crossing these streams, seeming to instinctively pick out the best fords, but they don't escape scot-free. When in Sikkim in 1909 I was informed that two coolies belonging to another party had been drowned in the Langpo Chu near where we crossed, and in 1907, three villagers of Rajaori (Kashmir) were swept away when trying to cross the River Tawi, an affluent of the Chenab, about half a mile from the ford. We crossed at the ford a few hours later, and found it quite difficult enough. For easy crossings one generally gets a coolie to carry one, but there is a great difference between the weight of a man and the weight of a load (50 to 80 lbs.), and only the strongest coolies can be relied on to carry one safely if the river is broad and rapid. If the crossing is at all difficult, it is best to insist that at least one man—preferably two—should come alongside to steady the man carrying you.

The crossing of these Himalayan torrents must be counted among the most sporting incidents of Himalayan travel. My introduction to them was in August 1907, when proceeding from Srinagar (Kashmir) to Gujerat across the Pir Panjal Pass (11,400 ft.). We had some trouble N. of the pass, especially with the Rembiara River, a large tributary of the Jhelam, but on getting to the S. side of the range, I had been under the impression that everything would be plain sailing. My nominal guide was a Kashmiri who knew nothing about the

route, but collected information every night—sometimes inaccurate—regarding next day's march. At Poshiana, the first village on the S. side of the pass, he came to me and said dolefully 'It is impossible to go on, master; to-morrow thirty-two bridges.' This impossibility of proceeding had been his plaint every day since leaving Srinagar, so I merely said, 'Very good, we'll cross them.' 'But they're all down,' was his reply, which turned out to be true. Next day's march was certainly exciting, as all the streams were in flood, but the number of crossings was nearer twenty than thirty-two. On that occasion I generally crossed on the back of a tall, powerful coolie, who was supported by two others. This gave me some experience.

In September of the same year a strange incident occurred when fording the Langpo Chu—then comparatively easy—when accompanied by two European guides. The coolies and I waded across without difficulty between 3 and 4 in the afternoon, but the guides kept on up the river, apparently looking for an easier ford. At 9 o'clock they had not come in, so we lighted a huge bonfire to direct them—there are large stores of dwarf juniper in that locality—and kept it going until past 10 P.M. At 11 we turned in. Next morning the guides were found in their tent, but on being questioned all the reply one could get from them was 'There was too much water for us.' Such men are somewhat cautious for Himalayan travel. It may seem slightly unkind to record such a reminiscence, but it was typical, and might warn travellers of unexpected effects, which should perhaps be laid at the door of mountain lassitude. But this digression is rather long. Let us return to the expedition.

The day after we arrived at the Green Lake was a holiday, which was passed in a clammy mist with rain and snow. This condition had been chronic since crossing the Thé La, so that I summoned the Sirdar, and asked him how long he had been camped there, and what the weather conditions had been. He had been there six days, and, as he expressed it, 'There was always smoke,' just as now. Had he never seen the mountains? His answer was 'No.' That was enough for me. A week of continuous mist with rain and snow was unendurable. Directions were given that on the following morning we would all start for Tent Peak Pass, after crossing which, four coolies would be sent back to transport the extra loads. Some of the coolies, whom the week's ease had demoralised, were dissatisfied with this arrangement, their idea being to take short marches,

and the whole number of loads (16) each day by making two journeys. I disagreed with any such arrangement, and my directions to the Sirdar were precise.

On August 14 we reached the foot of the great ice-fall of the E. Tent Peak Glacier, and I was annoyed to find that they had only taken one tent. To crowd nine coolies into a small tent, the floor of which was 6 ft. square, was impossible, so that I was reluctantly compelled to send back four men under Anderkyow to sleep at the Green Lake camp, the alternative being to take three or four men into my own tent. They were to follow us as soon as possible. This disobedience of orders—a little subterfuge of theirs—spoiled the rest of the expedition, and the next week's work might be concisely described as a general muddle.

On August 15 we ascended the ice-fall, cutting enormous steps in the ice : we had learned a lesson. The lower part was easy but at the top there were difficulties, including a wide and deep crevasse which we had to cross by a rather doubtful-looking ice-bridge. This crevasse was quite insignificant in 1911. We camped that night by the edge of the glacier in dense mist, and the same condition prevailed next forenoon, when we arrived at the deep snow at the base of the ascent to the pass. The coolies with me knew nothing of snow work, and their usual behaviour when the first man got stopped by a crevasse, or by deep snow, was to crowd up together. As for a considerable time we were forced to move nearly parallel to the direction of the crevasses, some of which are broad and deep, this was exceptionally dangerous, and I had to go last, stop, and pull on the rope until they understood a little better. We were six men on a 100-ft. rope. The conditions were worse than I had thought, and some huge avalanches had fallen from the cliffs on the E. The only easy going was when we crossed the extreme tails of these avalanches, the rest being deep soft snow considerably above the knee.

The exact direction of the pass was difficult to decide, beyond that it was somewhere to our right. After slow wading for an hour and a half, a tentative advance to the right was followed by a rapid retreat, for an instant's thinning of the mist had indicated that we were under inaccessible cliffs, down which an avalanche might come. One had fallen not far off, and now and again we could hear them falling in various directions, more especially down the face of the Tent Peak, as far as I could judge the direction. We did not see any fall, but we heard two come down comparatively close to

us. The coolies were discouraged, and the cautious Nema gave it as his opinion that the pass was too difficult for coolies. If the mist lifted I was confident that the pass, which had been merely a walk in May 1911, would be quite easy to cross. We would at least be fairly safe if we kept W. by N., for that direction would bring us on to the Tent Peak, and to our relief about 2 P.M. we saw the cliffs of the Tent Peak loom up through the mist. The distance was less than 2 miles in snow, but there had been several halts and cautious explorations.

The exceptional snow conditions made me decide to retreat a short distance and then camp, so as to give Anderkyow a chance of joining us. Our footsteps should be visible if he reached the bottom of the pass that day, because although snow was falling slowly there was little wind. Our camp was quite secure: we were 250 yards from the precipices of the Tent Peak and separated from them by a deep hollow. In all other directions the slope was gentle, and there were no signs of avalanches. Fairly heavy snow came on at night, and at least six inches fell before 5 next morning. The dense mist showed no signs of lifting.

I was tired of waiting for Anderkyow, so after having a cup of tea and a biscuit, I started with two coolies about 6 A.M., to look for the top of the pass. I was positive that I had recognised an ice-cliff, about 100 ft. high, which appeared for a few minutes 200ft. above us after camping. Our route should lie round by the right of it to its summit, and from there the way was unmistakable. The upper portion of the pass is similar in appearance to part of the bottom of an upturned boat inclined at an angle of 40° . The keel would run from the top of the ice-cliff to the col which lies about 500 ft. higher. This upper portion is uncrevassed. My identification was correct, and we reached the top of the pass (19,000 ft.) at 7.20 A.M. without difficulty. Before reaching the ice-cliff, we crossed the tail of a huge new avalanche which had evidently fallen from the invisible cliffs on the E. What gave cause for thought was the distance which it had fallen down a slope of only 30° from the base of the cliffs. This was somewhat disquieting when one thought of the sixteen loads which had to be carried over the pass by careless coolies. I had, however, confidence in Anderkyow, who had been with me in 1909 and 1911, and knew the pass far better than I did.

Unroping immediately, I sent the coolies back for the others, and indicated that I would make the route for them through the deep snow in front, and to follow as quickly as possible.

The camp was only about 800 ft. from the top, and I calculated that, since the road would be made easy for them the whole way, we should be camped on the other side of the N.E. Tent Peak Glacier before noon. Men could then be sent down the Chanson Chu valley for fuel.

From the top of the pass one should keep first to the left, and then almost due N. I forgot about keeping to the left, and nearly stepped over an ice-cliff about 50 ft. high—part of Lhonak Peak. In these dense mists, with a large amount of diffused light, it is extraordinarily difficult to judge perspective. The bottom of the cliff, which could be vaguely seen, looked only a yard away. Before long I was out of the mists, and, better still, before I had gone a mile from the top my axe rang against rock when the hilt was touching the snow, indicating the depth as 41 inches. This was encouraging, after a day in such a smother of deep snow that the axe could invariably without effort be driven over the head. From that place onwards the snow steadily diminished in quantity, and was soon only a couple of feet deep. On the N. side of the glacier there was no snow at all, and it was a comfort to feel solid ground beneath one's feet.

It was now 11 A.M., as I had been waiting for the coolies, of whom there seemed no sign. I could see up to the mist curtain on the pass, which was about $1\frac{1}{2}$ miles from our previous night's camp, and the total distance to that camp was only about $4\frac{1}{2}$ miles. By 1 o'clock I was getting anxious, and by 3 o'clock I was almost certain that something had happened. The night was beginning to settle down, and it looked as if it might snow. Between 3 and 4 I ascended a small eminence to examine the snow-field below the pass. I could see every portion which I had traversed except a little patch of snow hidden by a lofty sérac of the glacier in front. I swept every part repeatedly with the glass—not a sign of them was visible. It was too late to recross the pass without great danger of frost-bite—my boots leaked badly—so that the only course available seemed to be to shelter under a rock and recross next morning. Having selected a likely-looking rock I gave a final glance over the snowfield before descending, and was delighted to see five black specks slowly appear from the patch of snow hidden by the sérac. At 5 P.M. we camped. They had been over five hours late on an easy $4\frac{1}{2}$ -miles march. The Sirdar was at fault. I began to see that, instead of leading the coolies, they led him, and I determined not to give him a further chance

of making mistakes. To prevent misunderstanding, I must point out that we only required two days for this part of the journey in 1911. On this occasion we took four days, as we delayed so as to allow the men behind to overtake us. The men with me were certainly under- rather than over-worked.

Next day all were sent to the Lhonak valley for firewood except one coolie who had lost his spectacles, and was suffering from slight snow-blindness in consequence. I went up the 1000-ft. ridge, which divides the N.E. Tent Peak Glacier from the E. Langpo Glacier, to photograph and watch for Anderkyow, although we thought that he could hardly fail to see our tents.

Next morning early, as Anderkyow and his men had not appeared—it was four days since we had seen them—I accompanied the two strongest coolies some distance towards the pass, telling them to return the same day without fail and join us at a camp across the ridge. They should reach the top of the pass by 9.30 A.M., and the bottom of the S. side about 11. They should be back about 5 o'clock, as they were unloaded, and exceptionally strong men. We duly crossed the ridge and camped near a small tarn—probably one of those seen by Mr. Freshfield from the Sayok Col in 1899.* There are half a dozen such near. The height is about 17,700 ft.

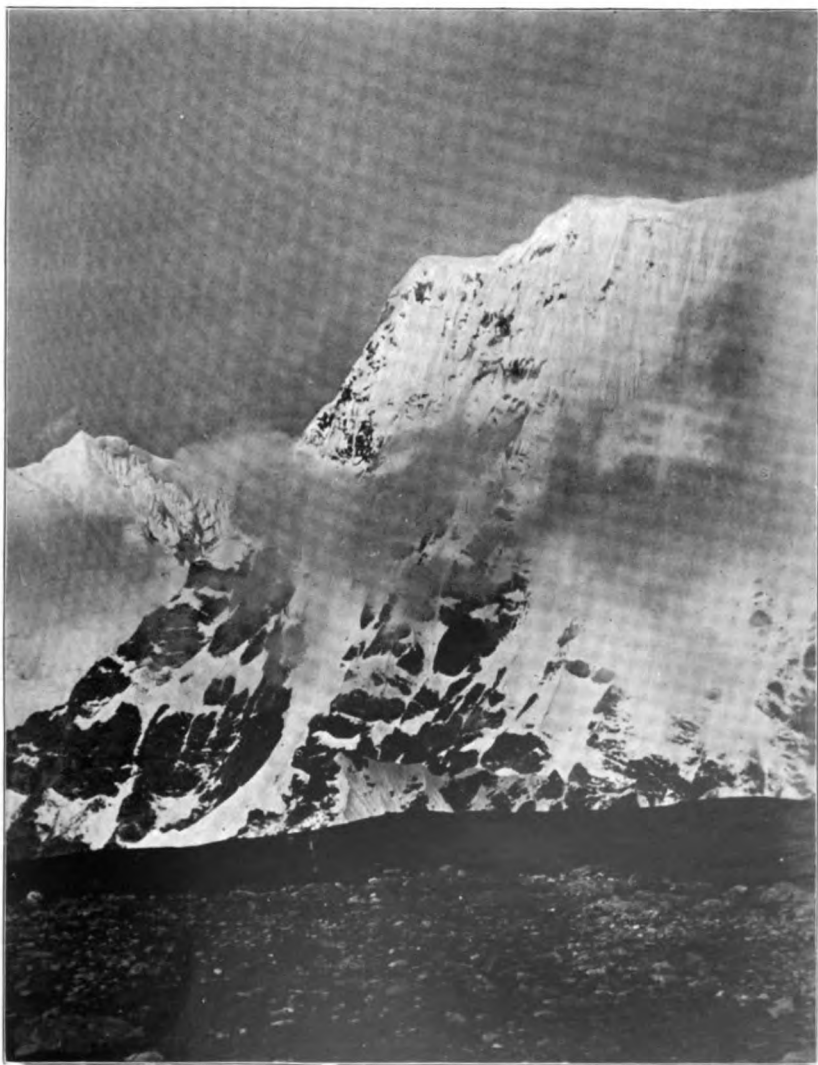
At 4 o'clock a snowstorm started, and continued during the whole night; there was 7 inches of fresh snow in the morning. I was naturally anxious about the six coolies supposed to be on Tent Peak Pass. The two men sent that day had no tent, and if caught by the storm on the pass, there would be grave danger of frost-bite. I kept a candle burning all night and slept little. Next morning was beautiful, but mists soon swept up from the S. The sun appeared at intervals, however, and by 4 o'clock the 7 inches of fresh snow had vanished. Only a comparatively small portion seemed to liquefy: the rest had gasified direct.

We had been expecting the six coolies all day, but they did not appear, and the worst storm we experienced during the trip took place that night. There was about 9 inches of fresh snow in the morning. There was no question as to what should be done: we must return over Tent Peak Pass to solve the exasperating riddle regarding our six coolies. We were off between 6 and 7, and by 11 o'clock were only $1\frac{1}{2}$ miles from the pass, which was clear. The day was the first really fine one since we left Lachen. I was waiting for the Sherpas, who

* *Round Kangchenjunga*, p. 146.

Pyramid.

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A.M. Kellas, photo.

Telephoto.

Swan Electric Engraving Co., Ltd.

No. 4.—View of the N.E. buttress (22,200 ft.) of the Langpo Pk. (22,800 ft.), showing summit of the Pyramid (23,400 ft.).

were some distance behind, when, happening to examine the pass with a telescope, two little black figures seemed to suddenly spring into the field of vision. I shouted to the coolies and pointed. When they came up they said that they had seen three men. Three men! That caused anxiety, as it might mean a serious accident. They had vanished behind a spur of Lhonak Peak for a time, but shortly afterwards they re-appeared, wading slowly through the deep snow. There were only two, and I could recognise them as those sent two days before. Although the distance was barely $1\frac{1}{2}$ miles, and although I sent two coolies to make the way and help them with the loads they were carrying, it was 80 minutes before they joined us.

The story they told was incredible. Anderkyow had massed all the loads at the bottom of the pass, and his coolies then refusing to advance, they had together absconded into Nepal *via* the Tangchung and Thé Passes, taking with them what was known as the 'money-box,' a locked iron box about $1\frac{1}{2}$ ft. square containing a large bag of rupees, scientific instruments, etc., a similar box containing all the photographic material, and all the best of the provisions. They themselves had gone back as far as the Tent Peak ice-fall, which explained their delay.

What evidence was there for this extraordinary story? Consideration showed that their own statements were against such a tale, and I was glad to remember afterwards that I never thought harshly of Anderkyow. In any case, if he had absconded, the blame was my own for throwing unnecessary temptation in the way of coolies, who regard 600 rupees (£40) as a small fortune. Absconding coolies would never have taken a heavy box of photographic material with them. They would break it open and leave it. A third locked iron box containing clothes had been left untouched. Besides, these Sherpa Nepalese coolies are not robbers. A few may pilfer a little from provision stores, and some may shirk work, but they are almost without exception loyal to their employers so far as my experience goes. Although in this particular expedition two or three did not always behave well, it was before we had a proper chance of becoming acquainted with each other, and I can honestly say that I would not hesitate to re-employ every one of them. Having noted their little foibles, I would merely take care that they did not use them against my interests in future. Except for the two trivial incidents recorded, one of which unfortunately had serious results, their behaviour was

excellent considering the heavy work required of them, because of the exceptionally bad weather. Towards the end of the expedition we were all working together most harmoniously. Many of these Sherpa Nepalese are really splendid fellows.

An investigation had to be made before definite action became possible. The evidence was not incompatible with their having been overwhelmed by an avalanche, or engulfed in a crevasse, and I still felt anxious. The Sirdar and one coolie were on their way to Lhonak within half an hour. They were to interview a Tibetan yakman we knew of, and return as early as possible next day. The others would return to our camp N. of the 1000-ft. ridge, whence we could either pursue fugitives over the Chorten-Nima or Jonsong Passes, or return over Tent Peak Pass, according to the information obtained.

Next day was again fine, and it was tantalising to feel that when we should have been camped at 20,000 ft. on the Jonsong Peak, ready to attempt the summit, action was completely paralysed. I ascended a small hill near the camp, and examined the upper portion of the N. and N.W. ridges of Kangchenjunga. They were more difficult than I had expected, but I see no reason to modify the statement made in reply to Mr. Freshfield's query after my last paper, namely that probably practicable routes do exist from both N. and N.W.

Returning to the camp about 1 o'clock, I was astonished to find the Sirdar already there, with the reassuring story that Anderkyow and his men were in Lhonak not far off, and would join us that afternoon at 4 o'clock. He had been informed that Anderkyow's coolies had refused to cross Tent Peak Pass, and they had therefore proceeded over the Tangchung and Thé Passes into Lhonak, and had been as far as the Lhonak Glacier looking for us. This statement was difficult to understand. Anderkyow's character had altered in the last few years. In 1909 he might have been described as timid, as he refused to do any climbing above the snow-line, but since then he had developed into the rashest coolie I have met with, and unless his fall had changed him, he would hardly have permitted his men to retreat in such a manner from an easy pass. Even if he had retreated, he could not possibly have reached the Lhonak Glacier. Things would be cleared up in a few hours, so that it was useless to speculate.

The confusion was not quite ended yet, however. As it seemed somewhat absurd to bring Anderkyow and his loaded men up 2000 ft. merely to take them down again, I suggested going to meet him along the Chanson Chu valley. We would

in this way escape, to some extent at least, the nightly snow-storm, which was becoming rather monotonous. My tent had come down on me during the previous night because of the superincumbent snow. We therefore descended into the valley, camping opposite the Fluted Peak. Coolies were sent to look for Anderkyow, but he did not appear.

Next morning before 7 A.M. two coolies went south-eastwards, and I went down to Lhonak and ascended a ridge 1000 ft. above the valley, which commanded the Chanson Chu and a large tract of Lhonak. There was no sign of Anderkyow. At 10 A.M. heavy rain came on with dense mist. I was slowly retreating along the E. bank of the Chanson Chu, when two loaded figures appeared vaguely for an instant on the opposite bank through the mist, and going rapidly away from me. By making a *détour*, I was able to cross the river and intercept them, and was glad to find my five men and also Anderkyow's party. It appeared that Anderkyow had never come up the valley at all, but had gone away behind the ridges—a custom for which he has a peculiar predilection—and, keeping high up between the two branches of the Chanson Chu, the chief southern tributary of the Langpo Chu, had reached our old camping-place late at night.

I was naturally anxious to hear his story, which was quite intelligible, and did him great credit. He and his men, by extremely hard work, had collected all the baggage at the bottom of Tent Peak Pass on the day we crossed. On the following morning early, they had started for the pass with the first sign of dawn. Our footsteps, although filled with snow, could still be followed, and, helped by that fact, he had crossed the pass before 6 A.M. He missed the tents by nearly a mile, and, keeping about 2 miles W. of the route followed in 1911, he had gone away behind the 1000-ft. ridge, and, not finding us, had made at once for Lhonak. There was mist about, which probably explains why he did not see our tents. He had been as far as the Lhonak Glacier looking for us. Anderkyow was greatly distressed because his rapid movements precluded his obtaining fuel, and they had therefore been forced to use some of my private stock of provisions. That, of course, was a trifle. I was so glad to find them all quite well that the comparative failure of the expedition, now practically certain, was felt to be of negligible importance. Although Anderkyow had not followed the Sirdar's instructions, according to the latter's statement, it is probable that they misunderstood each other, and in any case, the blame

for the confusion rested chiefly with the Sirdar and myself. If the Sirdar had given my orders clearly, all must have been well, but obviously I should have taken better precautions after crossing Tent Peak Pass, to preclude possibility of error.

Next afternoon we camped in a hollow on the S. bank of the Lhonak Glacier at an altitude of nearly 18,000 ft., and on the following morning four men were sent back over Tent Peak Pass to bring up the rest of the baggage. As the men defiled off, I noticed one of them carrying a suspiciously small coil of rope. On examination I found that it was a 30-ft. rope which two of us had used for exploratory purposes on Tent Peak Pass. On asking whether they intended to put four men on a 30-ft. rope, I was told that two men would go in front roped, and two follow unroped! I need hardly say that they left with a 100-ft. rope. The incident is characteristic.

On the same day we moved our camp to the base of the N.E. buttress of the Jonsong Peak. Anderkyow was sent in one direction to reconnoitre, while I went in another. I found the snow deep—one sank into it at least 2 ft.—but I could see Anderkyow floundering up to his waist. So far the mountain had remained in dense mist, and snow had been falling almost constantly, although only three inches lay round the camp.

It was decided to reconnoitre further, and on 26th August we camped just under the final peak at about 18,700 ft. The mist rose sufficiently to show the lower part of the route we had intended to follow, and it became obvious that under such conditions it was useless to proceed. Not only was the snow so deep that climbing the 5700 ft. above us would require immense labour, but our proposed route was in part commanded by séracs. We had intended to ascend by a steep slope which runs up by the N.E. buttress to an altitude of 21,500 ft. It might have been possible to work one's way through an ice-fall and circumvent the séracs. Once above 21,500 ft., there should be no difficulty until 24,000 ft. is reached. The summit arête might give some trouble, but it is unlikely. In May and September I am fairly sure that this route would be a good one. The séracs mentioned are then of little importance.

There is another possible route from the N. which we had examined in 1909. We had then camped at 21,500 ft. and ascended Wave Buttress 22,000 ft., from which there is undoubtedly a steep route to the summit.

A most striking rock rampart guards the approaches to the Jonsong Massif on the E. and S. One or more ways may eventually be found up these rocks, but at present the N.E. and N. routes seem preferable. If there had been any signs of the weather improving, I would have tried the northern route again, but during three days we had never seen the summit, and the whole mountain was usually in mist. Besides, I was climbing the peak more especially for the view. The whole of the Mount Everest, Chomokankar, or Chomo Langmo Group should be visible, the Jonsong Peak towering 1700 ft. over all the intervening ridges to the E. of the Arun River. The view from the summit would be one of the very finest in the world, the northern and western ridges of Kangchenjunga and Jannu alone affording a superb spectacle.

After consideration I decided to retreat, and try whether the weather might not be better on the Tibetan border. The afternoon of August 28 found us again at the confluence of the Chanson and Langpo torrents, where we camped until our men returned from Tent Peak Pass. They caused us some anxiety, for they were nearly 24 hours late—due, they said, to deep snow. Four coolies and the Sirdar were then despatched to Darjeeling, while Anderkyow, Nema, and two other men came with me up the Dothang valley. On August 30 we gained a ridge 1200 ft. above this valley, in order to get a view of the series of passes into Tibet, so as to select a convenient one for exploration, with a peak beside it worth ascending.

We obtained a splendid view of the whole frontier from near the Chorten Nima La to the Nago La. There are apparently six snow passes, all accessible, and seven or eight fine summits. The pass immediately before us, which might be called the Korayedu La, was the most interesting from our point of view, because it was flanked by two lofty peaks, apparently about 22,000 ft. high, which might provisionally be called the E. and W. Korayedu Peaks. In Professor Garwood's map they are marked as 22,120 and 21,620, but in the Government Map of Sikkim (1906) the heights given are 21,100 and 21,240 ft.* The E. face of the Sayok Col, visited by Mr. Freshfield in 1899, was visible, and I could recognise the Chortens which we had seen from the W. As viewed from near the Chanson Chu, they do remind one of those on the Chorten Nima La, but

* It seems probable that the first heights given in each case represent the W. Korayedu Peak, and that the height of the E. Peak is not given in either map.

the Sayok Col is probably 1000 ft. lower, and far easier of access. I am almost inclined to think that Rinsing might have made an unintentional mistake on that occasion.*

The most surprising part of the view, however, was a beautiful loch, about $1\frac{1}{2}$ miles long and $\frac{1}{2}$ to $\frac{3}{4}$ miles broad, which lay directly below us. We camped that evening at the head of this loch, immediately under the pass. This seems to be the largest lake in Sikkim, although unmarked on any map. At nightfall a dog barked for ten minutes a few hundred yards off, and then seemed to be suddenly seized and muzzled. This indicated that one or more Tibetan herdsmen—the mythical savage Dokpas—were near. The only precaution followed was to take the ice-axes into the tents, instead of leaving them in the open as usual. Tibetans always admire ice-axes. Uninvited visitors in Tibet would require to treat these herdsmen with more caution, but in Sikkim there is no danger.

Next day we crossed the pass by the W. side, keeping on unstable screes over ice-hummocks until we were within a few hundred feet of the summit (18,300 ft.). We only thought it necessary to rope 150 ft. below the top, where we met with several crevasses. On the Tibetan side there are also numerous crevasses. They did not seem to be particularly deep or broad, but they might easily cause accidents, which probably explains why the Tibetans prefer the Chorten Nima La to the W. The Chorten Nima La has a troublesome scree slope at the angle of fall nearly 1000 ft. high on the S. side, but as the N. side is uncrevassed snow, a rope is unnecessary.

We camped on the W. side of the N. Korayedu Glacier about 700 ft. below the top of the pass, with the intention of ascending the E. or W. Korayedu Peaks next day. The N. side of both peaks, so far as we could see, would afford fine climbing. Ice-cliffs are a prominent feature of both. The W. Peak (22,160 ft.) could probably be ascended by the N.W. arête, a considerable portion of which was corniced on the N.; probably the W. side is easier. The E. peak has several summits, and, although the most westerly summit could be ascended from the Korayedu La, might be better attacked from the pass on its eastern side. This pass could be reached by a glacier which we could see coming down between high cliffs right opposite our camp. It seems likely, therefore, that other passes to the E. have glaciers flowing northwards, although none are marked on the maps.

* Cf. *Round Kangchenjunga*, p. 148.

The scenery on the N. side of the Korayedu La is characteristic of the northern ranges of this portion of the Himalaya—great precipitous ridges with deep sombre gorges reminding one of the view on the N. side of the Chorten Nima La. The Tibetan slopes of many of these ridges could be easily ascended.

Next day broke stormily with mist and snow, and, as our time was up, I was reluctantly compelled to retreat, without making an ascent, or even recrossing by another pass. At the top of the pass a lark passed us, migrating from Tibet into Sikhim. There was a strong cold wind from the S., and the little creature had great difficulty in forcing its way against it, but ultimately it succeeded, and vanished into the mists on the S. side.

We proceeded to Darjeeling as fast as we could, and thence to Bombay. I very nearly missed the steamer at Bombay—actually arriving an hour after advertised time of sailing—because about 8 miles N.W. of Lachen we found that a bridge over the Lhonak Chu, on the new route mentioned on page 126, had been swept away, and the river was quite unfordable. Progress on our side of the stream was barred by precipices which came sheer to the water. Fortunately I remembered having seen a huge block about half a mile back, lying athwart the stream. This boulder in form and size somewhat resembled the famous ‘Clach Dhian,’ or ‘Shelter Stone,’ at the head of Loch Avon in the Cairngorm Mountains. It was easy to climb to the top from our side, and, by means of ropes, men and baggage could be lowered on to a rock near the other side. The last man came down on a doubled rope. Had it not been for this rock, we would have had to go back and cross the Lungnak La (17,800 ft.)—an extra two days’ march.

I had been hoping that we would save a day on the return journey, by proceeding from Dykchu to Rangpo in one day along the Teesta valley, instead of going by the usual circuitous route through Gangtok. Rinsing (or Mallein Kazi to give him his proper designation), one of Mr. Freshfield’s chief men in 1899—still as hale and hearty as ever—whom I had seen on the upward journey, had promised to let me know whether the route was practicable. Unfortunately some of the rivers were reported as quite unfordable, so that only a few hours were available in Darjeeling.

Thus ended a tour, somewhat unsuccessful, but not entirely unfortunate. If carefully recorded, failures may give almost

as much help to others as successes, and it is in this spirit that I have ventured to indite the foregoing brief summary.

The main lesson to be learned from it is that in August the southern ranges in Sikkim may be practically unassailable, but I hope that other useful points in connexion with the management of coolies, fording of rivers, and descent of ice-slopes may be found of service by a few travellers and mountaineers.

NOTES ON ILLUSTRATIONS.

1. THE SOUTH FACE OF THE KANGCHENJHAU (22,700 ft.), from a camp at 15,000 ft. to the S.W. of the Sebu La. The possible route of ascent by the crevassed S. Kangchenjhaul glacier is clearly seen.

2. Part of the NORTH FACE OF THE KANGCHENJHAU, from near a camp at 19,000 ft., showing a portion of the route followed in the ascent. The camera was tilted back, so that all angles are flattened. With the camera horizontal, the view only included two-thirds of the ice-slope below the col. With good snow conditions, the route would be comparatively free from danger.

3. CAMP NEAR THE GREEN LAKE AT 15,300 ft., below the N. bank of the Zemu glacier. On the left is the long ridge culminating in Little Siniolchum (21,500 ft.). Next comes Simvu and then Kangchenjunga. The crest of the latter mountain is about 8 miles off; and the appearance of the enormous ridges and buttresses leading up to it is extraordinarily impressive. The photograph gives a very imperfect idea of the gigantic scale. The confluence of the Tent Peak glacier with the Zemu glacier lies on the right, under the rocky spur of the E. Sugarloaf Peak (22,400 ft. approx.).

4. VIEW OF THE N.E. BUTTRESS OF THE LANGPO PEAK (22,800ft.), with the summit ridge of the Pyramid, 23,400 ft. The latter mountain could be ascended from the Langpo Gap (20,000 ft.), which is easily reached from the Nepal side. It would be easy up to about 23,100 ft., but the last 300 ft. look difficult. The easy part of the route is well seen in the 3rd panorama of the previous paper (1912, p. 118). The Langpo Gap should not be confused with the Langpo Saddle, which lies 3 miles N.W. between the Langpo Peak proper and the Langpo-chung Peaks.

5. THE N.W. FACE OF KANGCHENJUNGA from the W. bank of the S. Jonsong glacier (Nepal). A possible route is obvious, but would probably be dangerous, especially in July and August.

6. VIEW LOOKING N.E. from a camp at 21,500 ft., below the summit of the N. BUTTRESS OF THE JONSONG PEAK (24,400 ft.). The ascent to the col, which is on the Tibetan frontier, is easy, but the direct descent into Tibet seemed precipitous. Bad weather prevented investigation. By ascending the N. buttress, however (22,000 ft.), a long circuitous descent would be possible.

7. VIEW LOOKING WEST FROM COL SHOWN IN PRECEDING ILLUSTRATION. The summit ridge of the Jonsong Peak (24,400 ft.) appears on the left, and a probable route of ascent is visible. The two white peaks which come next are presumably the summits of the S. buttresses of the Jonsong Peak, the South faces of which are precipitous. The sharp peak which follows may be the Jonsong Outlier. Mr. Freshfield has suggested that the small finely-shaped peak in the far distance, with a belt of cloud across its face, may be Mount Everest. The direction is nearly correct, but it is probable that the peak in question is an unnamed mountain to the East of the Arun River.

In connexion with Mount Everest, it might be mentioned that the term Chomo Langmo applied to the group in the preceding paper (1912, p. 126) was given because of information received from Tibetans. I was surprised to find recently, on reading Major Bruce's book 'Twenty Years in the Himalaya,' that he applies the same name, his information being derived presumably from natives of quite a different region.

'WITHOUT ARE DOGS.'

BY F. W. BOURDILLON.

(Read before the Alpine Club, April 3, 1913.)

THIS prophecy is, unfortunately, one of those not yet fulfilled. Dogs are by no means always 'without'—that is, outside. I have been kept out of a railway carriage—no doubt unintentionally—by a young lady, because on the seat opposite her own was established an enormous bull-dog, flattening its nose against the window. I am told that many ladies now carry dogs in their muffis, much as undergraduates smuggle into college the surreptitious fox-terrier enveloped in the academic gown. In Italy I have even seen a lady kneeling at her devotions in a noble church with her little dog moored to her side.

But I ought, perhaps, to begin with saying that, in spite of its title, dogs are not the subject of this paper. I chose this phrase to be its heading because it is a very pointed instance and illustration of our old copy-book maxim: 'A place for everything, and everything in its place'; and, moreover, the phrase 'Without are dogs' implies that the maxim is applicable to living beings as well as to things. Unfortunately, it is a much more difficult matter, first, to find a place for everybody,

and secondly, to keep everybody in his—still more in her—place. We of the Alpine Club know this only too well. On the Matterhorn or the Jungfrau, on the difficult rock or dangerous ice-slope, even in the mountain-hut, how often have we met persons of both sexes who were certainly not in their right place—wherever their right place might be, on Brighton Parade, perhaps, or behind some counter in Berlin!

For there is an extraordinary tendency in human kind to follow the stream in the matter of enjoyments; to feign to find pleasure in what they see gives pleasure to another. Surely it was a fatal hour when the enthusiast of mountain-climbing first took to printing—and illustrating—his enthusiasm! Many of us—even I myself—have followed his suicidal example. This gate we had found into Paradise was rashly opened to the world; the little postern gate not waved over by the flaming brand because it was thought to be securely guarded by the Angel of Death; the way left undefended because it was deemed inaccessible. Well, it was rashly opened and revealed, and the multitude have rushed in. 'A place for everybody, and everybody in his place.' Are the snow-peak and the glacier the place for the masses of mankind?

There is a little ancient tale which has a very intimate bearing on this point; and, as it has to do with a dog, it may well be introduced in this paper. It is possible that it will ring familiar to many of you. But the spread of education has so altered the ancient boundaries of knowledge and ignorance, that one can never be sure what the rising generation may not know, or of how much it may not be ignorant. Euclid, the playful humourist of the Asses' Bridge, has been ousted from his long supremacy in the class-room. And Æsop, the teacher with his tongue in his cheek, who first instructed the infant mind in the art of skipping the moral, of enjoying the jam and leaving out the powder, has lost his old ascendancy in the earliest reading-books. Let me therefore, without apology, re-tell one of his tales.

There was once, so he avers, a dog. And the dog being, like Cowper's spaniel, 'well fed and at his ease,' and in search of new sensations, looked with growing envy upon the pleasure which his nearest neighbour, the horse, seemed to find in his manger—the satisfaction with which he returned to it, the zest which it afforded in his life. To the dog himself, indeed, this manger appeared too high to be got to with ease, too

inconveniently shaped to afford any comfort, and entirely lacking in materials either for food or sport. Seeing, however, the interest and importance of the thing in the eyes of his neighbour, the dog decided there must be something very desirable about it; and, being, like all pampered creatures, always on the look-out for new methods of relieving the *ennui* of life, he determined to test this means of enjoyment for himself, to see if there was some secret thrill in it which he could not discern, some pleasure for which he might possibly acquire a taste—even as his master's little boy, he observed, made himself sick in the stable-yard, in order to acquire a taste for smoking. One day, therefore, when the horse was out, the dog contrived with some difficulty to clamber into the manger—probably getting someone to hoist him up. And when the usual occupant of the stall returned, he found his privacy invaded, and his provender fouled and trampled and ruined. In vain he remonstrated; in vain tried to compromise by offering to give up the corner easiest of access and a little of his best hay, sufficient for all the dog's purposes. The more anxious he showed himself to get rid of his obnoxious visitor, the more determined the intruder was to remain; the more sure the latter felt that the place had some special desirability which, though he could not appreciate, he could at all events annex and keep for himself. And so, in spite of the fact that his kennel was more commodious, more accessible, in every way more convenient, the dog took to resorting habitually to the mountains—I mean the manger—and with considerable difficulty dragged his most dainty articles of food up there, leaving the tins—I mean the bones—and other refuse to still further defile the place. He even went so far as to bring his wife and puppies there with him; and to vaunt the charms of his new lodging-place to his fellow dogs, and boast of his own cleverness in having found out its charm and made the ascent to it: till the whole pack followed him, and the sweet pure healthy stable was turned into an unclean and noisy kennel.

Now I have ventured, in very rude and simple style, to re-tell this tale of ancient wrong and outrage, because there are actually persons of such distorted views that they have turned the story upside down. They have reversed the obvious intention of the fable; and have accused the Alpine Club and people who object to mountain railways of pursuing what they call a dog-in-the-manger policy. The best answer to this extraordinarily topsy-turvy view is Æsop's simple

story as I have told it—as indeed Æsop himself would have set it out, had he lived to-day—unadorned and unelaborated.

Unfortunately, the human man—*homo sapiens*, as the biologist politely calls us all—is by nature such a selfish animal that he is peculiarly sensitive to the accusation of selfishness. And this age in which we live is, perhaps, specially so. We are always supporting causes we do not believe in, and giving to charities we regard as injurious, simply to prove to ourselves how unselfish we are. Did anyone ever deliberately allow to himself that he was a selfish man? Even the historic—or unhistoric—person who burned his neighbour's house down to boil himself an egg, even he no doubt justified the action in his own eyes. His neighbour, he said, was not at home, and did not at the moment want the house; while he himself did, at the moment, very badly want a boiled egg. Had he gone without it, his vitality would have suffered, and the world have lost a day's service of his energies. It was in fact an unselfish action on his part to take so much trouble to fit himself for work, instead of simply lying in bed and enjoying a lazy day.

Self-persuasion carried to this pitch is, no doubt, unusual. But some insidious self-conviction makes us all inclined to be morbidly sensitive on the subject of selfishness. And then, to add nettles to our hair-shirt, some modern moralist invented a very mischievous phrase which has become adopted as the motto of our democratic age. 'The greatest happiness of the greatest number.' Alas! poor conscience! Not only must a conscientious man forbear to consider his own happiness, but also that of his wife and children, of his friends and neighbours, of his parish, his county, his country even—if on a reckoning of the total number of human noses the sharers of this happiness are in a minority. Was there ever a more fallacious truism? Was there ever a more damning self-doubt, whereby

the native hue of resolution
Is sicklied o'er by the pale cast of thought?

Adopted as a rule of life, and carried out logically, it would lead to some strange conclusions. For instance, when a man catches typhoid, his body becomes the home of an infinite host of minute living creatures. How can a truly democratic-minded person justify himself for putting an end to the happiness of these swarming millions by calling in a doctor? Whether he kill him or cure him, the millions perish untimely.

The fallaciousness of such a phrase 'The greatest happiness of the greatest number' lies in the absolute impossibility of finding the exact point, or any point approaching the exact, where the 'happiness' and the 'number' are both the 'greatest.' And we invariably find that those who use the phrase fix their attention on the greatest number and not on the greatest happiness. Whenever they see one person enjoying any pleasure, however special and individual, they instantly demand that it should be divided among a thousand.

But 'happiness,' in the sense of pleasure, delight, enjoyment of some particular object of joy, is rarely, if ever, infinitely divisible. Like whisky, the more it is watered the less worth having it becomes, till at last the strictest Puritan need not shrink from the one, nor the strongest teetotaler from the other. Could the exact balance be really attained, the exact point fixed where the happiness was divided as far as it could be without losing its quality, could delight be shared as whisky might be, so that each individual of a certain number could get, if not a real whack, at least a satisfactory taste, instead of one getting all, or all getting none;—well, in an ideal world, where there was no party-government, that might be an end worth striving after. But unless an archangel appears to divide the whisky, I fear the scheme is impracticable during the present dispensation; and, as often used, the phrase 'The greatest happiness of the greatest number' is merely a plausible formula disguising the world-old cry of jealousy: 'If I *can't* be happy, you *shan't*.'

But the phrase becomes still more mischievous when it takes for granted that what is one man's pleasure must be a possible pleasure to all men. Of course there are many cases in which it is not so. Many of the most refined and delightful joys of life would afford no pleasure at all to any but a small and select number of persons. Even whisky is to many people neither a temptation nor a pleasure. Is it still to be shared among them, to be portioned out, diluted to a final infinity? Naturally, those who do not care for it do not mind how much it is divided—even if each man's share becomes infinitesimal and the taste imperceptible. And they may still like to have part and lot in it. There may be prestige to be gained, a dignity in being a whisky-drinker, however nominal the draught. Do not cigarette-users pride themselves on being smokers? And so we come back to the fable of the dog, and to the cry of jealousy in a still worse form: 'I *can't* enjoy it; therefore you—who *can—shan't!*'

Well, it must be pretty evident by this time, what is the point at which this paper is aiming; what interpretation it would give to the unfulfilled prophecy, what fresh moral it would draw from the ancient fable. It is the old theme, well-worn but not out-worn, the old protest raised so often in this room in passionate sincerity: the defence of the mountains as the sanctuaries of the divine. Nor have I anything new to say on the subject. I am only saying what we all of us know, giving utterance to what we all of us feel. Reverence for the mountains is the root-faith of the Alpine Club, the very bond of our fellowship. To us, if to any, the mountains are the very temples of the pure joy of Nature; they are the Delphi where we listen to the oracles, the Mecca of our most pious pilgrimages. And yet I hope you will bear with me a little, even if I merely re-state the familiar, and repeat the oft-repeated. For it becomes increasingly, pressingly, more urgently necessary to have a clear faith on the matter ourselves, and a firm and reasoned answer to give to those who attack our position; to the many who by open assault or insidious suggestion, by audacity or by craft, by noisy outcry in public or stealthy working in secret, by all the wiles of the company-promoter and with all the powers of the money-market, are constantly and for ever striving to vulgarize the loveliest places of earth, and destroy the majesty of the most solemn scenery.

There seems no scheme too outrageous, no desecration too offensive for these folk.

Rien n'est sacré pour un sapeur.

These navvies reverence nothing. It almost seems as if unbelief were more powerful than faith in removing mountains. An hotel on the Jungfrau! For very shame the Switzerland which gave this lovely name should now re-christen the dishonoured maiden! What will they call her? Will they borrow a name from the book of the Revelations? Nay; for the shame is not hers, but theirs!

A railway across a glacier is one of the wildest-sounding schemes. Well, we may hope that the glacier itself would have something to say to that. The Earth herself opened her mouth once to swallow those whom we may well believe to have been the ancestors of the modern Korah, Dathan, and Abiram; and the glacier has many mouths—

Hungry, with huge teeth of splintered crystals.

We have been told that the scheme of the Matterhorn railway

has been finally abandoned. I wish I could believe it. There is much reason to fear that the promoters are merely lying low and waiting their time till the opposition has been lulled, and the resisting phalanx of united public opinion disintegrated by a false feeling of security. This hateful scheme may be revived at any time; and it is reported that among the mountain's foes are some who should surely be of its own household.

I said there is no scheme too outrageous to be proposed. What if the whole Matterhorn were to be turned into a perpetual memorial of the two men who chiefly made it famous—the huge rock itself, the whole of the upper mountain, carved into a mighty Janus with two monstrous human faces, the one in likeness of the late Alexander Seiler, the other in that of the late Edward Whymper! It would be a monument more enduring than the Lion of Lucerne, and an everlasting witness to the character of the age that produced it. What a field for the triumph of the surveyor! What a scope for the ingenuity of the engineer! The huge nostrils used for lifts, the cavernous eyes for refreshment-rooms!

Forgive me for suggesting such a nightmare fancy! It would fortunately be too costly and unremunerative for realization. But it would hardly be more of an outrage on Nature than some of the schemes that are seriously proposed. And those who have acquiesced in the Jungfrau-bahn and the Gleckstein lift would no doubt acclaim it with enthusiasm as the last triumph of man the puny over Nature the powerful.

We are accustomed to talk and think of this warfare between the lovers of Nature and the materialists as something new in the history of mankind, a special development of modern civilization. I doubt if this view is correct. Is it not certain that, in the long process of the ages, in the æonic succession of civilizations, the world must have passed several times through such periods as the present—times when material prosperity over-bore the instinct of piety, and when poet and idealist had to fight hard against commercialism and the spoiler? I am sometimes tempted to wonder if certain familiar tales of the Old World may not have had their origin in this way; if the time-worn myth of a maiden rescued from a dragon may not be the mystic history of some Jungfrau saved from sacrilegious hands; if Prometheus himself, chained to the rock, is not the legend-wrapped tradition of some Caucasian

Matterhorn, at whose tortured breast relentless engineers were ever hacking and hewing.

Creditur olim

Velificatus Athos.

Perhaps that story also arose from a scheme backed by potentates and baffled by poets. Let us take courage to hope that the utilitarian spirit will again have its period of waning ; and that some future satirist will scoff with equal incredulity at the tradition of mountain railways, and write—though not perhaps in Latin—

Creditur olim

Vilificata Helvetia ;

when such an outrage—in the revolution of public feeling and rebirth of reverence—has once again become a thing incredible.

No doubt there are even to-day plenty of ready rescuers, many a would-be St. George. Nor in these days of aeroplanes is the feat of Perseus himself impossible, would the foe but appear in the tangible form of a single monster. But as the dragon now is a syndicate or a limited company, so the hero-to-the-rescue must be a society or an association. There is, in fact, as you all know, an admirable society for the defence of Swiss scenery, the *Ligue pour la Beauté* or *Heimatschutz* ; and it has a well-managed English branch, to which many of us belong. The work done by this society is excellent, and has undoubtedly had some effect, both in checking schemes of disfigurement, and in educating public opinion to disapprove of them. But it is not my object here to advocate the claims of this society ; to discuss the rights and wrongs of mountain railways ; or to seek to enlist the Alpine Club on the side of the opposition to them. All that this paper aims at is to maintain the general principles of the defence of Nature against man's ill-treatment of her ; and to suggest the true and cardinal reasons for safe-guarding the mountains from disfigurement, and from the inevitable degradation caused by turning scenes of loveliness into places of popular pleasure.

To provide, however, some solid kernel for what I fear will seem to some a rather light and perhaps rather sentimental paper, I approached Mr. Eberli, treasurer of the English branch of *Heimatschutz*, and a member of the Alpine Club, and he has been kind enough to supply me with some brief details as to mountain railways, drawn mainly from an excellent paper by Professor E. Bovet of Zurich, president of the Swiss Society,

read before the International Congress at Stuttgart last June.

The first mountain railway was opened in 1871 (the Vitznau-Rigi), and now there are about forty more or less important ones.

The average return on capital is 3·70 per cent. ; but the highest is over 9¼ per cent.

Professor Bovet classes these lines under four heads :—

1. Lines of real service to man, between villages or districts which would otherwise be without communication.
2. Lines of benefit to invalids ; as to Davos or Leysin.
3. Lines of convenience, but not of necessity, to the tourist ; as the line from Lauterbrunnen to Grindelwald over the Kleine Scheidegg.
4. Lines to the mountain-peaks, lower or higher.

To the first two classes, of course, there is no reasonable ground of opposition, and no opposition. The third is less to be approved of ; but it is to the fourth—the mountain-railway proper—that there is the gravest objection.

Professor Bovet gives a list of such mountain-railways already made, or seriously proposed. The number is sufficiently startling. Of the lower railways, lines already made are :—

The Rigi—two separate lines	Rochers de Naye
Pilatus	Monte Generoso
Stanserhorn	San Salvatore
Burgenstock	Gornergrat
Brienzer-Rothorn	Niesen

and the following new schemes are pending :—

Männlichen	Faulhorn
Sentis	Chamossaire
Weissenstein	Molésou
Grammont	

To the higher peaks there is already the Jungfrau line ; and there are proposed lines—namely, the continuation of this to the top of the Jungfrau ; a line to the Diablerets ; and a line to the top of the Matterhorn.

In the course of his paper, Professor Bovet drew a contrast between the present and the past on certain mountains, between the healthful enthusiasm for Nature which formerly inspired the Swiss youth to exertion and to the simple enjoyment of a night spent on the Niesen, and the crowd of chattering tourists, insensible to the higher natural emotions, the picture-

postcard kiosks and the drinking facilities that now cause all lovers of quiet to shun such spots. 'The arguments that such railways serve the need of communication or afford economical advantages to the district fail in the case of summit railways; and they cannot truthfully be said to be undertaken for the weak and elderly, seeing that 80 per cent. of those who use the lines are of the healthy loafer type. Mountain-summit railways degrade a supreme possession to the level of a vulgar amusement, and in the process they annihilate it.'

'By what right,' asks Professor Bovet, 'are we mountaineers, for the most part Swiss, and from every stratum of our population, driven away by a rich, foreign, gaping crowd? Thus are sacrificed those sources of inspiration and spiritual strength by which the whole nation should be profited. The psychology of the true mountaineer is to the mere railway tourist a book with seven seals. The tripper is impressed merely with the wide horizon—to him the top constitutes the whole mountain, and after half an hour he has "done" the thing and can return to his kursaal. Mist or rain, sour wine or a scorched omelette spoil his whole pleasure. The cause lies not alone in the temperament of the tourist, but in the conditions of the journey.'

I think we must all agree that these pregnant sentences of the Swiss professor put the case against mountain-railways as well, as sanely, as temperately, as it can be stated. Let us hope that they will carry due weight with his fellow countrymen. But for others who are not Swiss, it is plainly impossible to interfere in any direct or pragmatical way with the use that the inhabitants choose to make of their own country. Any influence brought to bear must be indirect and by way of general principles. And, as I said before, my object here is not to attack mountain-railways—whatever I may think of them—but to suggest arguments of defence against all maltreatment of scenery, and to encourage our own instincts of reverence and love for Nature, in case they have in any of us been weakened or devitalized by the misapplied conscientiousness of the day. There are many persons now who defend almost any disfigurement of Nature or destruction of beauty, when the object is to provide a sanatorium for the diseased in body, or an asylum for the diseased in mind. Admitted that human feeling may demand sacrifices of this kind—that the claim of the weaker is in many cases paramount—are we therefore to consider the earth itself with all its glory and divinity made primarily for the failures and

misfits of Nature, designed by the Creator to be the scrap-heap of wrecked humanity? Or again: because a portion of the population, by choice or by necessity, live in squalid and unlovely surroundings, are we to say therefore that to prevent their feeling envious and ourselves uneasy in conscience, we will let squalor and unloveliness prevail everywhere; and to level all our standards of delight and comely life downwards, so that the existence of one man shall not present such a contrast to that of another? Is that the way to raise the masses, to ennoble the whole race? Of course it is not. In theory, at all events, every one of us knows that the way to exalt is to heighten the standard, not to lower it; to point to ideals that seem inaccessible till they are attained; rather than to reduce everything and everybody to what a felicitous Spoonerism calls one *lead devel* of mediocrity.

I think that our pity-moved age—in which the Good Samaritan has a statue in every town—is much too prone to think horizontally and not perpendicularly, to consider only the present generation, and recognize only the claims of the actually living world. ‘Who is my neighbour?’ We never ask the question now. We take it for granted that our neighbour is Tom, Dick, and Harry—the existing Toms, Dicks, and Harrys, not the unborn Tomsons, Dicksons, Harrisons. And yet how infinitely more power we have over the happiness and welfare of the future race by our self-restraints and pre-visions than over that of our contemporaries by our self-denials and charities! What do we not owe to our own forefathers, their thousands of years of endurance, and labour, and ingenuity? Have we not a vast debt to them which can be paid only in one way—namely, to their descendants, who are also ours? This consideration it is, which, clothed in theological language, regards our duty as twofold—to our neighbour, the living generation, and to God, the Great Trustee of all generations. These two debts, which we call duties, may be pictured as the limbs of a great cross. The horizontal limb is duty to my neighbour, to all my fellow-beings alive with me now on the same plane of life. The other duty is the perpendicular limb, reaching upwards and downwards, from the far-off past to the infinite future; duty of reverence to the past and of providence to the future, to all mankind who have been or shall be, to the whole universe of life and existence in which I for one moment am life-tenant, fiduciary of whatever I touch or control.

Recognize this—and, in the light of modern science with its infinite vistas of certain past and probable future, how

striking is its claim for recognition!—Recognize this and in what a new light is seen our use or abuse of the world we live in, our claim to do just as our whim or desire urges, to ruin and waste and destroy what is meant for all generations, beauty which we cannot restore or bring again, possessions of which we are only granted the user, a universe of delight which is only ours as the contents of a public museum are, whose destruction is the action only of an ignorant barbarian or a maddened mob.

Not for an instant will I grant that the case for the safeguarding of natural beauty is a matter only of sentiment—as it might be, say, whether I keep or throw away the flower I have gathered, whether I kill or spare some insignificant wild creature. It is a matter of simple duty—a word which, whatever its significance or its sanction, is recognized by all Englishmen and most Europeans as the mainspring of moral life. This view has—we may gladly admit—gained recognition more and more of recent years. Societies have arisen to preserve all sorts of things, from footpaths to parish churches; and the united influence of all these movements is telling on public opinion. And so I would fearlessly maintain that when we Alpine climbers and mountain lovers seek to keep our special haunts and shrines of worship from being trampled to mud by the million, we are not selfish, though we are pleasing ourselves, nor self-seeking, though the object is also our own dearest desire. We are striving in the everlasting struggle for the higher, the better, the nobler. We are keeping out not the individual, but the multitude. We are acting as the prudent sheep-master acts, who pens the flock into only one portion of the pasture, lest they foul and trample it all, and leave nothing for the time to come. This world in which we are constrained to live—at least until flying-machines or Zeppelins reach heights yet undreamed-of and we can explore the moon or other planets. No doubt some day some future Dr. Longstaff will be showing a future Alpine Club photographs of Tycho and describing climbs in the lunar mountains)—this world, to which at present, at all events, our climbing and other energies are confined, is in truth a strictly limited feeding-ground for man’s ever enlarging mental appetite. Our faculties of imagination and emotional perception have already browsed once and again over the main part of it. Already it is more difficult to find sustenance for these than in the days when Herodotus or Ulysses roamed in worlds all romantic and unknown; more difficult even than in the spacious times of great Elizabeth, when the sense of a new

world breaking on their vision so marvellously quickened and heightened men's appreciation of the wonder of the world, and delight over-flowed in the rich flood of Elizabethan poetry. All the more necessary is it to save what we can while we can. We should rigidly economise our regions of dream, and jealously husband the veins of this vital gold, the sources of this elixir of true life—not let them be worked out in spend-thrift haste, or exploited for mere commercial greed. The nearer they are to us, the more need to guard them. There seems at present little fear of overcrowding on the top, say, of Aconcagua, nor any need for a Himalyan Heimatschutz. The nearer the regions of dream are to the thickly populated haunts of men the larger is the number of those who can indulge in dreaming. But the more deadly is the danger of the destruction of all that makes dreaming possible.

I use the word *dream* to express that inexpressible vividness of delight and expansion of soul's horizon which comes to all of us in lonely places of the earth where for a while we are inheritors, sole and undisputed, of the streaming divinity of natural loveliness, 'made one with Nature' in even a truer sense than Shelley's. We have all—I am sure I may say so here—we have all known this feeling, this delight; and none who has ever known it can think of what the world would be were it no longer possible. It is one of the best, the highest, the least selfish of all joys; and in its consequences, in the reflected moods that follow it, it strengthens all our instincts of good, all our beliefs in rightness. Destroy this, here on the mountain, there on the seashore, or even in the common woodland or heath-clad waste, and the loss is irreparable. To destroy it widely, and for large portions of the earth, were crime worse than to burn down the National Gallery. For, after all, the highest aim of Art is to reproduce some feeling of this kind, to make permanent what was so fugitive. In looking, say, at Turner's 'Evening Star' we get some pale reflex of the feeling we have on a lonely shore at sunset; or in his mountain scenes catch, with a sudden intake of the breath, something of our mountain moments. What sums are spent to secure and preserve a single painting! And when it is painted and secured and preserved, what is there in its power to be compared to that of the hundred pictures Nature lavishes daily before our eyes—pictures man will destroy as thoughtlessly as a child slays a butterfly!

And what it is necessary to insist on more and more strongly is, that a multitude or a mountain-railway utterly destroys this emotional power in even the most lovely scenery. It is—

may I say it—as if Nature were a jealous goddess; she will give herself to a whole-hearted lover freely, fully, intimately. Where the mind is half-given, and the attention divided with human thoughts and distractions, she will give nothing—nothing at all, but just the outside attractiveness of her beauty. 'Oh, what a lovely view!' 'How sweet!' 'What a delicious afterglow!' In any company where we hear such phrases, however charming our companion or fair the lips that utter them, we are conscious that Nature herself has withdrawn her intimacy.

I am not, as I said, urging the claims of any society; I am not defining the reasonable limits of railway-construction, or holding the balance between the claims of the multitude—so over-riding in modern opinion!—and the claim of the individual. All that is detail for organised discussion and practical adjustment. What I have tried to do is in broad outline to show reason for the protest of the individual against the insurge of the multitude, to maintain the right and the necessity of a veil and a Holy of Holies in the vast temple of Earth. We have heard much of the soul of a people; and there are — or have been; it may be only a stage in race-development—fortunate races in whom a common soul can grow, races in whose common consciousness the highest tendency is not perpetually thwarted and brought to earth by the littlenesses of social intercourse, vulgarity, ridicule, caricature, jealousy, and the thousand other foibles of the mob. Our western races have other qualities and capacities. This capacity for the growth of a common loftiness and a unity of uplift seems either denied us altogether, or very feebly operative. Am I unduly flattering ourselves if I venture to say that such a common soul seems to me more realized in the Alpine Club than among most fellowships or associations of Englishmen? Certainly with our race in general the growth of a soul is an individual matter. If, therefore, we feel the enormous value to human kind of the uplifting tendency, the impulse of the *Sursum Corda*, it is surely imperative to recognize that there are rights of the individual which are not the rights of the multitude. If, for the reasons here suggested or others that might be urged, we can once satisfy our own minds that it is so, then with a good conscience and unweakened integrity of purpose, we can meet the two questions which the judge, Common Sense, puts to the jury, Public Opinion: first, Why do climbers climb? and, secondly, Why do they mind mountain-railways?

SOME NEW CLIMBS AT COGNE.

BY THE EDITOR.

(Read before the Alpine Club May 6, 1913.)

ON August 3, 1910, G. P. Baker, A. D. McCormick and I, with Benjamin and André Pession, drove from Aosta to Aymaville with baggage, multiform—I might almost say multitudinous—for we carried two tents, the necessary equipment for camping out, and many stores in the shape of blankets, cooking vessels, soups, preserved meats, conserves, chocolate and tea.

We left Benjamin and André in charge of the transport and walked on by the wonted way to Vièves. Here we had a simple meal. Whilst we were consuming it, the rain, which had begun gently somewhere above Pont d'El, received reinforcements and pressed its advantage.

Some of our stores—in fact the main part of them—were to be left at Vièves, as our first camp was to be pitched near the chalets of Gran Nomenon (some 9888 ft. above that village); it was therefore necessary for some one to remain to see that these arrangements were properly carried out. So Baker and McCormick stayed behind, whilst I—already a walking illustration of Mr. Mantalini's moist unpleasant body—continued along the watery way to Cogne.

Sometimes the rain moderated a little, and I ventured to hope for better things, then it began again harder than ever. One landmark—I might more truthfully say water-mark—after another was passed, and I grew wetter, and wetter.

By the time I reached Epinel I no longer greatly cared whether the rain ceased or not. It took me at my thought, and came down harder than ever; I might have fancied myself in Skye, but then there are no unnatural aggravations of the storm such as await the unwary traveller in a village like Cretaz, where he must dodge the spouts which with ill-mannered vehemence discharge themselves into the middle of the road with as little regard for consequences as the most enthusiastic of demagogues.

On August 5 we moved up to Gran Nomenon, 7602 ft. This spot, famous for its perfect views of the Grivola, the Nomenon, the E. end of the Mont Blanc Chain, the Grand Combin and its neighbours, forms an ideal camping ground. We were

all old campaigners, and perhaps a little difficult to please, but we unanimously approved of our quarters.

While McCormick painted and Baker photographed, Benjamin and I went up the Monte Ruje and the Mont Favret, Baker accompanying us as far as the Col des Mesoncles (or Charbonière). These two points seem to be very little known.

On the 8th Baker and I, with Benjamin and André, ascended from the N. the Punta Rom or Punta del Trajo, 10,293 ft. We did not start till 9.30. We saw many flowers, bouquets, and fine views, especially of the narrow high-walled glen below Vièyes through which the Grand Eyva makes its way into the Aosta Valley. Benjamin and I went on to the actual top, and then, after rejoining Baker and André, left them and traversed the whole ridge, climbing all the towers and crossing over the Punta di Lavincusse, 9993 ft. We traversed the ridge from end to end with the exception of the last little point. As we went down into the Trajo Valley we had before our eyes the horrible slabs of the N. side of the Pousset, which, assisted by the approach of fog and thunderstorm, turned Benjamin and me back in 1909, but which later (October 15) in the same year succumbed to the attack of Mr. C. F. K. Carfrae with the guides Alexis and Henri Brocherel.

We reached Cogne late with the impression that a storm would soon arrive; and night had scarce come when the signal for the deluge came too.

'Twas the lightning flash o'er sky and plain
Ere labouring thunders heave the chain
From the floodgates of the drowning rain.

We, in the enjoyment of supper and a water-tight roof, speculated with sympathetic interest on the fortunes of our friends and their tents in their romantic surroundings at Gran Nomenon.

THE PATRI PEAKS.

On August 14 I rejoined my friends at the camp which had been pitched close to the Monei chalets at a height of 7400 feet. I walked up by myself in the afternoon. The weather was beautiful, and though I had many times before taken the same walk—it is, indeed, one strongly to be recommended—I found it full of interest. When I had passed through the pinewood and came to the part where there is only an occasional tree to be seen here and there, I found many flowers. I discovered quite a number of Martagon lilies, which are not

—Col. Patri.

— N. Peak.

— S. Peak.



Vittorio Sella, photo.

Swan Electric Engraving Co., Ltd.

THE PATRI PEAKS, from the West.

very common in the Cogne Mountains. The best were trying to hide themselves under a bush. *Gentiana lutea*, the great yellow gentian, was in fine blossom. There were many *Pinguiculas* (Butterwort) in moist places. Alpine asters were plentiful: some blue, others of a redder tint than usual, both charming. I think the evening light may have helped to enhance their beauty. Multitudes of forget-me-nots were to be seen. I had not noticed them so good elsewhere in 1910; the season did not appear to have suited them. But the flower which I remember best was the Alpine columbine (*Aquilegia Alpina*), with

delicate bells
As fair as the fabulous asphodels,

poised on their shapely stems with a grace that added to the perfect blue of their colouring. (On my return to Cogne I gathered some of them, and I think they awakened more enthusiasm among the ladies than any of the beautiful flowers which had hitherto graced the dinner-table.)

Our camp had been pitched on a space of soft green turf and commanded unimpaired views of the Gran Paradiso, his satellites, his glaciers, and his icefalls. Whether in the fresh radiance of dawn, in the glow of noonday, in the soft flush of sunset, or in the dim cold gray of nightfall, he asserted himself as the undisputed monarch of the Cogne Mountains.

On August 15 Baker and I, with Benjamin and André Pession, left our camp at Monei at 6.5 in the morning with every promise of a fine day.

We made for the lower Patri glacier of the New Map and reached it after crossing rough pastures and moraine. The little tufts of *Linaria Alpina* gleamed like a miniature Assyrian host in their purple and gold, and *Thlaspi rotundifolium* was an effective foil with its pale lavender blossoms. These were the two most plentiful plants.

By and by we got to the glacier. We came to a huge crevasse, but it did not deny us passage, and when we reached the bergschrund at the foot of the slope leading to the Col Patri we had no difficulty. After that the snow was steep and we kept to the left of the snow couloir which falls from the Patri Col, that is to say to the true right bank of the gully. We then took to the rocks on the same side.

At 9.15 we halted for a meal and did not go on till 10.7. At our lunch-place *Eritrichium nanum* (the Fairy forget-me-not), *Androsace glacialis*, *Saxifraga bryoides*, *Silene acaulis* and a *Cerastium* gave us a miniature flower-show.

We reached the Col Patri at 11.0, having walked slowly and met with many difficulties, which, though not by any means serious, yet took time.

One spot I am not likely to forget. I was the last on the rope, and André, who was immediately in front of me, was carrying Baker's camera with the appurtenances thereof—to wit its legs. These projected across his back, and when he was crossing a most objectionable sloping rock with no really good holds in its lower part, and having another rock projecting above its upper portion, André was much hampered by the camera legs; and as I had followed him closely and wanted the rope held tightly lest I should slip off the rock and hang sideways—for André was not directly above me—he, in order to get himself free, descended a step and so caused the rope to slacken. I had now to hold on by pressing my fingers hard on the rock and making my knees do as far as possible the work of another pair of hands. Of this they subsequently reminded me for several days. I am afraid the voice in which I bade André pull in his rope was a trifle choleric, but he rounded the corner and I happily did not slip off; and so my equanimity was restored. If I had slipped off I should probably have hurt myself a good deal. This episode took not more than a minute or two, but had I been questioned I might have avouched my agreement with Juliet that

In a minute there are many days.

The two highest plants were *Ranunculus glacialis* and *Saxifraga oppositifolia*. The height of the Col is 11,096 ft. Here we found a pole, no doubt left by my friend Signor G. Bobba, who first reached the Col in 1890 with the porter V. Jeantet.

The day was glorious, and Baker now devoted himself to photography, whilst I was left to let all the splendours of the view sink into my memory. Monte Rosa and the other Zermatt giants were, of course, magnificent, while the Grand Paradis' great size asserted itself—in fact I think the group was more imposing than I had ever seen it.* Beyond the Punta Sengie clouds covered the Italian plain, though their

* When I recall this view I smile at the latest description of him in "The Valley of Aosta," by Felice Ferrero, p. 55. "Mont Blanc poses; Monte Rosa is gentle and gracious. As for the Matterhorn, it seems to embody all the characteristics of a stormy daredevil; while the Gran Paradiso is solid and well-balanced, quite the business man."

wild shepherd, the wind, was for the moment reposing in some invisible lair.

After we had spent all but an hour in these delightful surroundings, we returned to our climbing. We went round the Valeille (Eastern) side of the N. peak of the Patri, finding the rocks rotten (there were a number of flowers hereabouts), but yet enjoying the climb which was not easy ; in fact it involved what Benjamin called 'un peu de Cervin.' I always regret that I am unable to inventory and label as it were all the details in a good rock climb, as :

Item, one minute projection which saved my foot from slipping into space ;

Item, one pretentious gargoyle which rudely threatened my nose ;

Item, one indifferent handhold which held when a specious protuberance betrayed my other hand ;

Item, one escarpment where,

There's no art

To find the mind's construction in the face ;

Item, two Procrustean slabs where my limbs were stretched so far apart that it seemed improbable that they would ever cohere again ;

and so on. One place, however, I do recollect where perdition all but caught my sole, for I got my foot jammed, and my boot, chosen for its sympathetic rather than its unyielding character, seemed likely to suffer disruption, though happily so direful a result did not ensue. My friends above me, intent upon their own affairs, knew nothing of my trouble. We reached the N. peak of the Patri, 11,674 ft., which had never before been climbed, at 1.30. Here we spent a delightful hour. And then I urged the claims of the S. peak of the Patri so eloquently that its ascent was decided upon.

We left at 2.30 and descended over easy rock to the gap between the N. and S. peaks. Then a few steps brought us to a very steep snow-slope. Fortune here favoured us, for the snow was in perfect order. To our left great mamelons of spotless snow surmounted the wall of the precipice, but there were no cornices.

Then, in the excellent steps which Benjamin made for us, we were able to foot it featly to the S. summit, 11,748 ft. It was 3 o'clock when we arrived. 'This,' I said to Baker, 'is the peak we ought to have climbed in 1881 when we crossed the Coupé de Monei.' 'Yes,' he said, 'that was the Alpha of

my climbing in these parts, perhaps the Omega——’ ‘Hush,’ said I, ‘speak words of good omen.’

At last we had had a day like those delightful days of old, and we fell to talking of Basardjusi and the Caucasus—and Benjamin joined in, for had he not ascended Elbruz? I know few more magnanimous acts than that of the lady whom Benjamin and his brother, Augustin, accompanied in the Caucasus, for she, having fallen ill, yet sent her guides to ascend Elbruz.

At 3.40 we scampered off, first down rocks and then down the glacier of the Pène Blanche of the New Map, and afterwards on the rude rock escarpment between the upper and lower glaciers of the Coupé de Monei we found countless plants of *Eritrichium nanum*, where myriads of tiny cataracts tinkled and tumbled over the rocks merrily and musically.

There were many other little plants here, but the Fairy forget-me-not made the glory of this rock and water garden. It grew in crannies and on ledges in comparatively large tufts. I had not before found it in such a wet place, but I daresay the water here was temporary, as 1910 was a very snowy year.

The way here was not easy to find, and at least two little waterfalls diverted themselves on our heads and shoulders, but the wetting we underwent was not very serious.

When we cleared the glacier and moraine the last bit of our way led us through low-growing thickets of rhododendron still red with blossom.

And then supper—in old days it would have been considered only right to give you the menu and the writer’s opinion thereon as well as some jocular references to the party’s ability as trencher-men. I will only say that we did not fall short of our predecessors in such matters, and that we passed a hearty vote of thanks to McCormick for his kindly attention to the menu. It was all his fancy painted it, and far exceeded our expectations.

New peaks are not easily discovered nowadays, so I may sum up our Patri expedition in the words of Clough :

Happy is he that found, and finding was not heedless ;
Happy is he that found, and happy the friend that was with him.

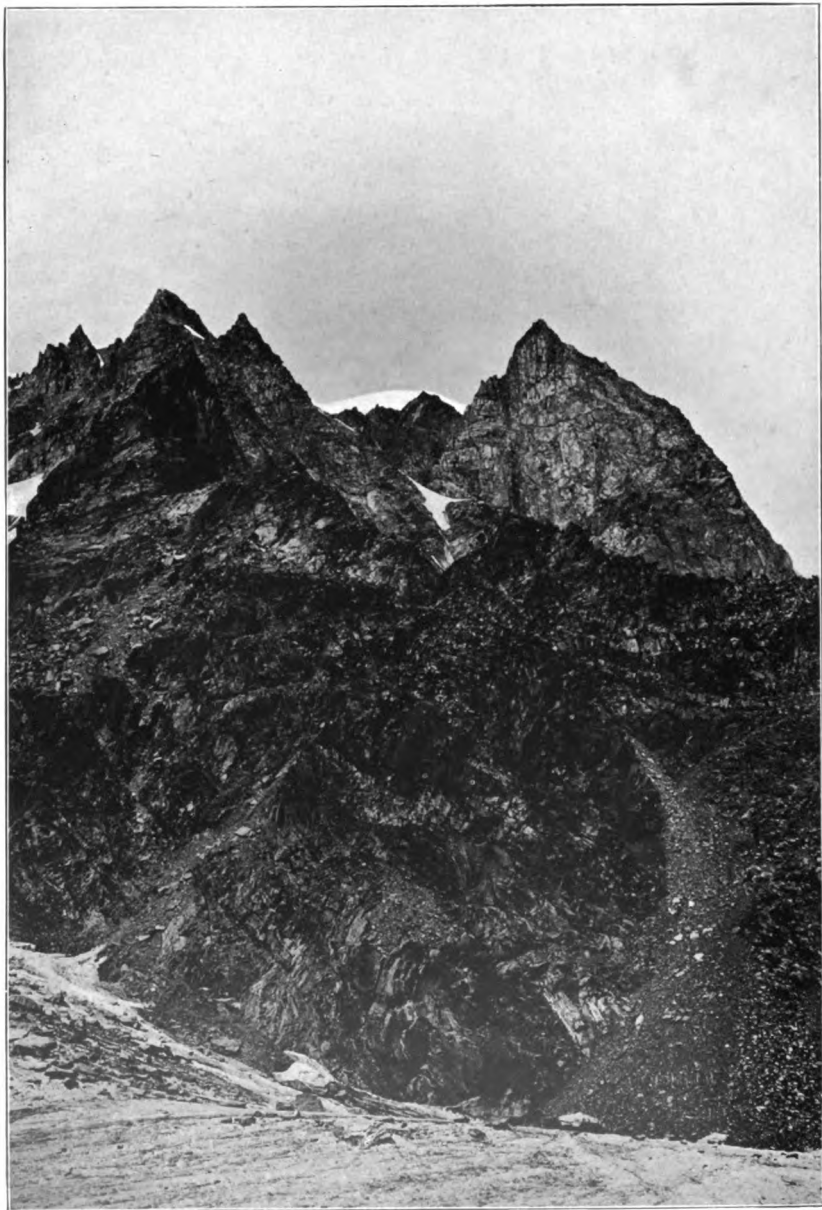
THE TOUR ST. ANDRÉ.

On August 14, 1911, Benjamin and André Pession and I set out for the Valeille. I had decided, after some cogitation, to adopt the regal style of the Orientals of old, that is to say to ride a mule, as far as the end of the King’s hunting path,

—Tour St. André.

—Col St. André.

—Tour St. Ours.



Vittorio Sella, photo.

Swan Electric Engraving Co., Ltd.

THE TOUR ST. ANDRÉ AND TOUR ST. OURS,
from the East.

and so to evade at least 2½ hrs. walking, for the Valeille appears longer to me now than it did in 1879 when I first traversed it.

About 4 A.M. all was ready, so I mounted the mule and proceeded from the Hotel Grivola up the village: when we got to the track for the Valnontey the muleman wanted me to turn to the right, and on my saying 'But I want to go to the Valeille,' he replied 'Oh, the guides said you were going to the Valnontey.' Then a horrible thought struck me, 'Where are the guides?' 'Oh, they have gone across the meadows (the natural short cut) to the Valnontey.'

When I heard this I jumped down and ran back to the Hotel Grivola and along the path to the Valnontey. In the dim light I descried a peasant irrigating his meadow: regardless of the water, I splashed through the long grass towards him. 'Have you seen two guides go by?' 'Yes.' 'Were they walking fast?' 'Yes.' 'Please run after them and tell them to come back at once.' Off went the good-natured peasant, and in a few minutes Benjamin and André were brought back. A brief conversation explained matters, and after I had rewarded the messenger with good words, and another gift that did not seem to please him less, we hastened back to the mule. I may say at once that the mule was a really excellent beast: his surefootedness was greater even than is traditionally expected from his race. Some of the places which he negotiated without a stumble astonished me, and I ended by letting him go practically as he pleased. At this time mist clung to the heads and shoulders of the hills. There is nothing new to be said of the Valeille. A good way up it we found a considerable herd of cattle. Still higher up *Veratrum album*, yellow-white monkshood and oak and holly ferns, attracted our eyes. The last part of the path had been a good deal broken up by storms. I dismounted from the faithful mule at 7, and at 8 we stopped to eat.

My object was to make a pass (parallel to the Coupé de Monei) between the Tour St. Ours and the Tour St. André; we therefore turned to our right, leaving the Valeille glacier well on the lefthand, into a comparatively large hollow not visited hitherto, so far as I know, which is shut off from the Valeille glacier by the dark barrier (shown in the illustration) to the W. of that glacier. This hollow glen is wild in the extreme. When we had gone on some distance, and the sun had dispersed those vapours which had offended us, we could see something of the wall under the snow-mound (well seen in the illustration) between the Tour St. Ours

and the Tour St. André, and it became pretty clear that if we delivered our attack on the wall immediately below the middle of the snow-mound,

Even in the force and road of casualty,
unjustifiable risks would be run, for there each missile recalled
John Gilpin :

So like an arrow swift he flew
Shot by an archer strong.

After such examination as we were able to make, I agreed with Benjamin that the danger was too great. My disappointment was somewhat lessened by the reflection that I had never climbed the Tour St. André (though I had given him his name when Mr. Stallard made his ascent in 1891), and that if we succeeded in reaching the summit our route would undoubtedly be new. So we kept to our left. Our route is not visible on the illustration, as it lay between the sharp needle (just to the right of the Tour St. André) and the main ridge between Valeille and Valnontey which runs from the St. Ours to the St. André. The rocks were for the most part loose and rotten, there were occasionally a few steps to be cut in ice, and there were many steep faces. I have memories of one beautiful snow ridge. There were a large number of bright coloured flowers in much the same variety as we had found on or near the Patri Col. By and by we came to a steep slope of about 300 feet where thin snow had frozen on hard ice. Benjamin here had an opportunity of showing his skill and power as an ice-man, and it would have been a very captious critic who was not satisfied with the workmanlike staircase which led us straight up the slope. Two stones came down; one, I thought, was coming straight for the well-fixed target of my body, but Benjamin warded it off with his axe; the other passed us on our left. We gained the ridge between the sharp needle and our peak, and then went up steep and, as far as I remember, sound rocks to the summit.

We had taken an abnormally long time from the end of the King's hunting path. While we were on the summit, I saw on the skyline of the lower point of the St. André a giant bouquetin. I had seen many before, but never one in a position which set off the splendour of his frame and head to such perfection. He was Vergilian :

Forma praestanti et cornibus ingens

like the pet stag of Tyrrheus and his children.



—Tour St. Ours.

—Tour St. André.

—Lower point of
the St. André.

—Tour St. Pierre.



Vittorio Sella, photo.

Swan Electric Engraving Co., Ltd.

THE TOURS ST. OURS, ST. ANDRÉ, AND ST. PIERRE,
from the West.

We descended a little way by the route by which we had climbed up, and then followed the ridge which falls N. towards the Cresta Paganini to its lowest point, and then went down direct over stones, snow, and a bergschrund to the Monei glacier. As will be seen from the illustrations it is not often that a peak differs so much on its E. and W. sides as the Tour St. André, being on the Valnontey side heavily laden with snow and ice and on the Valeille side consisting almost entirely of bare rock. Bergschrunds had a bad name in 1911, but we had not much trouble, though a little further to the S. enough of the monstrous blue caverns which lurked below was revealed to make us glad to find ourselves across in safety. Below this we found the traces

Of many a mighty marcher gone that way,

to wit, of Messrs. Irving, Tyndale and Mallory, who had crossed over the end of the Col Monei ridge of the Tour St. Pierre on their way back to Cogne from the Ondezàna, and had chosen an excellent line. We had in fact practically effected a new pass from the Valeille to the Valnontey, though not at that point at which we had intended to cross. It may be called the Col St. André.

We walked fairly fast to the end of the Monei Glacier which we reached in 1 hr. 50 mins. from the summit of the St. André. After a meal we descended to the Monei chalets where the men indulged in draughts of milk while I gathered flowers. I went rather too far down, as, though I knew the ground quite well, I could not see the bridge over the stream to the N. of the chalets. I was recalled by the shouts of my companions, and my bewilderment was explained by the fact that the bridge, such as it was, had been carried away!

By the time we reached the path in the valley darkness was coming on, and before we got to the hamlet of Valnontey the lantern was called into use. Dimly it revealed each little landmark on the way, and where I could not see memory supplied details. The voice of the torrent and the small streams seemed subdued as though the darkness had somewhat muffled the mid-day exultant joyousness of their voices. The night was cool and I reached the Grivola at 9.30 by no means overtired—a relief which I probably owed to the faithful mule that had saved my legs in the morning. My grateful thanks for the three beautiful illustrations are due to Signor Vittorio Sella.

AN EASTER TOUR IN THE BERGAMESQUE AND OTHER ALPS.

BY R. L. G. IRVING

A RAILWAY, particularly a railway in the mountains, is an unlovely thing; but the climber will employ any agent, however vile, that will hurry him into the presence of his beloved. Indeed, he is generally at pains to find out beforehand the line which penetrates nearest to the centre of the group of peaks which he intends to visit. When he has reached his journey's end he may safely indulge in pious lamentations over railways and motors and all such fatal facilities for the invasion of the vulgar crowd.

The railway to which I owe my introduction to the subject of this paper runs from Brescia to Iseo, then along the shore of the Lago d'Iseo to Pisogne, where it leaves the lake and ascends the Val Camonica as far as Edolo. Having chosen a wrong train at Brescia, I had to change and wait 4 hrs. at Breno, a large village in the lower part of the Val Camonica, that has not been provided with churches, picture-galleries, or other buildings which we generally use as waiting-rooms on such occasions. If you choose the right train you should reach Edolo in 4½ hrs. after leaving Brescia.

Edolo has a fine church and some picturesque old houses, but the general effect is marred by several garish new buildings. It is situated at the point where the northern and eastern boundaries of the Bergamesque Alps meet. Immediately above the town, on the E., rises Monte Aviolo, and on this my first day was spent. With great labour I reached the top of a spur called Monte Foppa (2273 m.), and then found that a formidable ridge would have to be ascended before I could reach the top of Monte Aviolo. For conscience' sake, I went on to where the towers on the ridge began, and was then willingly convinced of the folly of beginning to climb them in the middle of the afternoon. There was obviously a simple way up the mountain by the hollow below me on the N., but I think even by this route the summit could only have been won after very great tribulation in the deep snow. I retreated, therefore, unashamed, and found a series of gullies which provided the long glissades one expects at this season, and which quickly landed me near the snow-line. In the evening I made an unsuccessful attempt to get the key of the Capanna

Baitone, but I was given a card commending me to the care of a porter who lived at Rino, a village at the entrance to the Val Malga, 3 miles from Edolo.

Early next morning I set off laden with all manner of store, and bearing on the top of my rucksack the latest thing in snow-shoes purchased in Turin. I displayed my card to the inhabitants of Rino, and was directed to the porter's house. When the porter himself had been found, a long discussion took place. By eloquent gestures, I was at length made to understand that the porter was forbidden to entrust the key of the hut to anyone whatsoever, but that he would accompany me if required. A bargain having been struck, the porter got into his best climbing-kit, borrowed a pair of snow-shoes, and started with me up the Val Malga. Higher up, the valley is known as the Val Miller, the two portions being separated by a precipitous step called the Scala Miller. In about an hour we came to continuous snow, and put on our snow-shoes. They greatly diminished the labour of walking, and we did not take them off again till we reached the hut. Five miles from Rino, before reaching the Scala Miller, the path turns up the hill-side to the N., and we had a tiring climb to the Lago Baitone. We reached the hut, a short distance beyond the lake, at 6 o'clock, but it was another hour before we succeeded in getting into it. The winter snow had found its way in and made a big frozen mound behind the door. After we had both taken several spells at cutting away the accumulations of ice outside, we were able to lever the door up off its hinges and push it back sufficiently far to enable us to clamber over. One usually reckons on being able to enter a hut, especially if one has remembered to bring the key; but our plight if we had failed to do so would have been serio-comic, to say the least of it.

The basin containing the Lago Baitone is surrounded by a horseshoe of peaks which constitute the Baitone group, a distinct western wing of the Adamello group. Any of these peaks may be ascended in a few hours from the hut. The most important of them is the Corno Baitone, so I naturally selected it to climb next day. I had intended, after a second night at the hut, to cross the Passo del Cristallo between point 3187 m. and the Cima di Plem, and by traversing the southern slopes of point 3187 m. to try to reach the head of the Val Miller, whence, by the Passo Miller, the Adamello is accessible. It was an ambitious plan, for the traverse from the Passo del Cristallo may be impossible at this or any other season; but it is a

problem I look forward to solving some day, if I do not have the misfortune to find the solution in print.

The weather, when we went to bed, was perfect. It was therefore all the more disappointing to find the hut enveloped in mist when I got up in the morning. However, it was the light mist that often clears off when the sun gets up; so I started soon after 6 o'clock, leaving the porter to return at his leisure to Rino. In a couple of hours, I made my way to the Lago Gelato, a small lake in a hollow formed by the S.-E. and S.-W. ridges of the Corno Baitone. I crossed the lake, and was brought up against a steep snow-slope with a few rocks protruding from it. I kicked steps up to the first of these, and sat down on them in the hope that the mist would lift and let me see exactly where I was. From time to time dark patches appeared on the blank wall round me, and took the form of great isolated peaks, though they must actually have been small rocks a few yards away. Then they would vanish suddenly, and the feeling of absolute isolation became accentuated. After my hopes had been raised and disappointed many times, I climbed on till I saw what I judged to be the rocks of the S.-E. ridge of my peak looming through the clouds. There was no great difficulty in getting on to the ridge, and it proved a delightful ridge to climb, being of rough rock with plenty of handhold and plenty of variety. It was longer than I expected, and occupied me for more than an hour, though I went fast for fear a storm should come on. I halted a long time on the lee side of the cairn, but the mist gave me no chance of seeing anything. Before I got back to the hut flakes of snow were falling, so I decided to give up my plans for the next day and return at once. It was snowing hard when I crossed the Lago Baitone and continued to do so till I reached Edolo, a very drenched and pitiable object.

This ended the introductory stage of my holiday. In the first few days we do little more than take in the outer forms of what we see. Our heads are still full of problems of geography and transport. Lack of training, the change in our way of life, the struggle with impedimenta of various sorts all tend to render us less susceptible to the subtler influences around us. But on the afternoon following my return from the Capanna Baitone, as I walked up the broad fertile valley leading to the Colle d'Aprica, I was conscious of a different feeling towards my surroundings. They spoke to me with a voice that had been dumb before. There were several causes which might have produced the change. The wind, after

veering to the N., had died down and left the sun undisputed master of the sky. The signs indicating lack of condition in myself were disappearing. My baggage had been dispatched, and I was free to wander for a week, whither my inclinations led me. And all the way, I had the company of my new friends in the Baitone group. Each time I looked back towards them they smilingly reminded me that I had carried off a corner of the new white mantle that sparkled on their shoulders, though the sun had quickly removed all traces from my own. But when we find Nature in such a generous mood we do not analyse our sensations. We absorb without examining the beauties of the way, with all but our receptive senses drugged.

As I had lingered on the road it was nearly dark when I arrived on the pass. The hôtel d'Aprica received me as its only guest for the night. The staff spoke French and gave me a five-course dinner—a sufficient proof that the place is submerged by the tourist tide in the summer.

My plan for the next day was to ascend the Val Belviso which opens to the S., a short distance below the Colle d'Aprica, to cross the Passo Grasso di Pilla, ascending Monte Torena from the pass, and then descend to Bondione in the Val Seriana. Entering the Val Belviso, I took a wrong turning, and received grievous punishment at the hands of nut-trees, slabby rocks, and mossy gullies, before I fought a way down to the right path which keeps low. Monte Torena was deleted from my programme at this point. My equanimity was restored by the walk up the glen to S. Paolo—a spot much in favour for picnics, judging by the numerous photographs of it in the hôtel d'Aprica. At S. Paolo the snow began, and a little farther on, where the valley bends, I seemed to enter the region cut off from the lower world and which it is the climber's privilege to enter. And as I passed the corner, the crossing of the boundary was impressed upon me in a way I have noticed before when wandering alone. A puff of wind came past me and whispered in the language of the hills: 'Remember, this is a different world'; a message sent by the Providence that watches over solitary climbers, as over other fools and lovers.

It was several hours later that I neared the end of the long slope that rises steeply from the bed of the Val Belviso to the Passo Grasso di Pilla. The opposite side of the valley had sunk below me, and I knew the top of the ridge must be close at hand, but the reward of my labours came with delightful suddenness. A single step transplanted me from a solemn

wintery world whence the sun was hurrying away, into a world of spring and gladness in which his rays would linger till the last possible moment. Even on so modest a pass as this, just over 2500 m., one may enjoy the pleasures of much mightier summits. The mistakes, the monotonous toil, the prospects of defeat so freely held out on the relentless slopes are put away, and in their place we set the mystery of a new valley, the assurance of a safe descent, the sunny faces of the peaks on either side. Just as sunrise—no matter how many hours of night-marching have preceded it—fills the mind and body with new energies to meet the labours of the day, so the arrival on the summit restores his energies to the climber, who on the last slope had seemed incapable of further effort. It is remarkable how seldom the theory 'we shall get down somehow' has proved fatal to those who have trusted to it. Moreover, the solitary climber has no companions to restrain him in the indulgence of his powers of self-deception. His mind can tilt the slopes to an angle suited to an optimistic mood, and he can revel in their exquisite purity, without seeing therein a proof that they will hold his weary legs with nightmare clutch. He loves to let the sunlight play upon his face, though experience insists the tale of skin will be exacted later. Experience is an old and valued servant, but, like all old servants, is apt to be tyrannical and thrust her counsels on us uninvited.

The descent on the W. side of the pass, through a succession of small lake basins, is easy but very laborious under winter conditions. In a couple of hours I came to the Conca Barbellino, a snow-covered meadow enclosed at the far end by a low ridge. Mounting to a gap in this ridge, I found myself overlooking the long steep slope of the amphitheatre that cuts off the upper from the lower Val Seriana. The snow on this slope was in perfect condition for glissading, and I got down so quickly that I had time to halt at the first sign of a path before the gathering darkness urged me on towards Bondione. The hôtel de la Cascade, above the village, was shut up; but an obliging peasant came to my rescue and led me through a maze of narrow passages to the private house of its owner. I was shown into a large kitchen and was welcomed by a tall handsome man, who with the help of two small girls was sorting the good from the bad in a huge basket of walnuts. I joined one or two friends of the house by the fire, and tried to keep up an end of conversation while my supper was being cooked. If you are not particular about meat courses, the

fare in these places is good enough, and the bill generally seems to work out at about cost price. For once, I was tempted to try some wine, and I wish for my friends' sakes it was possible to procure in England the 'Bresciana' I was given. There must be many kinds of 'Bresciana,' for the sample of it I tried at my next resting-place converted me again to teetotalism.

The highest peak of the Bergamesque Alps, the Pizzo di Coca, rises above Bondione, and I was favoured with a glorious day for its ascent. It is best reached from a hollow between it and the Pizzo Redorto. The direct approach to this hollow is not free from difficulty, portions of the cliff directly below it being nearly vertical; but the alternative approaches, by grassy terraces under precipices laden with snow and ice, appeared to me too exposed to avalanches to be justifiable. From the hollow there is a choice of several routes up easy buttresses to the S.-E. ridge of the Pizzo di Coca. I struck the ridge several hundred feet below the summit, and enjoyed some first-rate climbing. One big step of red rock was split by an irresistible chimney. I climbed to within 10 ft. of the top and then climbed down—without the satisfaction I might have had if I had seen the 'Climbers' Club Journal' for 1912—preferring to turn the obstacle by steep snow. The exit from the chimney was a problem I was content to leave unsolved, though a little more trust in fortune would perhaps have carried me through. I was reminded of a story about a friend of mine who would certainly have done it, or at any rate tried it. A year or two after I had introduced him to climbing, he had the honour of leading a party containing one of the Club's most distinguished officials up a climb on Lliwedd. His variation from the usual, but by no means easy, route did not commend itself to this official. In fact he expressed his views in language which must have changed him at once from a recent acquaintance to an intimate friend. The leader thereupon replied in justification of his proceedings, 'I always go on in the way I have chosen till I can get no farther.' This is a daring creed, and the career of a solitary climber who conformed to it would indeed be thrilling if Fortune were indulgent enough to extend it over three or four years. For my own part, I confess I have learned to anticipate with decent fear the point at which progress upwards is maintained by the friction of the waistcoat, a scramble up on minute finger-holds, ice-axe holds, or other speculative holdings which hold out rosy promises of an immediate return.

The whole ascend from Bondione occupied 7 hrs. and the

return 3 hrs., but the conditions were good for the time of year.

I returned to the Val Camonica over the Passo della Manina. It is a lovely walk with grand views of the Presanella all the way down to Vilmaggiore, a village on a shelf high above the Val di Scalve. On the way down to the valley by a short cut, I gathered *Gentiana verna* in full bloom—a pleasure one does not often have in April and August of the same year. The lower part of the Val Scalve is a narrow gorge, through which a wonderful road has been made to the Val Camonica. For long stretches it is nothing but a groove cut in the vertical walls of rock, so that in many places the waterfalls that come over the top of the wall fall clear outside the road, without even splashing the parapet. At Pisogne, I rejoined my bag and delighted in its contents till the next evening. A day of idleness encouraged me to consider an ambitious plan for crossing the range that borders the Val Camonica on the E. My idea was to go up the Val Salarno, carrying, or having carried for me, enough wraps to enable me to pass the night near the head of the valley, or in the Rifugio Salarno itself, which is said to be one of the worst huts in existence. From there, I hoped to climb the Adamello and descend by such a route as might commend itself to a prudent man. I will not mention the routes I thought of, as it might lead to my making an apology for them. But the argument of the heavy rucksack, which crushes so many attractive plans before they come to maturity, for once did me a good turn in persuading me to abandon this one. I slept at Cedegolo, but instead of attempting the Adamello, I decided to cross the ridge in a single day by the pass at the head of the Pozza d'Arno (2228 m.), between Monte Campellione (2809 m.) and Monte Castello (2890 m.), ascending the latter if time and weather permitted. In an hour and a half from Cedegolo, I reached Isola, the point where the valley divides into the Val Salarno and the Val Adame. The path I took followed the S. side of the stream, but there is now a broad new one on the N. side constructed by the Electric Power Company which is busy disfiguring the sides of the valleys in this district. My route lay past the Lago d'Arno, a large sheet of water 3000 ft. directly above Isola. I had feared such an obvious source of power could not escape the Vandals, and sure enough I found a nearly completed line of pipes and rails ran down the hillside and entered a large ugly building, from which proceeded a loud unceasing hum which could be heard at a distance of two or



R. L. G. Irving, photo.

Swan Electric Engraving Co., Ltd.

A BUTTRESS OF MTE. CAMPELLIONE.



R. L. G. Irving, photo.

Swan Electric Engraving Co., Ltd.

CROZ DELL' ALTISSIMO,
from the slopes of the Cima Tosa.

three miles. My longing to get away from the thing made me leave the workmen's path and bear off towards the stream which carries away from the lake any surplus water not required to feed the pipes. On the far side of the stream I should have found a small path, but I kept on the near side and was soon struggling with the obstacles familiar to all who adopt short cuts. After 3 hrs. of strenuous work, I reached the end of a ridge where I at last lost the humming noise and dominated the highest of the workmen's shelters by several hundred feet. This ridge separates the valley containing the Lago d'Arno from the Val Adame, and runs eastward to Monte Campellione; there it joins the long ridge which runs N. and S. between the upper Val Adame and the upper Val Daone right up to Monte Fumo on the edge of the Adamello glacier.

In my efforts to escape from the electric works, I had climbed too high, and had to choose between three alternatives: to descend to the lake and follow the valley up to the Pozza d'Arno at its head; to make a long traverse along the slopes of the ridge and strike the valley a little below the pass; to continue along the ridge and cross Monte Campellione. The first two alternatives involved ploughing through miles of snow, and, as I had sampled its condition on the way up to the ridge, I had little hesitation in choosing the third. What troubled me most was the sudden change that had taken place in the weather, which had been superb in the early morning. A film of cloud was spreading and thickening over the sky; but I thought there would be time to cross the peak before a dangerous storm came on. The ridge was long, and it was 1 o'clock when I reached the foot of the final peak. This gave me a good hour's climbing over rock and snow. There were short passages that required extra care, though in summer it must be a very easy route if the easiest way is always chosen. The sun looked through a rift in the clouds, but before I reached the cairn I was enveloped in thick mist. I went along a short bit of the S. ridge, then down a face on the E. and bore gradually to the right over easy slopes till I came to the Lago di Campo, on the E. side of the pass I had meant to cross. A tedious descent by the banks or snowy roof of a stream led to a dreary expanse of snow in the Val Daone. One or two forlorn-looking huts inspired me with hopes that I should soon be on a good path, but I could only guess at the direction, and often guessed wrongly. The snow seemed endless, and the failing light constantly reminded me that I must lose no time in reaching a point beyond which I need fear no prolonged

disappearance of the path. Where the path kept high above the left bank of the stream it was clear, but owing to the vast accumulations of avalanche snow it disappeared whenever it came down low. I have never seen a valley where the havoc wrought by avalanches was so appalling. The path was constantly crossing openings in the wood where the descending masses had opened a wide lane strewn with mangled trunks and branches. And the manner in which this artillery of Nature was loaded was being shown me at the moment. Out of the still mists tiny white flakes were coming noiselessly down, so gently that the open spaces seemed to be growing white, instead of being overlaid with a covering, while the dark foliage of the pines turned to a soft silvery grey. I am sure I could not spend a winter in the Val Daone without becoming superstitious. My reason would become paralysed by the prolonged contemplation of a power which works in such a ghostly calm and strikes with such awful suddenness and force.

When at last I felt justified in halting, I rested a full hour, putting away all forebodings about the immediate future, and blissfully unaware that I was still many miles from any sort of inn. It was quite dark when I set off again, and I lost the path for a minute or two under a huge pile of larch-poles. Sometimes it could only be followed by walking under the lane of sky between the dark tree-tops on either side, but the surface was generally good and the angle slightly in my favour, and I must have done a good 4 miles an hour down it. Between 10 and 11 o'clock, I reached a village—presumably, Daone. I shouted many times at various lighted windows, but had even less success than Stevenson had with the 'Beasts of Gevandun'; indeed, I should have been very well content with a sleeping-bag with or without a donkey. I could see the lights of a straggling place below me, and was lucky in striking the road that led to it. It turned out to be Creto, which contains the Albergo Tre Stelle, praised by Ball. Its hostess was sitting reading by a lighted window. I may be misjudging her, but she seemed to enjoy refusing me admittance. Turning back down the main street, I found the Albergo Croce d'Oro, and banged upon its door with my axe and fists—it was not till next morning I discovered it had been newly painted. My banging roused a good Samaritan on the opposite side of the street, and with his assistance the hostess was awakened and persuaded to take me in. When I was safely in bed, I began to wonder what would have been my fate supposing I had

lost the race to get off the snow before dark, or had not succeeded in finding anyone to give me a lodging, and, speculating on these interesting possibilities, I fell asleep.

The next item on my programme was a walk to Tione and a motor drive to Riva. The sky was grey and heavy with rain and the day seemed marked for dullness, but at Tione I had an adventure. I had lunched and was writing in the sitting-room of a hotel when two Austrian officers came in and ordered some wine. Presently they engaged me in conversation, and, becoming definitely inquisitive, invited me to accompany them to headquarters. It was not an invitation one could decline, so I marched with them through the streets of Tione to a large building, where we found a third officer, evidently of higher rank. There appeared to be three charges against me: firstly, I had signed my name with three initials at Creto and with a single Christian name at Tione; secondly, I had no passport, and my I.A.C. card when produced had no photograph of myself stuck upon it; thirdly, my account of the route by which I had crossed the frontier, over Mount Campellione, was not credible. All the time, I had a feeling the incident was ridiculous, and the only really anxious moment was when one of the three, who particularly wanted to establish my identity as a spy, pulled down a transparent cotton blind and suggested that my camera should be opened and the supposed views of strategic positions on the frontier examined. The other two were evidently inclined to believe me innocent, and eventually we parted on good terms, with mutual apologies for the trouble we had each caused the other.

Riva is no place for a man who has been on the tramp for some days and whose baggage has not arrived. I had a beautiful walk to Limone by the Lago Ledro and the Bocca di Limone; but when I was back in my hotel, I became conscious of a growing feeling of disappointment. No part of a holiday has such an effect on the memories it leaves as its conclusion. I could have gone home content after the day on Monte Campellone, but the atmosphere of Riva had created a longing for one more day among the snows. The village of Molveno at the foot of the Brenta group can be easily reached from Riva, and I reflected that its highest point, the Cima Tosa, would be more feasible than any of the others at this season. The weather was still dull and threatening, but I felt that whether I succeeded or not mattered little if I could make a serious attempt.

Leaving Riva early in the afternoon, I drove in the public

motor to a small canteen about 3 miles beyond Sarché. From there a new path leaves the road, descends to the bed of the Sarca, crosses it, and leads in a short hour to Molini. Between Molini and Molveno, I had a glimpse of one or two great towers with their heads in cloud, which thrilled me with the hope that I might be in their august company on the morrow.

My first attempt on the Cima Tosa was a complete failure. Beyond proving the necessity of avoiding all alluring short cuts in the woods of the Valle delle Seghe, the attempt was useless as a reconnaissance, for the clouds were down below 1500 m. Snow began to fall steadily as soon as I was clear of the woods, and, as I was already in doubt about the way, it would have been folly to go on. I turned back in very low spirits, but was a little cheered in the woods by a sympathetic bird, whose song showed that he was sorry for me, and that he too was finding the day a very grey one. It stopped snowing in the afternoon, and I went to the other side of the lake to try to make out the best route. The clouds did not give me a chance of doing this, but I resolved to make a last attempt, and, if necessary, to accept a failure cheerfully.

There was nothing to show whether the sun had or had not risen when I left Molveno in the morning, and the weather bore a disquieting resemblance to that of the previous day. All the peaks were in cloud, and the glassy surface of the lake reflected a wan and wintry sky. But for my good resolutions by the lake, I should have relapsed into an attitude of sullen resentment at such hard treatment by the Fates. I forced myself into an obstinately optimistic mood, and soon received encouragement both from the weather, which began to improve, and from my friend the bird, who greeted me again in the same place and in whose notes I read a promise of better things.

Walking over snow, which was in dreadful condition low down but which improved as I got higher, I passed under Monte Cressolé and crossed a shoulder into a broad ravine, at the head of which, on a high shelf, I saw two substantial huts. To the right of them was a narrow opening, just clear of cloud, which I took to be the Bocca di Brenta. The clouds had risen when I reached the gap behind the huts, and I could see below me the great hollow called Pozza Tramontana, and at its head the rocky barrier which cuts off the high snowfield leading to the summit of the Cima Tosa. To reach the barrier without losing height, I traversed under a great cliff on the N. side of the hollow. It was difficult to keep an eye on the steps and also on the icicles which depended from the cliff, and

which seemed quite ready to take a shot at me if the sun came out and gave them a chance of breaking loose. The breach in the barrier which provides access to the upper snowfield was more difficult than I had expected. It may be a very easy chimney in summer, but the mixture of ice and snow-covered dolomite, which I found there, occupied my attention for some time. It was impossible to cut good steps owing to the narrowness of the chimney and the knobs of rock that protruded under the ice, while the position astride, with the feet on slippery ledges, was too unstable to be enjoyable. The snowfield above was a sore trial to my tired muscles, but I reached the summit about half-past two, early enough to have a long halt there.

On such occasions it needs little imagination to believe ourselves among the unrealities of dreamland. There is a sudden cessation of mental and physical stress, and when the screen of mist has been silently drawn across the door through which we have entered, and we are left alone on the narrow white floor, we are at the mercy of our fancies. Behind this screen the rocky forms, whose presence we feel all round us, may be waking from their long sleep and be preparing to appear as colossal phantoms beside us. And as we pinch ourselves at night to make sure we are awake and not accessible to ghostly visitors, so we keep our fancies in check on our isolated perch by busying ourselves with boilers, cameras, and other convincing reminders of every-day existence. Once or twice the mists parted enough to show me a neighbouring spire still rigid on its base, but looking so impressive even in its immobility that curiosity kept me on the summit hoping for a clearer view of all that lay behind. But the weather signs gradually became worse, and my version of what can be seen from the Cima Tosa remains a vague distorted fragment of the truth.

I was soon grappling with realities again. Previous work in the chimney at the base of the snowfield facilitated the descent, but there were steps that a cragsman would not have scorned to call interesting, and the successful passage of which satisfied me that the *mauvais pas* of the climb was behind me. As I traversed above the Pozza Tramontana, I heard the wind beginning to roar over the edge of the cliff above me, and one or two icicles sailed over my head on to the snow below. By the huts, the storm met me and drove sleet in my face so hard I had to turn round to get breath before I could go on, and then only in the position of a man about to enter the scrum.

My tracks had disappeared ; but to keep the direction it was only necessary to follow the line of least resistance. The storm was of short duration and the clouds lifted, so that I had no trouble in finding the point where I had to bear to the right to reach the slopes leading down to the Valle delle Seghe.

In the woods all was peace. The absorbing struggle with the details of the way was over, and with the trees and streams the lower world came back ; but not as I had left it in the morning : a spell had fallen on it. It is at the close of such a day that the climber may be rewarded with one of those enchanted hours when he realises the consummation of all his hopes, and the mountain's acceptance of his love ; when the flood of golden light that comes out of the west enriches the fields in which he has toiled with a wealth too great for him to comprehend. And though the commonplace comes back, and the fatigues of modern life close over our heads like cold grey clouds, so that we no longer see the sunshine of life undimmed as in that hour, we know it was no vain illusion we pursued but a fruitful blessing that will one day fall on us again.

Few of our visits to the mountains can have a perfect ending. Each time he leaves the plains is the beginning of a possible romance in the climber's life. But it is only the beginning over which he has control. Climbers are shockingly businesslike in the planning of their romances. Once the vague ' *besoin de la montagne* ' has entered into them and they have made up their minds to seek out the beloved, they will spend hour after hour devising means for the utmost satisfaction of their desires, and each, without exception, will plan adventures in her company with a sublime confidence that for him at least her mood will always be a smiling one. The end is beyond our schemes. A few of these romances may end suddenly, a few with disappointment, many with feasting in the secular and the ecclesiastical sense. I own to a preference for the old-fashioned romance in which we get a glimpse of the pair living happily ever afterwards. Each year brings nearer the age when we shall see with envious eyes the favours of the hills reserved for younger men, or, it may be, in ourselves ' *desire shall fail*.' And therefore, even in youth, we should treasure most those hours in which, after the snow and rocks have drawn the passion from our blood, we get a foretaste of a pleasure which the years are powerless to destroy. And as I dallied on the path, delaying my parting from the Brenta queen, the sources of this pleasure were revealed : not in the



Parker-Browne Expedition, photo.

Swan Electric Engraving Co., Ltd.

MT. MCKINLEY, FROM EXPLORERS' PEAK.

beauty of her face and form, not in the thought that I had made her mine—the fulfilling of desire is but the removal of a bar to love—but in the sweet weariness of every limb that told me I was hers. ‘S’être donné, être encore à elle’: it is the realisation of this and not satiety that brings content, that brings the renewal of our affections and beliefs which marks the attainment of our quest, and that will bring us a message of good tidings from the hills when the last climb is ended and we are looking for the final rest:

‘The rest ungrudged by duty or desire.’

CONQUERING MT. MCKINLEY : THE PARKER-BROWNE
EXPEDITION OF 1912.

By HERSCHEL C. PARKER.

THE present expedition was made not only with the object of climbing Mt. McKinley, but also to complete the work of exploration carried on by the expedition of 1910, and to cross the Alaskan Range at the nearest practicable point to the great mountain.

The party consisted of four men: Belmore H. Browne, Arthur M. Aten, Merl La Voy, and the writer.

From our previous experience in this region we knew that to carry out our plans and transport our supplies and equipment of some 2000 pounds, 400 miles from the coast to the base of the mountain, it would be necessary to cross the country while it was snow-covered and make use of dogs and sledges.

Mr. Browne and I left Seward on the Alaskan coast February 2, although our two companions, Aten and La Voy, had been hard at work for a month before this time, advancing our supplies toward the mountain. On February 18, with two dog-teams of five dogs each and four small sleds heavily loaded, we left Susitua Station, the last point of civilisation, and started up the Susitua River. This we followed for seventy miles to the Chulitna and continued on this river and its western branch for nearly one hundred miles farther until we reached the foot of a system of great glaciers absolutely unmapped, and knew that we must find a crossing of the Alaska Range at this point. Climbing the steep ice-foot the supplies were slowly relayed over the rough surface of the glacier, while

Mr. Browne prospected a route ahead and finally discovered a possible crossing of the divide at an altitude of 6800 feet. After some exciting adventures our outfit was safely got down the almost impossible slopes to the next series of glaciers, and here we found that the range must again be crossed at another point before the northern side could be reached.

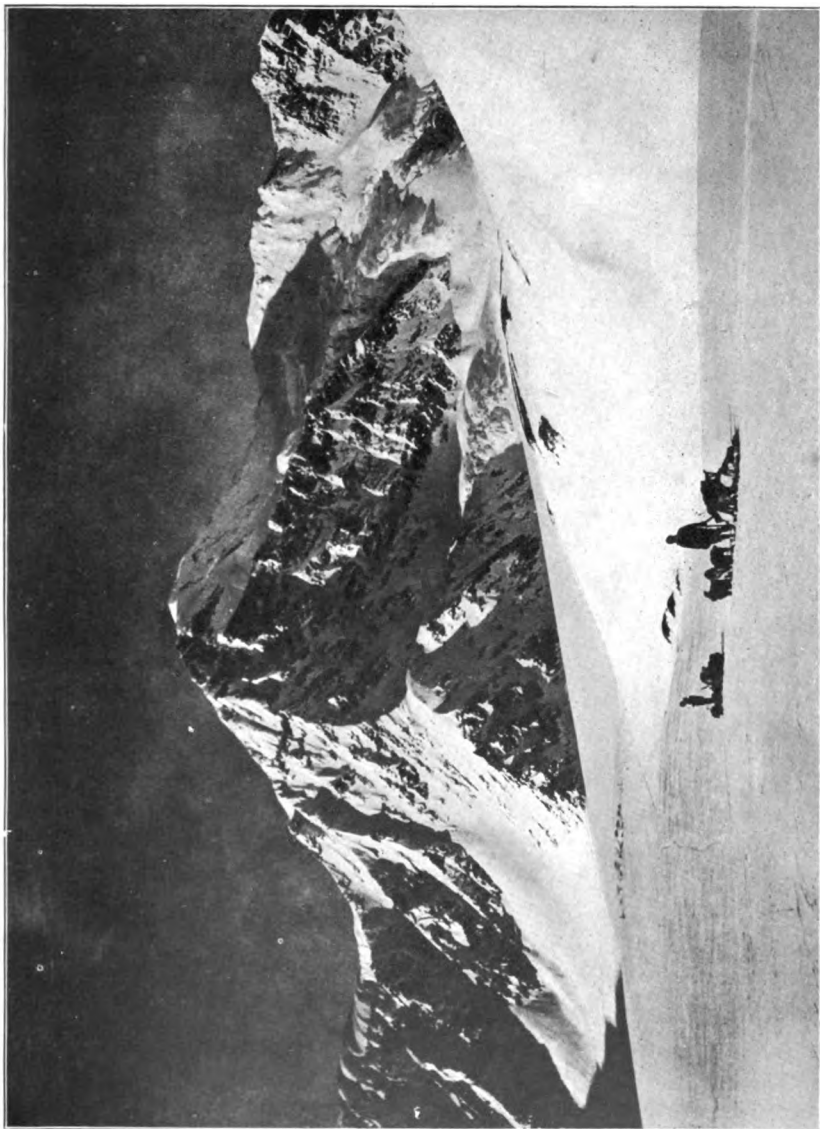
This last crossing, however, was only some 5000 feet in altitude and less difficult than the first one. At last, early in April, we came out on the Muldrow Glacier, about twenty miles N.E. of Mt. McKinley, and at almost the exact point we should have reached according to our observations. This work required fifteen days above timber line, using alcohol for fuel and pemmican for food. We had traversed and mapped two new glacial systems of some forty miles in extent.

The weather during March and the first part of April had been exceedingly bad, many severe storms and high winds, with a snowfall of about six feet. On the northern side of the range, however, the smaller precipitation and severe winds had left the ground for long distances completely bare of snow, and we had great difficulty in working our way along the side of the Muldrow Glacier before we reached the ice of the McKinley fork of the Kantishna River. Crossing from here a low range of caribou hills we reached our base camp about ten miles from Mt. McKinley, and at an altitude of 2500 feet on April 24.

Mr. Browne, after several exploring trips, located a pass across the mountains to the McKinley branch of the Muldrow Glacier, which swept upward to an altitude of 11,000 feet, between the N.E. ridge and the N. ridge of Mt. McKinley and offered a most promising route to the upper slopes of the mountain. This pass Mr. Browne called 'Glacier Pass.'

On April 29 we commenced our attack on the mountain, taking one of the dog-teams, in order to advance our supplies as far as possible up the glacier and determine the final route of ascent.

We followed the McKinley Glacier to an altitude of 10,500 feet, near the cliffs of Mt. McKinley, where we left a sled with about 300 pounds of mountain food and equipment, and returned to base camp after an absence of some eight days. The weather during nearly the whole trip had been very bad and the temperature had fallen to nearly ten degrees below zero at our highest camp. We decided after our return to wait several weeks for warmer weather and in the hope of better conditions. With the exception of a single week, however, the weather continued cloudy and stormy until June 5, when



Parker-Browne Expedition, photo.

Swan Electric Engraving Co., Ltd.

**CROSSING THE ALASKAN RANGE.
(MT. EVELYN, 9,000 ft.)**

we once more left base camp, crossed 'Glacier Pass,' and arrived at the foot of the first séracs that night. The following morning we found a heavy snowstorm raging and had to give up all idea of further climbing that day. Mr. Aten had accompanied us with a dog-team thus far, but started immediately after breakfast for base camp, where he remained during our absence on the mountain to look after the dogs and read the barometer. On June 6 and 7 we were storm-bound in our little mountain tent and, when the weather cleared on the 8th, were compelled to wait for the great mass of new snow to settle. About two feet of snow had fallen during the storm, and as our route above the séracs took us directly under the cliffs of the N.E. ridge the danger from avalanches was great.

On June 10 we once more started up the séracs, and, since we were carrying heavy back-packs and on account of the soft snow, found the work more difficult than on the previous trip. In fact we were compelled to use snow-shoes most of the time to an altitude of nearly 12,000 feet.

Of course, while travelling, we were continually roped together, but so treacherous were the crevasses covered by the new snow that it was necessary, while on the glacier, to sound ahead with the ice-axe nearly every step of the way. Mr. Browne usually led, and it was due to his great caution and good judgment that the trip was made in safety. On one occasion when La Voy was in the lead he fell nearly twenty feet into a crevasse, fortunately landing on a ledge of ice, which checked his farther progress. We learned from this incident that two men on snow-shoes, even with 100 feet of rope, are not sufficient to hold the weight of a falling companion when he makes a vertical descent into a crevasse.

At an altitude of 9000 feet we reached what we termed 'The Great Séracs,' and were forced to climb over the débris of avalanches directly beneath the great cliffs of the N.E. ridge, with immense masses of snow and ice ready to fall at any moment.

On June 13 we reached our sled and luckily discovered a small portion of it projecting from the snow. Here we recovered a large supply of food and fuel and also caribou and mountain sheepskins, which added greatly to the comfort of our fur sleeping-bags when placed between them and the ice. We had now reached a considerable plateau at the head of the glacier which, at an altitude of about 11,000 feet, ended at the great cliffs of Mt. McKinley. On June 14 we packed our outfit to the base of the N.E. ridge. Just above us the ridge

was broken by a low col and above that it rose with great steepness to an altitude of 15,000 feet, where it terminated in a snowy shoulder and fine rocky buttress.

During June 15 and 16 severe storms kept us in our tent at the foot of the ridge and some two feet more of snow added to our difficulties.

On June 17 we relayed all our belongings to the top of the col at an altitude of 11,800 feet, and made this our climbing base during our attack on Mt. McKinley.

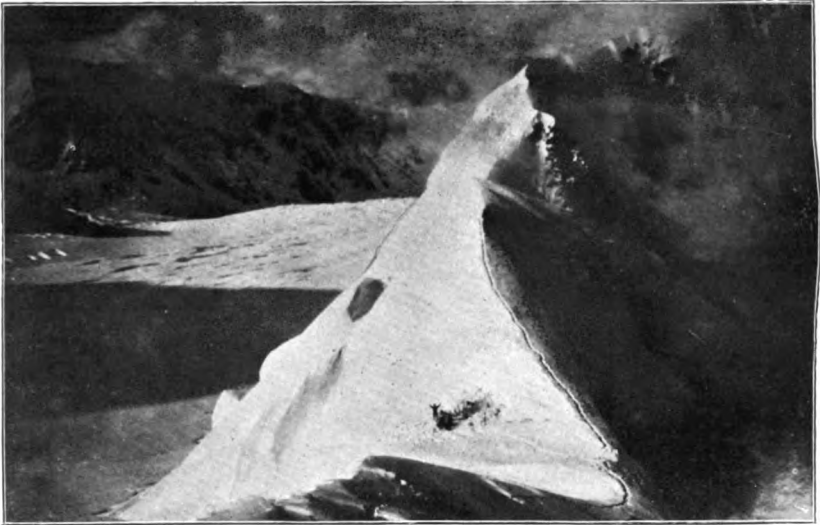
Mr. Browne and La Voy dug far into the snow-ridge and set the tent back so that it was well protected from any gale. An inspection of the supplies showed sufficient rations for practically a month.

It required some five days of the most arduous and dangerous work to relay our supplies up the ridge to an altitude of 15,000 feet.

The snow was soft and sometimes over ice. It was a question of making steps or platforms for nearly the entire distance, and we found it necessary to make an intermediate camp on the ridge at 13,600 feet. On June 24 we had transported besides our camp equipment sufficient food and fuel to last for about ten days, and were ready to continue our advance the following day from the 15,000-foot camp. During the night, however, a fierce snow-storm descended upon us, and while we lay in camp next day the avalanches roared down the cliffs beneath us.

At this camp we were just below the edge of the great basin between Mt. McKinley's two peaks, and it only required an easy 'traverse' under the cliffs of the N.E. ridge to enter the basin. For some time past we had been troubled more or less to relish or digest the pemmican which constituted the bulk of our food supplies, but from this camp on until we left the mountain we were compelled practically to abandon its use altogether and subsist chiefly on crackers, raisins, and tea.

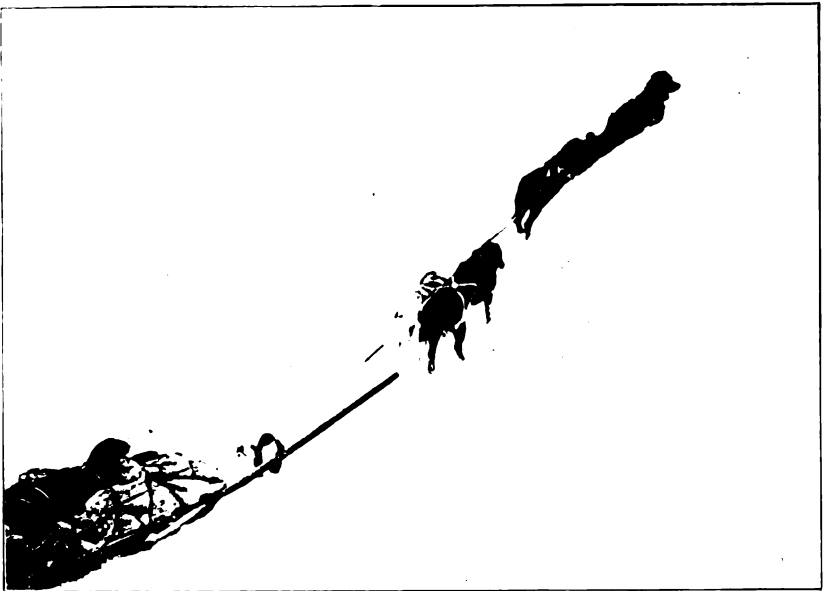
June 26 dawned clear, and that day we moved our camp to the centre of the 'Big Basin' at an altitude of 16,000 feet and at the foot of a sérac about 800 feet high which descended from a higher level of the basin above us. We could see on its northern end, however, good slopes of avalanche snow that promised an easy route to the top. The temperature inside our tent at 8.30 P.M. was five degrees below zero, and next morning a minimum thermometer we had left out during the night indicated nineteen degrees below zero. On June 27 we advanced our camp in two relays to an altitude of approximately 17,000 feet, on a plateau directly beneath the N.E. ridge



Parker-Browne Expedition, photo.

Swan Electric Engraving Co., Ltd.

12,000-FT. CAMP ON N.E. RIDGE OF MT. MCKINLEY.



Parker-Browne Expedition, photo.

Swan Electric Engraving Co., Ltd.

**DOG TEAM CLIMBING THE GREAT SERACS ON MT. MCKINLEY,
AT ELEVATION OF 9,000 FT.**

and only a short distance from the cliffs of the north peak. We became thoroughly chilled while making this camp, although the thermometer that night only indicated eight degrees below zero, but our vitality had been considerably reduced owing to the altitude and lack of nourishing food.

June 28 we rested and re-organised. The wind blew hard during the day and we devoted our time to preparing for the final climb. I boiled a hypsometer to check our aneroids. The clouds were below us, and a clear sunset gave promise of a good climbing day.

On the morning of June 29 at 6.20 we started for the summit in fine clear weather. Our course was directly up the side of the N.E. ridge. Most of the way the grade was steep and we were forced to traverse and cut steps. We reached the top of the ridge in about two hours and a half at an altitude of approximately 18,000 feet. This placed our climbing at about 400 feet an hour. The altitude and our insufficient diet were partly responsible for our slow progress. The views, looking down from the summit of the ridge, were magnificent, and beneath us to the S.E. we could observe the great mass of rugged mountains through which we forced our way on the 1910 expedition.

As we made our way upward along the ridge we noticed that we were somewhat short of breath, but the altitude seemed to have no other direct effect upon us except to greatly reduce our powers of resisting the cold. At about 19,000 feet we got a fine near view of the summit.

While climbing the ridge the southern sky had darkened and the wind increased in violence.

Ahead of us rose a small snow-dome some 300 feet in altitude, and, climbing this with comparative ease, we reached the foot of the final summit. Here the snow commenced to fall, and from this point upward every landmark was obliterated by the ever-increasing blizzard. The slope was steep and required constant and careful step-cutting.

After perhaps nearly two hours of desperate climbing in the storm, above an altitude of 19,500 feet, we came out on the crest of the ridge and met the full force of the gale. We were possibly at an altitude of from 20,000 feet to 20,200 feet, but we knew that upon the summit were several ridges of snow that rose to a slightly greater elevation. We were in a dangerous position, chilled by the gale, blinded by the snow, and our steps beneath us almost obliterated. After a brief consultation we decided that it was out of the question to go on, and so

with the greatest reluctance made our way as rapidly as possible down the summit, out of the storm, and back to camp.

It may be well here to quote from a recent magazine article by Mr. Browne :

‘ I should like at this time to correct the statement that the peak of Mt. McKinley rose 300 feet above us. If the summit of Mt. McKinley had ended in a peak we could have climbed it, as our only difficulty was our inability to see clearly where to go and how to get back. The summit of Mt. McKinley is a long horseshoe-shaped ridge. On a clear day it would require at least an hour to explore this ridge and make the necessary observations.

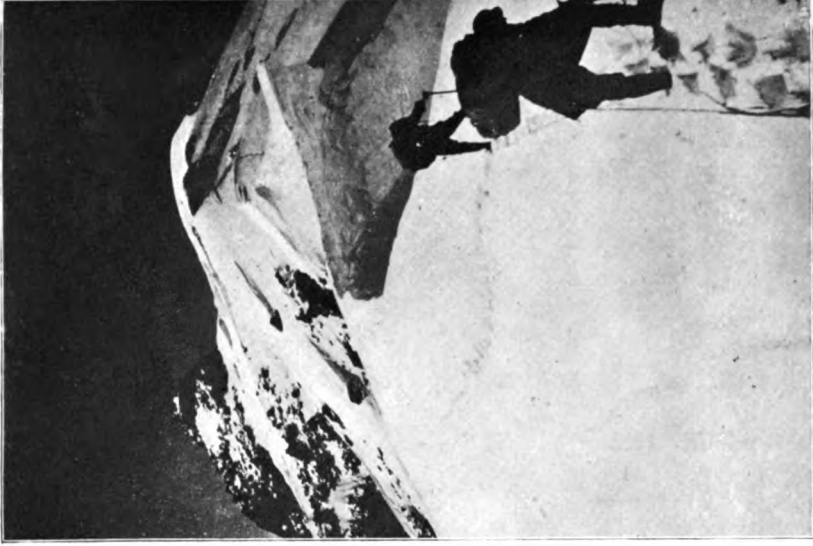
‘ While we were climbing straight up from the narrow N.E. arête all was well, but on reaching the edge of the flat summit it was impossible for us to find our way to the low rise in the ridge through the clouds of blizzard-driven snow.

‘ The hummock that formed the highest portion of the summit-ridge was only a short distance away, and reaching it under good weather conditions would have required no more labour than one encounters in walking along a city street. Our danger was the intense cold and the difficulty of correctly retracing our steps through the storm. But the dome on which we stood was the summit of Mt. McKinley.’

The following day was clear, but we were in no condition to climb, however, for it was necessary to rest in order to regain our strength and also dry our outer clothing, which had become more or less coated with ice during the storm.

On July 1 we left camp about 3.30 A.M. and again climbed to an altitude of about 19,300 feet, but a high wind rose and the clouds gathered in a most threatening manner. After a considerable wait for better weather conditions the cold once more compelled us to return to camp. We then held an inventory, and, finding that we only had about three days’ food, since our pemmican was useless, decided to return to base camp with all possible speed. We left our high camp that afternoon and descended to our camp at 15,000 feet. The following day we reached the ‘ col camp ’ at 11,800 feet, and, after re-organising, made our way to a camp among the crevasses at the head of the ‘ Big Séracs.’ Next morning we descended to the foot of the séracs, where we were held all day by fog and snow.

Leaving here at 8.30 P.M. we had a terrible journey over the crevasses covered by the most treacherous of snow-bridges, in the dim night light, and threatened by avalanches from the cliffs above. Finally we emerged upon the water-covered



Swan Electric Engraving Co., Ltd.

CLIMBING N.E. RIDGE OF MT. MCKINLEY.
(Showing from 13,000 to 15,000 ft.)



Purker-Broune Expedition, photo.

SUMMIT OF MT. MCKINLEY,
from 19,000 ft.

glacier at the foot of the first séracs, and, making our way across this, arrived at 'Glacier Pass,' at 3 A.M. on July 4.

I think I can scarcely close this brief account better than with another quotation from a previous article by Mr. Browne: 'I will never forget the joy we felt at having earth and rock beneath our feet. It was the first time in twenty-eight days that our feet had rested on anything but snow and ice. On July 4 we staggered down the snow-filled pass on our way to base camp. La Voy and I were carrying packs of over eighty pounds, and in our weakened condition we made rough weather of it. But the joy of smelling green grass and flowers, and resting our aching eyes on the green mountain pastures repaid us for all our work. Where the snow melted into crystal streams we entered the green lowlands, and a herd of fifty caribou welcomed us to their country. The sun was going down in a sea of crimson when we neared our base camp. As we stumbled on, overcome with excitement, I kept wondering if Aten was safe, for much can happen in twenty-eight wilderness days.

'Above our camp on a round hill stood a large rock that overlooked the surrounding country, and as we strained our eyes ahead, we saw a figure against the sky, then a smaller shape—a dog—appeared, and our yells echoed down the valley! We were a happy crew that night!

'For several days we ate and rested, enjoying to the full the beauties of our wilderness home. But as the tender caribou meat brought back our strength, we began to long for the trail again, and on a sunny morning we sadly bade good-bye to our old camp and turned our faces northward—toward the Yukon.'

THE ASCENT OF STACK-NA-BIORRACH (THE POINTED STACK), ST. KILDA.

By RICHARD M. BARRINGTON.

'THE man who cannot climb it never gets a wife in St. Kilda.' So said Maclean in his 'Sketches of the Island of St. Kilda,' a scarce book, published in Glasgow 1838. In view of the fact that the natives of this remote island formerly subsisted largely on sea-birds and eggs, it is not unreasonable to suppose that a girl of St. Kilda, having in view her future welfare, should establish some sort of test whereby to judge her lover's ability as a climber.

Sir Robert Moray, in a paper communicated to the Royal Society in 1678, describes the dangers connected with the capture of sea-fowl by the men of Hirta on the apparently inaccessible Stacca Donna. There can be no doubt that this is the stack now called Stack-na-Biorrach.

'After they landed,' he says, 'a man having room but for one of his feet, he must climb up 12 or 16 fathoms high. Then he comes to a place where, having but room for his left foot and left hand, he must leap from thence to another place before him, which if he hit right the rest of the ascent is easie, and with a small cord which he carries with him he hales up a rope whereby all the rest come up. But if he misseth that footstep (as often times they do) he falls into the sea and the company takes him in by the small cord and he sits still until he is a little refreshed and then he tries it again; for everyone there is not able for that sport.' See *Phil. Trans.* p. 928.

Martin, in his 'Late Voyage to St. Kilda,' published in 1698, describes (p. 34) the ascent of 'the famous Rock *Stackdonn*, i.e. as much, in their Language, as a *Mischievous rock*, for it hath prov'd so to some of their Number, who perished in attempting to climb it; it is much of the Form and Height of a Steeple; there is a very great dexterity, and it is reckoned no small gallantry to climb this Rock, especially that part of it called the *Thumb*, which is so little, that of all the Parts of a Man's Body, the Thumb only can lay hold on it, and that must be only for the space of one Minute; during which time his Feet have no support, nor any part of his Body touch the Stone, except the Thumb, at which Minute he must jump by the help of his Thumb, and the Agility of his Body, concurring to raise him higher at the same time, to a sharp point of the Rock, which when he has got hold of, puts him above danger, and having a Rope about his Middle, that he casts down to the Boat, by the help of which he carries up as many Persons as are designed for Fowling at this time; the Foreman, or Principal Climber has the Reward of Four Fowls bestowed upon him above his proportion; and perhaps, one might think Four thousand too little to compensate so great a danger as this Man incurs; he has this advantage by it, that he is Recorded among their greatest Heroes; as are all the Foremen who lead the Van in getting up this *Mischievous Rock*.'

This quaint description was written 215 years ago, but every writer of importance on St. Kilda since that date has also mentioned this rock. Macaulay (grand-uncle of Lord Macaulay), in his 'History of St. Kilda,' 1764, appears to be the first to mention *Stacki-birach*, and says (p. 121) 'within a pistol shot of it lies *Stacki-don* or the Stack of no consequence, being the only rock within the territories of *Hirta* where the fowls do not hatch.' Then he says that *Stacki-birach* derives its name from 'ending in a spire.'

Seaton, in his 'St. Kilda, Past and Present,' 1878, which is the

most exhaustive account of the island yet published, does not allude to the confusion of names.

Heathcote, however, in his attractively illustrated book on St. Kilda, published in 1900, takes it for granted (p. 142) that the Stack referred to by Martin as '*Stackdunn*' was that which is now known as Stack-na-Biorrach.

Martin does not give the height, but Macaulay (p. 191) gives it as 40 feet; Maclean (p. 11) as 400 or 500 feet. Heathcote is, in my opinion, correct in putting it at 'about 240 feet.' Macaulay's 40 feet was perhaps intended for 400, as the old writers were given to exaggeration.

Heathcote appears to have been the only writer on St. Kilda who ascended any of the Stacks, all of which rise out of the ocean. He states (p. 134) that he has done a lot of climbing in Skye and a certain amount in Switzerland, and thinks he may claim to be a tolerable climber, and in this he is probably correct. For although he did not attempt Stack-na-Biorrach, which he says is the most difficult climb, he scaled Stack Lii, the height of which he gives as 533 feet, and the cover of his book is illustrated with a striking picture showing the commencement of the ascent. He failed to trace the story that in order to get a wife in St. Kilda it was necessary to climb Stack-na-Biorrach. In this his experience agrees with mine.

The truth is that, although not a necessity, it was looked upon as a great feat amongst the islanders, where for hundreds of years the chief food of the inhabitants was obtained from the lofty precipices and Stacks. In fact there is no part of the world, as far as I am aware, where the practical advantage of being a skilled cragsman was so well recognised. The chief topics of conversation in this out-of-the-way island are climbing and birds.

A visit to Switzerland in 1882, during which the Schreckhorn, Finsteraarhorn, Jungfrau and Matterhorn, and an equal number of high passes were negotiated within ten days ('Alpine Journal,' vol. xi. p. 181), and the fact that a certain rivalry existed between myself and an elder brother who first ascended the Eiger ('Alpine Journal,' vol. xi. p. 172), induced me to visit St. Kilda in 1883, as I wished to test the ability of the natives as cragsmen, to compare them with Swiss guides, and to study the fauna and flora of this remote island, of which little was then known.

It is thirty years ago next June since I ascended Stack-na-Biorrach, and therefore I trust I shall not be accused of hasty self-advertisement; indeed, my chief object in writing is to give the members of the Alpine Club an account of a climb which the older writers have attempted to describe on second-hand information; and, moreover, I fear that even the St. Kildans themselves will soon cease to ascend the rock, as they no longer subsist to the same extent on sea-birds and there is not the same necessity for dangerous rock-climbing.

But I have not yet described the St. Kilda group, which lies about fifty miles west of the Sound of Harris, and about one hundred west of the Scottish mainland.

It consists of one large island, three miles long and two broad, rising to a height of 1372 feet, and two smaller ones—Soa and Borera, each about 1200 feet in height, and three Stacks—Stack-an-Armin, Stack Lii, and Stack-na-Biorrach, besides smaller rocks.

Formerly communication with the mainland was of rare occurrence. Lady Grange was conveyed there in 1734, and was not released for eight years. Since David McBrain's steamers began running there, from thirty to forty years ago, intercourse with the outer world in summer time has been frequent, if uncertain.

Fearing I might be left on the island all the winter, I arranged with McBrain to send a special steamer to take me off in September for the sum of £30. There was no necessity to take advantage of this arrangement, as his ordinary steamer took me off in good time. Not knowing Gaelic, I brought an interpreter with me from Glasgow, but, as he was afraid to go within ten yards of any cliff and did not understand the St. Kilda dialect, he was useless, save as caretaker of an old Crimean tent which we pitched on the only level patch (about ten yards square) near the landing-place.

The natives could not speak a word of English, and it was nearly a fortnight before they permitted me to accompany them in catching fulmar petrels on the ledges along the face of the great Connacher (1200 feet). They wanted to test my ability. I remember one day walking along its edge and seeing a stout stick firmly embedded in the earth about three yards from the face, with a rope round it. I was sure someone was below catching birds, so descending about 100 feet I came upon another rope, also fastened round a stick, embedded in the next ledge. This I also descended and came to a second ledge on which two men roped together were busy catching birds with long fishing-rods, to the end of which horse-hair nooses were attached. Having obtained permission to try my hand and being rewarded with success, the natives became very friendly. Of course I had my boots off. If you don't take them off it is done for you compulsorily. For, on another occasion, after landing on the island of Borera and proceeding to climb without removing them, I felt myself pulled down from behind, one of the islanders grasping my arms and waist together while the other proceeded to unlace my boots.

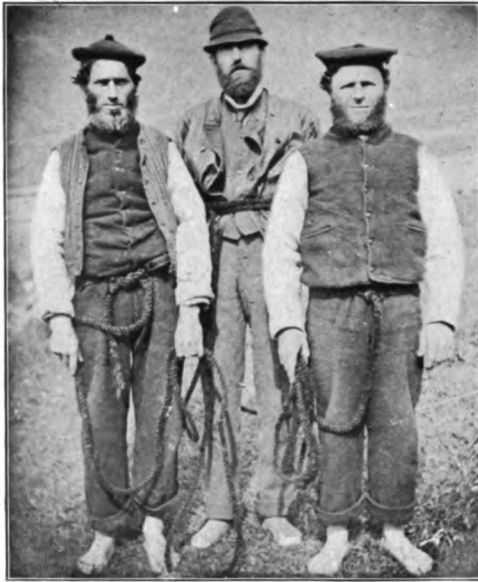
The ropes by which the men descended the Connacher cliff were of hemp and rather heavy, but the line between the two men on the ledge was made of horse-hair and was light. In 1883 there were no horses on St. Kilda, but many cows.

Martin, in 1698, said there were only three ropes in the whole island, each 24 fathoms long. 'The chief thing,' he says, 'upon which the strength of these ropes depends is cow-hides, salted, and

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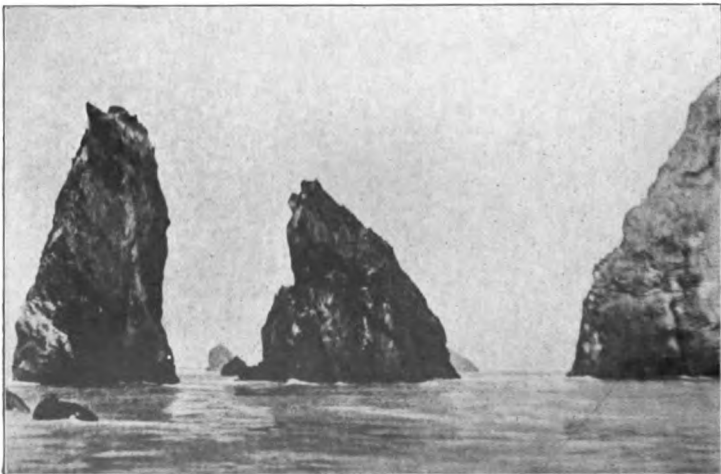
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Arthur Barrington, photo.

1. Dena'd McDonald.
2. R. M. Barrington.
3. Donald McQueen.



Richard Kearton, photo.

Swan Electric Engraving Co., Ltd.

STAC A' BIORACH.

(Shown to the left.)

Reproduced by permission of Cassell & Co., from
"With Nature and a Camera." by Richard Kearton.

cut out in one long piece. This they twist round the ordinary rope of hemp, which secures it from being cut by the rocks.'

Macaulay says (1764) that 'a rope is the most valuable implement that a man of substance can be possessed of in St. Kilda. In his will he makes it the very first article in favour of his eldest son,' and 'it was reckoned equal in value to the two best cows on the island.'

The rope alluded to by Macaulay appears to have been made entirely of cow-hide.

I brought two Alpine Club ropes with me, the red central thread being regarded as a great curiosity by the natives. They would use neither of them. But they were very useful when attached to the top of the tent, preventing it from being blown into the sea on two very stormy days.

After repeated entreaties, and when the natives had tested my ability in various ways, they consented to bring me to Stack-na-Biorrach. The wind was light, and the entire able-bodied population assisted in pushing the boat over the rocks into the sea. During this operation a crowd of about twenty dogs barked furiously.

There were eight rowers, my nephew, and myself in the boat.

The natives are very religious, and a prayer was said before starting. We rowed round the Doon and under the tremendous cliffs of the western face of St. Kilda, the great Atlantic swell making a white fringe along the rocks and booming in the great caves. In about an hour's time we came to a narrow sound between the island of Soa and the large island, and the boat unexpectedly stopped before a perpendicular and in some places overhanging Stack, which looked to me absolutely inaccessible. The men talked in Gaelic, not a word of which I understood. One of them put a horse-hair rope around his waist. I could not imagine what they intended to do. For to ascend the rock immediately opposite appeared an utter impossibility, and my heart sank within me when they shouted 'Stack-na-Biorrach, Stack-na-Biorrach!'

Donald McDonald, the man with the horse-hair rope round his waist, stood in the bow of the boat. Another man held the rope slack, and, watching his opportunity as the boat rose on the top of a swell, McDonald jumped on a small ledge of slimy seaweed below high-water mark. There was a momentary stagger, but he kept his balance, and fastened himself to the rock by holding on apparently to the barnacles with which it was covered. He then proceeded upwards by sticking his fingers and toes into small wind-worn cavities on the western face. The rope was gradually slackened, and at a height of about thirty feet he turned to the east, getting on a small narrow ledge, unseen from below, which could not have been more than two or three inches wide. The whole of this performance was remarkable, especially having regard to its surroundings, the steeple-like rock rising from the ocean off the very wildest part of this remote island, the boatmen shouting in Gaelic

to the climber, the great surge of the Atlantic threatening every moment to drive us against the cliff, and the horse-hair rope alternately slack and tightened as the boat rose and fell.

At a height of about 30 or 40 feet McDonald stood on a projecting knob, about two feet square, right over the boat. He hauled up another rope and fastened it round the knob. There were now two ropes to the boat. Donald McQueen, tapped me on the shoulder and explained by signs that I was to ascend, boots of course being first taken off. At that time I could ascend a rope easily hand over hand; the swaying of it between the boat and the cliff made it less perpendicular at intervals and therefore easier, and I soon stood on the knob beside McDonald. I recollect every incident as if it only happened yesterday.

He pressed me against the face of the cliff, and, to my horror, Donald McQueen now proceeded to ascend the rope. For the life of me I did not know where he was going to stand, and to this day I am puzzled to know how we three men contrived to stand on this projection. Fearing every moment that I would fall, I shouted to pull the boat from the rock, so that in case of accident I should drop into the sea, and not into the boat from a distance of about 40 feet. McQueen now put the rope round his waist and took the lead up a ledge two feet wide, wet with spray, which sloped at a very steep angle upwards. Having ascended this he grasped a narrow horizontal ledge about four inches wide and sloping outwards, so that the fingers slipped readily, and, with his feet dangling in the air, proceeded to jerk himself along this ledge by getting a fresh hold every time with each hand alternately. It was about 15 feet long. McDonald held the horse-hair rope which was round McQueen's waist in his hand. This, no doubt, gave him a false sense of security, but otherwise was absolutely useless, for, had McQueen fallen, they would have both tumbled into the sea.

McQueen now stood on another projection of a more satisfactory character than the first, about 70 feet over the sea, and beckoned me to follow him. The horse-hair rope was placed round my waist, and with McQueen on one side and McDonald on the other, holding the rope, I proceeded along the ledge, dangling without any foothold. Had it not been slippery with the droppings of guillemots I might have succeeded, but when midway I slipped, and, unable to recover my grip, would have fallen had not the two men simultaneously tightened the horse-hair rope with a powerful jerk, raising me a foot, during which I caught sight of a small lump sticking up, and, grasping this anxiously with one hand, was soon safely landed by McQueen at his end of the ledge.

Whether this slight projection, which really makes this traverse possible, was the *Thumb* referred to by Martin more than 215 years ago I cannot say.

McDonald now came along with apparent ease, and we all stood

together for the second time. There was more room here, but the cliff above was overhanging and I was curious to see what would happen next.

The rope was unloosed from everybody, and one of the men made a lasso of it and proceeded to throw it round a projection about 14 feet overhead.

After five or six failures it was successfully lassoed and the rope tested by vigorous pulls to see whether it would give way. Having satisfied themselves that it was secure McQueen ascended, I followed, and then McDonald, all hand over hand. We were now about 80 feet above the water, and as the Stack was no longer perpendicular or overhanging I shall not give minute details of the remainder of the climb, which was not more difficult than many first-class Clubmen could contend with. It was interesting, however, and the view from the top was very fine. Hundreds, almost thousands, of guillemots scurried and fluttered or flew into the ocean below. The top was not flat, like the pinnacles on Farne Islands, but weather-worn and uneven.

My thoughts were not, I fear, ornithological, but rather concentrated on the problem 'How shall I ever get down?' However, the descent was accomplished with less assistance than the ascent, and I caught the *Thumb* this time. The boatmen exclaimed '*Saulia*,' which, being interpreted to me, signified that I was a great climber, like a famous St. Kildan of that name.

The best photograph I have seen of Stack-na-Biorrach faces page 124 in Kearton's well-known and beautiful book 'With Nature and a Camera,' published in 1902. It is the left-hand Stack in that photograph. Even still, although the people on the island are getting spoiled by visitors, St. Kilda and its inhabitants are full of interest. I do not know whether either of the men who accompanied me in the ascent of Stack-na-Biorrach is alive.

My nephew took a photograph of us after we returned, which is here reproduced. It shows exactly how we were attired for the climb, horse-hair rope and all.

Thirty years ago there was no Ordnance sheet of St. Kilda, and I believe none has yet been made. The best maps I know of are the Admiralty chart and the map at the end of Heathcote's book.

The ankles of the natives are tremendously developed. Kearton, who is a powerful man, gives in his book a photograph of his own ankle and that of a native.

The flowering plants of the island are dealt with in a paper I contributed to the 'Journal of Botany' in 1886, and the list has since been extended by other writers.

As to the birds, St. Kilda was one of the last refuges of the Great Auk, now long extinct, and it has a special interest as the home of a wren which differs somewhat from that on the mainland of Scotland and the adjoining Hebrides. One object in going was to obtain this bird, but I unfortunately forgot to bring small shot, and every

specimen fired at escaped. (See 'Zoologist' third series, vol. viii., p. 383.)

The following year (1884) I met the late Mr. Henry Seebohm, author of a well-known book on British Birds in Montreal, and told him I thought the St. Kilda wren was worth looking after. In the following year he sent Mr. Dixon there, who obtained the wren, and Seebohm immediately described it as a new British bird, *Troglodytes hirtensis*.

Heathcote, at the end of his book, hopes that he has deterred most people from going to St. Kilda. I am afraid his interesting volume will have exactly the opposite effect, but I do not expect his happy hunting-grounds, as he expresses it, will ever be 'invaded by a host of Sassenachs.'

My last visit to St. Kilda, in 1896, was very brief, and was made when returning from an expedition to the still more remote island of Rockall,* 170 miles further west in the Atlantic; nobody has, I believe, been able to land on this island for over half a century. I saw Donald McDonald, then looking very poorly, and believe Donald McQueen was dead, for I could not find him.

THE GROWTH OF A LEGEND ; OR, PACCARD *v.* BALMAT.†

By DOUGLAS W. FRESHFIELD.

It has been a matter of dispute from the beginning in what proportion the credit of the first ascent of Mont Blanc was to be shared, or divided, between the two men who took part in it. Both were born Chamoniards—Paccard, the village doctor, a man of intelligence and some scientific attainments, and Jacques Balmat, a sturdy peasant and crystal-hunter of an adventurous spirit. The story till lately current, according to which Dr. Paccard played an altogether secondary part, was first given a European currency by the famous romancer, Alexandre Dumas *père*. In his 'Swiss Travels' he describes at length how in 1832, anticipating the modern interviewer, he invited Balmat to supper, and over his wine induced the old man to pour out the tale of his forty-six years' old adventure.

Dr. Dübi has, in the volume before us, set out the details of an attempt made with infinite pains to investigate the existing evidence for and against this story as repeated, or embellished, by Dumas. His researches, coupled with those of a member of our Club, to whom he repeatedly acknowledges his indebtedness (Mr. Montagnier),

* See *Transactions Roy. Irish Academy*, Aug. 1897.

† *Paccard wider Balmat : oder Die Entwicklung einer Legende, ein Beitrag zur Besteigungsgeschichte des Mont Blanc.* Von Dr. HEINRICH DÜBI. Bern : A. Francko. 1913.

have added largely to this evidence. The result of their joint labours is aptly expressed in Dr. Dübi's sub-title, 'The Growth of a Legend.'

It can hardly be needful for me to repeat here the well-known tale. I have already done so once in these pages (A.J. vol. xix., pp. 341-9). We were asked to believe that it was to Balmat alone that was due the discovery, or adoption, of the route taken; the climb from the Grands Mulets up the snow-valley and across the Petit Plateau, the forcing of the 'ancien passage'; that Balmat reached the top of Mt. Blanc alone, and then returned to drag his exhausted companion up the final slope.

But how, the reader may well ask, can such a controversy be definitely solved one hundred and twenty-seven years after the event? The answer supplied by Dr. Dübi is simple and satisfactory. He has the good fortune to be able to put before us the diary, written at the time, of a disinterested eyewitness. This witness is the Baron von Gersdorf, a German traveller of repute who was at Chamonix on the day of the first ascent, watched with a telescope from the upper part of the village the climbers' progress, and made exact notes which he illustrated by diagrams of the route taken. The following is the crucial sentence: 'They started again (from the Petits Rochers Rouges) at 5.45 p.m., halted for a moment about every hundred yards, *changed occasionally the leadership* (the italics are mine), at 6.12 p.m. gained two rocks protruding from the snow, and at 6.23 p.m. were on the actual summit.' It may be well to quote the original: 'Von da' (the Petits Rochers Rouges) 'brachen sie wieder auf um 5.45, ruhten nach ungefähr 100 Schritten immer einen Augenblick aus, wechselten mit einander in Vorausgehen manchmal ab, kamen um 6.12 bei zwei durch den Schnee ausstechenden kleinen Felsen vorbei, und kamen um 6.23 auf dem höchsten Gipfel an . . . Sie verliessen den Gipfel um 6.57 und waren laufend schon in 6 minuten bei dem untern einzelnen Felsen.'

Von Gersdorf had a companion, von Meyer, and they both, at the request of Dr. Paccard's father, who was a notary at Chamonix, signed a certificate of what they had seen, which is still preserved at Chamonix. Von Gersdorf's sketches of the route taken by the climbers were handed to and used by de Saussure. Von Gersdorf's diary was found at Görlitz, where his correspondence has been preserved in a public library. The various steps by which Dr. Dübi was set upon this track are fully set out in his introductory chapter. One fortunate link was the fact that von Gersdorf was a frequent correspondent of Herr Wyttenbach of Bern, a Swiss savant whose biography Dr. Dübi has recently written.

This conclusive testimony of trustworthy and impartial witnesses ought to demolish once for all the Dumas version, to which, by his too ready acceptance of it in his work on Mont Blanc, M. Durier had given a renewed currency. It justifies all the doubts and scepticism expressed by C. E. Mathews, Mr. Gribble, and myself in recent years. The legend, promulgated by the ready pen of the

prince of storytellers, must be finally abandoned. Henceforth Paccard must share at least an equal fame with his companion.

But from what sources did the legend spring? Dr. Dübi, with unflagging industry, traces it back to its very birth. It had its first origin in the brain of a man who had, in de Saussure's own words, 'even more than myself set his heart on the conquest of Mt. Blanc,' the self-styled 'historiographer of the Alps'—the indefatigable and irrepressible Marc Theodore Bourrit. The fact that Mt. Blanc had been conquered by another, and that other, like himself, an amateur, he resented as an outrage; he regarded his too successful rival as a 'trompeur ou voleur' (Dübi, p. 87). His only solace lay in attributing all the credit to Balmat, and disparaging, as far as possible, the part played by Paccard.

The character of Bourrit offers an entertaining and somewhat perplexing study to the biographer. I tried my hand at drawing his portrait many years ago ('A.J.' vol. ix. p. 11). Attracted by his enthusiasm for the Alps, by his pathetic efforts despite frequent failures to become a climber, I was disposed to touch lightly on his lesser faults, his exuberance, his exaggerations, his naïve vanity. The full evidence of the snares into which that vanity led him was still unrevealed.

By profession a precentor in the cathedral at Geneva, by taste an artist, it was Bourrit's ambition to be regarded and treated as one of the leading explorers of the Alps. He succeeded in so far that distinguished strangers came to his studio and bought his books, and that Goethe described him as 'ein passionirter Kletterer.' He had enough sense to recognise that he could not compete with de Saussure, who was equally his superior in station, in talents, and in means; but in his special field he would brook no other rival. His treatment of Bordier, to which I referred in my article on the Buet quoted above, was more characteristic of the man than I then knew. It illustrates and explains his treatment of Dr. Paccard.

No sooner had the news of the first ascent of Mt. Blanc reached him than, true to his assumed post as 'historiographer of the Alps,' he determined not only to write about it, which was natural, but to write about it in such a way as to disparage Dr. Paccard's part in the exploit, and to injure his prospect of getting subscribers to an account of the famous adventure. To this end he prepared his now notorious letter of September 20, 1786. It was first published as a pamphlet at Geneva, and afterwards in the *Mercure de France* and other newspapers. Here he lays the foundation of the legend. This is what he told his readers: 'By 3 P.M. the climbers were in straits. The Doctor began to lose his breath, his knees grew stiff, the cold incapacitated him; his companion, better trained and harder, encouraged him. A crest came in view. Was it the summit? Balmat sprang in front, reached the top, shouted to his companion, then went back and helped him up.' Now follows this sentence, the motive

of which is only too evident : ' J'apprends déjà que M. le Médecin Pacard [*sic*] espère tirer des fruits de sa course, qu'il s'est fait annoncer à Lausanne et s'y est fait voir comme le Conquérant du Mont Blanc, dont il promet une description pour laquelle il fait déjà souscrire ; tandis que le pauvre Balmat, à qui l'on doit cette découverte, reste presque ignoré, et ignore qu'il y ait des journalistes, des journaux, et que l'on puisse par le moyen de ces trompettes littéraires obtenir du Public une sorte d'admiration.'

De Saussure, on hearing from Tairraz, the Chamonix innkeeper, the first news of the ascent, had written thanking him for announcing ' l'heureux succès de l'expédition de M. le Docteur Paccard.' His action on seeing an early copy of Bourrit's effusion was consistent with the view thus clearly expressed. He seems to have protested, and warned Bourrit he might expose himself to an inconvenient reply. Bourrit consequently added a postscript, in which he apologised to a certain extent for his reproduction of Balmat's story, and referred in a different and more appreciative tone to Dr. Paccard's promised work. An anonymous reply to Bourrit, giving Paccard's version of the ascent, and probably founded on notes communicated by him to the Editor, appeared in the *Journal de Lausanne* on February 24, 1787. This quickly (February 28) drew Bourrit, who, I regret to say, in order to confirm Balmat's story, resorted to an untruth, now brought to light : he wrote as follows : ' Balmat's story seems very natural . . . and is further confirmed by an eyewitness, M. le Baron de Gersdorf, who watched the climbers through his glasses, and this stranger was so shocked at the indifference (to use no stronger word) shown by M. Paccard to his companion that he has reprinted my letter in his own country in order to start a subscription in favour of poor Balmat.'

We know fortunately from the traveller himself what he did see through his glasses ; and Baron von Gersdorf promptly wrote to Paccard disclaiming altogether the motive assigned for his action in raising a subscription.

Paccard's reply to this fresh attack was to publish in the *Journal de Lausanne* of May 18 following two affidavits by Balmat. The first was sworn in the preceding October, in the presence of two witnesses who countersigned it ; the other was dated March 1787. In the former, Balmat not only gives credit to the doctor as the planner of the expedition and as having taken a full share of its labours ; he acknowledges also that he had been fed and paid by the doctor, and received from him, besides his wage, a present given by von Gersdorf. This document has perished. The second, which is still in existence and of which a facsimile is given by Dr. Dübi, is entirely in Balmat's own handwriting. It again attests the payments made to him and thereby contradicts Bourrit's repeated statement, alleged to be made on Balmat's authority, that the latter accompanied Paccard as a volunteer and refused an *écu de six livres* offered him as payment for his services.

An effort was subsequently made by Balmat to disparage these fatal documents ; he alleged that in the first case he had signed a blank sheet. I agree with Dr. Dübi that this tale, which was never apparently put into writing, is inconsistent with the facts ; Balmat was the reverse of a fool, and the document was written on stamped official paper and signed by Balmat and countersigned by two witnesses.

We have from two quarters—Gosse's papers (very *dissecta membra*) and the diary of Bourrit's son—an account of 'a regrettable incident' arising out of this dispute. Monday, July 10, 1787, was a wet and cold day ; Balmat and others of his family were drinking at Couteran's wine-shop near the bridge at Chamonix ; some of Paccard's relatives were there too. Words waxed high, the disputants went out intending to go to the doctor's. They met him in the street ; Balmat addressed some remark to him, the reply was a blow on the nose from the doctor's umbrella which laid Balmat on the ground.

De Saussure, who had arrived at Chamonix the same day, did his best to mend matters. Balmat was able next morning to give an account of the affair to Bourrit's son—an ingenuous youth whose diary has fallen into Mr. Montagnier's hands. Balmat is not recorded to have ever repeated his assertion as to the blank document. The conclusive evidence against it is, however, Bourrit's silence on the subject in the *Journal de Lausanne* and elsewhere. He would have jumped at such an opportunity to discredit the doctor had he had any hope of proving his case.

We are forced, then, to the conclusion that it was through Bourrit's mischievous intervention that strained relations, culminating in this petty strife, were first created between the two conquerors of Mt. Blanc. We have, further, Paccard's own statement that it was owing to the prejudice created by Bourrit's letter, not confined to Geneva, but already circulated in Germany, France, Holland, and England, that the doctor failed in the subscription for his proposed book. That it was never published may, I think, now be taken as proved. Further records indicate that Paccard at a later date proposed to incorporate the material in a larger volume, which also never saw the light.

But there still remains a puzzling inconsistency in Bourrit's conduct towards his companion. In after years we find Bourrit writing in his 'Description des Cols ou Passages des Alpes (1803)': 'Although M. Bourrit procured for Jacques Balmat recompenses from subscribers in Germany, from the King of Sardinia, and M. de Saussure, it is none the less true that Dr. Paccard should share in the glory of this Chamoniard, even if, as we have reason to believe, he was not its first cause (si même, comme nous avons des raisons de croire, il n'en a pas été la première cause).'

How is this marked change of attitude to be accounted for ? Did it arise from a tardy sense of justice ? I should like to think so, for

one cannot help feeling a tenderness for the old 'Historiographer.' But I regret to say the Gersdorf correspondence suggests quite another explanation.

In 1791 we find Bourrit behindhand in delivering coloured plates that had been already paid for. Next year Balmat wrote to von Gersdorf complaining that Bourrit was still holding back a large part of the money subscribed for him in Germany. Von Gersdorf wrote to Bourrit with polite severity, calling on him to hand over the money to Balmat. The reply to the first complaint, written for Bourrit by a primary schoolmaster, is a plea of illness and poverty. To the second and more serious one no reply has been preserved.

It is fair to state that Bourrit, in his letter to Miss Craven, written in 1787, asserts that he has paid to Balmat these seventeen louis. Bourrit writes seventeen, but the exact sum was something over sixteen. (Dübi, pp. 92 and 111.) Did he take the intention for the deed? Let us be more than generous, and assume the contrary. But, whether or not the money was duly paid, the fact that Balmat had written to von Gersdorf, complaining of Bourrit's withholding it, supplies a very sufficient reason for the latter's altered language as to his accuser.

The judgment of a contemporary is against Bourrit. Wytenbach, the Bernese savant, to whom von Gersdorf communicated the charge, writes back in terms of unmeasured harshness, alleging that 'all who know him realise Bourrit to be a conceited toad, a flighty fool, a bombastic swaggerer,' and threatening to let de Saussure, Pictet, Tollet, Jorine, and Gosse—all Geneva—know of his misappropriation, should he not forthwith deliver the prepaid plates.

I turn with relief to the kinder, and, I think, more discerning verdict pronounced by the celebrated Bonnet: 'Les Voyages aux Alpes de notre Bourrit ne sont au fond que des peintures; cet homme, chantre de notre Cathédrale, qui a ses talents pour la musique et le dessin, n'est ni physicien, ni naturaliste, et son imagination est toujours en effervescence. Il faut néanmoins lui tenir compte de son ardeur et de son courage.' With these words let us leave 'notre Bourrit'; for by his passion for the mountains he remains one of us.

The main purpose of Dr. Dübi's book is to put before us the character and relations of these three men, Bourrit, Balmat, and Paccard. We have discussed the first; Balmat and Paccard have yet to be brought up for judgment. Dr. Dübi prints an anonymous appreciation of Balmat which he attributes to de Saussure's grandson, the late M. Henri de Saussure. In any case it reproduces very exactly what M. de Saussure told me in 1891: 'C'est uniquement l'apport d'une forte somme promise par M. H. B. de Saussure qui a fini par conduire Balmat à la cime du Mont Blanc. Il a plus qu'une fois renoncé à poursuivre son escalade parce qu'il se voyait suivre par d'autres guides. Toujours âpre au gain, il redoutait avant tout d'avoir à partager avec d'autres non l'honneur, mais l'argent. On retrouve dans Balmat le type le plus accentué du Savoyard à

l'esprit étroitement intéressé. S'il a fini par s'associer au Dr. Paccard c'est que celui-ci ne réclamait rien pour sa part.'

Last we come to Dr. Paccard. Everything we know of him—unless we except that fracas in the street—is to his credit. His scientific attainments were undoubtedly insignificant compared with those of a Bonnet or a de Saussure. Yet he was a member of the Academy of Turin, he contributed articles to a scientific periodical published in Paris, he corresponded with de Saussure about his barometrical observations. He is described by a visitor to Chamonix in 1788 in the following terms : ' We also visited Dr. Paccard, who gave us a very plain and modest account of his ascent of Mt. Blanc, for which bold undertaking he does not seem to assume to himself any particular merit, but asserts that anyone with like physical powers might have performed the task equally well. He is at present employed in a work upon the glaciers which will contain the results of many years' examination into their origin : from an intelligent man who lives at their very foot and can observe them at every season we may reasonably be led to expect something satisfactory relative to so important and curious a subject.' Paccard's diary, now in the possession of the Club, shows him to have been a competent botanist.

I have cited M. Henri de Saussure as a witness in Balmat's case. I may refer to his testimony with regard to Paccard, equally emphatic, which may be read in my paper ('A.J.' vol. xix. p. 347). It appears to me conclusive. The traditions directly handed down in the de Saussure family seem the best of all evidence on the matters in question.

Apart from its main purpose the curious reader may find much varied matter in Dr. Dübi's entertaining volume. There are long strings of rhymes (I will not call them poems) addressed to the climbers. One of the rhymes celebrates de Saussure; another depreciates him in order to extol Balmat and Paccard. Their authors, after a fashion not yet extinct, bandy about personal names, and endeavour, fortunately in vain, to affix them to the great mountain.

' Mortels, ne courez pas après un vain renom,
L'injustice et l'erreur maîtrisent la Nature,
Vespuce à l'Amérique a su donner son nom,
Et le Mont Paccard est nommé le Mont Saussure.'

Americans, take warning, and at any rate confine yourselves to your own continent and your own citizens! Personal nomenclature, applied to mountains, is a snare resented by none more than by those who have been among its unwilling victims.

With regard to the relative and at first sight contradictory claims of Paccard and Balmat to the *discovery* of the route taken in the ascents of Mont Blanc prior to the coming into use of the Corridor and Mur de la Côte, I find nothing in the documents collected by Herr Dübi to modify the conclusion I came to in my previous article

(‘A.J.’ vol. xix.)—to which I would again refer readers. For a summary of the parts played by Paccard and Balmat respectively in the various explorations and attempts made previous to the successful ascent they must turn to Dr. Dübi’s volume, pp. 43–4. It shows that Paccard came earliest into the field and was the more enterprising of the two.

It may be convenient if I take this occasion to supply here, where it may catch the eyes of those who are interested in matters relating to Mont Blanc and its early ascents, a correction of a very surprising statement contained in ‘The Diary of Frances Lady Shelley,’ published last year. It is to the effect that Sir John Shelley, the lady’s husband, *climbed Mont Blanc with de Saussure.* Mr. Edgcumbe, the editor, has been good enough to furnish me with the original sentence in his grandmother’s Diary, which he has paraphrased in his text. It runs as follows :

‘In 1787 he (Sir J. Shelley) passed through Paris on his way to a private tutor at Geneva, the celebrated Professor Pictet, the friend of de Saussure. Here . . . he gained practical knowledge, ascending to the Dome of Mont Blanc with de Saussure.’

In a letter Mr. Edgcumbe adds : ‘Sir John was only seventeen years of age at the time of de Saussure’s ascent and his name was probably not even known to those who wrote an official account of that ascent. I have no doubt in my mind of the truth of Lady Shelley’s statement.’

He repeats the assertion in a ‘sixth imprint,’ and thereby compels me to point out its incredible character. As all Alpine climbers know, De Saussure’s ascent of Mt. Blanc has been described in very minute detail both by himself and others, and the presence in his party of an English lad could not possibly have passed unrecorded ; nor is there any entry in the annals of Mt. Blanc of the 18th century that can be made to support the statement that Sir John Shelley ever climbed the mountain. It seems to me obvious that Lady Shelley must have put down in her Diary some confused recollection of conversations as to her husband’s early years and exploits. Sir John, between 1787 and 1790, while Pictet’s pupil, was probably among the visitors to Chamonix. Possibly some reference to him, or to an excursion of which he may have spoken afterwards, may turn up in the Pictet papers ; but there was no successful ascent of Mt. Blanc between 1788 and 1802. According to Ebel’s ‘Voyageur en Suisse’ (vol. iii. article ‘Mont Blanc’) four Englishmen, however, attempted an ascent in 1792. They got no farther than the Montagne de la Côte—the ridge dividing the Bossons and Taconnay Glaciers—owing to a fall of rocks which more or less seriously injured two members of the party and some of their guides. Sir J. Shelley, however, was not of this party, for he returned to England in 1790, a date fixed by his having been present at the famous Federation in the Champ de Mars on his way home.

IN MEMORIAM.

EDWARD ADRIAN WILSON.

I.

EDWARD ADRIAN WILSON, M.B., F.Z.S., was born in 1872 and was the son of Dr. E. T. Wilson, a leading physician of Cheltenham. He was educated as a day-boy at Cheltenham College, where his inherited love of nature and scientific pursuits rapidly showed themselves; he was popular with his school-fellows, but probably the happiest moments of his school-life were the holidays spent in sketching and hunting for flowers and birds and beasts on the Cotteswold Hills. On leaving Cheltenham he went up to Caius College, Cambridge, to study Science and Medicine, and in 1894 he took a first class in the Natural Science Tripos, Part I. He rowed in his college boat and made many good friends alike among dons and undergraduates at Cambridge.

After this he studied at St. George's Hospital, but the strain of his medical work, added to self-imposed labour among the poor at the Caius College Mission in Battersea, ended in an acute attack of tuberculosis, and in 1898 he was advised to spend a year in Switzerland and a couple of summers in Norway, where his taste for nature studies and painting, especially of birds, again found delightful exercise. In 1900 he took his M.B. at Cambridge. It was at Battersea that he first met his future wife, Miss Oriana Souper, whose devoted affection and practical sympathy in his work contributed to an ideal union.

Dr. Wilson was just rejoicing in his complete recovery of health and renewed power of work when a mutual friend, who found him painting animals at the Zoo (he was already an F.Z.S.), brought about the introduction to Captain Scott, which proved the beginning of a loyal comradeship, only to close on earth with their heroic death together twelve years later.

He was married in July 1901, and the same month he sailed with Captain Scott for the Antarctic as second medical officer, vertebrate zoologist, and artist to the *Discovery* expedition. Captain Scott was a good judge of men, and in Edward Wilson he secured a man just suited to the work in hand. Dr. Wilson was highly qualified in medicine and surgery; he was a good zoologist, and a first-rate all-round naturalist; he was a very accurate draughtsman and a delightful water-colour painter; but, above all, his charming personality and cheerful disposition, his unruffled temper, his untiring readiness to turn his hand to anything, however unpleasant, that was to be done, made him an invaluable colleague for an expedition where health and good spirits during the dark winter months were as important as hard work during the summer.



E. T. Wilson, photo., 1910.

Swan Electric Engraving Co., Ltd.

EDWARD ADRIAN WILSON.

Born, Cheltenham, 1872.

Died on return journey from South Pole, 1912.

It is needless to set out here the story of that first Antarctic adventure which is told so admirably in Captain Scott's 'Voyage of the *Discovery*' (1905) and illustrated by some of Dr. Wilson's paintings; but it will be remembered how in their southern sledge journey Captain Scott, Dr. Wilson, and Sir E. Shackleton reached 82°17' S. (some 420 miles from the South Pole), and how, owing to their companion's breakdown, Captain Scott and Dr. Wilson had great difficulty in getting back to the headquarters. Some idea of the zoological work done mainly by Dr. Wilson on that expedition may be gained from the able appendix which he contributed to Captain Scott's book.

On his return to England in 1904, Dr. Wilson took a studio at Bushey and spent much time in finishing his paintings and arranging at the Natural History Museum the specimens brought home by the expedition, as well as in editing a volume of photographs and drawings for the Royal Society; and those who visited the Exhibition of *Discovery* Pictures and Photographs will not have forgotten his clear and delicate water-colours, some of them showing singularly beautiful effects of Antarctic sunset and aurora australis. Other work of his, in lighter vein, is to be found in the *South Polar Times*, the journal which was published by the members of the expedition for their own entertainment during the Antarctic winter, and which has since been well reproduced. He also delivered a series of lectures, at public schools and elsewhere, in which his power of lucid description, his occasional touches of humour, and his admirable pictures—especially of the Emperor penguins—won much appreciation.

In 1906 he was appointed field observer to the Grouse Commission, a task exactly suited to his well-trained powers of observation and scientific investigation, and the success of the Commission in diagnosing the cause of the grouse disease (in which Wilson had a large share) is to be read of in the Report issued in 1911 on 'The Grouse in Health and Disease,' largely illustrated by Dr. Wilson's careful diagrams and pictures, which he did not live to see in their completed state. Another work that occupied his busy pencil and brush at this time was the illustration of Barrett Hamilton's work (now in course of publication) on the British Mammalia. Thus the six years that elapsed between the two Antarctic expeditions were full of the happiest domestic life, often with his parents and family at Cheltenham, often travelling with his wife—who, alike in the studio, camping out on a grouse moor, or observing the grey seal on the west coast of Ireland, was his inseparable companion and most efficient helper.

In 1909 came an urgent invitation from Captain Scott to join him in a second expedition to the Antarctic, as head of his scientific staff. The spell of the Antarctic was upon him: Dr. Wilson accepted at once, and from that moment he became Captain Scott's chief and trusted adviser. Henceforth his time was fully occupied with

preparations for the expedition in which he was able to give much help. Such details as sledges, clothing, foods, snow goggles, and the like had all to be carefully considered and tested in the light of previous experience. Furthermore, as it was hoped that the *Terra Nova* might fall in with some whales in the Southern Seas, Dr. Wilson spent three weeks of the precious time that remained before the start roughing it aboard a 'whaler' off the Shetlands, in order to learn the use of the whaling tackle which had been presented to the expedition.

The *Terra Nova* sailed from Cardiff on June 15, 1910, and the remainder of the story is already well known in outline, and will doubtless be of great interest when the careful records of the expedition are published. And, among these, Dr. Wilson's journey with two comrades (one of whom, alas!—Lieutenant Bowers—perished with him) to the Emperor penguin rookery at Cape Crozier in the Antarctic mid-winter of 1911, will furnish a tale of endurance in the cause of pure knowledge hardly to be surpassed in the history of science.

The final Southern advance party, consisting of Captain Scott, Dr. Wilson, Lieutenant Bowers, Captain Oates, and the seaman Evans, started on Nov. 2, 1911, and reached the South Pole on January 18, 1912. It is unnecessary here to tell again the tragic story of the return journey—their heroic struggle against difficulties of every kind: the sick companions, the shortage of fuel, the persistent bad weather, the unusually low temperatures—it is told best and simplest in Captain Scott's last message, which breathes the spirit of his companion of two expeditions no less than of himself.

Dr. Wilson died with Captain Scott and Lieutenant Bowers about March 29, 1912, of cold and privation, 155 miles from the headquarters at Cape Evans, and their surviving comrades buried them there six months later in the Antarctic ice of the Great Barrier, whose secrets they have done so much to reveal. Edward Wilson was a man of singularly lovable character; modest and retiring by nature, he was utterly unselfish and unassuming; yet everyone who was fortunate enough to know him liked him, and was impressed by his goodness and simplicity no less than by his mental capacity and artistic skill. The basis of his character was a firm Christian faith. He was only in his fortieth year when he died, and it seemed that a long career of usefulness and distinction lay before him. This was not to be: but he has left behind him a name that Englishmen will not readily forget.

G. R.

II.

It is perhaps undesirable to amplify in any way the above short but admirable epitome of a life singularly full of varied activities, and it is unnecessary to draw attention to the many exceptional tributes which have been paid, during the past three months, to the talents, the energy, and the character of the late explorer.

The memoir, written by his brother-in-law, though condensed, leaves but little untouched. A note, however, on his connection with the Alpine Club will not be inappropriate in these pages.

Dr. E. A. Wilson was the only member of our Club who has ever been elected on a purely Arctic, or Antarctic, qualification; and he was, further, the only prominent Polar explorer who has valued Alpine experience and attainment sufficiently to seek our membership. He took a lively interest in mountaineering, and would often discuss Alpine icecraft with his climbing friends; and he had a fuller appreciation of the bearing of such knowledge upon the problems of Antarctic exploration than had any of his compeers. Possibly the fact that he had been, throughout his life, associated in one way or another with climbers may have given his mind a bent in this direction. He had many Alpine friends, among whom Walter Larden, who was his first form-master at Cheltenham and kept in touch with him to the end, may be named. Later on he came into close association with the late Mr. Dent at St. George's Hospital: while the writer had, through ties of relationship, known him since his early school-days. But he had many friends amongst the climbers, for he was a man who made friends everywhere, and no enemies. A born artist, a born naturalist, possessed of indefatigable energy and cheerfulness, he was one who, despite a serious attack of pulmonary tubercle in early manhood, lived to seek and endure hardships and privations, in the course of his pursuit of knowledge, such as fall only to the lot of the bravest and most adventurous. In him were combined all those qualities which members of this Club especially admire and venerate, and his name will ever live in our annals as one of the few we have most reason to be proud of.

The portrait here reproduced has been enlarged from a photograph taken by his father, immediately prior to his final departure from home.

C. W.

DEATH OF HERR EDUARD WAGNER.

THE death, from cancer of the lung, of this very distinguished mountaineer is announced.

He was born at Prague in 1870 and acquired his early mountain experience in the Zillerthal at the hands of such good masters as Hans Stabler, Hans Hörhager I, and others, making the first ascent of the Thurnerkamp by the E. ridge, and a new ascent of the Hochferner direct from the Schlegeisgrund among many other expeditions. In 1894 he felt himself qualified to dispense with the services of guides, and in the following years was a member of various parties which carried through successfully many of the great expeditions of the Alps.

Among these expeditions were the first ascents of the N.E. face of the Langkofel, of the N. face of the Grohmannspitze, and of the N. face of the Villnösserthurm. He was also one of the earliest to climb the Delagothurm. In the Western Alps he could claim the second ascent of the Schalligrat and the first guideless ascents of the Zmuttgrat and of the Teufelsgrat. In 1897, with Dr. Hans Brun, he made the first ascent of the stupendous N. face of the Grosse Windgälle ('The mountain has also been ascended by a very long, difficult, and dangerous route, up the great N. face.'—Ball, 'Central Alps,' Pt. I. p. 245). In 1900, in the company of Dr. Hans Lorenz, he made the third and hitherto unrecorded ascent of the intricate S. face of the Bietschhorn.

He took a prominent part during his student days at Zurich in founding in 1895 the since famous Akademische Alpenklub, Zurich. This quickly became the finest school of climbing in Europe, so that its membership carries with it to-day an almost unrivalled imprimatur. The Club showed its appreciation of his services by electing him an honorary member—a notable distinction. He is described by all his friends as a staunch and lovable companion.

J. P. F.

THE ALPINE CLUB LIBRARY.

THE following additions have been made to the Library since January:—

Club Publications.

Akad. Alpenklub Bern. VII. Jahresbericht, 1911–12. 1913
9 × 6: pp. 18.

New ascents are:—

A. Mottet, Lauterbrunner Breithorn, 1. Begehung d. O.-Grat v. Schnadidjoch aus: *E. Häberli*, Oberaarhorn, neuer Aufstieg d. d. O.-Wand: *P. Simon*, Graspasp v. Rosenloui, 1. Begehung im Aufstieg.

Akad. Alpen-Verein Berlin. IX. Jahresbericht. 1912
9½ × 6½: pp. 22.

Among the 'Bemerkenswerte Turen' are:—

K. Endell, 1. Begehung d. W.-Grates d. Gr. Mörchners: *A. Hoffmann*, 1. tur. Erst. Sass da Lastei: Pala di Vernel, 2. Erst.: Mte Alto, 1. tur. Erst.: *K. Burchhardt*, Forcella di Formenton, 1. Aufst.: *P. Borchers*, 1. Erst. d. Cavallo d. Torro: *W. Martin*, 1. Begehung Aig. de Béranger z. Dome de Miage: Tête Carrée, Aigs. de Trélatête, Aig. de l'Allée Blanche—teilweise neue Gratstrecken.

Akad. Alpen-Verein München. XX. Jahresbericht, 1911/1912. 1913
8½ × 5½: pp. 92.

This contains:

G. Leuchs, Die ersten 20 Jahre d. Akad. A.-V. Among the 'Neue Touren d. Mitglieder' are:—*E. Wagner*, Hochkarsp. 1. Erst. ü. d. N.O.-Wand: *H. Dülfer*, Fleischbanksp. 1. Erst. ü. d. O.-Wand: *H. Pfann*, Törltürme, 1. Erst. v. kl. Törl: *W. v. Bernuth*, Lärcheck, 1. Erst. ü. d. O.-Wand: *H. Lossen*, Gr. Häuselhorn, 1. Erst. ü. d.

S.-Wand: *H. Dülfer*, Oestl. Tschaminsp. 1. Erst. ü. d. S.-Wand: Cime d. Pope, 1. Erst. ü. d. S.-W.-Kante: Seewand, 1. Erst. ü. d. S.-Wand: Rosengartensp. 1. Durchkl. d. direkten W.-Wand: Valbonturm, 1. Erst. ü. d. N.W.-Kante: Schwalbenkofel, 1. Erst. ü. d. O.-Wand: W. Zinne, 1. Erst. ü. d. W.-Wand.

Alpenklub 'Hoch-Glück' München, 23 November 1906. Satzungen und Mitgliederverzeichnis. 1911

5½ × 3: pp. 4.

Mitglied kann jeder unbescholtene und ausübende Alpinist werden, der Mitglied d. D. u. Oe. A.-V. ist.

— Bericht ü. die beiden ersten Vereinsjahre, 1906/7 und 1907/8. 1909

— 1910/11. 1912

8½ × 5½.

C.A.F. Belfort. Bulletin trimestriel. 27^e année, no. 1. Janvier 1913

8½ × 5½.

C.A.F. La Montagne. Revue mensuelle. Maurice Paillon (Rédacteur en Chef). Vol. viii. 1912. Paris, 1912

8½ × 5½: pp. xxxvi, 616: ill.

Among the articles are the following:—

V. de Cessole, La grande Aig. de Péleus.

H. Beraldi, Pezay et Villaret, 1775.

A. Mazas, La Winklerturm.

C. Lévêque, Une ascension de la Munia.

G. Cadier, Marmuré et Costerillon, le Balaitous.

L. Sinek, La muraille nord du Triglav.

J. Bregeault, Chateaubriand et Shelley à Chamonix.

— **Jura.** A la mémoire de Alfred Boysson d'École, Président de la Section.

7½ × 5½: pp. 14: portraits. (Besançon, Dodivers) [1912]

— **Provence.** Bulletins, 1910–1912. Marseille, 1910–12

8½ × 5½.

Among other contents:—

1910. C. Andriny, L'Aig. de Sorniou.

A. Gouy, Le Bec-de-l'Aigle.

M. Bourgogne, La petite Pte de Claphouse.

1911. E. Andriny, L'Aig. de Sugiton.

V. Gros, Le Dôme du Monestier.

1912. R. Gombault, L'Hubac des Béguines.

C.A.I. Rivista. Redattore-Capo: Walther Laeng. Vol. xxxi.—1912.

9½ × 6½: pp. xxiv. 400: ill. Torino, 1912

Among the articles are the following:—

G. Rey, Sulle torri del Trentino.

U. di Vallepiano, Al Monte Bianco per il Colle Emilio Rey, il Picco

Luigi Amadeo ed il Monte Bianco di Courmayeur. Primo

ascensione senza guide.

C. Ronchetti, Il circo terminale del ramo settentrionale del ghiacciaio Zeja.

H. Hess, Note topografiche s. Gruppo Boucher-Ramiere.

A. Roccati, I ghiacciai del gruppo Clapier-Maledia-Gelas.

L. Brasca, Topografia dei Pizzi del Ferro.

A. Calegari, Il Pizzo Badile di Valmasino d. versante N.

M. C. Santi, Il Cervino per la Cresta di Z'Mutt, senza guide.

A. Brofferio, Grand Combin, senza guide, pel Col d'Amianthe et la cresta E. S. E., discesa pel versante N. ed il col des Maisons Blanches.

A. Andreoletti, Nuove ascensioni nelle Dolomiti di Val Talagona.

W. Laeng, Nel Gruppo della Presanella, senza guide.

G. B. Asquasciati, Corno Stella, prima ascensione italiana.

— **Como.** Annuario 1908, 1909, 1910, 1911. This contains Rules of the C.A.I., list of members, guide tariff, reports, etc.

— **Milano.** Conferenze, Gite giovanili, Escursioni sociali per l'anno 1913.

4½ × 3½: pp. 8.

- C.A.I. Sezioni venete.** Annuario 1912-1913 delle sezioni venete compilato della sezione di Padova. 1912
 6 × 3½: pp. 142.
- **Staz. Universit.** Equipaggiamento. 1912
 7½ × 4½: pp. 4.
- Centre Excursionista de Catalunya.** Sports d'hivern, 1913.
 9 × 5½: pp. 24: ill.
- — — — — Butlletí. Any xxii, num. 204-215. 1912
 9½ × 6½: pp. 403, ill.
 Among the articles are:—
 V. de L., Els darrers concursos de Sports d'hivern.
 X. Parés y Batra, La vall d'Aran.
 J. Oliveras, Dugues ascensions als Encantats.
 X. Parés y Batra, Excursió per l'Alt Pireneu francès.
- The Colorado Mountain Club.** April 1912. Notice of formation. 1912
 8½ × 5½: pp. 2.
- **First Annual Outing.** 1912
 6½ × 3½: pp. 8.
- D.u.Oe.A.-V. Allgäu-Kempton.** 41. Jahres-Bericht, 1912. 1913
 8½ × 5½: pp. 30.
- **Austria.** Ski-Vereinigung. Tourenkurs. 1912
 8½ × 12½: pp. 12.
- — — — — Der Oesterreich. Alpenverein und die Sektion 'Austria' des
 D.u.Oe.A.-V. 1862-1912. Wien, Selbstverlag, 1912
 9½ × 7: pp. xii, 144: plates.
 Published on the jubilee of the Club.
- **Bayerland.** XVII. Jahresbericht, 1912. München, 1913
 8½ × 5½: pp. 144.
 Among the new ascents are the following:—
E. Gerber, Mit. Gatterlkopf, I. Erst. ü. d. N.-Wand: *M. v. Bernuth*,
 Gr. Kirchturm, I. Erst. ü. d. O.-Wand: *E. Gerber*, Zugspl. O.-
 Gipfel, I. Aufst. ü. d. S.O.-Grat: *J. Färber*, Katzenkopf, I. Erst.
 ü. d. N.-Wand: *O. Herzog*, Kühkarlspl. I. Aufst. ü. d. N.-Wand;
H. Düljer, Fleischbank, I. Aufst. ü. d. O.-Wand: *F. Berger*,
 Goinger Turm, I. Aufst. ü. d. N.O.-Grat: *A. Deye*, Geiselturm, I.
 Erst.: *Dr. Leonpacher*, Gr. Häuslhorn, I. Aufst. ü. d. S.-Wand:
J. Itlinger, Pta Sforcellina, Ortler, I. Erst.: *K. Burhardt*,
 Forcella di Formenton, I. Aufst. v. S.: *K. Jelínek*, Pala Marietta,
 I. Erst. ü. d. W.-Wand: *A. Deye*, Camp. di Fiocobon, I. Erst.
 ü. d. S.-Kante: Camp. di Val Grande, I. Aufst. ü. d. S.O.-Grat:
O. Oppel, N.O. Cadinsp., I. Aufst. ü. d. O.-Wand: *A. Bonabocossa*,
 many in the Bernina group: *K. Planck*, Aig. de Bellaval, I. Erst.:
L. Kraul, Aigs. de Trélatête, I. Begehung d. Grates: *P. Reuschel*,
 Tête N. d. Fours, Scharte v. d. Pete de Bellaval, I. Gratbegehung:
W. Gruber, etc., Dschailik-Basch, Gestola, Kentschat-Basch,
 Caucasus.
- **Bozen.** Jahresbericht 1912. 1913
 8½ × 5½: pp. 52.
- **Frankfurt a. M.** Bericht. 1913
 8½ × 5½: pp. 44.
- **Halberstadt.** 4. Jahresbericht 1912. 1913
 8½ × 5½: pp. 11.
- **Hannover.** 28. Jahresbericht. 1912
 8½ × 5½: pp. 31.
- **Landau.** 15. Rechnungs-Abschluss. Mitgliederverzeichnis, 1912. 1913
 13 × 9: pp. 4.
- **Moravia,** Brünn. Bücherei-Verzeichnis. 1912
 9 × 5½: pp. 46.
- — — — — Nachtrag. 1912
 8½ × 5½: pp. 4.

- D.u.Oe. A.-V. Moravia.** Jahres-Bericht ü. d. Jahr 1912. 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 36.
 — **Oberland.** XIV. Jahresbericht. München, 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 31.
 — **Prag.** Jahres-Bericht 1912. 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 26.
 — **Reutlingen.** 7. Jahresbericht 1912. 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 24.
 — **Steyr.** Satzungen. 1913
 $9\frac{1}{2} \times 5\frac{1}{2}$: pp. 4.
 — **'Tauriskia.'** 2. Bericht 1912. Wien, 1913
 $8\frac{1}{2} \times 6$: pp. 17.
 Contains accounts of the following ascents:—
 L. Patéra, 1. Ersteig. d. Mosermandels ü. d. O.-Grat: 1. vollstánd.
 Ueberschreitung d. Faulkogelgrates: H. Dvorak, 1. Durch-
 kletterung d. N.-Wand d. Graihorns.
 — **Turner-Alpen-Kränzchen,** München. Vierzig Jahre alpiner Verein.
 Festschrift. 1912
 $9\frac{1}{2} \times 6$: pp. 58: plates.
 Contains Bericht für 1911:
 This was started in 1872 as the Turner-Alpen-Kränzchen, joining
 with the Munich Section in 1894.
Innsbrucker Turnverein. Bericht der Bergsteiger-Riege über das Jahr 1912. 1913
 9×6 : pp. 4.
Japanese Alpine Club Journal for 1912. (In Japanese.)
 $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 575: ill.
Ladies' Scottish Climbing Club. The fifth annual record. 1913
 5×4 : pp. 37.
Mecsek-Egyesület. Evkönyve 1911. Pécs, 1912
 $8\frac{1}{2} \times 6$: pp. 192: plates.
 Among the articles is:—
 E. Bokor, Séták a Dolomiták között.
 — Evkönyve, 1912. Pécs, 1913
 $8\frac{1}{2} \times 6$: pp. 190 plates.
 Among the articles are:—
 M. Jankovics, A zermatti Weisshorn.
 J. Serényi, A Sass Maor.
 K. Balog, Kirándulás a Triglavra.
Oe. A.-K. Oesterreichische Alpenzeitung. Organ des österreichischen Alpen-
 klubs. Geleitet von Hans Wödl. XXXIV. Jahrgang.—1912. Nr.
 849-872. Wien, 1912
 $10\frac{1}{2} \times 7\frac{1}{2}$: pp. viii, 432: ill.
 This contains, among other articles:—
 K. Blodig, Erste Besteigung d. Mont Blanc vom Col Emile Rey.
 G. Cermak, Einige neue Touren in der Suhi-Plaz-Gruppe.
 H. Hoek, Aus der Val de Mesdi, Sellagruppe. Kostnerscharte
 u. Mittagstürme, Boëseekofel, Vallonscharte.
 O. Schuster, Ostwand d. Hochbrunnerschneide.
 H. Trier, Eine Schitour a. d. Piz Bernina.
 K. Endell, Neue Hochtouren am Lyngenfjord.
 G. Künne, Eine Ueberschreitung des Lodners in d. Texelgruppe.
 O. Schuster, Itinerar d. Kasbekgruppe.
 R. Weitzenbeck, Ueber d. Tricotgrat a. d. Aig. de Bionnassay.
 G. Künne, Erstbesteigungen im arktischen Norwegen: Botnelvtind,
 Mit. Leirelvdaltind, Nörd. Leirelvtaltind.
 O. Bleier, Neues aus d. cadorischen Voralpen.
 E. Hofmann, Unbekanntes a. d. Reichenspitzgruppe.
 O. E. Meyer, Der Gurue-Berg in Mangati u. die Dent Blanche im
 Wallis.
 F. Nieberl, Vom Pinnistal aufs Kirchedach.

- R. Gerin, Zwei Nordanstiege a. d. Grossglockner.
 H. Hoek, Clach Leathan, Garbh Bheinn u. Sgorr Dhearg.
 Neue Turen in d. Ostalpen 1911.
 G. v. Radio-Radiis, Eine Besteigung d. Grossen Ararats.
- Oe.T.K. Oesterreich. Touristen-Zeitung.** XXXII. Bd. Wien, 1912
 11 × 8 : pp. vii, 299 : ill.
 Among other articles this contains :—
 L. Patéra, Berg- und Kammwanderungen in d. Radstädtertauernkette.
 H. Nägele, Auf die Braunarlenspitze.
 R. Kubasch, Monte Pelmo : Marmolata : Fanisturm.
 N. Nägele, Ueberschreitung d. Zimbaspitze.
 K. Baum, Auf die Kleine Zinne.
 M. Humpelstetter, Aus Hintertux.
 O. Firbas, Eine Besteigung des Montblanc.
 E. Buxbaum, Hochschwabtour.
 G. Haupt, Der Langkofel : with illustrations of routes marked.
- **Baden.** 32.-35. Jahresberichte. 1910-1913
 8½ × 5½.
- **Wiener-Neustadt.** 34. Jahres-Bericht. 1912
 9 × 6 : pp. 28.
- S.A.C. Taschen-Kalender** für Schweizer Alpen-Clubisten pro 1913. X. Jahrg.
 Redaktion : Dr. C. Täuber. Zürich, Tschopp, 1913. M. 2
 6 × 4 : pp. 283 : 54.
 Contains :—Clubhütten, Wegmarkierungen, Bergführer, Führer- u.
 Träger-Taxon, Notsignale, Erste Hilfe, Rettungsstationen, Statuten
 d. S. A. C., Verschiedene Regelmenten. u.s.w.
- **Basel.** Jahresbericht pro 1912. 50. Vereinsjahr. 1913
 9 × 6½ : pp. 71.
 Contains memoir and portrait of Dr. Andreas Fischer.
- **Bern.** Jahres-Bericht für 1911. 1912
 8 × 5½ : pp. 58.
- ——— Exkursionsprogramm 1913.
 5½ × 4 : pp. 4 : plate.
- **Bodan.** Reglement. 1906
 5½ × 3½ : pp. 3.
- ——— Touren-Programm. 1913
 4½ × 3½ : pp. 4.
- **Davos.** Reglement der Section. 1904
 7½ × 5 : pp. 4.
- ——— Touren-Verzeichnis. Sommer, 1913
 4½ × 2½ : pp. 3.
- **Gotthard,** Altdorf. Statuten. 1911
 8 × 5 : pp. 4.
- ——— Tourenprogram 1913.
 5½ × 4 : pp. 3.
- **Grindelwald.** Statuten. 1907
 8½ × 5½ : pp. 6.
- **Hoher Rohn.** Statuten. 1912
 8½ × 5½ : pp. 3.
- ——— Exkursions-Programm. 1913
 5½ × 3½ : pp. 3.
- **Lägern,** 5 Feb. 1900. Statuten. 1910
 8 × 5½ : pp. 4.
- ——— Programm der Sektions-Ausflüge. 1913
 5½ × 3½ : pp. 4.
- **Neuchâtel,** 6 Janvier 1876. Statuts. 1906
 8½ × 5½ : pp. 10.
- ——— Programme des Courses pour 1913.
 5 × 3½ : pp. 12.
- **Oiten.** Statuten. 1909
 7½ × 4½ : pp. 7.

- S.A.C. Olten.** Touren-Programm pro 1913.
 $5\frac{1}{2} \times 4$: pp. 4.
- **Rorschach.** Statuten. n.d.
 $6\frac{1}{2} \times 4\frac{1}{2}$: pp. 7.
- **Touren.** 1913
 $5\frac{1}{2} \times 4$: pp. 4.
- **Sentis.** Tourenprogramm, 1912.
 $5\frac{1}{2} \times 3\frac{1}{2}$: pp. 4.
- 1913.
 $4\frac{1}{2} \times 3\frac{1}{2}$: pp. 4.
- **Üto.** Jahresbericht 1911. 1912
 8×5 : pp. 70: plates.
- 1912. 1913
 8×5 : pp. 64.
- Ski:**
- Alpen-Ski-Verein, Wien.** Satzungen. 1908
 $6\frac{1}{2} \times 4$: pp. 11.
- **Unterrichtsordnung nebst Ratschlägen für Anfänger.** 1912
 $6\frac{1}{2} \times 4$: pp. 25.
- **Veranstaltungen im Winter 1912/13.**
 6×9 : pp. 19: ill.
- Deutscher u. Oesterreich. Skibund.** Satzung. 1912
 $8\frac{1}{2} \times 6\frac{1}{2}$: pp. 6.
- Mitteleuropäischer Ski-Verband.** Ski-Chronik 1912. 4. Jahrgang. Hsg. v. Dr. H. Schwarzweber. Karlsruhe, Lang, 1912
 $9 \times 6\frac{1}{2}$: plates, pp. iv, 295.
- This contains, among other articles:—
 C. J. Luther, Ski Technik.
 R. W. Thune, Das Training d. Skiläufers.
 Dr. Schwarzweber, Ernährungsweise d. Skifahrer.
 G. Bilgeri, Mit Sommerski im Engadin.
 J. Stumreich, Ski-Unfalls-Chronik 1911/12.
- Norges Skiforbund.** Aars-beretning 1912. Kristiania, Grøndahl, 1913
 9×6 : pp. 83: ill.
- North of England Ski Club.** Year book, vol. 1, no. 3. Newcastle, 1912
 $9\frac{1}{2} \times 6$: pp. 24: ill.
- Oesterreich. Ski-Verein.** Zwanzig Jahre. Wien, 1912
 $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 162: plates.
- Contains, among other articles:—
 K. Sandtner, Niedere Tauern.
 J. Draxler, Die Admonter Berge im Winter.
 W. Thune, Training für Langlauf u. Springlauf.
 F. Rigele, Wert u. Gefahr der Schnelligkeit.
- Schi-Klub Hannover.** Chronik 1912.
 $6\frac{1}{2} \times 4\frac{1}{2}$: pp. 69: ill.
- Contains:—
 W. Hering, Silvester in der Schihütte.
 Rosenthal, Wie ich ein Schiläufer zu werden anfang.
 F. Wellhausen, Wer die Wahl, hat die Qual: Regeln u. Winke.
 W. Paulcke, Das Schilaulen.
- Schneeschuhverein München** v. 1893. Skiführer. Bd. 1: Schliersee Bayrischzell. München, Steinebach, 1913. M. 1.20
 $6\frac{1}{2} \times 4\frac{1}{2}$: pp. 76: ill.
- This useful little guide has been written by members of the Club.
- Ski Club de Provence.** Statuts. In C.A.F. Provence, Bulletin 1911: Chronique in subsequent Bulletins, q.v.
- Ski Club of Great Britain and the National Ski Union.** Year-book. Edited by H. Archer Thomson. Uxbridge, Hutchings, 1913
 $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 95-222: plates.
- Ski-Club Oberstdorf.** Ski-Fahrten in den Oberstdorfer Bergen.
 9×6 : pp. 29: maps. Kempten i. A., Himmer, 1912

Ski:

Ski-Klub Salzburg. Jahrbuch 1912. München, Deutsch. Alpenzeit. 1912
9 × 6½: pp. 82: plates.

Contains:—

G. Bilgeri, Freiwilliges Alpenkorps.

F. Barth, Ski-Fahrten in Finse.

G. v. Wolfstein, Skifahrten im Jotunheimen.

F. Rigele, Ski-Kurse.

Société d. Alpinistes dauphinois. Revue des Alpes dauphinoises. Bulletin mensuel. 15^e année. Grenoble, Vallier, 1913

9¼ × 6: pp. vi, 192: ill.

Among the articles are:—

W. A. B. Coolidge, Les Cols de glaciers des Alpes dauphinoises dans l'histoire.

C. Velain, Neige et glaciers.

A. Raymann, Töpffer et les caravanes scolaires.

Fluctuat, Le Mont-Blanc.

Baron de Castille, Une excursion à la Gde Chartreuse en 1782.

Towarzystwa Tatrzańskiego. Pamiętnik, Rok 1912. Krakow, 1912

11¼ × 8: pp. lxxx, 83: plates.

Turner-Alpen-Kränzchen, München. Bericht zum xxv. Stiftungs-Fest am 27. März 1897. 1897

8¼ × 5½: pp. 17: ill.

Verein zum Schutze der Alpenpflanzen. 12. Bericht. Bamberg, 1913

9 × 5½: pp. 120: plates.

Contains:—Reports on various alpine gardens, Lindauerhütte, Neureuth Garten, Raxalpe, Schachengarten, Bad Reichenhall. Die wichtigsten Gesetze u. Verordnungen zum Schutze d. Alpenflora in d. Ländern Bayern, Oester.-Ungarn u. d. Schweiz.

— Satzungen.

n.d.

9 × 5½: pp. 4.

New Books, etc.

Abraham, A. P. Beautiful Lakeland. Keswick, Abraham, 1912. 3/6

11 × 8¼: pp. 52: 32 plates.

Good plates of Lake Country scenery, with short text.

Abraham, G. D. The dangers of the Alps: how to avoid them. In Baily's Mag., London, vol. xci. no. 635. January 1913

9 × 5½: pp. 15–22: ill.

Augustin, Emill. Hilfe für Alle. Das internationale Alpine Notsignal. Der Signalverkehr. Wien, Selbstverlag, 1912. 70 Heller

5½ × 4¼: pp. 39.

On the usefulness of knowing the Morse code for signalling, and on the Alpine distress signal in particular.

Barton, W. W. Engadine Year-book 1913. A record of the sports. A guide to the resorts. Third year. London, Siegle, etc., 1913. 2/6

7½ × 5: pp. xvi, 240: ill.

Contains: Flora, Mountaineering (from Climber's Guide, etc.), Curling, Ski-ing, Bobsleighing, Skating, etc. Also Guide to the Engadine.

Bartsch, Rudolf Hans. Kunst und Natur in Bildern. Die Wachau.

10 × 7¼: pp. 17: 78 plates. Leipzig u. Wien, Rosenbaum, 1912

A most interesting series of architectural plates of streets, houses and public buildings, of old and picturesque types.

Benson, Arthur Christopher. Along the road. London, Nisbet, 1913. 7/6 net
8 × 5¼: portrait.

This contains a paper of considerable interest from the alpine point of view—'The Face of Death'—in which the author describes his sensations after falling into a crevasse. With two others in 1896 he was crossing the Unterbachhorn Glacier when a snow-bridge gave way under him, and he was got out only after considerable difficulty, owing

to the dangerous condition of the edge of the crevasse. The writer says: 'That is the story of my taste of death. The strange thing about it to me was its utter unlikeliness to anything that I should have imagined such an experience to be, the simplicity of it, the commonplace thoughts that came to me, the entire absence of any tragic, or melodramatic, or indeed emotional elements.'

Canada. Department of the Interior. Report of the Commissioner of Dominion Parks for the year ending March 31, 1912. Part V., Annual Report, 1912. Ottawa, Gov. Printing Bureau, 1912
9 × 6½: pp. 88: maps, plates.

There are the following reserves in the Canadian Rockies:—Jasper Park, near Yellowhead Pass; Glacier Park, round Roger's Pass; Yoho Park, on Bow Range; Rocky Park, round Banff and Laggan.

Caulfield, Vivian. How to ski and how not to. 3rd and revised edition.

7½ × 5: pp. viii, 286: ill. London, Nisbet, 1913. 4/6 net

de Choinoky, E. Le groupement des montagnes de la Hongrie. In Bull. Soc. hongr. de géogr. vol. 38, no. 1-5. Budapest, 1910

9½ × 6½: pp. 133-141.

Correvoon, Henry, and Robert, Philippe. The Alpine Flora. Translated into English and enlarged, under the authors' sanction, by E. W. Clayforth.

8½ × 5½: pp. 436: 180 col. plates. London, Methuen (1912). 16/- net

This is a translation of a work published in French in 1909. The coloured plates are remarkably good.

Dillmann, Alexander. Die verwünschte Alm und andere Sachen. Fahrten durch Berg und Tal. München, Senger, 1913

7½ × 4½: pp. 136: plates.

Climbing reminiscences in literary form and as stories, well written. Contents: Der Kleine Waxenstein: Herbstage im Engadin: Piz Bernina: Campiglio u. Brentaturm: Das Kloster; Die verwünschte Alm; Die Königsspitze; Aus St. Moritz; Ein Orgelspiel; In Bettoggas Klettergarten; Glocknerfahrt; Muottos Murail u. Schafberg im Winter; Die Montgelas-Nase; Côte d'Azur.

Döhlemann, C., u. Fleischmann, W. Uebungsplätze und Skitouren im Gebiete der Bahnlinie Schliersee-Bayerischzell und der Wendelstein-Bergbahn. 6½ × 4½: pp. 69: ill. Diessen v. München, Huber, 1912

Dübl, Dr. Heinrich. Paccard wider Balmat, oder Die Entwicklung einer Legende. Ein Beitrag zur Besteigungsgeschichte des Mont Blanc. 9½ × 6½: pp. 298: plates. Bern, Francke, 1913

Dubois, Auguste. La région du Mont Lusitania au Spitzberg. In Bull. Soc. neuchât. de géog. t. 21. Neuchâtel, Attinger, 1912

9½ × 6½: pp. 7-77: map, plates.

Enthoven-Thomas, Mme. Leo. La Savoienne. Paroles et Musique. 13 × 10½. Amsterdam, Alsbach (1913)

A song opening:—

Vers vous, géants de la Savoie,
Monte l'ardeur de tous mes vœux.
Les nerfs en feu, le cœur en joie,
Je veux sur vos sommets neigeux
Implanter comme un fier trophée
Mon piolet aux reflets bleus.

Equipment Lists:

C. Biber, Munich: Bilgeri-Werk, Bregenz: Biotti and Merati, Milan: Böcher, Munich: P. Breitmeyer, Stuttgart: Carter, London: D. Denzler, Zurich: J. Fischer, Freiburg i. Br.: Gamage, London: W. Glaser, Zurich: P. Gleize, Chambéry: Gutkind & Einstein, Nürnberg: Hauer's Wwe, Nürnberg: Hill & Son, London: Hupfau, Einsiedeln: Jaeger, London: Jemoli, Zurich: Mizzi Langer, Vienna: J. Nörr, Zurich: Och frères, Geneva, etc.: Revol neuveu, Grenoble: Rid, Munich: Rodenstock (Hygat-Brillengläser), Munich: Sigris, Basel: Silver, London: Sporthaus Westend, Vienna: G. Steidel, Berlin: Suardi, Milan.

- Feuerstein, Arnold.** Die Entwicklung des Kartenbildes von Tirol bis um die Mitte des 16. Jahrhunderts. In Mitt. k. k. geogr. Ges. Wien. Bd. 55, no. 5 u. 6. Wien, Lechner, 1912
9 × 6: pp. 326-385: maps.
- Fischer, Andreas.** Hochgebirgswanderungen in den Alpen und im Kaukasus. Herausgegeben mit Lebensbild und Bericht der letzten Fahrt versehen von Ernst Jenny. Frauenfeld, Huber, 1913. M. 5.60
7½ × 5¼: pp. 7-311: plates.
Contents: Ueber's Jungfrauojoch nach dem Mönch: Neujahr auf dem Finsteraarhorn: Das obere Jungfrauojoch: Matterhorn: Montblanc: Im Dauphiné: Neue Kaukasusfahrten: Gefahren und Technik: Letzte Fahrt.
- France.** Ministère de l'agriculture. Service des grandes forces hydrauliques (Région des Alpes). Compte rendu et résultats des études et travaux au 31 Décembre 1911. Tome V. 1912
11½ × 7¼: pp. 530.
- Francé, R. H.** Die Alpen. Eine volkstümliche Darstellung der Natur in den Alpen. Mit gegen 500 Abbildungen und 12 Tafeln und Karten in Farbendruck. Leipzig, Theod. Thomas, 1913
10½ × 7: ill.
Parts 1-16 published: to be finished in about 40 parts at 60 pfg. each.
Well illustrated and altogether well got up. The work, when finished, will give a complete view of the various aspects of alpine science and short sections of certain portions of alpine history of special interest.
- Glass, Dr.** Führer für Skiläufer durch Johannegeorgenstadts nähere und weitere Umgebung. Johannegeorgenstadt, Stopp (1912)
7½ × 4½: pp. 27: map, ill.
- Guidon, J. P.** Winter in Graubünden. Hsg. v. Verkehrsverein für Graubünden. Davos, 1912
6½ × 4½: pp. 39: map, ill.
- [—] — Winter in the Grisons. Chur [1912]
6½ × 4½: pp. 31: map, ill.
- de la Harpe, Eug.** Les Alpes Valaisannes. Seconde livraison. Illustrations de Fréd. Boissonnas. Lausanne, Bridel, 1913. Fr. 15
pp. 129-216: plates.
- Knowles, Archibald Campbell.** Adventures in the Alps. London, Skeffington, 1913. 3/6 net
7 × 4½: pp. xi, 176: plates.
A description of Switzerland and part of the Dolomites from the pedestrian's point of view, by one who has greatly enjoyed walking among the mountains.
- Köhlers Deutscher Wintersportführer.** Bd. I. Riesengebirge, Iser- und Jeschkengebirge, Lausitzer Gebirge, Sächs. Schweiz und Elbgebirge. Unter Mitwirkung der Wintersportvereine und auf Grund amtlichen Materials bearbeitet. Dresden, Köhler, 1912
6½ × 4½: pp. 147: maps.
A very useful guide.
- Kuhfahl, Dr.** Hochgebirgs- und Winterphotographie. Praktische Ratschläge für Ausrüstung und Arbeitsweise. 2. Aufl. Halle a. S., Knapp, 1912. M. 2.50
8½ × 5½: pp. vi, 144: plates.
A second edition of this useful work.
- Lehmann, Louis.** L'irrigation dans le Valais. In Rev. de géographie, t. 6. Paris, Delagrave, 1912
8½ × 7: pp. 75: ill.
- Luther, Carl J.** Ski und Skilauf. Anleitung zur Selbsterstellung von Skiern und Schule des Skilaufes. Spiel und Arbeit, Nr. 52. Ravensburg, Maier [1912]. Pfg. 80
9 × 6: pp. 32: ill.
- Luther, Carl J., u. Lücke, Dr. G. P.** Der Skitourist. München, Lindauer 1913. M. 2
6½ × 4½: pp. vi, 169: plates.
A useful little work containing short notes on History, Equipment, Training, Style, Touring, Orientation, Avalanches, Photography, &c.

- Mettrier, Henri.** Le Mont Blanc vu de Dijon au xvie siècle. Extr. Bull. géog. hist. et descript. Ns. 1-2. Paris, Impr. nation. 1911
9½ × 6½: pp. 19.
- **Le Mont-Blanc dans la géographie administrative de la France.** *Ex Rev. savoisienne*, fasc. 4, 1911. Annecy, Abry, 1912
10 × 6½: pp. 23.
- This is a very excellent historical study. The reason for calling the Department 'Mont-Blanc' in 1792 is given in the following interesting extract from the representative Grégoire:— 'Dans cette chute nécessaire et prochaine de tous les rois ensevelis sous leurs trônes, le seul trône qui restera sera celui de la liberté, assise sur le Mont-Blanc, d'où cette souveraine du monde, faisant l'appel des nations à renaitre, étendra ses mains triomphantes sur tout l'univers.'
- The following note is also interesting:—
'Ce même nom [Mont-Blanc] sera attribué à l'une des grandes rues de la capitale [Paris], qui ne reprendra que sous la Restauration son nom de la Chaussée d'Antin.'
- Myrtill, Georges.** Paccard contre Balmat. In 'Le Savoyard de Paris.'
Presented by H. F. Montagnier, Esq. 25 janvier 1913
- New Zealand.** Scenic glories of New Zealand. Mountains and lakes of Otago. Dunedin, 1913
9 × 4½: pp. 8: ill.
- Miller, Ludwig.** Auf der Reitalm. Alpiner Schwank in drei Aufsätzen. [1913]
8½ × 5½: pp. 74.
- A light play, suitable for club entertainments.
- Peege, Emil, und Noggler, Josef.** Jahrbuch des Wintersportes für 1912/13. III. Jahrgang. Wien, Gerlach & Wiedling, 1912. M. 2
7½ × 4½: pp. viii, 342: ill.
- Among other subjects there are here articles on: History of skating: A general review of winter spots 1911/12: Guide to winter sports in Austria-Hungary: Ski-ing in the Tote Gebirg: Spring on the Arlberg: Winter in the Bavarian Highlands: List of Winter Sport clubs: Bibliography.
- Pemberton, Max.** White motley. London, Cassells, 1913. 6/-
7½ × 5: pp. 340: frontispiece.
- A novel of aviation over the Alps, crime and love. The hero flies over Mont Blanc, the Matterhorn, Monte Rosa and the Simplon Pass.
- Perron, Joseph.** Poésies. Alpinisme. Milan, Alfieri [1912]
7½ × 5½: pp. 19.
- The poems are:—Le Mont Cervin, le Breithorn, Ascension hivernale du Cervin, Ascension hivernale de la Dent d'Hérens, Inauguration Cabane Jumeaux, Les vainqueurs des Alpes.
- From the last we quote:—
'Nous grimperons aux mâts du navire du monde,
Pour contempler sa marche au vaste sein des airs,
Et chanter de plus près la sagesse profonde
Du divin Nautonnier qui guide l'univers.'
- En Planant sur les cimes neigeuses.** In *Lecture pour tous*, Paris, t. 15: no. 4
9½ × 6½: pp. 298-306: ill. Janv. 1913
- Reinhart, William.** The ascent of Ixtaccihuatl. In *Wide World Mag.*, London, vol. 28, no. 165. December 1911
9½ × 7: pp. 280-286: ill.
- Riekmers, W. Riekmer.** The Duab of Turkestan. A physiographic sketch and account of some travels. Cambridge, University Press, 1913. 30/- net
10: pp. xv, 264: maps, plates, etc.
- Sawieki, L.** Les études glaciaires dans les Karpates. Aperçu historique et critique. In *Annales de Géographie*, xxi^e année, no. 117, Paris, A. Colin. 10 × 6½: pp. 230-250. 15 mai, 1912
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hsg. v. d. Gelehrten Gesellschaft. 76. Stück. Als Fortsetzung d. Neu-
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10½ × 7 : pp. 81 : col. front. and portraits.

It is of some interest to see what attracted Hegetschweiler to climbing :
' Mich zog seit langem eine dunkle Sehnsucht nach dieser Welt der
Einsamkeit und der erhabensten Gesellschaft, des Todes und der
Wiege des Lebens, des Schreckens und der herrlichsten Genüsse.'
He explored especially the Tödi.

Spemanns Alpenkalender 1913. Stuttgart, Spemann, 1913
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9½ × 6½ : pp. 172-184 : map, plate. Leiden, 1913

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This contains all information as to Club meetings and proceedings
and other matters connected with Winter sports.

Among the articles are :—

F. Kutschera, Lapponische Schneeschuhe.

W. Munach, Hüttenleben in Norwegen.

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Lilienfeld, Schneewanderungen im Bühmerwald und Bayerischen
Wald.

L. Handl, Gurgl n. Vent auf Skiern.

P. Preuss, Winterfahrt a. d. Dreiherrnsp.

F. Nöberl, Skifahrten in Sellrain.

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Abraham, George D. Up the Schreckhorn in a storm. In Strand Mag., London,
vol. 36, no. 214. October 1908

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The following quotation from this novel—which has not been added to the library—is worth giving as being probably the expression of the genuine feeling of an Egyptian Turk:—“Their alpine tour, however, was of short duration. Yusuf was contented in Geneva, giving praise to Allah for the vast supply of drinking water. But when, at her suggestion, they moved on to Chamounix, his feeling changed. His face went green. His nostrils and his eyes distended to their utmost, reminding one of the behaviour of a frightened horse. The sight of the great mountains closing in and hanging over him oppressed his soul with terror, which was not diminished by the occurrence in the hour of their arrival of a dreadful thunderstorm. When he saw the numbers of visitors he gasped and questioned: “Come these here for pleasure? Is it possible? A place so frightful, so appalling, like Gehennum! If one came with a large company, with music and loud songs that never ceased, and kept his eyes shut all the time, it might be bearable; supposing one were forced to do it, for some crime . . . for pleasure, sayest thou? What pleasure can they find?”
- ““They walk and climb the mountains. They love nature. And the air is excellent.”
- ““By Allah, wild beasts! Human beings are more sensitive. How can they love nature who approve her in most horrid mood? It is evident that God Most High designed such things for a warning and a menace, to be shunned. Yet these applaud. They are truly devoid of feeling. May Our Lord destroy them.””

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Subject Index of Club Publications and New Books.

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| Accidents: A. C. Benson, <i>Along the road.</i> | Aig. de Trélatôte: Akad. A.-V. Berlin. |
| Admonter Berge: <i>Ski-Verein Oesterreich.</i> | Alps: R. H. Francé, <i>Die Alpen.</i> |
| Aig. de Bellaval: <i>D.u.Oe. A.-V. Bayerland.</i> | America: <i>Colorado Mountain Club.</i> |
| Aig. de Béranger: Akad. A.-V. Berlin. | Ararat: <i>Oe. A.-K.</i> |
| Aig. de Pélenis: <i>C.A.F. Montagne.</i> | Balaitous: <i>C.A.F. Montagne.</i> |
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| | Bernina: A. Dillmann. |
| | — <i>D.u.Oe. A.-V. Bayerland.</i> |
| | — <i>Oe. A.-K.</i> |

- Botany** : H. Correvon, *Alpine Flora*.
Boucher-Ramière : *C.A.I. Rivista*.
Braunarlansp. : *Oe. T.-K.*
Cadore : *Oe. A.-K.*
Carpathians : L. Sawicki, *Études glaciaires*.
Caucasus : *D.u.Oe. A.-V. Bayerland.*
Cavallo d. Torro : *Akad. A.-V. Berlin.*
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Clubs : *S. A. C. Taschen-Kalender*.
Corno Stella : *C.A.I. Rivista*.
Dent Blanche : *Oe. A.-K.*
Distress Signal : E. Augustin.
Dolomites : *Mecsek-Egyesület. C. A. I. Rivista.*
Dôme de Miage : *Akad. A.-V. Berlin.*
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Graspasp : *Akad. A.-C. Bern.*
Grisons : J. P. Guidon.
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Gr. Kirehturm : *D.u.Oe. A.-V. Bayerland.*
Gr. Mörchner : *Akad. A.-V. Berlin.*
Gurue-Berg : *Oe. A.-K.*
Grand Comblin : *C.A.I. Rivista.*
Hochbrunnernschneide : *Oe. A.-K.*
Hochschwab : *Oe. T.-K.*
Kasbek : *Oe. A.-K.*
Kaukasus : A. Fischer.
Kirchdach : *Oe. A.-K.*
Kl. Zinne : *Oe. T.-K.*
Lake District : A. P. Abraham.
La Munla : *C. A. F. Montagne.*
Langkofel : *Oe. T.-K.*
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Lodner : *Oe. A.-K.*
Lyngensfjord : *Oe. A.-K.*
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— H. Mettrier.
— Oe. A.-K.
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Zeja : *C.A.I. Rivista.*
Zimbasp. : *Oe. T.-K.*
Zugsp. : *D.u.Oe. A.-V. Bayerland.*

ALPINE ACCIDENTS IN 1913.

ON February 5, 1913, a party of six young students of Milan reached the Cecilia Club Hut, where they were detained by bad weather for two nights. Early on the 7th, the weather being now fine, four of them set out for **Monte Disgrazia**. They followed the usual

route and reached the Forcola della Speranza (Bocchetta Pioda) at 9 A.M. Mounting the narrow and heavily corniced N.W. arête, Arrigo Truffi, the leader, suddenly heard a loud crash behind him. He at once threw himself over on to the S.E. slope of the ridge, but the remainder of the party, together with an immense piece of corniche, were precipitated down the nearly perpendicular N. slope. Truffi held firm, but the rope broke between the third and the last man, **Ettore Levis**, and the latter fell with only one or two bounds straight on to the Disgrazia glacier, a fall of quite 3000 ft. One of the fallen students had kept his ice-axe, and by this means and Truffi's assistance, the survivors managed to regain the ridge. Truffi's skill and presence of mind had undoubtedly prevented a still worse disaster. The party at once descended to the hut.

A search party was immediately organised by the Valtelline section of the C.A.I. Thirteen persons set out for Chiareggio on the evening of the 9th, and after perilous adventures, in which several of them nearly lost their lives on the steep and always dangerously crevassed Disgrazia glacier, gallantly recovered and brought down the body on the evening of the 10th. Death had, of course, been instantaneous.

This is said to be the first accident that has ever occurred on Monte Disgrazia.

From the Journal 'La Valtellina.'

On March 22 three young men from Zürich, Herren **Dusailler**, **Gerson**, and **Wingerling**, when attempting the ascent on skis of **Piz Misaun**, probably trod an avalanche loose when about $\frac{3}{4}$ m. above the Boval Hut. Only one body has been recovered.

NEW EXPEDITIONS IN 1912 AND OTHER YEARS.

Mont Blanc Group.

MONT BLANC (4810 m. = 15,782 ft.) from the Glacier du Mont Blanc. August 1905. Herren Eduard Franzelin and J. Hechenbleikner, 'Ö.A.Z.' 1913, p. 61.

The party left the Sella hut at 4 A.M., at first in the direction of Mont Blanc through the first icefall immediately N.E. of the hut, then bore in a curve to the right (E.) across the highest glacier to the foot of the couloir Emile Rey. New snow, however, caused them to take to the rib which lies W. of Picco Luigi Amedeo and runs nearly parallel to its S.W. arête (foot of the rib between curve 3500 and 3550, the upper end in the name Mt. Blanc de Courmayeur on the map). This rib was followed with varying difficulty (ice

and rock) until it ended in a high ice-cliff, or hanging glacier (Eisabbruch), climbing which was exceedingly difficult. The conditions here, however, vary probably each year according to the state of the glacier. To the upper edge of the ice-cliff they took 8 hours. After an hour's rest they continued the ascent and reached in 3 hours without any difficulty, direct, the summit of Mont Blanc. They slept in the Vallot hut and next day traversed the Aig. de Bionnassay to the Col de Miage, and so regained Courmayeur.

[This ascent is apparently considered 'new,' but the route is, if not identical with, at least very close to, one or other of the routes that have been made up this face (*cf.* Mondini-Gugliermiana-Canzio; 'Monte Bianco' Boll. XXXV.; Panorama 'Il lato Sud-ovest del Monte Bianco (Bacino del Miage).']

AIGUILLE DU MIDI (3843 m. = 12,605 ft.) BY THE N.W. FACE (*cf.* 'La Montagne,' 1912, pp. 561-562, with photograph showing line of ascent).

August 25, 1912, Mdlle. Renée Eugster with the guide Alfred Simond and the porters Robert Claret and Michel Claret-Tournier.

The party left the Pierre Pointue in doubtful and cold weather at 4 A.M. and took to the N.W. arête, where it forms a little spur on the Gl. des Pèlerin. After crossing some disagreeable screes they ascended a chimney rendered difficult by snow and verglas. Thereupon they ascended a second chimney more to the right, difficult but excellent rocks. There followed two hours of fairly easy climbing, always bearing to the right to turn impossible slabs. After a fruitless attempt to pass above these slabs they gained the bank of the great snow couloir and there breakfasted. Weather very indifferent—very cold—a tempestuous wind at intervals and snowing slightly, which rendered the rocks wet and iced.

They then took to the couloir itself, finding, fortunately, the snow excellent, as the slope, especially after passing a sort of funnel formed by the narrow part of the couloir, became much steeper. Higher up the snow swept by the wind was not so good. The arête was now far behind them, and they gained the foot of the first summit in view of the Bergschrund when suddenly the weather got worse. The icy wind and the snowstorm increased to such an extent that upon Simond's advice the descent was decided on. The couloir was followed, descending face to the slope, for three hours, and the glacier finally regained at nightfall.

Pennines.

WANDELUH (3595 m. = 11,792 ft.) BY THE E. FACE.—July 15, 1912. Herren Guido and Max Mayer with the guides Angelo Dibona of Cortina and Luigi Rizzi of Campitello.

The climb was commenced near point 2772 to the left of the more southerly of the two snow couloirs which seam the face, and

which are interrupted by big black overhangs. A very intricate and difficult climb led to the edge of the couloir (at a small cavern) which was swept by avalanches. Mounting in zigzag and crossing a small ice-couloir the party gained a platform and continued up a very difficult slabby couloir and by the arête itself, or its N. flank. On attaining the fork of the couloir they followed its left branch up rocks covered with verglas and buried in masses of fresh snow. They finally ascended about 20 mètres in the great couloir itself, then quitted it for its left edge, and then gained the principal arête, which they followed for about 80 mètres, and after a short time reached the snow-covered summit. The ascent is described as very difficult and very dangerous by reason of falls of stones and ice. The height of the face is about 800 mètres.

Times :

From Schönbühl hut to foot of rocks	..	30 min.
Ascent of face, including 2 hours' rest	..	11 hours.
Descent to the hut	..	2½ hours.

(*'La Montagne,'* 1912, pp. 526-527.)

Trift District (Uri).

FÜNFINGERSTOCK No. 4; (about 2977m.=9755ft.) ascent by the S. face and E. arête, descent by the W. arête and N. face. (See the Rev. A. V. Valentine-Richards's article and the accompanying photos, &c., 'A.J.' xx. pp. 116 et seq.)—On August 3, 1911, Captain H. Bone, R.N., W. Audley Bowdler, Roger E. Richards, and H. Scott Tucker started from Stein at 6.45 A.M. and went up the W. Oberthal glacier (where they left three axes and most of their spare clothes and food) to the most easterly snow couloir on the S. side of the mountain. This was impracticable. They therefore took to a pyramid buttress on its W. (10.30 A.M.) (this buttress is almost directly below the dotted line indicating No. 3 peak—'A.J.' xx. photo p. 116) and climbed always to the left, sometimes on the face and sometimes by gullies (partly stone-filled) to a little snow col overlooking the Wenden glacier and the N. fingers.

Thence over broken rocks and by a chimney to the ridge just E. of the junction of the W. and S. arêtes. The first peak was reached with ease at 1.15 P.M. Following the arête to the W. they descended rather loose rocks and a little chimney towards the gap between peaks 1 and 2, which was gained by climbing some detached blocks and making an easy traverse on the N. side immediately below the summit, reached a few moments later. A 10-ft. chimney, or slab and crack with a good handhold, led to the gap between peaks 2 and 3. An ascent, steep for the first 20 ft., to peak No. 3 followed. Then came a traverse down a rotten freshly shattered chimney, a good ledge, and a 5-ft. pull up a corner to a second ledge. From here they crossed the arête to the S. side; 12 ft. below they found good rock leading to the top of a gendarme in the gap. A difficult descent of about 18 ft. led towards peak 4—a flat

summit ledge ending in an almost perpendicular wall descending to the low broad gap between Nos. 4 and 5. Peak 4 is apparently the second to the left of the white-dotted line marked 'No. 4' in Mr. Valentine-Richards's *unbekannt* photograph ('A.J.' xx. 116.).

A storm which had been gathering in the W. began to approach, and, as progress along the ridge seemed impossible and no means of turning the difficulty could be found, it was decided to descend the N. face to the Wenden glacier. The descent began at the gap between Nos. 4 and 3, and was continued slightly W. of a large and recent rockfall, first by the face, next by a stone-filled gully, again by the extremely steep face, which was broken by a series of very narrow ledges and slabs which led down to a scree platform. Thence a difficult descent straight over a buttress, afterwards a sharp traverse over sound smooth rocks to a snow couloir. At times a dense mist hid the leader of the caravan from the last man. During the later part of the descent the moon dispersed the mist and gave the party superb views of the Western Alps. At 10 P.M. the foot of the couloir was reached and the fitful light of the moon showed the climbers a wide bergschrund yawning beneath. A night out seemed inevitable. This was spent on a sloping rock above the schrund between the W. rock-wall of the couloir and the snow which filled it. The only axe was driven into the snow, everybody made fast, and the night spent as comfortably as possible. At 1 A.M. a large meteor fell. At 4 A.M. the party restarted, found an easy way along the rocks to the W., crossed the schrund to the glacier, climbed to the W. Oberthaljoch, recovered their baggage, and walked to the hotel in bright sunlight, meeting a rescue party of its cook and two cowherds bringing rum and madeira cake. Their services were recorded in each of the four bills as 'Trinkgeld für Suchen am Fünffinger 7.50f.'

FÜNFFINGERSTOCK (square or truncated sugarloaf rock peak, unnamed, next to and S. of Finger No. 2 (cf. photo 'A.J.' xx. opp. p. 116).—On July 29, 1911, Messrs. Roger E. Richards and H. Scott Tucker left their sacks and axes at the Thurmjoch and crossed the snowfield roughly from W. to E. to a snow couloir immediately to the left of a little nameless col (at the letter 'l' in 'Sustenlochspitz' on the map in the Urner Alpen Führer Band, II. p. 199). Reaching the rocks at its top they climbed, by a shallow rock and grass chimney slanting to the right, to the arête, turned two gendarmes on the right and climbed two others. They were then face to face with a wall of rock about 200 ft. high, up the centre of which ran a long narrow and apparently unclimbable crack, shown in Mr. Valentine-Richards's photo. To the right appeared a leaf of rock and a shadow suggesting a possible route. Between this wall and the climbers was a breach about 75 ft. deep. They reached its foot by broken rocks and crossed a snow couloir—bordered by white granitic rock—rising from the Kl. Sustlifirn.

Scrambling inside the overhanging leaf, they found themselves in an almost closed chimney about 150 ft. high and 2 ft. wide. Its centre was filled by a stream of hard ice; its sides were formed of loose rock and stone. The chimney cuts off about a quarter of the peak from the main body. The split seemed of comparatively recent origin from a geological standpoint. The presence of the ice and the absence of an axe made back and knee work necessary. At times it was impossible to move without starting showers of stones, some of large size. Fortunately the second man was partially sheltered. For the greater part of the chimney the climbers were shut in by its high walls and were within, rather than upon, the mountain.

After leaving the chimney they climbed a stone-filled gully to the top of the N.-W. arête (looking towards the Thurmjoch) and reached the foot of the twin summits of the peak on their S.S.E. They turned the more southerly peak by a short descent (doubled rope) which led to the gap between them and climbed that point over difficult rock. Next they climbed its twin by the S.-E. corner and descended by the crack splitting it into halves. Thence stony ledges separated by steep and difficult rocks (doubled rope) led to the Oberthal glacier. (Estimated time from top of first snow couloir to Oberthal glacier, 5 hours.)

Bregaglia Group.

MONTE DI ZOCCA (3179 m. = 10,430 ft., *S. map*; 3174 m. = 10,414 ft., *Lurani map*). By the N.E. arête. Signori E. Fasana and P. Mariani, August 1, 1910.¹ From the Allievi Club hut the party attained the Zocca Pass. Thence straight up to the Monte di Zocca's serrated N.E. arête (*cf.* the late Count Lurani's admirable photograph in 'A.J.' xxiv. facing p. 381). At first below the crest on the N. slope by ledges and snow, then to the arête itself by hard rocks, thus attaining top of first tooth. Then over the following teeth, turning again later on to N. slope by insecure slabs; said slope is followed till crest can be regained close to an enormous tower, which from hut resembles an upturned hand. Tower is turned by narrow ledge on its S. slope, and crest again followed till just *short* of the very conspicuous 'Anticima' or false summit. (All previous parties have been compelled to retreat after reaching *top* of 'Anticima.'—E. L. S.) Next a traverse follows on the S.E. slope of 'Anticima' over slabs and a small, very steep ice-patch, whence difficult rocks are scaled to the summit (9 hrs.).

[*Cf.* 'A.J.' xxiv. p. 392, where read N.E. arête for W.; 'R. M.' 1911, pp. 125-6; 'Le Prealpi' xii. No. 1, 1912; 'Guida Alpi Retiche Occidentali,' iii. p. 196; 'Climbers' Guide,' p. 122. Conditions are said to have been very bad, which makes the apparently simple circumvention of the formidable 'Anticima' all the more remarkable.]

¹ Kindly communicated by Professor Corti.

Central Caucasus.

A full report of the 1912 expedition of Dr. Walter Fischer, Dr. Hermann Renner, and Dr. Oscar Schuster is contained in 'Ö.A.Z.' 1912, pp. 322-323. See 'A.J.' xxv. 462-4 for the report of their 1910 expedition, and 'A.J.' xxvii. 92-95 for the report of their 1911 expedition.

The party left Dresden on July 6 and reached Wladikawkas, *via* Kohlfurth, Kalisch, Snamenka and Rostow, on July 10.

(Through carriages run from Kalisch as far as Beslan.)

July 11, drove, *via* Archonskaja, to a little village on the Mamison Road, 9 versts S. of Alagir, which was left away on the right.

July 12, drove to Unter-Saramag. Moderate accommodation in an inn, 'Krepost.'

July 13, to the last bivouac, of the 1911 expedition (5 to 7 August; cf. 'A.J.' xxvii. 95) at the foot of the Lagau-Choch.

July 14, to the N.E. Khubag Glacier and from here by means of a great rock-spur from the S. to the summit of **Lagau-Choch (first ascent)**, Pt. 13,331 ft. = 4066 m. of Freshfield's map in 'A.J.' xvi. 31. Time of ascent 4½ hrs. (A photo of Lagau-Choch from the N.W. accompanies Dr. Schuster's article.) Returned to Saramag.

July 15 and 16. Rest and wet.

July 17.—Up the Srug Valley. Pitched tent at about 2300 m. S. of the Birachtikaw.

July 18.—Up the S. arête or close to it, easy but very tiring, to the summit of Sikara-Tau in 3½ hrs. (3829 m. = 12,559 ft.).

July 19.—During the night heavy storms. As the valley path was flooded returned over the Srug Pass (2787 m. = 9141 ft.) with an Ossetian hunter to Tib on the Mamison Road. Srug Valley to Pass, 1½ hrs., thence to Tib 2 hrs., thence to Saramag 1½ hrs.

July 21.—Returned to Lagau bivouac. Cf. July 13.

July 22.—On to the Central Khubag Glacier (cf. Freshfield's map, 'A.J.' xvi. 31), over its left bounding arm to the snowfields which descend from the Kaltber ridge direct S. to the upper Saramag Valley. Up these snowfields to the dividing ridge in the direction of Zeja, which was reached between two prominent rock towers in the deepest gap between Lagau and Kaltber. As a descent to the Kaltber Glacier from this point would mean much difficulty; they followed the ridge for a short bit to the W. until they gained the point attained by Fischer and Schuster in 1910 when ascending Kaltber (4409 m.) (called locally Adai-Choch). They descended by the 1910 route to the Zeja stream, which they reached opposite the inn 'Lednik,' but as it could not be crossed there they descended the right bank for ¼ hr., when they crossed a bridge to the path leading to Rekom. They followed this path to St. Nikolai. Quarters in the engineers' house. Times from the Lagau camp to the ridge about 3 hrs., thence to the bridge 4 hrs.

July 23.—Returned to Saramag by road.

July 24.—Went down the high road to the junction of and up the Ilsa Valley (Freshfield's map = Elssa Valley) W. of Pt. 1521 of Merzbacher's map.

Fine bivouac at about 1900 m. among luxuriant vegetation.

July 25.—With an Ossetian hunter named David Chaidmasa, very arduous, to the S. wall of the Kalper (cf. 'Jahrbuch of the Russian Mountain Club,' 1903, pp. 115 *seq.*). The peak is not named in Merzbacher's map, but is marked 12,467 ft. in Freshfield's map, 'A.J.' xvi. The S. wall was climbed to the summit (2 hrs.), which had probably been previously gained by local hunters. The rocks remind one of the Aig. du Moine. The hunter subsequently followed the party to the summit. They descended by his line of ascent by steep bouquetin paths along (or across) the ridge which divides the upper end of the Ilsa Valley, and so got back to the stream in S. valley basin E. of Pt. 9051 (Freshfield).

July 26.—Returned to Saramag.

July 27–29.—Bad weather.

July 30.—Up the Nardon Valley to a bivouac at 2570 m. on the (orogr.) right side (5 hrs.).

July 31.—**First Ascent of Merzbacher's Pt. 3777 m.** (4 hrs. from bivouac). Gained the ridge between m. 3631 and 3777, then by the W. flank and the upper part of the W. arête to the S. summit. Crossed to the N., probably higher, summit in $\frac{1}{2}$ hr.; very bad snow.

Returned, with some variations, by same way.

August 1.—Heavy thunderstorm in night. Ascended in 2 hrs. to the lowest depression between Pt. 3777 and the Tepli-massif, which they named Tepli Pass (3300 m.). Descended to N. Tepli Glacier and traversed E. to the glacier N. of the Tepli precipices. Grandiose ice-cirque. Descended to the glacier tongue, but a storm, swollen torrents, uncertain weather, and difficult orientation made them abandon a further descent. Returned to the pass in driving snow (4 hrs. from the end of the glacier). On the way back to Saramag much delayed by floods, which swept away the bridge at Nar.

August 2.—Down the Mamison road to Misur.

August 3.—Drove to Alagir.

August 4.—To Darg-Koch Station.

The weather during the expedition was mostly unfavourable, indeed on some days abnormally bad; consequently much trouble was experienced with the torrents. For the whole journey they employed a Grusinian, with his horse, from Sion, on the Grusinian Road, and they were at times accompanied by the hunter of Saramag named above.

It will be noted that the Winkler Expedition ('A.J.' xxvii. pp. 95–98), which started early in August, had quite good weather.

J. P. F.

ALPINE NOTES.

'THE ALPINE GUIDE.'—Copies of Vol. I. of the new edition of this work, price 12s. net, and of 'Hints and Notes, Practical and Scientific, for Travellers in the Alps' (being a new edition of the General Introduction), price 3s., can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C.

'THE ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes those portions of Switzerland to the N. of the Rhône and Rhine valleys.

'THE ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes 'those Alpine portions of Switzerland, Italy, and Austria, which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige.'

THE ALPINE CLUB OBITUARY.—Cawood, A. H. (1874). Daunev, A. (1860). Loppé, G. Honorary Member. Wilson, E. A. (1905).

ALPINE JOURNAL, Vol. xxvii. No. 199—Addenda and Corrigenda :
THE WETTERHORN (p. 49).—'This mountain (the Wetterhorn) was said to have been ascended once before by two guides, but the authority for this is somewhat vague, and Wills was certainly the first who can be said with any confidence to have stood upon the real highest peak of the Wetterhorn proper.' The highest peak of the Wetterhörner, the Mittelhorn, 12,166 ft., was first ascended by Mr. Speer, July 8, 1845. The Hasle Jungfrau 'often called the Wetterhorn without any qualification,' was first ascended by Melchior Bennholzer and J. Jaun on August 31, 1844. 'Finally on Sept. 17, 1854, the first completely successful ascent of the Hasle Jungfrau from Grindelwald was effected by Sir Alfred Wills with his guides,' &c.—'Climbers' Guide to the Bernese Oberland,' by Rev. W. A. B. Coolidge, vol. ii. p. 110.

THE MONT AIGUILLE (p. 76).—A full account of this extraordinary mountain will be found in Ball's 'Western Alps,' Alpine Club edition, edited by Rev. W. A. B. Coolidge, p. 178.

P. 96, footnote—See C. Dent's 'Ascent of Gestola,' 'A.J.,' vol. xiii. p. 232. Dent called it 'Tetnuld' but the mistake was corrected, p. 360.

P. 47, line 13, for 'not one' read 'only one' (viz. Rev. J. Llewelyn Davies, D.D.).

P. 89, line 30—For Miss 'Botchford' read Miss 'Botsford.'

LADIES IN THE CAUCASUS.—Mr. Freshfield sends the following note:—It may interest climbers who are turning their thoughts to the Caucasus to know that a party of ladies, one English and two Russians, visited Urusbieh last summer. Having procured through the Prince native guides they crossed the long Adyr Tau glacier pass to Suanetia, stayed with the princely family there—whose acquaintance they had previously made at Tiflis—returned to Urusbieh by the Dongusorun Pass, and finally rode over the Klukhor to Sukhum Kaleh. This may be taken as adequate evidence that the Caucasus is open to travel even in its remoter recesses. I should add that both at Urusbieh and Ezeri the Princes inquired warmly after their English guests of 1889 and expressed their disappointment that so few Englishmen now visited their country.

THE COLICO-CHIAVENNA RAILWAY.—A new railway station has been opened at Verceia on the Colico-Chiavenna line between Dubino and Novate-Mezzola. Travellers bound for the Volta Club hut in the Ratti glen will consequently be able to avoid the dusty two miles of road which formerly had to be traversed from Dubino before reaching Verceia village. A key of the hut is to be found at the Inn of Lorenzo Corti, Verceia.

THE FIRST ASCENT OF CARTENSZT IN DUTCH NEW GUINEA.—In March last official news was received in Amsterdam from Amboyna, Dutch New Guinea, that the expedition which left England towards the end of last summer under the leadership of our member, Dr. A. F. R. Wollaston, had succeeded in accomplishing its chief object.

Towards the end of January Dr. Wollaston, accompanied by Lieutenant Van de Water of the Dutch Army (who had been commissioned by the Government to afford the expedition all the assistance possible), succeeded in reaching the summit of Cartenszt, the highest of the snow mountains in Dutch New Guinea. The height of this mountain has been estimated at between 16,000 and 17,000 feet.

The Amsterdam papers have been full of praise of this exploit and are particularly gratified that Dr. Wollaston included their compatriot Lieutenant Van de Water in the ascent.

Later news reports that the expedition reached the coast on their return journey in good health, and it is expected that Dr. Wollaston may reach this country by the end of this month or the beginning of June.

He deserves our hearty congratulations on his fine performance.

BRITISH EXPEDITION FOR EXPLORATION AND CLIMBING IN THE CAUCASUS THIS SUMMER.—It is proposed to start from London about the beginning of July, returning about the end of August—60 days. No Swiss guides will be taken, but native assistance will be utilised wherever possible.

The plan embraces both travel and working from centres.

Full information has been obtained with regard to the work still to do in the districts proposed to be visited. Anyone desirous of joining the party will please communicate with Mr. H. Raeburn, 32 Castle Terrace, Edinburgh, who will be pleased to give any further information required.

The party will be limited in numbers.

THE CIRQUE DE GAVARNIE.—Some negotiations have taken place between the authorities of the Vallée de Barèges and an industrial syndicate for the granting of a concession of the right to use the water-power of the Valley. As the necessary installation would threaten the springs which add so much to the beauty of the Cirque, energetic protests have been lodged against any concession which fails to safeguard these great natural beauties. M. Pierre Loti, the eminent Academician, has been one of the most strenuous protesters, and it is hoped that the powers that be will prevent any ill-considered action.

D. & E. A.-V.—The total income of this great association for the year 1912 was as follows:—

	Mark,
Members' subscriptions (98,474, including 1474 new members)	666,676
Interest	11,034
Various sources	12,592
Advertisements	18,894
	709,196=£35,460

The expenditure was as follows:—

	Mark
'Zeitschrift' (93,500 copies)	235,145
'Mittheilungen' (95,000 copies)	116,950
Huts and paths	220,863
Management	44,619
Expenses in connection with guides	25,200
Central Library	13,000
Alpine Museum	20,000
Accident Fund	18,000
Other objects	21,147
	714,924=£35,746

It will be noted that the Verein spends on its publications, the annual 'Zeitschrift' and the bi-monthly 'Mittheilungen,' about 49½ per cent. of its total income.

The total assets of the Association amount to M.363,333=£18,166.

AUSTRIAN ALPINE CLUB (Ö.A.C.).—The annual accounts for 1912 of this Club, which, in point of numbers and of the mountaineering qualification expected of its candidates, stands nearest to our own, show the following position :—

RECEIPTS.

	K.
742 members' subscriptions . . .	11,130
Various sources	754
Receipts at, and rent of, their three huts	15,370
Advertisements, etc.	4,527
	31,781=£13,313

EXPENDITURE.

	K.
'Die Oestr. Alpenzeitung' . . .	11,883
Upkeep of huts	686
Management	4,407
Premium to guide	190
Library	851
Other objects	638
	18,655=£771

It will be noted that this Club spends on its very admirable bi-monthly paper about 37½ per cent. of its total income.

The annual report is very interesting reading. Great stress is laid on the necessity of continually bringing young blood into the governing body of the Club, and of keeping in touch with the outlying members by means of Club publications and records of expeditions. The guide-books to the Mont Blanc group and to the Dauphiné (the latter being an authorised translation of Dr. Coolidge's 'The Central Alps of the Dauphiny,' revised by the author) are stated to be either in the press or well under way.

SCHWEIZER ALPEN-CLUB.—The published accounts to December 31, 1912, give the following interesting information :—

Total members (including 1307 new members)	13,508
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Total income, inclusive of the subscription to the 'Jahrbuch'	fcs. 140,162=£5606
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The principal items of expenditure are :—

New huts	fcs. 8,350
Repairs to huts; furniture, assurance and paths	„ 5,473
The fortnightly 'Alpina' after deduction of proceeds of advts., &c.	„ 10,652
The 'Jahrbuch,' vol. 47	„ 51,427
Instruction and assurance of guides	„ 11,511
Various subventions	„ 17,928
General expenses	„ 8,398
Instalment to building fund of the Swiss Alpine Museum	„ 8,000

fcs. 121,739 = £4870

The total assets of the Club amount to fcs. 78,060 = £3122, exclusive of balances standing to the credit of various special funds. 'Alpina,' April 15, 1913.

A SWISS NATIONAL EXHIBITION will be held at Berne in 1914. The S.A.C., together with the Zurich and Berne Academical Alpine Clubs, intend to make an Alpine exhibit including a complete Club hut.

THE NEW BOVAL HUT, or rather mountain inn, has unfortunately been destroyed by an avalanche. Its situation certainly seemed perfectly secure.

BRIGUE-FURKA-DISENTIS RAILWAY.—Good progress is being made with this. Some of the principal viaducts, as well as the Gletsch tunnel, are in a forward state. The Furka tunnel is also being pushed rapidly forward. It is expected that the line may be ready for use by the summer of 1914.

PROJECTED RAILWAYS.—The question of an approach to the Jungfrau Joch from the Valais side is again raised. The proposal is to run an ordinary mountain line from Brigue to the Aletsch Glacier. The intention is then to instal an electrically-driven endless wire rope over the eighteen kilometres of glacier to the Jungfrau Joch. Sledges holding eighteen or twenty people would be attached at intervals to this rope. The initial engineering difficulties of this scheme would probably not be very great, but the cost and the maintenance, in view of the short season, would appear to be a serious factor.

A scheme has been put forward to connect Martigny to Turin by a line from the present terminus at Orsières, via the Col Ferret (tunnel), thence via Courmayeur, the Valley d'Aosta and the Val de Cogne, whence a tunnel, piercing the range, would emerge at Ronco. The project is an interesting one, but is not likely to be carried out for many a year.

DR. XAVIER MERTZ, who perished from exposure on the Australian South Pole Expedition (Dr. Mawson's), was a member of the S.A.C., and was a good ski-runner. He was not, however, the champion of Switzerland, as stated in the American papers.

THE WESTERN FACE OF THE DENT BLANCHE.—In the number of the ALPINE JOURNAL for November last I read an account of a new climb on the Dent Blanche (p. 462) which recalled to my mind an early memory. In the 'Climbers' Club Journal' for last February, which someone has kindly sent me, I find the note expanded into a short article, with a diagram, and the climb in question referred to in another place as 'one of the great guideless first ascents in the Alps . . . forming a new route up the west face of the Dent Blanche.'

Of late years we have grown more meticulous than of yore in the records of our climbs, and I am tempted to repair an omission. In the first days of July 1867 a party consisting of my friends Mr. Comyns Tucker, Mr. T. Carson, and myself, with the guides P. Michel and D. Balley, slept at Alp Bricolla in the hope of climbing the Dent Blanche. It was our first expedition of the season, and we none of us knew the mountain. We started boldly to climb the western face, and we did climb it by a route exactly corresponding with Mr. Porter's description, and closely corresponding to his diagram as far as the arrow-head under the letter D. Here, or perhaps a little sooner, we bore to our right and hit the Wandfluh ridge a short way below the top. We were a large party and so early in the season there had been a prodigious amount of step-cutting on the face. Consequently it was past noon—I believe past one—when we got to the ridge. It would obviously have been too dangerous to descend by the face, and the amount of time that might be needed for the return by the ridge was unknown. At the guides' instance we turned back, therefore, without reaching the summit. We climbed down the Zmutt side of the great tower without any particular difficulty, but it was dark before we got back to the Bricolla Alp.

At that period young climbers were shy of recording a 'variation' which resulted in a failure. My recollection is that the face was much more laborious than the ridge, but that there were no very bad places on either. We saw nothing fall. Our reason for not returning the same way was that in the ascent we had been able to use snow lying on ice, and late in the day fresh steps would have had to be cut and old steps recut.

I would not be supposed to question Mr. Porter's claim to having accomplished a 'New Expedition'; for the last few hundred feet his party doubtless took a different line. But the western face of the Dent Blanche long ago ceased to be virgin ground. Seen from below and close at hand it looks attractive. Had I had François Dévouassoud with me that year we should probably not have been misled by its attractions!

In the Index to 'A.J.' vol. xxvi. Mr. Porter's note is wrongly entered as Dent Blanche by W. Ridge.—DOUGLAS W. FRESHFIELD.

THE DE FILIPPI INDO-ASIATIC EXPEDITION.—In 'The Italian Gazette' of April 29, 1913, kindly sent to us by Mr. J. L. Tod-Mercer, A.C., will be found some very useful notes on this Expedition, translated from the official Notice in the 'Rivista d'Astronomia' for April. We regret that want of space prevents us from reproducing them here.

REVIEW.

Alpine Studies. By W. A. B. Coolidge. With 16 illustrations. London: Longmans, Green & Co. 1912. 7s. 6d. net.

'In the following pages,' says Dr. Coolidge, 'I give a selection of twenty of the very numerous articles relating to the Alps which I have written during the past forty-two years. Three have not been printed previously ("Tschingel," "The Name of Monte Rosa," and "A Driving Tour"), the rest having originally appeared in English, French, German, or Italian, and now in an English dress.' Six of the articles first appeared in the *ALPINE JOURNAL*, two in the 'Guardian,' three in the 'Pilot,' and one in the 'Yorkshire Ramblers' Club Journal,' so that five are now seen for the first time in an English dress.

We may say at once that this is a book which no one who is interested in the history of the Alps can afford to neglect. It is very convenient to have these papers brought together in one volume, and as we read them it is pleasant to find articles from this Journal filling so large a part in the book. It is not necessary to speak at length of those papers which have appeared in our own pages. 'The Chambeyron District' (of the Cottian Alps), 'The Monte Viso,' 'The Second Ascent of the Meije,' 'The Wetterhorn and Jungfrau in Winter,' 'The Schreckhorn in Winter,' 'The early attempts on Monte Rosa from the Zermatt side (1848-1854),' will awaken pleasant recollections in the minds of the older members of the Club.

Of the other climbing papers, 'How I made the First Ascent of Les Bans' is perhaps the most interesting. 'The History of the St. Théodule Pass,' first published in the 'Rivista Mensile' of the C.A.I., October 1911, is welcome in its English dress, as is that on 'The Matterhorn and its Names' from the same excellent publication (January 1912). Both these articles have been carefully revised by the author, as is the case with other papers in the volume.

The article on 'The Name of Monte Rosa' is most instructive; that on 'Tschingel,' the author's famous dog, will commend itself

to all lovers of 'the friend of man'; and the paper on 'A Driving Tour' shows what interesting journeys may still be made by those who are 'rude donati' as far as actual climbing is concerned.

The account of 'A Swiss Wrestling Match on the Napf (4629 feet)' takes us back to the primitive world. 'The landlady' (of the Kurhaus), says Dr. Coolidge, 'amused us much by perpetually drawing our attention to the Jungfrau. When we tried to explain that we knew it very well, as we lived at its foot, and had even been on its summit, she cut all remonstrances short by the curt remark that it could be seen from nowhere so well as from the Napf. In fact, in her eyes the Jungfrau seemed to be an appendage to the Napf.'

The illustrations, sixteen in number, are mainly from photographs by Signor Vittorio Sella and the late Mr. W. F. Donkin. Those of 'Les Bans from the Pilatte Glacier,' 'The Wetterhorn from the Mettenberg,' and 'The Ostspitze of Monte Rosa seen from the Dufourspitze' appeal to us most.

As was to be expected in the case of so careful a writer as Dr. Coolidge there are few errors to be found in this volume, but on page 167 we find 'most of his party were assembled as Torrenthorn,' and on page 46 we are surprised to see the misquotation 'fresh fields and pastures new,' especially as in the ALPINE JOURNAL, Vol. X. page 138, the passage is correctly given, 'fresh woods and pastures new.'

But these are mere trifles. The book deserves a place on the shelves of all who are interested in the Alps, and if much of it is already known to the oldest of us, yet it will well bear re-reading.

PROCEEDINGS OF THE ALPINE CLUB.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W., on Tuesday evening, February 4, 1913, Sir Edward Davidson, *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club:—Messrs. H. A. Carter, J. E. Fisher, jun., W. L. Davies, and A. C. Pigou.

The PRESIDENT said: I am sorry to say that since we last met we have had two more losses amongst the veterans of the Club.

First of all, we have lost Mr. ARTHUR MILMAN, who was elected a Member of the Club in 1859, and who was considerably over 80 at the date of his death. He was a very distinguished climber in his early days, as all of you probably know, and he possessed a charming literary style, which was well displayed in that fascinating paper—no doubt familiar to many of us—which he wrote on the first ascent (not the first passage) of the Col des Grandes Jorasses from the Montanvert side. I think it was in 1864, in company

with the late Sir Alfred Wills and his brother and four guides, two of whom were well-known guides at that time, and two porters who afterwards came to be very well known guides, that he accomplished the ascent. His account of this expedition is well worthy of its place in the well-known second volume of the *ALPINE JOURNAL*, which is really a garland of the very best Alpine literature from the first page to the last. Mr. Milman died very suddenly, and the last literary work on which he was engaged, and which will appear in the February number of the *ALPINE JOURNAL*, was a labour of love to him, being the 'In Memoriam' notice of his old friend and climbing comrade, Sir Alfred Wills.

Another much-respected Member of the Club has passed away in the person of Mr. ALEXANDER DAUNEY. He was a very well known and much esteemed Member of the Chancery Bar and a Master of the Bench of the Middle Temple, of which Inn he served some few years ago the office of Treasurer with great distinction. In his early days he climbed a good deal, and although of late years he had not visited the High Alps he retained his interest in them to the last.

One grieves more and more over the losses we have recently sustained when we look round and find so very few of the earlier Members of the Club present with us.

Now it is my pleasant duty to do what every President has to do once a year, and a duty which I hope every President will have to do once a year for many years to come, and that is to propose a very hearty vote of thanks to the Hanging Committee, and especially to Mr. Sydney Spencer, who is the life and soul of that Committee, for the great care and skill which they displayed in connexion with the Exhibition of Photographs which took place in this Hall in December last. Mr. Spencer, as we all know, brings the greatest possible knowledge and experience to bear on the work, and although we pass this vote annually one feels every time more and more, if that be possible, how very well deserved are the thanks of the Club to him.

The motion was carried by acclamation.

I have also to move a hearty vote of thanks to Mr. T. Howse for his great kindness in arranging the Herbarium and Geological specimens of the Club. I do so with the knowledge that the Club is deeply indebted to Mr. Howse, who has devoted a great deal of time to this work, and I think that the Club is very lucky in having a Member so capable and so willing to undertake it.

The motion was carried by acclamation.

Dr. A. M. KELLAS then read a Paper on 'A Fourth Visit to the Sikkim Himalaya, with Ascent of the Kangchenjau,' which was illustrated by lantern slides.

The PRESIDENT said: I have no doubt that there are many Members here who would like to say something on the subject of the Paper we have just heard.

Dr. T. G. LONGSTAFF said : The Paper has been most interesting, and it has been a great pleasure to me to listen to it, and also a great pleasure to see the slides. There are a good many things I would like to say, but as it is getting rather late I will confine myself to one or two points only.

Here we have Dr. Kellas going straight out from London to Darjeeling, getting into the snows at once, and starting to climb straight away. I think he was only three months away from England altogether. There was no long acclimatisation. This is a point I have always urged, that acclimatisation is unnecessary, and I think Dr. Kellas's success on this last expedition is a good illustration of my point. But recollect that he has been many times at 20,000 feet. This practice is more valuable than any gradual acclimatisation. When we come to his climb, we see that he camped at 19,000 feet, and his mountain is 22,600 feet, so that he had some 3,600 feet to ascend, which we find he has accomplished in six hours. That means that he has climbed at the rate of 600 feet per hour.

The absolutely convincing way in which the Paper has been given made it all the more delightful, and the simple narration of it conveys the idea that it is nothing exceptional. We must all admit that it is very encouraging to be able to climb 600 feet an hour at that altitude.

I remember Dr. Workman telling me that there must be some mistake about the height of Trisul, because it was impossible at that altitude to climb, as I appeared to have done, at 600 feet an hour, and now we have a climb at the rate of 600 feet an hour on a distinctly more difficult mountain. We learn that on a preliminary climb he cut up the 2000 feet ice slope to the col in five hours.

Another question that would have been asked a few years ago would have been, 'How about mountain sickness?' and I think it is very unkind of us not to ask Dr. Kellas this question, as it does not give him any opportunity of saying that he did not suffer from it.

The Duke of the Abruzzi, on Bride Peak, found his barometer stood at 12·3. You will remember there that he had no trouble about mountain sickness. On the top of Everest, at least we have always been taught so, the barometer is going to stand at 10·7. This gives a difference in pressure of only $1\frac{1}{2}$ inches, and I think if one can stand 12 inches there is no reason to suppose that the next $1\frac{1}{2}$ inches will be prohibitive to success.

There is one other point which I should like to mention, and that is the way Dr. Kellas got on with his natives when climbing, and the way he has trained them. I believe there are plenty of men in this Club who, if they were able to get hold of the right kind of natives, would be certain of success in Himalayan exploration, and that after what Slingsby, Bruce, Collie, Freshfield and Kellas have done we need none of us think it essential to take Alpine guides to the Himalaya, but will make up our minds that many of the native

racers are able to do everything that is necessary for our success if only they are properly treated and well led.

Mr. FRESHFIELD said: I can touch on only one or two of the many points raised by Dr. Kellas in his very full and interesting account of his last year's expedition to Sikkim.

The region is very familiar to me, and I should like in the first place to say something as to the relation of its main ranges. They may best be represented by the figure of a capital 'H' laid on its side, thus \sqsubset . Along the upper limb lies the watershed on which stand the peaks climbed by Dr. Kellas, Kangchenjau and Chumiomo. The gaps in it afford broad and easy grass passes. On the cross-bar running south at right angles to the watershed stand the Jon Song and Tent Peaks. On the lower limb of the \sqsubset rise Siniolchum, Kangchenjunga, and Jannu, forming the great screen visible from Darjeeling.

What I want to point out is that the character of the scenery changes, not at the watershed, but at the ends of the Kangchenjunga limb, and south of this you have Sikkim scenery, the characteristics of which are the extraordinary depths of the valleys, the steepness of the mountain-sides, and the luxuriant growth of sub-tropical forests and flowers.

Farther north you come to relatively broad, shallow, and naked valleys, lying at a much higher level, 8000 to 12,000 feet, scenery approximating to and soon reaching the Tibetan type, though lying on the Indian side of the watershed. The change in scenery may be realised if I compare it to that experienced when one climbs from the Bregaglia into the Engadine. Imagine the watershed of the Engadine somewhere near Zernetz and the parallel would be more complete. All the photographs we have seen to-night, though taken in a district which is both geographically and politically Sikkim, have represented typical Tibetan landscapes.

The admirable views of the glaciers shown, with their prodigious séracs and weird crevasses, suggest to me a hope that this part of the Himalaya may afford a golden opportunity for the revival of a craft which has been somewhat neglected of late, owing to the recent craze for rock gymnastics, the icecraft of the old Chamonix guides.

I must refer, in conclusion, to two practical points. I venture to think that Dr. Kellas, greatly encouraged by his previous successes, may have, in his last expedition, trusted a little too much to his native followers. When a great peak is to be attempted, when a base camp and a relief party become essential, I think two or three Englishmen might have a better chance than one. A sense of time is not a coolie's strong point. One can hardly expect him, even under his own headman, to turn up at the right spot at the right moment. Moreover, on steep snow and ice the native is necessarily more or less of a novice, if a capable one; he has the defects of his qualities, and one of these is over self-confidence, or carelessness.

There is one other matter on which we should like to have Dr.

Kellas's opinion. On this occasion he visited Sikkim in early summer, and with regard to the Eastern Himalaya we have no conclusive evidence from mountaineers (and no other evidence is worth anything) whether this season or autumn will prove the best for an assault on the great peaks. My own experience was that in September the upper glaciers were easy, owing to their crevasses being choked with the snows of the rainy season. This, however, means that rock faces would be heavily laden and in bad condition. I incline to believe that the best time would be before Midsummer, but Dr. Kellas is in a better position to advise the Club.

I am sure that all present will join in once more according to Dr. Kellas our hearty thanks for his extremely valuable Paper. He is paving the way for great further successes, some of which we hope may fall to his own lot, in Himalayan mountaineering. He has proved to us to-night that the Himalaya offer not only a vast field for exploration but also a pleasure-ground within the compass of a three months' tour.

The PRESIDENT said: If nobody else wishes to address us I will now move a very hearty vote of thanks to Dr. Kellas for his most interesting Paper. One or two points have been alluded to by previous speakers on which it is perhaps as well that I should not dilate, as I cannot myself speak from personal experience of the Himalaya, but one point of great importance which had already occurred to me has been raised by Mr. Freshfield, and that is, what is really the best time of year for visiting the Himalayan ranges, and this point does not seem to have been cleared up.

Last year both Dr. Kellas and Mr. C. Meade, whom I am sorry not to see here to-night, visited Sikkim, and in speaking of his experiences Mr. Meade confirmed Dr. Kellas's remarks about the weather he had had there, saying that it was practically as bad as it was in Switzerland last summer. However, notwithstanding the bad weather, Dr. Kellas managed to ascend a fine peak of 22,600 feet, with a great deal of exploring work thrown in, and one or two so-called failures that were really successes.

With regard to the question of guides, which interested me very much last year when Dr. Kellas was good enough to read us a Paper, his own native guides do not seem to have quite lived up to the reputation which was claimed for them last year, at any rate as ice-men, and I still think that in this respect there is something to be said for the Swiss guide who has been carefully trained in snow and ice craft amongst the glaciers and snow slopes of the Alps.

I beg to move that a very hearty vote of thanks be accorded to Dr. Kellas for his most interesting Paper.

The motion was carried with acclamation.

Dr. KELLAS returned thanks for the manner in which his Paper had been received, and said: With regard to a point mentioned by Dr. Longstaff, there seems to be a little doubt about climbing at 600 feet per hour at high altitudes, but I would like to say that I

am absolutely confident that some of the Sherpas whom I had with me could have ascended 800 to 900 feet in the hour, above 21,000 feet.

I must answer Mr. Freshfield with some diffidence in regard to the best time of the year for commencing an attack on Kangchenjunga or any big peaks, but I personally think that May or the beginning of June would be the most suitable time, as the upper portions of the mountains are then usually free from fresh snow, and one can see exactly what is before one. In September and October, I think, there might also be possible weather for attempting big peaks, but there would then be rather more danger from heavy snowstorms. I think Mr. Freshfield experienced three feet of snow near Greenlake in 1899, and in 1909 I had over two feet, so that probably May or the beginning of June is the best time for the Eastern Himalaya. It need hardly be pointed out how dangerous snowstorms of that nature would be if one were caught at a high camp on a difficult peak.

With regard to what the President said as to the distinction between the Swiss guides and the Sherpa coolies, of course the Swiss guides are better under ordinary conditions of snow than untrained men, but if one trains the coolies for a short time they would be quite as good on easy mountains, though perhaps rather reckless. If one could sufficiently impress upon them not to be careless they would be first-rate climbers. Experience shows, however, that these men are not so reliable on ice slopes as one might expect from their capacity as climbers, but if I had only insisted upon the steps being better when descending from the Kangchenjau there would probably have been no accident or danger at all. I do not for a moment represent these Sherpas as being as good as European mountaineers to start with, but they are easy to train and learn very rapidly. They have the great advantage over the average European that they are only slightly affected by mountain lassitude. If thoroughly trained, therefore, many of them would be better above 20,000 feet than most Continental guides. The two men trained by me in 1911 (Sona and Tuny) were unfortunately away in Nepal, as mentioned at the beginning of the Paper.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W., on Tuesday evening, March 4, 1913, at 8.30 P.M., Sir Edward Davidson, *President*, in the Chair.

The PRESIDENT said: Since we last met in this Hall the news has reached this country of the loss, which took place now nearly a year ago, of Captain Scott and his four gallant comrades on their return from a successful attempt to reach the South Pole, when, at any rate as regards four of the party, they were within a measurable distance of succour and of safety.

The tragic story of this great disaster has moved the whole civilised world to grief by its pathos, and to profound admiration for the

sublime heroism displayed by every member of that gallant band, who perished almost at the very moment when complete success was within their grasp.

The Members of this Club have special reasons for participating in these feelings.

We had taken the greatest interest in the expedition from the first, and many of us had subscribed to its funds.

Captain Scott, its trusted leader, was personally known to many Members, and in 1905 addressed us in this room on 'Antarctic Glacier Work,' and at one time, in 1910, a project took shape and a considerable sum of money was collected for the purpose of providing the expedition with a couple of Alpine guides, who it was thought might be of use in the long march over the southern glaciers to the Pole.

Captain Scott was at that time in New Zealand, and for one reason and another the project fell through, and the money subscribed was, with the consent of the donors, diverted to the general expenses of the expedition.

Whether Swiss or Italian guides would, in the, to them, entirely novel and trying circumstances of Antarctic exploration, have proved a success is perhaps open to question. At any rate, one can quite understand and sympathise with the desire which Captain Scott is said to have entertained to choose the *personnel* of the expedition from amongst his own fellow-countrymen as far as possible.

This is not the place, and I should deem it presumption on my part, were I to attempt to descant at any length on Captain Scott's lofty character and noble career. We can all of us best judge what manner of man he was from the beautiful and touching tribute paid to his memory by our own Honorary Member, Lord Curzon, when speaking from the Presidential Chair of the Royal Geographical Society.

We make no distinction in our sorrow for the loss of each one of those brave and noble spirits, Captain Scott, Dr. Wilson, Captain Oates, Lieutenant Bowers, and Petty Officer Evans, but we have a mournful pride in reflecting that Dr. Wilson, who was his leader's right-hand man and trusted friend and counsellor, was a Member of this Club, to which he was elected in 1905.

He was a most skilful naturalist and an artist of no mean merit, and the beloved physician of the expedition. In the words of one who knew him well, 'Wilson was a man of indomitable courage—one who never spared himself—characteristics that were appreciated to the full by Captain Scott. He was very simple in all his habits and very direct in his thought and address, loyal to his friends, staunch to any cause he took up. He had, in fact, all the characteristics of the finest type of an English gentleman.'

He leaves behind him a wife who has been awaiting his return in New Zealand for the past eighteen months, and to whom, in her great sorrow, the earnest and respectful sympathy of all his brother Members of this Club will go out in the fullest measure.

Although physically the most splendid human effort will avail nothing against the forces of Nature, yet in death have these men triumphed, and have won a moral victory of mind and of soul over matter, almost unexampled in the history of the world.

They sleep their last sleep in calm and tranquil grandeur amidst the eternal snows of the Antarctic zone.

Their bodies are buried in peace, but their names will live for evermore.

Mr. FRESHFIELD said: I feel that I owe so much in many ways to the Club that it is difficult for me to refuse to do anything I am asked on its behalf—otherwise I should certainly have kept silence to-night. For I have had already, in another place and in trying circumstances, to speak in public of this heart-breaking and haunting Antarctic disaster. To do so again is an ordeal, and one I would most willingly have foregone.

You, Sir, have referred to the proposal made in this Club to contribute towards supplying Captain Scott's party with Alpine guides—men of the stamp of those who took part in the Duke of the Abruzzi's Arctic Expedition and for some time held the record of the Farthest North. For various reasons nothing came of the suggestion; but I have in my hand a letter from Captain Scott in reference to it which may, I think, interest the Club:

'DEAR MR. FRESHFIELD,—I quite understand your point, and it is one which I have often debated with myself and others.

'After much experience on the Ferrar Glacier I felt that I knew exactly how and why things went with E. and W. glaciers and could have attacked any southern glacier to best advantage. Shackleton has told me that he attempted to guide himself by my rules, but found they did not work for a N. and S. glacier. I have wondered whether he quite understood the rules.

'These seem to me points to be considered. When the glaciers meet the Barrier ice-sheet there are no rules: it is chaos, the principle of which could not be resolved by any Alpine guide; one must trust to guesses inspired by the moment.

'Again, there is always the experience that a man brought up in one school is often worse than the ignorant man when introduced to new conditions. Over-caution by people who were supposed to know robbed us of much result in the South. As the old saw has it, "Fools rush in where angels fear to tread." I have seen a little of the glaciers of the temperate zones and have been struck by the extraordinary difference of ice conditions. You will remember that our northern explorers were always very down on the icemasters.*

* "Icemaster" is the term employed for the officer responsible for the navigation of a vessel in the frozen seas.

'Sir E. Shackleton tells me that in travelling on the Ferrar Glacier, which runs E. and W., it was found best to travel on the S. side, "because it was under the lee of the sun and therefore not subject to the change due to the sun going off behind the mountains after playing on the side during the day. On glaciers running N. and S. the same definite conditions do not obtain."

‘Such ideas as these have crowded into my mind when the question of Alpine guides has been under discussion, but I quite think that the matter is worthy of further discussion, and, having no experience of such men, I have no prejudices. I should be most happy to talk it over with you and other experienced mountaineers, if you can arrange a meeting. Meanwhile, perhaps you could put your hand on the sort of man you would propose, having regard to age, adaptability, capacity for other useful work, etc. Yours sincerely,

‘R. SCOTT.’

The guides I applied to through Signor Sella showed reluctance to any engagement possibly extending over a second year, and the matter dropped.

With regard to our own member, Dr. Wilson, I can add but little to what has been already said by the President and Lord Curzon. His character is best drawn, and his fame will live, in the tribute Captain Scott paid to the head of his Scientific Staff in his letters home from his winter quarters—letters which have been printed in the March number of the ‘Cornhill Magazine.’

Captain Scott, writing to their common friend, his publisher, Mr. Reginald Smith, expressed himself as follows:—

‘Wilson has been all that you expected of him and I know that is saying a great deal. I find myself wondering at his energy, his tact, and his unselfishness: such qualities have made him beloved by all, and in return he wields the power of an oracle—he is consulted in everything, from the larger issues to ridiculously small details of daily life and work. I hold him mainly responsible for the extraordinarily amiable relations which have existed amongst us: it is really a fact that there have been no quarrels, or social troubles, since the expedition started.’

Wilson’s praise flows in to us from all quarters. A man of many sides, above all a naturalist and an artist, his energies were directed in his various pursuits by a whole-hearted enthusiasm. These are no formal, obituary phrases. Wilson’s character and talents were widely appreciated while he was still living. It is no secret that he would have been nominated this year for one of the highest honours it is in the power of the Royal Geographical Society to bestow.* Here in the Alpine Club we shall keep his name in our memories with those of others of our members who have fallen, ‘killed in action,’ far from the old familiar snows, with the names of Donkin, Fox and Mummery.

There is no need to dwell to-night on the last struggle of that heroic band. We mountain explorers realise only too well the terrors of the storm and cold. Men have died on Mont Blanc, and that more than once, in not dissimilar circumstances. I have myself, with Donkin, heard the tempest rave round—and through—the

* See Dr. Wilson’s report of his first year’s scientific work in the Antarctic (*Geographical Journal*, June 1912). The Founder’s Medal has been awarded posthumously to Dr. Wilson since the above words were spoken.

old hut on the top of the Aiguille du Gôûter, and looked down on the mad race of the mists as they rushed across the face of the rocks below its crest. But such Alpine experiences, however they may end, are generally brief. As the Duke of the Abruzzi once said to me, 'The Poles are too long.'

It may, perhaps, not be amiss if I remind my hearers, as I was myself reminded the other day, that the very heart of the situation—the situation both physical and spiritual—revealed to us in Captain Scott's diary had, in a moment of strange prescience, been grasped with his customary force, one might say gripped, by one of our great Victorian poets. (I am old, and old-fashioned, enough to hold Browning and Tennyson to be great poets.) I am not going to quote Browning's 'Prospice' here; it will be found in his 'Dramatis Personæ.' We can better read it by our firesides.

Henceforth the physical terrors of the Antarctic may in a sense serve us as a measure of the moral fortitude that conquered them, that now illumines their icy wastes with an Aurora Australis of British heroism. While we recall that closing scene the noble sentence in Plato, at the end of the 'Republic,' may rise in some of our memories: 'Believing the Soul to be immortal and able to endure all extremes of Ill and Good, let us ever hold fast to the Upward Path.' *Τῆς ἀνω ὁδοῦ ἀεὶ ἐξόμεθα.* No bad motto for the Alpine Club!

There can be few of those who heard the roll of the drums of the 'Dead March' under the dome of St. Paul's who did not feel touched by an emotion akin to that some versifier has tried to express in four lines:—

To Fortune's last extremity they bowed;
 Alone in the white wilderness they lie;
 Their souls are here, to teach the sensual crowd
 How best an Englishman may dare—and die.

But whatever literary offerings may be brought, whatever form of memorial may ultimately be dedicated to those we have lost, the last entry in Scott's diary—his message to his country—will always remain their best monument—*monumentum aere perennius*—one to last as long as the English language itself.

I believe that I shall be acting, Sir, in accordance with our custom and precedents, and in harmony with the feelings of all present, if I conclude by asking you formally to convey to the widow and relatives of Dr. Wilson on behalf of the Club an expression of our great admiration of the services rendered to science and discovery by Dr. Wilson in the two recent Antarctic Expeditions, of our sorrow at his death, and of our deep sympathy with those on whom the loss chiefly falls.

The PRESIDENT said: I will certainly carry out Mr. Freshfield's suggestion, in which he has happily anticipated my own intention. I will also send to Mrs. Wilson a copy of to-night's proceedings of the Club.

Mr. H. C. BOWEN then read a Paper on 'Some Dolomite Climbs,' which was illustrated by lantern slides.

The PRESIDENT said: We are very fortunate in having with us this evening a great number of eminent Dolomite climbers, and among them is one whom we are particularly glad to see, as he does not now often come to our meetings. I refer, of course, to Mr. H. J. T. Wood, who has made in his time some of the very best climbs in the Dolomites. I also see our Vice-President (Mr. Broome) and Mr. Rolleston, who, I think, has been most distinctly put on his defence by Mr. Bowen's observations. Then there is Captain Farrar, who knows all there is to know about the Dolomites, as well as every other part of the Alps. I also see Mr. Carson, who, as you are aware, made the first ascent of the Rosengartenspitze, so long ago as 1874.

Mr. BROOME said: It is a pleasure to listen to a Paper from Mr. Bowen, but I fear I cannot add much of interest to what he has said. I am certainly not competent to contrast British with Dolomite climbing, for though I think I have climbed all the mountains in Great Britain worthy of the name, it was before most of you were born, before the difficult climbs were invented, and before so many necks had been broken on them.

I am more up to date in the Dolomites; I love them, and perhaps one reason is that the Dolomite country is so much more successful in bad seasons. Even when climbing is impossible in the Swiss, Savoy, and Italian Alps on account of bad weather, one can always count with some certainty on being able to climb every day, or at least every other day, in Tyrol.

When last year a congenial party of nine or ten was arranged I at once suggested the San Martino district, this not being quite the place for people who prefer their own insular habits and the exclusive society of their own countrymen to visit singly or in pairs. The hotels, though good, serve a huge meal in the middle of the day, when you are always aloft, and in the evening they offer you a light cold repast when a good dinner has been earned and is wanted. Then as to the people one meets there, they certainly come from every other part of Europe, but we saw no British besides ourselves.

As regards the San Martino mountains, I think they are equal in interest and difficulty to any in the Alps, and I might perhaps add one or two remarks to Bowen's excellent descriptions.

We certainly got up all the best mountains by the best routes. On the Cima della Madonna, which is often spoken of as the hardest climb in the district, we did not consider Phillimore's chimney on the south side (1897) to be quite as sensational as the Winkler Kamin on the north side.

As regards the climb on the Campanile and Cima di Val di Roda, I think this was the most difficult combination of the lot. The steep west wall ascended was taken for the first time in 1895 by two Members of this Club, Harold Beeching and Percival Pryor, and the

upper wall from the gap between the two Campanili, also a very difficult climb, was achieved first in 1899 by another distinguished A.C., J. S. Phillimore. I emphasise these names, as Purtscheller and Hess have omitted to mention them in their usually correct guide-book to the Dolomites. Our whole day, which also included the vertical north face of the Cima, was a long, hard fifteen hours.

Then our most sensational expedition was the uncompleted climb on the Pala di San Martino. We had got nearly to the top when there burst upon us one of the worst thunderstorms I have ever experienced, and we began to wonder if we should ever get down. Bowen mentioned the German lady-climber complication, but he was much too modest to tell you of his helping her guide to lower her down the iced chimneys and faces while we others were looking after ourselves.

His description of the Vajolet Thürme takes me back to a rather severe cross-examination I underwent in this room at the hands of a distinguished K.C. (our President) as to the Pichl-Riss and how I liked it. I remember quite well that I came out of this ordeal very badly, for I could recall no details. The explanation, however, is simple. On that occasion Corning and I had come down the crack, as Bowen and Rolleston did last year. We made no bones about using the doubled rope, but scrambled down as quickly as we could. This time we had to ascend it, and though it is only about thirty metres high it took the two of us and our two guides one hour and twenty minutes to get up, and I for one well remember every laborious inch.

The Marmolata Südwand we once again found to be the best all-round climb in the Dolomites, and I am pleased to have got up this magnificent wall three times. Our time was also a bit of a record this last year, for we were ten and a-half hours on the face, as against six and five and a-half hours previously, but our number (eight) and the iced rocks were responsible for this.

Mr. Bowen's Paper has been most interesting, and we are all grateful to him for the pleasure he has given us.

Mr. H. J. T. WOOD said: I have not enjoyed the Paper at all this evening, as it has made me feel very old indeed. It is twenty-five years this season since I made my first ascent in the Dolomites, and twenty-five years since I became a Member of this Club, and what in 1888 were regarded as first-class climbs appear to be now considered merely pleasant scrambles. The only climb on a mountain over 10,000 feet of which we have heard to-night is the ascent of the south face of the Marmolata. The ascent from the north is easy, that from the west used to be fairly difficult, but since I made my first ascent by this route hand-holds of wire, shaped something like bicycle handles, have been fixed on the rock face for the convenience of climbers. Nevertheless, the Dolomites are extremely pleasant places for rock climbers, and one can find there just what suits one's

fancy. We have heard a comparison between the English Lake Mountains and the Dolomites, but I do not think this comparison is a fair one, or that it has been shown that the Lake Mountains are in any way superior to the Dolomites. It is obviously impossible to get up all the faces and chimneys of any rock mountain, and it seems to me that nearly all the possible ascents in the Lake Mountains are now known, while few, if any, of the Dolomite peaks have been explored in such minute detail.

For myself, I go out to the Dolomites whenever I get the chance, and always find something new to do. My idea of the best way to go about in the Dolomites is to get a guide who does not know the district you wish to explore and to go just where fancy leads you. If there is any information I can give to any of you at any time I shall only be too glad to do so.

Mr. CARSON said : Mr. Bowen has spoken in his Paper of the time when the peaks of the Dolomites were still unclimbed, their passes untrdden, and when the glamour of the unknown still hung over the country. Sir, it was my good fortune to visit the Dolomites before that glamour had passed away. It was about forty years ago that, in the company of Mr. Comyns Tucker and my old guide François Devouassoud, I made the first ascent of the Rosengartenspitze, which was then known as the Federer Kogl. I can add also that I climbed the Marmolata when it was yet undecorated with bicycle handles. Since these things happened much water has flowed down the valley of the Adige, but the charm of that retrospect has never left me. I can only hope that the climbs so well described by Mr. Bowen will be to him as treasured memories, as my own climbs in the seventies of last century have been to me.

The PRESIDENT said : If nobody else will come forward I will now endeavour to fulfil my usual and pleasant duty of proposing a hearty vote of thanks to the reader of the Paper for his most excellent discourse and the very beautiful views he has shown us, which, moreover, really had a great deal to do with the Paper, as is not always the case on these occasions.

The Vice-President has been described as the Father of Mr. Bowen's party. He is, as we all know, a father of sorts, but I am quite certain there is one sort of father he is not, and that is a 'heavy father.' He seems to have looked after the party very thoroughly on this trip, and is much to be congratulated on the success of his happy family.

Well, we have had comparisons of the Lake District Mountains and the Dolomites, and after all has been said I still think the Riffelhorn, which has unaccountably escaped mention this evening, is as good a mountain as any mountain in the Dolomite country. Of the Lake district I cannot speak with the same intimate experience.

Speaking of eminent Dolomite guides, I had the great privilege of climbing the Cima della Madonna under the leadership of one of

the finest of them. I allude to Sepp Innerkofler, and perhaps for this reason I thoroughly agree with what Mr. Broome said about the Winkler Kamin on that peak. I went up that a great many years ago, and I must say that I found it a very great deal easier than I expected. Certainly it is nothing like so hard as it is made out to be, nor is it anything like so difficult as the Schmidt Kamin on the Fünffingerspitze or the Kleine Zinne from the north, or the Delagathurm, all three of which I also climbed with Sepp, in what now seem almost prehistoric days.

I have much pleasure in moving a hearty vote of thanks to Mr. Bowen for the delightful Paper he has given us this evening.

This was carried by acclamation.

Mr. BOWEN thanked the Club for their appreciation.

A GENERAL MEETING of the Club was held in the Hall of the Club, 23 Savile Row, on Tuesday evening, April 8, 1913, at 8.30 P.M., Sir Edward Davidson, *President*, in the Chair. Mr. Robert Stuart Low was elected a Member of the Club.

The PRESIDENT said: I will now call upon the Hon. Secretary and Treasurer to present the accounts for 1912.

The HON. SECRETARY and TREASURER (Mr. C. H. R. WOLLASTON) said: Gentlemen, you have, no doubt, all looked at the accounts and have mastered them by this time, and I think on the whole you will agree that they are not unsatisfactory. Receipts have been much as usual, and the expenditure has certainly been less. You will remember that in the accounts presented last year it was mentioned that the Club had been put to great expense by the printing of the new edition of Ball's 'Guide,' and that there was an excess of expenditure over receipts of 97*l.* This year you will have noticed that there is an excess of receipts over expenditure of 124*l.*, but I would call your attention to the fact that this sum does not really represent the normal profit for the year, owing to our having received two special amounts, one, a legacy of 45*l.*, from the late Edward Whympfer, and the other, 66*l.*, from the sales of Ball's 'Guide.' The rather exceptional sales of Ball's 'Guide' are accounted for by the fact that the new volume of the 'Eastern Alps' had just been published, and I may mention that the publishers inform me that the whole work is going off very well now.

The only other thing I need call attention to is the expense of printing and publishing the ALPINE JOURNAL which you will see amounted, for the year 1912, to 600*l.* This is a matter which is being considered at the present time by a Sub-Committee appointed for the purpose, and the President, who will second the adoption of these accounts, will give you some further information on the subject. I beg to move the adoption of the accounts for 1912, as presented.

The PRESIDENT said: I have great pleasure in seconding the motion which has been made by the Hon. Treasurer.

Perhaps it would be well that I should just say a word or two

upon the principal point which I think arises in connexion with these accounts, viz., the growing expenditure, which has progressively increased to an enormous extent in the last four years, upon the ALPINE JOURNAL. I believe that all the Members of the Club wish to see the text of the ALPINE JOURNAL kept up to its present high standard, and to see the illustrations, whether photogravures, photographs, or what not, of the highest kind; but we must not forget that the Club does not exist simply and solely for the production of the JOURNAL, and, looking to the future, we have to think of various other matters which will require some day or another the expenditure of money. If, for instance, we have to leave these rooms, which may happen some day, though I sincerely trust it will not occur for some time to come, we ought to be increasing our reserve fund, but this is quite out of the question when we have in reality a balance in favour of the Club of some 10*l.* or 20*l.* only, if we exclude the two items mentioned by the Hon. Treasurer, which amount together to some 110*l.* One is Whympy's legacy, which should be regarded in the light of a windfall, while the other was received from the sales out of stock of the volumes of Ball's 'Guide,' which is not a recurrent source of yearly income.

The Committee of the Club considered that the best thing to be done was to refer the whole question of the publication of the JOURNAL to a small Sub-Committee. This is the sort of question which cannot in detail be dealt with satisfactorily by thirteen or fourteen gentlemen, however able, sitting round a table at intervals of a month. We have had a great many meetings of this small Sub-Committee, and though we have not yet reported fully on all the matters referred to us, we came to the conclusion that certain points which seemed to us to require immediate attention should be the subject of an interim report, and of that interim report, which has been accepted by the General Committee, I am now speaking.

The Sub-Committee found, on looking into the figures, that the expenditure on the ALPINE JOURNAL from the year 1909 to the present time, four years, had gone up 100 per cent. The ALPINE JOURNAL cost us 300*l.* in the year 1909, and last year, as you have heard from the Treasurer, it cost us 600*l.* I think that it must be obvious to all of us that we cannot go on at quite that rate, but at the same time we are very anxious indeed to preserve the quality of the JOURNAL, and I am sure that the Members of this Club would prefer that, in reducing its cost, the necessary reductions should be made in the matter of quantity, and not in the matter of quality.

The Sub-Committee have made an interim report containing certain recommendations which have been unanimously adopted by the Committee, as I have said, and which are now in force. These recommendations were that first of all we should revert to what used to be the practice many years ago (I am referring now to the time when I was myself Hon. Secretary, and I think both before and afterwards), which was that the Committee used to

vote at the beginning of every year a certain sum for the purposes of the JOURNAL, and if it was found necessary to exceed the sum voted the matter was referred by the Editor to the President, who laid it before the Committee for their sanction or otherwise. Well, we have now reverted to that practice and we have voted for the purposes of the JOURNAL for the current year the sum of 450*l.*, and we have decided that, roughly speaking, the amount to be spent on illustrations shall be about one-third of that sum, and that the rest of the grant is to be spent on the printed matter and general expenses of the production of the JOURNAL. The amount I have mentioned represents the sum we think we are justified in spending on the JOURNAL, but if the Editor finds that there is any reason for any special expenditure on one particular number and he asks for more money, the question will be very carefully gone into with every wish to meet his desires. Still, we have felt that in present conditions we should not be justified in continuing an expenditure which had increased to 600*l.* per annum and was still increasing.

I should just like to add again that, above everything, we wish to maintain the very high quality of the JOURNAL. We do not wish in any way to have inferior photogravures produced, or inferior illustrations of any sort, and I feel sure that in future the Editor will be very careful, in his selection of pictures for the JOURNAL, to maintain to the full the high standard which has been characteristic of it in the past.

I daresay many of you have noticed on the cover of the quarterly number of the JOURNAL which has just come out that the price is 3*s.* 6*d.* nett. I should just like to explain how it was that we found it necessary to raise the price from 2*s.* to 3*s.* 6*d.* Each quarterly number of the JOURNAL for the past year has cost the Club 2*s.* 4½*d.* to produce. We have received for all copies sold 2*s.* less 25 per cent. which we have to pay for publishing and other charges and commissions, so that the nett amount received per copy is only 1*s.* 6*d.* It is obvious, therefore, that we have lost nearly 1*s.* on each copy of the JOURNAL sold. Now, our idea in the first place was to raise the price to 3*s.*, but we found that that would leave too small a margin, and we therefore deemed it advisable to raise the price to 3*s.* 6*d.*, which, less 25 per cent. for publishing, &c., and 3*d.* postage, leaves us the very slightest possible margin of profit, something like 3*d.* per copy.

I have ventured to explain all this at, I fear, rather tedious length, so that you may all see that the raising of the price of the JOURNAL is not merely a capricious act on the part of the Committee. There are a number of other questions regarding publishing and so on with which I have not troubled you to-night, but which the Sub-Committee have under consideration at the present time, and on which, in due course, they will make a full report.

As far as the rest of the accounts go, they have been audited by two very careful Auditors, and the Committee have unanimously

approved them. Therefore I think that you may very safely adopt them. If there is any Member who would like to ask a question with reference to them the Hon. Treasurer will be happy to give him any information. I beg to second the motion that these accounts be adopted.

After discussion of various points the accounts were unanimously adopted.

Mr. F. W. BOURDILLON read a paper entitled 'Without are Dogs.'

The PRESIDENT said: I have no doubt that there are many gentlemen present who would desire to say a few words on the general subject of the paper we have heard.

Mr. EDGAR FOÀ said: Mr. President, I suppose, if we are to have a discussion at all, that somebody must begin it, and as no one seems ready to make a start, I will, with your permission, say a few words, by way of expressing our gratitude to Mr. Bourdillon for the charming and interesting discourse he has given us. I say that more especially because I cannot help thinking that we have perhaps too many papers read here of what may be described as the sensational climbing order, and when we get a paper with a genuine literary flavour in it we ought to feel the more grateful because it is, comparatively speaking, so rare.

Of course, climbers may be roughly divided into two classes. There are those who climb chiefly for the physical joys of climbing, a class which includes the man with acrobatic frame and grip, who is never so happy as when wriggling up some difficult chimney, or balancing himself by his eyebrows on some inaccessible ledge of rock.

We have, on the other hand, the man who is a mountaineer in the first place because he loves and venerates Nature, and who resorts to the mountains because it is only there, as he knows, that he is able to see the work performed by her in the most grandiose of all her varying moods. The papers which are read in this room appeal, as a rule, mostly to the former class. The one of to-night will awaken a response chiefly in the latter.

At the same time, I am bound to say, and I should think that mine was the experience of the majority, that the title of the Paper was a great puzzle to me. Those of us who are not so well versed in Scripture as Mr. Bourdillon is must have been fairly exercised in their minds by the announcement as to the nature of the paper to be given, which they read in the monthly circular. Perhaps some may have spent a portion of the Easter holidays in trying to find out the meaning of the title. For my own part, I tried a short cut, and obtained the assistance of some of my friends in the matter. Of the answers to the puzzle which I received I think two may be worth mentioning for their ingenuity. Both were founded, as commentaries so often are, on the text being corrupt. The first was to the effect that the 'are' was an obvious misprint for 'our'; that the real subject was 'Without *our* Dogs'; and that the Paper was going to be a dissertation on the advantage of training dogs for

the purposes of mountaineering, as they are used, for instance, in Arctic exploration. This seemed to be quite a reasonable solution, but, of course, it has turned out to be entirely wrong. The other suggestion I received was that it was in the last word, and not in the last but one, that the printers had made a mistake; that the proper title should have been 'Without are Fogs'; and that Mr. Bourdillon was going to paint for us a vivid picture of the comforts of an Alpine hut, with the fogs and chilling blasts and snowfalls outside, and to give us the reflections of the man within when he finds himself—an experience but too well known to us all—hopelessly defeated by the weather. But this turned out to be equally incorrect, and though a certain amount of ingenuity may become thereby wasted, I cannot help thinking that there are advantages in choosing a somewhat obscure title for a paper, because it 'gives one furiously to think' and supplies members with something to talk about, and no doubt adds interest to the discussion. Let me give an illustration of what I mean. Last month we had a paper read in this Club on the Dolomites. Well, the Dolomites, as we all know, are, under certain conditions, a perfect paradise, and I suggest that the next Member who reads a paper on climbs in the Dolomites might add greatly to the interest aroused by it if he described it as 'Climbs in Paradise, illustrated by Lantern Slides.'

With regard to the Paper itself, one cannot help expressing complete agreement with what Mr. Bourdillon said in regard to mountain railways. This is a question the discussion of which is going on year by year in Switzerland, and I myself belong, and I hope other Members of this Club belong too, to the English Branch of the Society for the Protection of Swiss Scenery. Of course, as we all know, the Swiss are exceedingly jealous of any foreign interference, and we can only go to work very cautiously. I regret to hear from Mr. Bourdillon that plans for the construction of mountain railways are on the increase, and one can only hope that, with the spread of education and enlightenment, the responsible authorities may be brought to see the error of their ways, and that a change for the better in this respect may be soon witnessed.

Sir ALEXANDER KENNEDY said: The Club must have listened with the greatest pleasure to Mr. Bourdillon's 'reasoned judgment' in the matter of the individual *v.* the multitude. It is most satisfactory to find that, for once, the conclusions of sentiment and of reason can be shown to be identical. I think, however, that such railways as the Scheidegg and Mürren lines are even more objectionable practically than the high mountain railways. It was these lines which were primarily responsible for bringing into the mountains the hordes of Lunnites and Polytechnics and others who constituted the undesirable 'multitude' whose categories in the text Mr. Bourdillon has been too polite to specify. Without their existence Jungfrau Bahns and other outrages would never have been dreamt of.

But the question of 'access to mountains' is a very difficult one, and when I have been dodging keepers and otherwise trespassing

and transgressing in our own Highlands, I have often wondered whether even the present conditions, hardly as they bear on the native wanderer, were not preferable to a state of affairs in which every Tom, Dick, and Harry from Lanarkshire should be able to spend his week-ends defiling the moors.

The Club is greatly indebted to Mr. Bourdillon, as much for the manner as for the matter of his paper, which it is to be hoped will somehow reach a much larger audience than the Club Members.

MR. E. A. BROOME said: Mr. President, I think it would be a piece of presumption on my part to attempt to criticise the charming literary paper we have just heard, so I can only join in the other expressions of appreciation and gratitude. There is one remark I might make, and that is to express my astonishment that our Hall is not even fuller than it is. Some years ago Mr. Bourdillon read us a Paper entitled 'Another Way of (Mountain) Love,' and I know those present at that meeting made mental notes not to miss his next. Another reason why I should have expected this room to be full to overflowing is the interest the title of the paper has created. I doubt if my knowledge of Scriptural quotation is as considerable as you make out, Sir, but seeing that I have that reputation I must try to live up to it. The full text of Mr. Bourdillon's title will be found in the last chapter of the last book in the Bible. As no Member of the Alpine Club ever did or ever could belong to any of the categories there referred to, you will understand my astonishment that so many are without, and so few, or comparatively few, are within the fold to-night.

THE PRESIDENT said: As no one else seems to wish to address us, I should like to take the opportunity of moving a very hearty vote of thanks to Mr. Bourdillon for his most interesting and delightful Paper, which has given us all the greatest possible pleasure. I must confess that when I first saw the truncated text which serves as the title or motto of the paper I was very much puzzled, and it was not until to-night, after having the opportunity of consulting my Scriptural adviser, our senior Vice-President, that it came as a *Revelation* to me that this truncated text had not been given in all its unblushing bluntness. I thought I had got hold of the key to Mr. Bourdillon's allegorical description in the fable of 'The Dog in the Manger,' and that, roughly speaking, the Manger was represented by a mountain hut, say the *Bétemps Hut* or the *Cabane d'Orny*; the Horse (who, as we know, 'is a very noble animal and the friend of man, though he does not always do so') by my friend Mr. Bourdillon or some other Member of the Alpine Club; and the Dog in the Manger by that person unfortunately too familiar to most of us, who without the slightest intention of making any mountaineering expeditions, but nevertheless accompanied by the whole of his living ancestors and descendants, male and female, of all ages, and by a packing-case or cases of portentous size containing tinned provisions for a fortnight, takes up his abode in the mountain hut most convenient for his diabolical purpose, to the great annoyance and discomfiture of the

mountaineers for whose benefit it was presumably built. As the Paper went on, however, it took a much wider scope than that, and, amongst other things, the great wrong that is being done in the desecration of Swiss scenery and the invasion of the sanctuaries of the hills by the mountain railway was brought home to us. I hope Mr. Bourdillon's paper will be read by a large circle, as his eloquent protest cannot be too widely known. I beg to move a very hearty vote of thanks to him for the delightful discourse which he has delivered to us this evening.

Mr. BOURDILLOIN thanked the Club for their appreciation.

CAMPS OF THE ALPINE CLUB OF CANADA AT LAKE O'HARA AND ROBSON PASS IN JULY AND AUGUST 1913.

THE Alpine Club of Canada extends a hearty invitation to members of the Alpine Club, England, to the number of twenty-five, to be its guests at the two camps that will be held during the year 1913: one at Lake O'Hara, along the line of the Canadian Pacific Railway, and one at Robson Pass, along the line of the Grand Trunk Pacific Railway.

The Lake O'Hara Camp will be held during the last two weeks of July, and the Robson Camp during the first two weeks of August. Each camp will be for ten days, not including the time of travel from and to the railway.

Should the number specified above not be filled by members of the Alpine Club, the Canadian Club will be very pleased to receive as its guests any persons recommended by its London Committee.

The Canadian railways will give transportation from all parts of Canada to the railway station nearest the respective camps at a one-way fare for both going and returning (inclusive).

From such railway stations the Alpine Club of Canada will provide transportation to the camps.

Members to whom the above invitation may appeal will kindly communicate with the Director of the Alpine Club of Canada.

Full information concerning the nature of the camps and the attractions of the alpine beauty-spots where they will be held may be obtained from A. L. Mumm, Esq., Secretary of the Alpine Club of Canada's London Committee, 4 Hyde Park Street, London, W., to whom they are well known. Mr. Mumm should be notified of the intention to attend one or both of the camps.

Complete details of the arrangements have not yet been elaborated, but fuller information can be had on application to the undersigned.

This will be the first camp of the Alpine Club of Canada held in the vicinity of Mt. Robson. Its attendance will be limited in number owing to the difficulties of establishing a large camp at Robson Pass. The spot selected is one of the most fascinating of the entire Rocky Mountain system, and has, as yet, been visited by very few. It is hoped that the Alpine Club, England, will collaborate with us in the

first camp beneath the shadow of Mt. Robson.—ARTHUR O. WHEELER, Director, Alpine Club of Canada, Sidney, Vancouver Island, Canada.

The steamer fare, first class, from Liverpool to Montreal is £18 10s. each way. (£11 by one-class boats.)

The cost of return ticket, first class, from Montreal to Laggan (C.P.R.) for the Lake O'Hara Camp is £13. The extra charge for a berth in the sleeping-car is £6 for the double journey.

The cost of return ticket, first class, from Montreal to Mt. Robson Station (G.T.P.) for the Robson Pass Camp is £14. The extra charge for a berth in the sleeping-car is about £6 10s. for the double journey.

The time occupied by the journey from Liverpool to Mt. Robson or Laggan Station is 10 to 11 days, whence the camps can be reached in one long day.

Steamer and train fares are paid by each accepting guest.

All information can be obtained and passages arranged for at the Grand Trunk Offices, 17 Cockspur Street, S.W.

POSTSCRIPT.

THE EAST OR MACUGNAGA FACE OF THE NORDEND.—We have received the following very interesting note from Dr. Vittorio Ronchetti:—In No. 198 (November 1912) of the ALPINE JOURNAL were published two articles concerning the Macugnaga Face of Nordend. In these articles the alpinistic history of this interesting wall of rock was also related: and in the second of them ('The East or Macugnaga Face of the Nordend,' by J. P. Farrar) is an attempt to give a complete list of the climbs which have so far been accomplished up the rock itself. Now, not from personal vanity, but from love of exactitude, I should like to record the climb which I, myself, made, and which is, I see, forgotten in the two articles mentioned above. On July 30, 1911, with the guide J. J. Carrel and the porter A. Barmasse from Valtournanche, to whom I was obliged to add the guide Corsi from Macugnaga, I started at 3.30 A.M. from the Marinelli Shelter, and, after having lost over an hour and a half on the Nordend Glacier because of the guides' uncertainty as to the advisability of going on, at 3.30 P.M., following the Brioschi itinerary, we arrived at the crest of the watershed and at 4 P.M. the Nordend summit. Descending towards Bétémps, having lost our way by the canals of the W. Crest, we were obliged to camp. No detailed account of this climb of mine (which was not my only ascent from the Macugnaga side of the Monte Rosa, since, on July 25, 1905, I had climbed the Dufourspitze * also from the Marinelli Shelter, and on July 15, 1906, the Signal Col and Gnifetti Point * from Petriolo) was published, but it was mentioned in the 'Corriere della Sera' of August 2, 1911, and in the 'Monthly Review of The Italian Alpine Club for 1912' (p. 114).

* *Bollettino dell' Alpinista*, 2nd year, No. 5. Rovereto.

† *Rivista Mensile del C.A.I.*, 1906, No. 10, Torino.



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JACOB LEUTHOLD,
Leader on the ascent of the Finsteraarhorn, in 1828.

THE
ALPINE JOURNAL.

AUGUST 1913.

(No. 201.)

THE FIRST ASCENT OF THE FINSTERAARHORN :
A RE-EXAMINATION.

BY J. P. FARRAR.

THE seventeenth 'Jahrbuch' of the S.A.C., published in 1881, contains an elaborate article by the late G. Studer on the subject of Meyer's expedition of 1812, when his guides are stated to have reached the summit of the Finsteraarhorn by following the S.E. arête which they gained from the E.

Another article on the same subject in the forty-third 'Jahrbuch,' published in 1907, by Professor J. Lüders of Aix-la-Chapelle, also shows a remarkable grasp of the subject, since, so far as is known, the Professor has no personal knowledge of the actual route said to have been followed by the guides in 1812.

The Professor suggests that the question bears close resemblance to an Alpine criminal trial, 'in which the veracity of the traveller recounting the first ascent is attacked in the sharpest possible manner and he is made out to be a lying swindler.'

Both these articles are worthy of close study. The authors state the case so far as it could be known to them and give a verdict in favour of Meyer's guides.

It is however interesting to note that Studer was not always of this opinion, as in his 'Panorama von Bern' (Bern, 1850) he passes over Meyer's claims (p. 220) and referring to Leuthold and Währen's ascent in 1829 writes of them as 'Wahrscheinlich die ersten Sterblichen auf der Zinne des Finsteraarhorns' ('probably the first mortals on the summit of the Finsteraarhorn.')

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A concise summary of the whole position, with the arguments for and against the now generally accepted conclusions, is given by Dr. Coolidge with his accustomed accuracy in 'The Bernese Oberland,' ii. 31 seq., published in 1904; and Dr. Dübi's translation of this work, published in 1909 under the title 'Hochgebirgsführer durch die Berner Alpen,' Band. III. contains a few further references and additions. Both these great authorities are also entirely in favour of the guides' claims, although I have more than once warned my friend and master, Dr. Coolidge, of the strength of the opposite view.

During the last thirty years I have made this ascent three times—in 1883, 1903, and 1907*—and the second and third expeditions were made apart from their mountaineering interest, with the special object of studying the question on the spot. I had made myself in the meantime thoroughly acquainted with the literature on the subject—indeed on the last occasion I carried with me Zschokke's brochure of 1813 as well as a MS. précis of Meyer's own account of the expedition, first published in 'Alpenrosen,' 1852.

I propose in the following pages to examine the whole question, and I think I can do so without impugning Meyer's veracity in any way, although I shall have to show that his recorded observations are often unreliable—and that hence too much credit is not to be claimed for his general accuracy. I may as well placate any would-be foeman whose ardour this article may arouse by confessing that I fail to reconcile one of my own 'observations' of 1883 with the experience of my later expeditions when the enthusiasm of youth had given place to the calmer observation of the veteran. Moreover, in the note of my earlier ascent ('A.J.' vol. xi. p. 368) my argument in favour of the authenticity of the ascent by Meyer's guides entirely hangs on what I shall have to show is an unsustainable assumption. My argument has for many years been quoted with great approval by all advocates of Meyer, so that my reluctance to destroy it is somewhat natural. However, I have allowed Alpine critics thirty years in which to exhibit their literary acumen, and it is after all very satisfactory to have left to oneself the opportunity of pointing out one's own errors.

The original documents bearing on the question are two only, although some very interesting later references have

* And again, partially, in 1913, as recorded farther on.

been unearthed by the industry of Dr. Dübi, one of the greatest living Alpine authorities, and of M. Charles Montandon.

The earliest account of the expedition which has come down to us was published in 1813 in a little brown-covered brochure, entitled 'Reise auf die Eisgebirge des Kantons Bern und Ersteigung ihrer höchsten Gipfel im Sommer 1812,' and the preface, which is signed 'Zschokke,' expressly states 'Der folgende Bericht ward von mir nach mündlichen und schriftlichen Mittheilungen des Herrn Meyer verfasst; daher die Erzählung in seinem Namen geschieht, zu welcher jedoch die übrigen Reisegefährten wesentliche Beiträge gaben,' which being interpreted reads: 'The following report was drawn up by me from verbal and written communications of Mr. Meyer; therefore it appears as his own to which, however, the others who accompanied him made substantial contributions.'*

The other original document is Meyer's own MS., which was, however, only published in 1852. Zschokke had this MS. before him when preparing his account, published in 1813, after some delay caused by the preparation of the map which accompanies it. Zschokke expressly states that his account was supplemented by information obtained from Meyer's companions, and we know that Meyer's guides in the autumn of 1812 did actually pay a visit to Aarau † where also Zschokke lived, and when, no doubt, Zschokke heard their own narratives.

Previous notices of the expedition had apparently appeared in the local newspapers, as there is a reference to them in Zschokke's preface and in a footnote on page 35, although these accounts may have referred to the second ascent of the Jungfrau recorded in the same pamphlet.

For nearly forty years Zschokke's remained the only published account of the expedition.

During this time

- (1) The inherent improbability of such an ascent having, at this period, been successfully completed at the first attempt;
- (2) Some small points in Zschokke's recital;
- (3) The failure of Meyer's leading guide to conduct another party to the summit; and
- (4) His reported denial, when questioned, that he had ever made the ascent at all,

caused serious doubts to be thrown on the authenticity of the claim to have completely ascended the mountain.

* The italics are mine. † P. 36: *Reise auf die Eisgebirge.*

Rudolf Meyer was, during a portion of this time, and until his death there in 1833 at the age of forty-two, an inhabitant of Aarau. Born in 1791, Meyer was, at the time of the expedition in question, a little over twenty-one years of age and a student at the University of Tübingen. He has nearly always been referred to in the polemical literature which has sprung into being over his great expedition as Dr. or Professor Dr. Meyer, but this was not his title at the time and its use tends to give to his observations a weight they do not necessarily deserve. In weighing his account one must not overlook the fact that one has to do with the experience and observation of a youth.

The principal doubter was F. J. Hugi of Solothurn, a traveller of some eminence, who made various attempts to reach the summit of the Finsteraarhorn in the years 1828 and 1829, two of his guides, J. Leuthold and J. Währen, actually reaching the summit on August 10, 1829.

In 1830 Hugi published his book 'Naturhistorische Alpenreise.' Chapter VI. deals with his attempt on the Finsteraarhorn. He was accompanied by seven guides. 'Among them was Arnold ab Bühl, who accompanied the MM. Meyer of Aarau in these parts sixteen years previously and who is reported to have ascended the Finsteraarhorn. At first he was very talkative about this occurrence but contradicted himself so much that I could make nothing certain out of what he said. As we got nearer to the mountain he endeavoured to avoid all questions and inquiries and remained at some distance from the caravan. . . . When at last we descended in a N.W. direction from the Rothornsattel, I asked him for definite information where he had descended from the Finsteraarhorn. He pointed to the hanging névé on the right and said that up there was the Finsteraarhorn. Without taking notice of this, I kept on my way laughing. . . . Soon a whole row of points higher than the one he had indicated showed themselves and, when we at last reached the height [probably somewhere about the present breakfast place of the W. route] he no longer pretended that he had ever ascended the Finsteraarhorn.' (Translated.) ('Wollte er das Finsteraarhorn nicht mehr erstiegen haben.')

Dr. Dübi has pointed out to me that three years before the appearance of Hugi's book, the 'Alpenrosen' of 1827, page 319, contained an allusion by Pfarrer Schweizer to his having visited, on September 13, 1821, at Im Boden, the famous mountaineer Arnold Abbühl, 'der den höchsten Gipfel des

Finsteraarhorns *wirklich* * *erstiegen* hat ' (who *really* * ascended the highest point of the Finsteraarhorn).

This allusion points to Abbühl's enjoyment of credit for the ascent, but the introduction of the word '*wirklich*' or '*really*' may be taken as indicating that doubt did exist in some quarters even before Hugi's book appeared.

Upon the publication of Hugi's book, Dr. Rudolf Meyer sent a note to the '*Schweizer Bote*' of January 6, 1831, of which the following is the gist (translated).

'As Professor Hugi has cast doubt on the ascent of the Finsteraarhorn by Volker, Bartes, and Melchthal [Abbühl came from Melchthal and so went by that name] I feel compelled to declare that in the account which appeared in 1813 and of which Herr Kirchenrath Heinrich Zschokke describes himself the author, some of the details of the way (which is correctly shown in the map) are certainly ambiguous. These ambiguities are not my fault, as will appear from the MS. account of the journey which served to prepare the above account and which has come to light again. As I am not prepared to remain under Professor Hugi's suspicions I shall publish this account in the course of the summer, and I hope by then to produce testimony in support of the ascent.'

Hugi's answer appears in the issue of January 13, 1831, of which the following is the gist (translated):

'No one will find in my account any charge against Herr Meyer nor is it true that I question the route of Herr Meyer on the arête. This Arnold von Bühl (Melchthal), who told Herr Meyer in 1812 that he had ascended the Finsteraarhorn, was one of my porters in 1828. He pointed out to us on the spot the place where they had ascended and descended and which was the Finsteraarhorn itself. When, however, we passed this summit and he saw that the highest point lay much more to the N. he declared repeatedly that he had made a mistake sixteen years ago in respect to the highest point and that he had not ascended the Finsteraarhorn.'

M. Charles Montandon, to whom we are indebted for unearthing these very important documents ('S.A.C. Jahrbuch,' 1891, vol. xxvii. p. 384), states that the same newspaper contains up to the end of 1831 no reply from Dr. Meyer, and he concludes that the discussion was in fact closed.

Meyer did not, in fact, publish his MS., nor did it appear until 1852, long after his death.

* Italics are mine.

Hitherto writers on this subject have passed over these documents as of little importance, but it seems to me that, quite apart from Abbühl's reported negation, they may fairly be construed as telling against the authenticity of the completion of the ascent by Meyer's guides with most deadly effect.

What was the position in 1812? We have an enthusiastic, ingenuous youth attempting an ascent, the like of which in point of difficulty had, at that time, never been, nor was for nearly fifty years after, attempted. He reaches a point on the arête without any great difficulty and there he remains, too tired to proceed. About this portion of the ascent there is, save as to the precise point gained, no question, and it is of this portion alone that Meyer is a first-hand witness. Three of his guides go on and return to him after many hours with the statement that they had reached the summit, or that is what he understands. I shall examine later this point. But is it not perfectly natural that Meyer should accept their statement, that he should swallow with avidity their claim to have reached the goal of all his labours? He had, as I shall show later, no reason to doubt them, and doubtless he remained firm in his belief until Hugi's book appeared, many years after. At once he is up in arms at Hugi's questioning, as he thinks, his own statements and his guides' claims. He pens his reply quoted above, promises to publish his MS., and hopes to produce testimony in support. Then comes Hugi's reply, and Meyer realises that his own personal share in the expedition is not questioned, but he sees that he may, after all, have been misled by, or have misunderstood, his guides, and he is faced with the reported emphatic denial of his leading guide, who was at that time still living and could have been referred to. It may be that he wrote to Abbühl for the 'testimony' and failed to elicit a satisfactory reply. Thrown into hopeless doubt, all the stronger because his belief in his guides' statements had been firmly implanted in his mind all these nineteen years, is it to be wondered at that he lets the matter drop? He finds himself unable to get any testimony and realises that the publication of his MS. will not supply any more reliable evidence. One can easily picture the disenchanted man putting the whole matter aside in sheer despair of ever arriving at the truth.

When his MS. was at last published Meyer had been dead nearly twenty years, and its publication then is no evidence that he attached any importance to it or considered that it bore out his original beliefs. On the contrary, his failure to

publish the MS. in 1831 as announced may fairly be taken as supporting the opposite view.

Various reasons have been advanced for Abbühl's retraction, one that he was not on good terms with Hugi's party owing to their difference of religion, another that Hugi badgered him with questions. These reasons seem to be far-fetched. A simple reason is that when he was asked to repeat the ascent he finally owned that he and his comrades had never really reached the highest point. Abbühl is described by Hugi as at first very talkative about his expedition of 1812 but as avoiding any questions as he got nearer to the scene of operations.

On the other hand, Professor Wyss in his 'Reise ins Berner Oberland,' published in 1817, says 'I talked to Arnold Abbühl himself at Bern. He describes without any brag the dangers of the climb.'

Even if Abbühl and his comrades never reached the highest point, I shall show that they in all probability reached a point on the great S.E. arête so high as fully to entitle them to the very highest praise and, from the point of view of that period, almost equal in importance to the actual summit.

I will now examine, with my personal knowledge of the ground, the account as published by Zschokke in 1813 and Meyer's own MS., published in 1852. The material portions of each are printed side by side.

ZSCHOKKE'S ACCOUNT.*

1. Als die Eisgipfel wieder in Morgenroth brannten machten wir uns zur Fortsetzung der Reise auf. Es war der 16 August; ein schöner Tag . . . Wir wanderten über den Vieschergletscher; dann von der Grimsel Seite aus, zur linken des tiefen Finsteraargletschers, gegen den ungeheuern Granitthurm zu.

2. Wir erreichten den Bergschrund. Mühsam krochen wir darüber hin vom Gletscher ab zum festen Lande. . . . Das Klettern begann nach diesem und zwar auf einer fast senk-

MEYER'S OWN ACCOUNT.

1. Wohl versehen . . . mit Stricken, Alpstöcken und Füsseisen, stiegen wir über den harten Schnee von unserem Nachtlager wieder hinab in die ausgedehnten Gefilde des obern Vieschergletschers. Von der Grimsel-Seite aus, zur linken des tiefen finstern Aargletschers stiegen wir den mächtigen Granitthurm des Finsteraarhorns an.

2. Mit Mühe krochen wir über den Bergschrund. . . . Immer steiler wurde dann die Schnee- und Gletscherwand am Felsen, der senkrecht zum Himmel emporsteigt. Dem Kühnsten nach,

[* The text is broken up by me into numbered paragraphs for comparison.]

rechten Schneewand am Felsen. Wir traten in die Tappen oder vielmehr Stufen, die der Kühnste voran eingedrückt hatte, einen Arm immer in den Schnee tief eingrabend um den unsichern Fusstritt zu erleichtern.

3. An einigen Stellen war das glatte Eis bloss. Da hieben die Vordersten Tritte für Hand und Fuss. Alle schlangen wir ein Seil um unsern Leib dass Einer den Andern sichere.

4. So kamen wir über Felsen Eis und Schnee empor; einmal auch unter einem weitüberhängenden Gletscherblock durch, im schönsten Eisgrün prangend, dessen säulenhafte Eiszapfen wie Stalaktiten, herabhingen, und kaum von uns berührt in das Unabsehbare des Finsteraargletschers hinunterprasselten.*

5. Gegen Mittag, nach sechsstündigem Steigen, nahten wir einem der Gebirgsgipfel. Allein dem ganzen Grathe des Berges nach beugte sich der Gletscher überhängend gegen uns. Nicht ohne Mühe ward auch diese Höhe erklimmt.

* Als im Herbst des gleichen Jahres unsere beiden Walliser auf der Jagd wieder hier durch kamen, sahen sie, dass dieser ungeheure Eisblock vom Berge herab ins Thal gestürzt war.

traten wir in seine Stufen, den Arm tief im kalten Schnee eingrabend, um den unsichern Fusstritt zu unterstützen.

3. An einigen Stellen war der Gletscher nackt, kein Schnee hielt daran und wie die Fläche eines Krystals, deckte er den Felsen. Da hieben wir Tritte für Hand und Fuss und befestigten ein Seil um den Leib welches der Erste hielt wenn der wanke Tritt uns wich.

4. Weniger schüchtern kamen wir auf dem Felsen fort wo man sich nicht auf den trügerischen Schnee verlassen musste. So krochen wir schräg unter einem Gletscherblock durch der weit sich hinausschwang über die Thalschlucht, voll Spalte, vom schönen Gletschergrüne ausgefüllt; Eiszapfen hingen an seinen überhängenden Gipfeln herunter, wie die Stalaktitensäulen einer Felsengrotte, und nieder stürzten sie zuweilen neben uns, durch unsere Tritte aufgeweckt, und prasselten hinab in's Unendliche des Finsteraargletschers.*

5. Sechs Stunden lang waren wir mühsam nun hinaufgeklettert an dieser Riesenwand; um Mittag nahte der eine Gipfel des Gebirges, da wölbte sich dem ganzen Grathe nach der Gletscher über den Abgrund hinaus, gegen uns zu. Mit grosser Anstrengung konnten wir auch diesen erklettern und kamen so auf die Höhe.

* Als im Herbst unsere beiden Walliser die Jagd wieder hier durch führte sahen sie, dass dieser Eiskoloss vom Berge herab in's Thal gestürzt war.

6. Wir standen auf dem Oberaarhorn.

Es war ein heiterer Tag; die Aussicht unermesslich. Die hohen Gebirge der Urkantone lagen unter uns; über die Alpen Graubündens sahen wir in die tirolischen Firnen . . . nur das obere Wallis erschien uns noch als ein Thal; nur dies noch in grüner Farbe, durch Tannenwälder schwarz besprengt; die Rhone schien ein matter Silberfaden. . . . Die schweigenden Abgründe unter unsern Fusssohlen konnte man nie lange ohne Schauern betrachten.

7. Noch als ein schwarzer Felsen stand gegen Norden der höchste Berggipfel vor uns. Dies war das Finsteraarhorn. Er sollte erstiegen werden. Es war ein Uhr Nachmittags.

8. Aber mir waren die Kräfte gewichen. Ich blieb hier liegen auf dem scharfen schmalen Gletscherrücken, wo ich mir einen Sitz im Eise grub, den höchsten Thron zu dessen Füßen die Reiche der Erde lagen. Caspar Huber musste mir Gesellschaft leisten.

9. Arnold aber und die beiden Walliser wollten das Aeusserste versuchen. Ich munterte sie auf. Sie stiegen wieder abwärts auf den Gebirgsgrath. Ich erzähle Abentheur wie sie mir dieselben am Abend berichteten.

It will be noted that Meyer's immediate part now ceases. He goes on to chronicle mainly what his men told him on their return at night.

10. Mühsam erstiegen sie den hohen Felsberg. Sie glaubten

6. Aber ein einzig schöner Genuss lohnte uns reichlich für alle Strapazen. Ueber das Oberaarhorn sahen wir hinab auf die höchsten Gebirge der kleinen Kantone, über die Bündner Alpen, bis tief in die Tyroler Firnen schweiften die Blicke . . . durch eine Berglücke der Walliser Viescher-hörner sahen wir über den Gletscher hinab in das Oberwallis, das einzige Thal das uns grünlich erschien; Tannenwald und Alpen unterschieden noch schwärzere Schattten und durch dieses Dunkel schlängelte ein Silberstreifen, die Rhone, sich hindurch. . . . nur mit Schauern durfte man sich nahen dem betretenen Wege und mit unsicherem Tritte. . . .

7. Noch als ein schwarzer Felsen ragte der höchste Gipfel vor uns empor und raubte die Aussicht nach Norden. Es war 1 Uhr Nachmittags.

8. Ich als der schwächste unter ihnen blieb hier müde liegen.

9. Die andern aber muthiger, unabhaltbar eilten wieder abwärts auf dem Gebirgsgrath.

10. Mühsam erkletterten sie einen Felsen, den sie wieder hin-

auf der Spitze des Finsteraarhorns zu stehen ; aber daroben erkannten sie den Irrthum. Ein noch höherer Thurm ragte vor ihnen in die Luft, von welchem sie ein Abgrund trennte. Sie stiegen in diesen hinab und wagten sich auch an jenen. Aber nun den letzten Gipfel wollte lange Keiner von ihnen erklimmen, wenigstens Keiner wollte vorangehen. Denn der Felsenberg, vom nackten Eise bepanzert, hing über ihnen gebogen. Durch die Lücke der Wölbung sah man in den Finsteraargletscher hinab.

11. Endlich fasste Arnold Muth. Er kletterte, an ein Seil gebunden und von den Andern gehalten, auf dem Bauche kriechend, über diese hohle Eishaube, und zog die Andern darauf nach.

12. Jetzt war der höchste Gipfel des Finsteraarhorns besiegt. Es war vier Uhr. Sie hatten den Weg in drei Stunden zurückgelegt welcher in einer Viertelstunde gemacht werden zu können schien. Denn so nahe schien uns Allen die letzte Höhe.

13. Der oberste Punkt des Finsteraarhorns ist scharf wie der Sattellücken eines Berges. Das Eis darauf ist mehrere Klafter tief. Durch einen Eis-spalt sieht man den Finsteraargletscher.

14. Kein Berg ringsum scheint höher. Man übersieht alle andere Gipfel. Die finstern Berge der Schweiz, Alpen und Ebenen und Hügel, scheinen eine dunkle Ebene zu sein. Nur der Thuner See spiegelte im Sonnenschein aus der Tiefe herauf. .

untermussten, um einen höhern zu ersteigen. Auf diesem letzten Gipfel wollte keiner vorangehen ; Gletscher lag auf dem nackten Felsen, und zwischen beiden sah man durch eine Lücke hinab in die Finsteraargletscher.

11. Der Oberhasler Arnold von Melchthal endlich kletterte angebunden und von den andern gehalten über diese hohle Eishaube, und zog die Andern darauf nach.

12. Jetzt war der höchste Gipfel besiegt. Es war 4 Uhr ; drei Stunden wurden gebraucht, diesen Weg zurückzulegen, welchen man glaubte in einer Viertelstunde zu machen.

13. Diese Spitze ist scharf wie eine Kante, ganz mit Eis bepanzert und mehrere Klafter weit ragte dieses hinaus über die Felswand so dass man nur durch einen Eis-spalt hinunter sehen konnte auf den finstern Aargletscher.

14. Kein Berg ringsum scheint höher, jeden Gipfel übersieht man, und die fürchterlichsten Gebirge sind friedliche Hügel. Unbegrenzt ist die Aussicht hinab in das Berner Oberland, für unsere Blicke liegt aber alles in Nacht gehüllt und die finstern Berge scheinen

15. Ich sah von meinem Gletscher die kühnen Leute, wie sie mühsam versuchten, eine Fahne von rothem Wachstuch auf dem Gipfel des Horns zu befestigen. Sie litten von strenger Kälte, während sie vor drei Stunden, als sie noch bei mir waren, Sommerwärme empfanden. Zwar hatten sie Barometer und Thermometer hinaufgenommen; aber diese Instrumente wurden sehr unvollkommen beobachtet, dass ich darauf keine Rücksicht nehmen konnte. . . . Der Sturm war so gewaltig dass sie sich kaum auf den Füßen erhalten mochten. Noch während sie droben standen; riss der Wind die Fahne wieder von der Stange ab. Sie mussten sie aufs neue daran befestigen.

16. Nach einer halben Stunde, länger mochten sie den schneidenden Frost nicht ertragen, kehrten sie wieder zurück.

17. Weit leichter stiegen wir aus diesen Höhen von der Westseite nieder. Auch erkannten wir nun erst, leider zu spät, dass das Finsteraarhorn von dieser Seite ohne Schwierigkeit zu ersteigen gewesen wäre, da es von der Grimselseite nur mit grosser Noth geschah. Wir kamen ohne alle Gefahr herab auf den Vieschergletscher, über Schnee und Felsklippen, und zu dem Berge; an dessen entgegengesetzter Seite unser Nachtlager war. Der Berg ward überstiegen.

eine Ebene; nur der Thunersee, auf dem die Sonne sich spiegelte, glänzte aus dem schwarzen Grunde hervor.

15. Die Kälte war ausserordentlich stark, und der Wind stürmte, dass man sich kaum halten konnte, während vor drei Stunden 500 Fuss tiefer noch Sommerwärme war. Barometer und Thermometer wurde hier sehr mangelhaft beobachtet. Hier befestigten sie zum Zeugnis der Besteigung eine Fahne; aber während sie noch oben waren riss der Wind die Fahne von der Stange weg, und sie mussten solche von neuem wieder befestigen.

16. Nach einer halben Stunde, länger konnte man es vor Kälte nicht aushalten, kehrten sie wieder zurück.

17. Weit leichter und fröhlicher kamen wir nun hinunter auf der Westseite des Berges und ohne Gefahr auf den Vieschergletscher, bald über Felsrippen, bald über Schnee hinab-rutschend. Zu unserm Nachtlager mussten wir auf der entgegengesetzten Seite hinaufsteigen; glücklich kamen wir alle durstig und müde mit dem Abend dort an. Auf dieser Seite, wo wir herabgekommen waren (westwärts) ist der Berg ganz ohne Schwierigkeit zu erklimmen; wie schwer dagegen unsere Ersteigung war, zeigt schon ein flüchtiger Anblick des Finsteraarhorns von der Grimselseite aus.

TRANSLATION

ZSCHOKKE'S ACCOUNT.

1. As the icepeaks glowed once more in the red of dawn we started to pursue our journey. It was the 16th August ; a fine day. . . . We followed the Viescher Glacier ; then from the Grimsel side, to the left of the deep Finsteraar Glacier, in the direction of the enormous granite tower.

2. We reached the Bergschrund. Painfully we crawled across it from the glacier to the firm ground. . . . The climbing thereupon commenced up an almost vertical snow-wall against the rock. We trod in the treads or rather steps which the boldest leading had trodden out, one arm always buried deep in the snow to ease the insecure footstep.

3. In some places the bare ice appeared. Then the leaders hewed steps for hand and foot. We all bound a rope about our waists so that one could secure the other.

4. We thus advanced up rocks, ice, and snow ; at one time under a far-overhanging block of Glacier preening itself in loveliest ice green, the column-like icicles of which hung down like stalactites and, scarce touched by us, rattled down into the invisible of the Finsteraar Glacier.*

* When, out hunting in the autumn of the same year our two Valaisans passed here, they saw that this enormous iceblock had fallen down from the mountain side into the valley.

MEYER'S OWN ACCOUNT.

1. Well provided . . . with ropes, alpenstocks, and footirons we descended the hard snow from our bivouac to the extensive fields of the upper Viescher Glacier. From the Grimsel-side to the left of the deep dark Aar Glacier we attacked the mighty granite tower of the Finsteraarhorn.

2. With pains we crept across the Bergschrund. . . . Always steeper became the snow- and ice-wall against the rock which mounted vertically to the sky. Following the boldest we trod in his steps, the arm buried deep in the cold snow to support the insecure foothold.

3. In some places the glacier was bare, no snow held thereon and like the surface of a crystal it covered the rocks. Then we hewed steps for hand and foot and fastened a rope round the body which the leader held in case our unstable footing gave.

4. With greater confidence we progressed on the rocks, where one was not compelled to rely on the deceptive snow. Thus we crept diagonally under a block of Glacier* which swung far out over the gorge, full of cracks filled out with lovely glacier green ; icicles hung on its overhanging pinnacles like

* When in the autumn the hunt brought our two Valaisans past here again they saw that this ice colossus had fallen down from the mountain into the valley.

5. Towards midday after mounting for six hours we approached one of the summits of the mountain—but along the whole length of the ridge of the mountain the glacier [cornice] hung over on our side. Not without trouble was this height climbed.

6. We stood on the Oberaarhorn.

It was a bright day; the view immeasurable. The high mountains of the Forest cantons lay beneath us; over the Alps of the Grisons we saw into the Tyrolese Glaciers . . . only the Upper Valais looked to us still like a valley; only this still in green colour, the pine woods picked out in black. The Rhone appeared a dull silver thread. . . . The silent precipices beneath our feet one could not look at long without a shudder.

7. Ever like a black rock stood to the N. the highest mountain summit. This was the Finsteraarhorn. It had to be climbed. It was 1 P.M.

8. But my powers had given out. I remained here lying on the sharp narrow ice arête where I dug myself a seat in the ice, the highest throne at the foot of which lay the kingdoms of the earth. Caspar Huber had to keep me company.

the stalactite columns of a rock grotto, and from time to time fell past us, awakened by our steps, and rattled down into the infinity of the Finsteraar Glacier.

5. Six hours long had we now painfully climbed this giant wall; at midday the one summit of the mountain approached when along the whole length of the ridge the glacier swelled [or arched] over the precipice [formed a cornice] in our direction.

6. But a single beautiful enjoyment repaid us amply for all fatigues. Over the Oberaarhorn we looked down on the highest mountains of the little cantons, over the Alps of the Grisons to far into the Tyrolese glaciers our glances roamed. . . . Through a mountain gap of the Walliser Viescherhörner we saw over the glacier down into the Upper Valais, the only valley that appeared to us green; still darker shadows picked out the pinewood and the [grazing] Alps and through this darkness glided, a silver band, the Rhone. . . . Only with a shudder dare we approach the path we had trodden and with uncertain step. . . .

7. Ever like a black rock the highest summit loomed above us and blocked the view to the North. It was 1 o'clock P.M.

8. I, as the weakest among them, remained lying here tired.

9. Arnold however and the two Valaisans were bent on attempting the uttermost. I encouraged them. They descended again to the arête. I am now telling their adventures as reported by them that evening.

9. The others, more courageous, not to be denied, hurried down again on to the ridge.

N.B.—It will be noted that Meyer's immediate part now ceases. He goes on to chronicle mainly what his men told him on their return at night.

10. Painfully they climbed the high rock peak. They thought to be on the summit of the Finsteraarhorn but found that they were mistaken. A still higher tower soared in the air above them from which a precipice divided them. They descended into this and ventured to attack the tower. But none of them would for a long time attempt the last peak, at least no one would lead. For the rock mountain, armoured with bare ice, hung right over them. Through the gap of the vault one saw down to the Finsteraar Glacier.

10. Painfully they climbed one rock and were compelled to descend it in order to ascend a higher one. Up this last peak nobody would lead. Ice lay on the bare rock, and between the two one saw down through a gap to the Finsteraar Glacier.

11. At last Arnold took courage. Tied on to a rope and held by the others he climbed crawling on his belly over this hollow icecap, and pulled the others after him.

11. The Oberhasler Arnold von Melchthal at last, roped and held by the others, climbed over this hollow icecap and pulled the others after him.

12. At last the highest summit of the Finsteraarhorn was conquered. It was 4 o'clock. They had taken three hours to do a way that looked as though it could be done in a quarter of an hour. For so near appeared to us all the final summit.

12. At last the highest summit was conquered. It was 4 o'clock; three hours had been needed to cover this way which one expected to do in a quarter of an hour.

13. The highest point of the Finsteraarhorn is sharp as the

13. This summit is sharp as an edge, completely armoured

saddleback of a mountain. The ice covering it is several fathoms deep. Through an iccrack one sees the Finsteraar Glacier.

14. No mountain anywhere around seems higher. One looks over all other peaks. The dark mountains of Switzerland, Alps and plains and hills, appear to be one dark level. Only the Lake of Thun gleamed in the sunshine out of the depths.

15. I saw from my glacier [position on the ice arête] the bold men, how they laboriously endeavoured to fix a flag of red waxed cloth on the summit of the Horn. They suffered from severe cold, whereas three hours earlier when they were with me they felt summer heat. They had, it is true, taken up barometer and thermometer, but these instruments were very imperfectly observed so that I could place no reliance thereon. . . . The storm was so powerful that they could hardly keep their feet. While they were still on top the wind tore the flag from the staff. They had to fasten it on afresh.

16. After half an hour, for longer they were unable to stand the cutting frost, they started back.

17. Much more easily we descended from these heights, down the West side. Also we now first recognized, unfortunately too late, that the Finsteraarhorn could have been ascended from this side without

with ice, and for several fathoms this ice stretched out over the rockwall so that only through a crack in the ice could one see down to the Finsteraar Glacier.

14. No mountain around seems higher, one sees over every summit and the most terrible mountains are peaceful hills. Unlimited is the view down into the Bernese Oberland, but for our gaze everything is wrapped in night and the dark mountains seem like a plain; only the Lake of Thun on which the sun is reflected sparkles out of the black depths.

15. The cold was exceedingly severe and the wind blew so that one could hardly hold one's self, whereas, 3 hours earlier, 500 feet lower was the warmth of summer. Barometer and thermometer were very imperfectly observed here. Here they fixed as evidence of the ascent a flag, but while they were still on the top the wind tore the flag away from the pole and they had to make it fast again.

16. After half an hour, longer they could not hold out for the cold, they returned.

17. Much easier and gayer we came down on the West side of the mountain, and, without danger, to the Viescher Glacier, at times over rock ribs, at times sliding down over snow. To gain our bivouac we had to

difficulty, whereas from the Grimsel side this had only been done with great difficulty. We got down without any danger on to the Viescher Glacier over snow and rocks and to the mountain [Gemslücke] on the opposite side of which was our bivouac. The mountain was crossed.

ascend on the opposite side; safely at nightfall, thirsty and tired, we got there. On this side where we came down (westwards) the mountain can be climbed without any difficulty; how hard on the contrary was our ascent is shown by a cursory glance at the Finsteraarhorn from the Grimsel side.

Let us now compare Zschokke's and Meyer's versions, *seriatim*.

1. These paragraphs are practically identical. The route described as well as marked on the map is perfectly clear. Meyer, student of mineralogy though he was, in describing the Finsteraarhorn as a *granite* tower is however apparently wrong. The analysis by E. v. Fellenberg of samples taken by R. Lindt ('Jahrbuch S.A.C.,' I. 309) is 'Talkiger Dioritschiefer' and 'Hornblendschiefer,' nor does the geological map show the granite as extending to the Finsteraarhorn.*

The early mention of crampons is interesting.

2 and 3. There is again only a difference of wording in these paragraphs.

Apparently Herr Kirchenrath Zschokke † was a stylist and constantly amends Meyer's phraseology.

4. These paragraphs are also practically identical, but they, especially the footnote, are intensely interesting, owing to the circumstance mentioned below. It is however a serious error to say that the icicles fell on to the Finsteraar Glacier, which lies far to the N. beyond the Ober Studerjoch.

5. These paragraphs are again very similar, but Meyer's MS.

* Professor Bonney very kindly looked into this point for me and thinks that the mountain is 'the rather hard, somewhat fine-grained, non-porphyrific gneiss of which there is much in the central part of the Oberland. . . . The rock very probably is igneous and thus is a granite, but as now its constituents have acquired a certain foliation, probably from subsequent pressure, it is rather a gneiss.'

† Dr. Coolidge kindly informs me that Heinrich Zschokke (1771-1848) was a German exile settled in Switzerland, politician and *littérateur*, best known for his 'Des Schweizerlandes Geschichte für das Schweizervolk' (Aarau 1822), a very well known popular history of Switzerland.

is more precise in stating that the actual wall, presumably from the Bergschlund, had taken six hours to climb. The mention of the cornice along the whole length of the arête is particularly important, as it fixes the spot within close limits where the party struck the great S.E. arête.

6. These paragraphs now differ. Zschokke says the party stood *on* the Oberaarhorn, whereas Meyer's MS. says they saw *over* the Oberaarhorn. Zschokke's statement is absurd and flatly contradicts the map published with his article. The error is probably due to bad writing in the MS. It is strange that Meyer, who also lived at Aarau, did not detect the error, as it is hardly conceivable that the proof was not submitted to him, but it is possible that he was away at the University of Tübingen, where he studied from 1809 till 1813.

This statement of Zschokke's misled no less a personage than the late Mr. John Ball.*

Meyer's MS. again is more precise inasmuch as he states that the Rhone was visible through a gap in the Walliser Fiescherhörner. I will deal with the view from the arête later.

7. These identical paragraphs are most important as they describe the appearance of the summit, or what was taken to be the summit, seen from the point where the party gained the arête. The time given, 1 P.M., may not, in view of the hour stated in paragraph 5, be the actual time of reaching the arête, but was probably the time at which the three guides started again, after the party had rested and looked round. The important point is that the guides did not start earlier than 1 P.M.

I deal further on with the appearance of the 'highest summit.'

8. These paragraphs supplement each other. Meyer's MS. simply says he remained at the place where they reached the arête. Zschokke adds that Meyer made himself a seat in the ice and that Kaspar Huber remained with him. These details are not such as can have been invented or imagined; the one confirms the previous statement (paragraph 5) that the arête was an ice arête at the place where they gained it, and it is quite certain that Meyer did not remain alone. As already pointed out, Zschokke's narrative does not rest on Meyer's MS. alone, but also on conversations with Meyer and

* I do not however consider that Zschokke at all 'deserves to be pilloried as an example for all editors present and future' (*Modern Mountaineering*, p. 66 (bound with *A.J.* viii.)). The Herr Kirchenrath is certainly a bit fond of his own wording, but only makes one easily explained mistake.

with the other members of the expedition. Moreover Meyer in his note to the 'Schweizer Bote' of January 6, 1831, gives the names of the guides who did continue the climb, and Huber's name is not one of them.

9. These paragraphs are again practically to the same effect. Apparently the party had gained a slight elevation on the arête and had to descend to continue the journey.

Now in no criticism or account of this expedition that I have seen has it been insisted on that at this point Meyer's and Zschokke's narratives lose their status as first-hand evidence. Before we venture into the doubtful domain of hearsay evidence, which is nearly all we possess with certainty for the doings of the guides from the time of their leaving Meyer at 1 P.M. until their return to him probably between 6 and 7 P.M., let us sum up what had been done :

The party left their bivouac on the now-called Gemslücke* when the sun had already struck the higher summits, probably about 5 A.M.,† descended to the Studerfirn, which they followed parallel to the E. foot of the S.E. arête of the Finsteraarhorn, almost to the Ober Studerjoch, until they had the great pyramid of the Finsteraarhorn immediately above them. They then crossed the Bergschrund and proceeded to *attack a very steep snow- and ice-wall* that lay against the rock. It was mostly snow, as they were able to bury an arm deep in the snow, but at a few places it was bare ice, when they were forced to cut steps and put on the rope. They were glad at times to *take to the rocks*, and at one point *crept diagonally under a huge sérac*, from which icicles broke off. At last, after 6 hours spent on this gigantic wall, they approached at midday *the one peak of the mountain, but a considerable length of the arête above them carried a great cornice* leaning over on their side. With great exertion they managed to climb this and so reached its crest.

* Hugi used this bivouac in 1828 and built a small stone shelter (*Alpenreise*, 181-3. One of the frontispieces to the book shows the building of this shelter; the other a rock-climb, the positions of the amateurs of the party being amusingly precarious). In 1907 Mr. H. V. Reade and I carefully examined the place, which is a nearly level ridge; there is still in existence a sort of shelter formed of thin slabs of rock with one side open. I have had often to note the extremely slow disintegration which these old bivouac places suffer. (Cf. *A.J.* xxv. 642.)

† Which of us does not know how hard it is to quit a bivouac before daylight!

Meyer's Peak.
"Minor Highest Summit," point.



Wehrli, photo.

— Ordinary route to S. E. arête.
... Meyer's route.

(A) Hanging glacier.

Seven Electric Engraving Co., Ltd.

**THE EAST FACE OF THE FINSTERAARHORN,
from the Oberaar hut.**

I only wish that all the valued contributions to this Journal which pass through my hands were as clear as this.

I have marked on the photograph a line of ascent which agrees with this description *and which, in one or other of its parts, is the exact line followed to-day.* The line of ascent ascribed to Meyer by Mr. G. Hasler ('Deutsche Alpenzeitung,' II. Jahrgang Heft 17, p. 119) makes Meyer gain the arête slightly higher than I do, but this route is one of the few in the Oberland that Mr. Hasler has not done, and his line has the fatal defect of not traversing any rocks, whereas rocks are specially mentioned by Meyer. In other respects Mr. Hasler's route suits my argument equally well, *but it will not fit in, as I shall show, with the theory that the guides starting from that point reached the actual summit.*

A reference to the photograph shows, descending from the S.E. arête at its N. end, i.e. nearest to the summit, a hanging glacier bounded on its left or S. edge by a broad rib or curtain of rocks set in the ice commencing almost at the bottom of the slope and reaching nearly to the crest of the arête. In the lower portion of this glacier slope just below the foot of this rib of rocks is inset the huge sérac mentioned above.

By this hanging glacier, up its centre when the snow is good, or by the rib of rocks on its S. side with occasional traverses on to the snow when the glacier is hard, the ascent is made.

Daniel Maquignaz and I, in 1903, starting from the old Oberaar Hut, walked right up to the Ober Studerjoch, until we could look down on to the Finsteraar Glacier. We retraced our steps about 100 yards and struck right up the centre of the hanging glacier which appeared to offer good going but, coming on ice, we immediately traversed close under the great sérac so as to reach the rib or narrow curtain of rocks to the S. of the hanging glacier, and by the S. side of this rib with occasional traverses on to the bounding snow slopes we reached the main S.E. arête in about two hours from the foot of the slope.

Four years later, when repeating the ascent with Mr. Herbert Reade, I did not like the look of the great sérac—we were rather later, weather having delayed our start—and so gave it a rather wide berth. And well we did, for, as my companion has vividly described (*A.J.* vol. xxiv, pp. 303-6), down it came with the most awe-inspiring thunder. We completed the ascent to the arête mainly by the N. edge of the above-mentioned rib or curtain with occasional traverses on to the snow on its N. side. We took from the Bergschrund to the arête $3\frac{1}{2}$ hours

(including some stepcutting and halts). We struck the ice arête to the S. of the little rocky peak marked 'Meyer's Peak' between *two long lengths of cornice*.

What Meyer, with practical certainty, did was to cross the Bergschrund rather on the Studerjoch side of the great sérac, then doubtless finding ice as we did he cuts some steps, ropes and then crosses diagonally under this sérac to gain the rib of rocks, keeps to this for a bit until, higher up, as the day advances and the snow gets softer, he bears away to the right up the steep snow slopes to gain the arête where I have marked. The inference, apart from Zschokke's statement, is a fair one that the arête was ice where he gained it, for rock arêtes do not carry long stretches of cornice.

The shape of this part of the mountain, dictated by natural causes, has persisted to the present day in the most remarkable manner. The great sérac which fell in 1812 might have overwhelmed two members of the Alpine Club in 1907. Meyer started up a steep snow and ice slope, as do we to-day, though its angle is no longer 'senkrecht,' but that epithet was more frequently used then than now, except by our modern Lake climbers. He alternated between rocks, snow and ice as we do, and he reached the arête close to a great length of cornice which exists to-day hanging over in the same direction to the E. as Meyer describes it. I can locate the point of Meyer's intersection of the main S.E. arête very closely. We struck the arête between two stretches of cornice; he at the upper end of the N. length, practically at 'Meyer's Peak.' The hanging glacier is the furthest to the N. of any of the slopes of snow or ice on the E. flank of the S.E. arête, and there is beyond it to the N.—i.e. nearer the summit—nothing to fit in with Meyer's description. The E. flank in that direction is a hopeless rock face, scored by shallow rock gullies, carrying little snow and forming about the worst kind of ground any climber could encounter, unsafe to climb and very exposed, and in no wise answering to Meyer's account. My 1903 party would have nothing to do with such ground. What possible object could Meyer's people have in choosing such ground, the practicability of which remains to be proved, when a good snow slope lay open to them to the arête? Moreover, there are at the point where I say Meyer gained the main S.E. arête several places on the rocks of the W. slope just below the arête where one could rest in fair comfort for some hours, as he had to do. It is scarcely likely that he sat in his icestep all that time, shelterless

on the arête. Alexander Tännler* used to be the chief practitioner on this route and, I am told, he always bore up the middle of the hanging glacier and so would reach the arête N. of our point of arrival, the same as Meyer did. About the middle of the bit of ice arête forming the upper edge of the hanging glacier there is a small rock mound or peak on the arête, which I propose to call 'Meyer's Peak.' This is very probably 'der eine Gipfel des Gebirges' to which he refers. It does overtop the Oberaarhorn. Here also is good resting ground, and since Meyer refers to his guides, when they left him, as descending on to the arête, it is extremely probable that it was very close to here that he reached the arête. From where we struck the arête it took us to Meyer's Peak, in 1907, 20 mins.

One statement of Meyer's admits of no doubt. At the point where he attained the arête there he remained.

Moreover, Meyer distinctly states that on the return of the guides they all descended *with ease down the W. face*. Now seen from Meyer's Peak and from the arête for a distance on either side of it the W. face looks quite easy and naturally invites descent. It is not steep and consists of rocks and snow slopes as described by Meyer, so that *this essential condition is also satisfied* by his having gained the arête at or about Meyer's Peak.

His narrative of the further occurrences is mainly what he understood from or what was told him by the guides on their return, so that *direct first-hand evidence, save so far as Meyer could follow the men with his eyes* (he carried usually a telescope, *vide* 'Reise auf die Eisgebirge,' p. 41), *of what took place on that part of the ascent the conquest of which is prima facie improbable is entirely absent*. The guides may have misinformed him, he may have misunderstood them, he may have wrongly reported them, or he may have jumped to conclusions.

Meyer, describing the view from the arête, says he saw through a gap in the Walliser Fiescher-hörner . . . the Rhone. But the Rhone is not seen through any gap in the range mentioned, but down the lateral valley which contains the Fiescher glacier, just below the village of Aernen. In 1907 I looked most carefully for it all day but could only see it down that valley. He says that the highest peak rose like a black rock to the N. cutting off the view. Thirty years ago in describing my

* Cf. also Dr. Coolidge's interesting note in *A.J.* xxiii. 418-421: 'The Alpine History of the Finsteraarhorn.'

first ascent ('A.J.' xi. 369) I too *say* I saw this black rock, but youthful enthusiasm imagines much, and I have never since been able to see it. There is possibly some excuse, for in 1883 the conditions were very disturbing: the arête piled with new snow, a howling W. wind, a temperature 14° F. I had at that time studied Studer's closely argued case for Meyer's guides ('Jahrbuch S.A.C.' xvii.) and doubtless got obsessed with his view. On the contrary, you see a ridge of reddish-brown rock rising gradually to a shoulder, the so-called 'minor summit' of my account. This shoulder, seen from Meyer's Peak, is apparently the actual summit.

In 1907 I looked very narrowly, with a good Zeiss glass, from Meyer's Peak at this shoulder, and the actual summit is, *I think*, visible just to the right of and partially masked by the shoulder or 'minor summit.' The highest point, if indeed seen from Meyer's Peak, is a small reddish point almost like the remaining arête, and does not look any higher than the 'minor summit' or shoulder, in fact, it is only on most narrow scrutiny and with previous knowledge that one perceives that the 'minor summit' may mask another point beyond. I well remember in 1883 as we got close under the 'minor summit,' being quite convinced that we were just attaining the final peak and being quite disappointed by the appearance of a new and higher summit; and in 1903, although I knew that the highest point was far beyond, I could hardly bring myself to realize it until we reached the 'minor summit' and saw the peak. Thus much for the view that Meyer would see.

It will be noted that Meyer states that his party took 6 hours to climb the wall to the arête, whereas the longest time taken by my party was 3½ hours. There is reason to think that Meyer's party would be slow. We have his own evidence that he was exhausted after attaining the arête, so that his powers of endurance on that day were not great. Moreover the equipment at that period would not of course be as good as now and, in addition, barometers and all sorts of impedimenta were usually carried. Still the longer time does lend some colour to the theory of his having taken a longer route, i.e. traversing diagonally from left to right, i.e. in a northerly or N.W. direction, so as to reach the arête much higher up, and this supposition, I imagine, was the justification, if indeed I did not clean jump to it, for a somewhat ingenious suggestion, which I put forward in 1883, that Meyer's party gained the arête actually at the 'minor summit.'

This suggestion was the most important contribution to the case for Meyer's guides that has been made.

The great master in Grindelwald seized immediately on the idea and holds to it with bulldog tenacity. He has often quoted it as well as the 'acute remarks' of my late friend Blezinger in the 'Zeitschrift' for 1883, pp. 507-9. I ought perhaps to say that I was alone to blame for it, and that I still possess a memorandum dated October 12, 1883, by which I finally overcame the absolute disbelief of my friend Blezinger, who was not previously acquainted with the matter at all, in such a climb having been done seventy years before. The memorandum was returned to me with his remarks written thereon.*

Writing on December 15, 1908, Dr. Coolidge says: 'I see what your theory as to the Finsteraarhorn is in Reade's paper. It is open to several *fatal* objections, so be careful before publishing it.'

* The ascent by the S.E. arête was on my 1882 programme and v. Bergen had recommended me a certain Zwald as local guide. But the charms of the Zermatt peaks detained me. Earlier that season I had met Blezinger in Tirol. He was then a man of about thirty-five, of considerable mountaineering experience, and of great personal charm. During the winter he wrote to invite me to join him in the Oberland the following summer. Of course I included in our programme, first and foremost, Meyer's 'course.' I had Peter Dangel of Sulden, a very good man, then about thirty-five. Blezinger brought Joh. Grill of Ramsau, under the Watzmann, known as Köderbacher from the name of his 'Hof,' then a man of forty-nine and one of the very best mountaineers I ever met, a mixture of determination, executive ability and sound judgment. He had got his early experience as a 'Treiber' at the royal chamois shoots—no mean school for the young climber. He first came to Switzerland when well over forty, and single-handed, with two Viennese, climbed a number of the big peaks. He has often told me in his uncouth 'Bayrisch' what risks he ran when his Herren, as they often did, 'ausgerutscht sind.' He was our leader throughout—indeed no other guide, be he ever so famous, ever disputed Köderbacher's right to command. As we passed Alpiglen on our way to traverse the Jungfrau, Köderbacher became enormously interested in the N. face of the Eiger and was with difficulty induced to give up the desire to try it. It was to satisfy his desire to do something 'wirklich schwer' that at the end of that season when Blezinger went home he led me up the great W. face of the Weisshorn. The veteran is still alive. He was a very great man on a mountain.

It will be quite understood that, with considerable trepidation, I venture to remind the great master :

1. *That the 'minor summit' has never in modern times been reached direct from the E. or Studerfirn.*

2. *That the approach to it up the E. face bears, according to my own careful observation, no resemblance whatever to the route as described by Meyer.*

The approach would, as already stated, in great part, certainly in the upper half, be up a rock face scored by shallow stone gullies carrying little snow, dangerous and difficult ground which would be chosen, *even if practicable*, by no one when the direct route to a lower point on the main arête is obviously open. I was considerably startled, at the time, to read the note in 'A.J.' xx. 142-3, wherein it was suggested that some guides in 1898 had actually reached the 'minor summit' direct, and the main object of my second visit (in 1903) was to repeat this ascent and thus to test my theory, *about which I had long become suspicious*. At the Oberaar hut, by great good luck, I met Rieder, one of the guides mentioned, a very intelligent man. At first he made the general statement that they had ascended direct from the Studerjoch. Finding, however, that I knew my subject, he got down to actual facts and pointed out their actual route, remarking 'Wir waren so lang am Grat wie an der Wand' (We were as long on the arête as on the face). *Their route as pointed out was the regular route up the rock rib S. of the hanging glacier mentioned above.**

This therefore disposed of any 'new' route. All the same, next morning we went right up to the Ober Studerjoch to make a close inspection of the direct approach to the 'minor summit,' with the result indicated above. The ground is of dangerous and negligible description.

3. *That the arête where the 1812 party struck the main S.E. arête was on Zschokke's direct statement, supported inferentially by Meyer, an ice arête, whereas the 'minor summit' is a shoulder of a rock arête continuing as such for a long way below it.*

4. *That just before the 1812 party gained the arête Meyer describes the arête for a considerable distance as carrying a great*

* Cf. also Dr. Coolidge's note, *A.J.* xxiii. 418-421, previously mentioned.

cornice. Now rock arêtes do not for considerable continuous distances carry cornices.

5. That Meyer states that the snow was so soft that the arm could be buried deep in it. But this could not be in the early morning but later, say, not earlier than 10 a.m., when the sun was making itself felt. Now to fit in with the theory that Meyer gained the 'minor summit' direct he would by that time have quitted any snow and be on rocks!

6. That Meyer distinctly states that from the point where he gained the arête they descended on the W. side without any trouble. Now no descent has ever been made on the W. side from this 'minor summit' direct.

It was gained direct by Dr. Thomas in 1909 ('A.J.' xxv. 171) and again by Mr. Millington in 1911 ('A.J.' xxvi. 88). They took respectively about $2\frac{3}{4}$ hours and 2 hours 55 mins. for the actual ascent from the foot of the buttress to the 'minor summit,' and in no single particular do their accounts tally with Meyer's statement that the going was easy.

Thus there is the *single point* of the long time taken by Meyer's party, for which I have offered a reasonable explanation, which possibly favours his having gained a point on the arête higher than Meyer's Peak, and *there are the strongest objections* to the theory of his having gained the 'minor summit' direct.

It may be argued—I will give my critics every possible weapon—that Meyer gained direct a point on the arête much higher than Meyer's Peak, if not indeed the 'minor summit.'

Most of my objections would equally apply to that theory, and moreover, as the guides *descended* on to the arête after leaving Meyer, no point between Meyer's Peak and the 'minor summit' would well answer to this condition.

To clear up this and some other points, Mr. Fynn and I on August 2 of this year, starting from the Finsteraarhorn hut, ascended the W. flank of the S.E. arête and thus attained, mainly up hard snow with some step-cutting, its crest a short distance to the N. of Meyer's Peak. A good aneroid, set at the hut, indicated 12,950 ft. = 3,948 m. We estimated the height of Meyer's Peak at about 12,800 ft. = 3,903 m. We spent about 2 hours ascending the actual W. flank from the glacier and made the descent in 45 minutes. The ground more to our right and directly below Meyer's Peak is of similar description, snow slopes mixed with rock outcrops. While seen from the E. Meyer's Peak stands out prominently on the arête, as shown in the photograph, its position seen from

the W. is not so clear, as the W. face is scored with many rock ribs, which reach to the arête, forming small rocky protuberances.

We were able to establish the points :

1. That the descent by the W. face from at or about Meyer's Peak to the Glacier at the foot is easy and quick, as described by Meyer.

2. That at a short distance above Meyer's Peak, the glimpse of the Rhone, seen down the Viescher Glacier Valley, is lost. It follows therefore that it must have been very near Meyer's Peak that the arête was gained by him.

Unless it can be shown that Meyer did reach direct the 'minor summit' or a point very close to it, the case for the guides having reached the actual summit collapses, as I will proceed to show.

I will base my case mainly on the clock, which admits of scant appeal. Meyer's guides left him at 1 P.M. at earliest (paragraph 7). They are stated to have gained the summit at 4 P.M. (paragraph 12), i.e. in 3 hours.

Now in 1903 Daniel Maquignaz and I, then a fast party, in fair conditions, knowing the route, took 3 hours 7 mins. actual walking from rather lower down than Meyer's Peak to the summit.

In 1907 Reade and I took 4 hours actual walking for the same bit. We were somewhat hampered by snow in the gaps between the gendarmes.

Claude Macdonald in 1905 took 3 hours 55 mins. : 'snow good but the rocks bad and a good deal glazed.'—'A.J.' xxiii. 339.

Fynn's party in 1907 took 3 hours 15 mins. actual walking for the same : 'Weather cool and perfect, snow in best condition, rocks free of ice and loose snow except about the fixed rope in the gully where there was a little ice and snow. We kept pretty clear of it by keeping well on the left (looking up). No attempt was made to create a record of any sort. Bergschrund was nicely bridged and the step cutting was all in hard snow with the exception of a short traverse into the rocks, when a dozen steps might have been cut in ice.'

Now we know that in 1812 the conditions cannot have been good. Meyer had spent July 27 at his bivouac on the Genslücke in a snowstorm which buried his shelter under 18 inches of snow. Next day the deep snow caused them trouble in reaching the Grimsel. Up to August 14 the weather was generally so bad that they had to wait at the Grimsel. It

even snowed while harvest was being got in. When they got back to their bivouac on the Gemslücke on August 15, they found all their belongings frozen together in a lump of ice. Were these conditions likely to ensure the condition of the S.E. arête being such that these three men make record time over absolutely new and, for the then standard of climbing, very difficult, and, even as measured to-day, when in bad condition, by no means easy ground? * Such a thing is out of the question.

As to what the men may have told Meyer on their return I pay little attention. Which of us has not had a very great deal to say after doing a great ascent and which of us has not had to listen to even greater 'Heldenthaten'? It is only the very calm and experienced mountaineer who really knows where he has actually been and what he has actually done and seen! What Meyer records of their sayings is up to a point just what they might be expected to have said. 'The ice covered the naked rock. At last Abbühl screws up his courage and leads up the last bit and pulls the others up. The summit is sharp as an edge all over ice with a great cornice.' These are all generalities that might apply to any mountain. But surely Meyer overdoes it somewhat when he puts into the mouths of a couple of cowherds and the 'Knecht' of the Grimsel the somewhat poetical description of the view. *Surely this is what he expected them to see* but it is about the last thing they would dream of describing. Moreover in point of observational powers, notwithstanding the bitter cold and the storm which nearly carried them off their feet, they exceed Tyndall and others who have described the view from the summit. So far as I can trace none of these mention the Lake of Thun which the guides make 'gleam in sunshine out of the depths' although Tyndall's and Hardy's descriptions (in splendid weather—*P. P. G.* 1859) of the view are very detailed. If Meyer's men really had seen the Lake of Thun, which can only be seen from the actual top, I wonder at their not telling Meyer that *all they saw of it was a little corner over the shoulder of the Eiger*, for all the rest is completely hidden. If they did not, it tells against their having seen it at all. The Lake of Thun actually makes so small an impression that my companion failed to notice it till I pointed it out.

I cannot attach any importance to the description of the

* Note their three hours included halts and some considerable hesitation!

view as put into their mouths by Meyer or admit for one moment that it proves that they reached the actual summit—when every other circumstance goes to show that they cannot have so done. Meyer would be more than human did he not allow himself a little innocent writing up of what he felt assured would be visible from the summit. Then again it is 4.30 P.M. before they start on their return. If they did reach the actual summit then they have to return over ground which took them three hours to ascend and *which is so uninviting that up to this date so far as I know only one party has cared to descend by that way** and they, Mr. Hasler and Jossi, a well-trained party, took from the summit to a point on the arête, quite a long way, say $\frac{1}{2}$ hour, above Meyer's Peak, 1 hour 35 min., equal to about 2 hours from the summit to Meyer's Peak.

Are Meyer's people likely to have been anything like as fast as such a unique party? If not then they can only have reached their employer after seven. He must have been pretty tired of his six hours' wait and somewhat cold! It would be dark before eight, and yet Meyer says they got back to their bivouac, down the W. face and up over the Gemslücke by dark.

The whole thing is incredible. What happened is really this. Meyer remained behind somewhere near Meyer's Peak. His three men went on as far as the 'minor summit.' This is quite a respectable climb—there are quite a lot of gendarmes—and the time 3 hours is fair time. Until they reached this 'minor summit' they would most certainly take it, as we did in 1883, for the actual summit and be somewhat disgusted to see the reddish-brown ridge continue farther. Moreover Meyer from his resting place could see them plainly on the 'minor summit.' They had done probably the hardest climb of their lives. It had taken them 3 hours. It took Maquignaz and myself over 2 hours. It was 4 P.M. Why should these men be expected to pay such pedantic attention to the 'actual top' as we do nowadays? Their wages were 25 centimes per day. Surely they had done enough. The cold was severe, the wind very strong. Every sentiment of prudence and self-interest urged them to risk no more and to

* We had the half intention, on my 1907 expedition, of descending by the same way, but the intention oozed out by the time we reached the top! I hear since writing this article that Mr. Hasler, some time ago, made a second descent, this time with the guide Heinrich Fuhrer and a lady.

hurry back to their employer, waiting below, so as to regain camp before nightfall.

How easy it is to reconstruct the scene! The three men excited, tired, ill-clad, cold, wondering how they were going to get down the steep avalanchy snow up which they had come in the morning, and with the long jagged ridge ahead that leads to the actual top.

It is not hard to picture prudence easily overcoming foolhardiness. What could it matter to the young man who was so stupid as to prefer a cold bivouac to the comfort of a decent home whether they went on to the farther point even if they could get there! Have we not all heard in our experience many similar arguments for turning back? Why expect so much more from these men one hundred years ago, when these fine distinctions were undreamt of?

Little did Abbühl and his companions dream of the long drawn out controversy which the decision of their little *conseil de guerre* would involve!

They proceeded to fix the flag in full view of the waiting Meyer and then they hurried down, say, in $1\frac{1}{2}$ hours. That would be 6 P.M. They might just get back to camp by dark.

It is all clear as daylight. If Meyer saw them on what looks for all the world like the top,* *he may never even have asked them the question* whether there was a higher point beyond. He would naturally, as a youth will, ply them with the kind of question which amounts to a suggestion as to what he expected they had seen and done, and they, naturally enough, excited and anxious to get on, would acquiesce in all his suppositions.

Doubtless on the way back to camp Meyer would cast many a glance up at the great peak, but from the site of the present Finsteraarhorn hut and between it and the W. face of the S.E. arête, where they would pass, *the true top looks no higher but rather lower than the 'minor summit.'* Thus the party returning to the Gemslücke would not see that they had not reached the true top.

It is not until the more sceptical and experienced Hugi comes along, years later, that Abbühl calls once more to mind that jagged arête and farther half-forgotten higher point, the way to which looked so uninviting, and finally, under the

* Zschokke distinctly says Meyer did, based possibly on a conversation with Meyer or Huber. Further, Meyer's own description of what the men did on the summit reads much more like personal observation than mere hearsay.

cross-questions, answers the invitation to repeat the ascent by the statement *that he had never reached the actual top*. Was he not human even as we are?

One may reasonably conclude that Abbühl had equally failed to convince the other guides. Hugi's guides in the 1828 attempt, when the party got within 200 feet of the top, being only turned back by the breaking of a cornice by which Hugi and a guide nearly perished, and by the intense cold and a furious wind, were Jakob Leuthold, then 22, another Leuthold, probably his father, Lauener, Moor, Arnold Dändler, and one unnamed, possibly Währen, besides Abbühl himself.

Now some of these were Abbühl's fellow servants of the Grimselwirth and must have known him well. The Leutholds and he lived at the same village.

Although Abbühl failed to point out his exact line of descent from the arête, there were among the others, as they showed later in the day, and again the next year, men quite capable of selecting the rather obvious route. When we find them, however, abstain from this, and make a considerably longer journey to seek a problematical new route, it would seem that their belief in their comrade was not great. The rage for new routes was not yet. Their record as given by Hugi is that of keen enterprising mountaineers, not likely to be deterred by tales of mere difficulty. This tacit testimony is very suggestive, much more so even than Hugi's statement.

I accuse the men of no actual deception.* They acted well within the mountaineering canons of their day. They need not indeed have had to tell the youthful and imaginative Meyer very much. He may easily from what he saw have jumped to his conclusions.

However much my conclusions tell against the hitherto accepted version of what Meyer's guides actually carried out, no man is more impressed than I, who thrice have followed their steps, by the brilliance of the courage and ability exhibited at a period when mountaineering was attended with an inconvenience, a hardship and an exposure to which we moderns are utter strangers.

The names of Arnold von Melchthal, 'ein Knecht des

* It is not very reassuring to note that not only the 1812 expedition but also that of 1829 was disbelieved. It was apparently not the custom of the people of the country to accept unsupported claims on trust, which would seem to indicate a not too high standard of veracity.

Grimselwirths,' Alois Volker, Joseph Bortes, Caspar Huber 'Alphirten und Gemsjäger,' deserve to be remembered and held in the highest honour. They are worthy progenitors of the great school of guides of the Hasle Valley which for many years was almost unrivalled, and of that later school of guides of the Valais, among whom are to-day some of the ablest exponents of their craft.

I have already suggested that the three men may have attached scant importance to reaching the actual top, or at any rate may have failed to appreciate any great difference. Which of us has not been asked by some fair neighbour at *table d'hôte* 'Have you ever been up the Matterhorn?' and, after replying in the affirmative, another question, 'What, right to the top?'

Readers of the ALPINE JOURNAL (xi. 249) will remember the Disgrazia incident. 'In course of conversation he gave us the somewhat startling information that three years ago a body of about 200 soldiers had visited the Alp and while there had made the ascent of the Disgrazia. . . . We . . . eventually elicited from him that none of the soldiers had got to the top but that some had got as far as the glacier.'

Even Hugi ('Alpenreise' Index, page xiii.) used the words 'Ersteigung des Hornes' in describing an unsuccessful attempt. When his guides finally attain the summit he writes: 'Ersteigung des Hornes, der höchsten Spitze.'

Similar incidents could be easily matched in Alpine history to show that, if the three men did consider they had as good as completed the ascent, they were acting up to—indeed exceeding—the canons of their time.

Surely it cannot be demanded of them that they should for one instant foresee the minute criticism to which even the smallest Alpine subject is now subject, and shape their action accordingly.

I fully acquit them of any deliberate intention to deceive. I have already shown that in respect of a portion of their reported statements Meyer may certainly have written them up freely, and I have suggested the possibility that he never thought to ask them whether there was a still higher point beyond.*

If the three men did reach the actual summit in 1812, then I can only say that in my opinion their rock-climbing powers

* The Rev. J. F. Hardy's experience of Oberländers must have been unfortunate. I trust that I have produced better reasons than his suggestion. *P. P. G.* 1859, p. 301.

were not surpassed until Carrel conquered the Italian side of the Matterhorn in 1865.

There is at least one place on the route as sensational as the 'Enjambée' which turned Bennen back on his attempt on that side of the Matterhorn. Now Tyndall—no bad judge—considered Bennen a very good man.

Men of admitted experience and judgment of difficulties like Daniel Maquignaz, V. A. Fynn, Herbert Reade, Geoffrey Young, consider it extremely improbable that such a climb was carried through at that period.*

It will be remembered, moreover, that attempts to repeat the ascent in 1865 and 1870 failed.

What does Cordier, who in 1876 was the first, led by Jakob Anderegg, to repeat the climb, say? An imaginative youth like Meyer but quite experienced in difficult work, he writes of the last part of the arête between the 'minor summit' and the top: 'Cette dernière heure a été pour moi la plus émouvante que j'ai passée jamais dans les Alpes.'

I have not been able to ascertain the opinion of Mr. Seymour Hoare, who, led by v. Bergen, was the first to follow Cordier.

Köderbacher is reported to have called the last part 'eine seiner exponiertesten wenn nicht die schlimmste seiner Klettereien gewesen;' but then in his expedition, as I have mentioned, the conditions were the very worst.

We know † that three of Meyer's men were chamois hunters and all were, or doubtless had been, Hirten or goatherds. But at that date chamois were more plentiful and a hunter needed, in view of the short range of firearms, to be rather a very careful stalker than a desperate cragsman. Certainly there is no training like that of a goatherd to make a keen lad into a good cragsman. The actual leader was Abbühl—'Knecht des Grimselwirths'—and we know that many similar 'Knechte,' to wit Bennen and Melchior Anderegg, became great guides. Far be it from me to detract from the climbing abilities of Meyer's men. I have endeavoured to show that their actual performance is still, and was even more in that day, highly respectable.

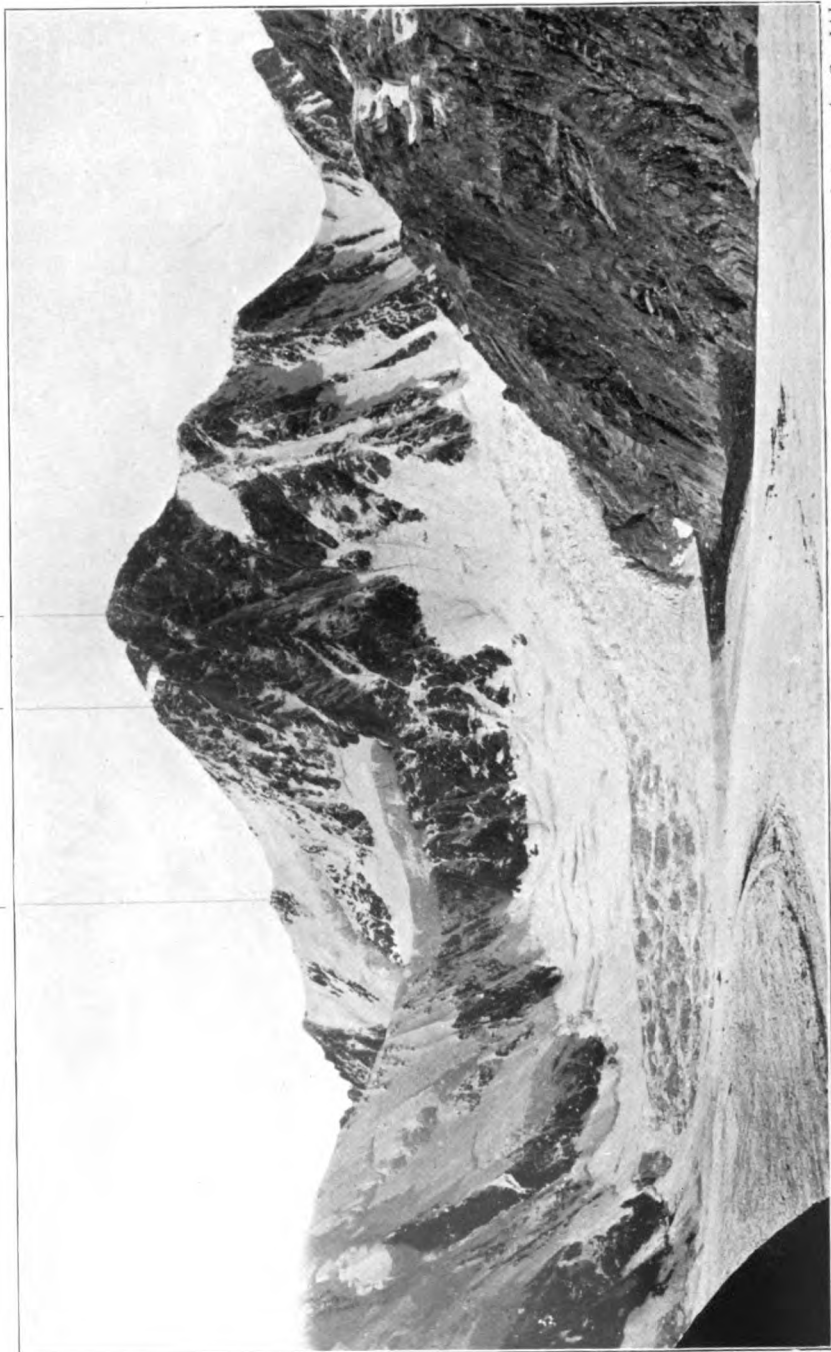
Turning now to Meyer's own part in recording the expedition, his own account as published in 'Alpenrosen,' 1852, is, in my opinion, one of the most brilliant Alpine literary gems that I have ever read. No doubt the equipment and organization

* Cf. Dr. Coolidge, *A. J.* vol. xxiii. p. 420.

† See Meyer's words of warm appreciation, *Alpenrosen*, p. 11.

Meyer's
Peak.

"Minor Highest
Summit." point.



W. F. Donkin, photo.

THE EAST FACE OF THE FINSTERAARHORN,
from the Abschwung.

Swan Electric Engraving Co., Ltd.

of the Meyers' expeditions was due to the older Meyers, father and uncle of our man. But young Meyer in his descriptions approaches very nearly to our modern ideas. It is to be regretted that his Alpine career seems to have ended with his campaign of 1812.

It has often seemed to me that the craft of mountaineering, and even more the art of mountaineering description, distinctly retrograded for over 50 years after these great expeditions of the Meyers. It is not until the early sixties that rocks of equal difficulty are again attacked. Even then—witness Almer's opinion as to the inaccessibility of the Matterhorn—men had not yet learned the axiom, which Alexander Burgener was the first, certainly by practice rather than by explicit enunciation, to lay down, viz. that the practicability of rocks is only decided by actual contact. Meyer's guides had a glimmering of this.

It is again not until the sixties that Meyer's calm yet vivid descriptions of actualities are surpassed by those brilliant articles of Stephen, of Moore, of Tuckett, and by Whympyer's great 'Scrambles,' that are the glory of this Journal and of English mountaineering.

There is one further important point to deal with.

The 'Alpenrosen,' 1852, pp. 33 *seq.*, contains an account by Meyer of his passage on September 3, 1812, with his same two men, Huber and Abbühl, of the Strahlegg from the Grimsel to Grindelwald. This was the first authentic passage of this Pass, which again testifies to the capacity of his two guides.

This is what Meyer says (translated): 'After five long hours we reached at last the foot of the Finsteraarhorn . . . when we followed with our eyes the way which we had ventured on the ascent of its summit; *through a telescope we saw our flag-staff on the highest point.*'

The accompanying Donkin photograph, taken from Meyer's probable standpoint near the Abschwung, shows the highest point and the 'minor summit.' It incidentally also shows the face of the 'minor summit' which Meyer would have had to climb to gain that point direct.

I do not profess to explain this positive statement except on the general ground that one often thinks one sees what one expects to see,* or on the particular ground that Meyer

* Our column was on the march in the Orange Free State during the war when the officer commanding the screen sent back word
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may have concluded or have been assured that the 'minor summit' lying farther back was really the highest point. It must be remembered that his own experience of mountaineering was exceedingly small, and that he was certainly obsessed with the idea that the highest point had been gained.

At the same time it is a very definite statement, but I do not think it can be allowed to outweigh the many points, not depending on any personal factor, that go to show the extreme improbability of the case for the guides.

The first *complete* ascent of the Finsteraarhorn was, in my judgment, after attaining the Hugi'sattel in 1828, made on August 10, 1829, by Hugi's two guides Jakob Leuthold and Joh. Währen by the now ordinary route by the W. flank and the N.W. arête. Hugi himself remained behind, with his remaining men, about 200 ft. below the summit within perfect earshot and apparently in full view of the men on the summit.

The two men spent three hours on the summit building a great stone pyramid 7 ft. high in which was planted a pole as thick as one's arm and 7 ft. long which projected 2 to 3 ft. out of the pyramid.

This pyramid is stated to have been seen through a Frauenhofer telescope from Solothurn by several observers.

Hugi makes no mention whatever of his men having remarked any signs of any previous ascent. We are bound to conclude that, in view of his knowledge of the claim of an earlier ascent, he would certainly ask his people for information on the point. There appears to be no reason to doubt his good faith in the matter. (Cf. 'Alpenreise,' pp. 207-210).

It is interesting to get a sidelight on what was considered in 1829 to be difficult: 'When Leuthold and Währen got back to us they were pale as death. Even their voices and their whole outward appearance were altered. Leuthold declared afterwards often that for no price would he in such a deep state of the *névé* repeat the ascent' (*ibid.* 209).

This Jakob Leuthold, whose portrait from a sketch made by M. Burkhardt in 1842 for Desor's 'Séjours' forms the

that a party of Boers was advancing in *column of squadron*. The column halted whilst two of us rode out to reconnoitre. The position of the enemy was pointed out to us, but we could find no trace of any enemy and nothing except some fields of waving mealies! Which of us cannot multiply similar cases!

frontispiece to this article,* deserves more than a passing mention. Born in 1806, the son of a former intendant † of the Grimsel and brother-in-law of a later intendant, the well-known Zybach, in whose service he stood, he became at an early age the recognised leader among the Hasle men for any serious mountain expedition.

Accordingly in 1828 and 1829, he was Hugi's chief guide, and with his comrade Hans Währen reached in the latter year the summit of the Finsteraarhorn. Hugi's pages contain very warmly appreciative references to his skill and daring. On one occasion his watchfulness and instant intervention saved Hugi from a very serious accident, and on another occasion when Hugi sprained his ankle, Leuthold and Währen alternately carried him down bodily during the night. The relations between the somewhat exacting Hugi and his guide were evidently of the very best.

When Agassiz, Desor and their party paid in 1840 the first of their classic visits to the Grimsel, Leuthold and his comrade Währen were at once engaged as leaders. Desor's pages abound with constant references to the ability and fine traits of Leuthold, who is certainly entitled to recognition as an able, intrepid and very intelligent guide.

Besides his ascent of the Finsteraarhorn referred to above, he was the leader on the first ascent of the Lauteraarhorn in 1842, and on an early crossing of the Strahlegg. He died of pneumonia at the early age of thirty-seven.

Währen, the other guide, was Leuthold's lieutenant, a stonemason by trade, and reputed the strongest man in the Oberland. He was also one of Zybach's best men, and Desor tells an interesting story of his great keenness and insistence on accompanying the party, of whom, by the way, Forbes was one, notwithstanding violent inflammation of the knee. After Leuthold's death, Währen appears to have succeeded him as leading guide to Desor's party.

* The date under the portrait of Jakob Leuthold should be 1829. The attempt in 1828 was unsuccessful.

† The intendant was nominated by the communes of the Hasle Valley under the control of the Bernese Government, and was one of 'les puissans et les habiles de la vallée.' Zybach is described by Desor as 'un bon gros papa en habit de milaine jaune . . . et qui sous des dehors très simples cache un esprit adroit et observateur. Töpffer's references to him will also be remembered. He was evidently a man of considerable character and a great friend to the early mountaineers and investigators.

It is well to recall the memory of these worthy pioneers of our great pursuit, and I hope that abler hands than mine will one day extend our knowledge of their lives and doings.

The mountain then remained undisturbed until August 16, 1842, when Joh. Jaun—a good Hasle name—and Heinrich Lorentz,* the guides of Herr J. Sulger, attained the summit by Leuthold's route. Dr. Coolidge has placed me under a further obligation by pointing out to me that Jaun's own account of this expedition appears in 'Matériaux pour l'Etude des Glaciers par Dollfus-Ausset,' Strasbourg, 1864, Tome v., Ire Partie, and he has since published in 'A.J.' vol. xxv. pp. 186-7 an interesting note on the subject.

Jaun and Lorentz reached the summit (p. 361) at 11.30 A.M. and 'fanden dort einige kleine Eisenstäbe und ein Knäuel Faden und Nadeln welche Jacob Leuthold und Hans Währen vor einigen Jahren dort zurückgelassen hatten. Wir machten eine kleine Pyramide' ('found there a few little iron rods and a ball of thread and needles which Jacob Leuthold and Hans Währen had left behind there a few years before. We built a little pyramid').

On page 362 Jaun † mentions his ascent with Herr Sulger, Lorentz, and Andreas Abplanalp aus Hasle-Grund, and says 'trafen unsere Fahne noch an. Wir vergrösserten die Pyramide, &c.' ('We found our flag still there. We enlarged the pyramid.')

* *Bernese Oberland*, vol. ii., 1904, and *A.J.* vol. xxv. p. 187, say Jaun and Andreas Abplanalp, but according to Jaun his companions on this expedition were Heinrich Lorentz aus Wasen and Melchior Bircher von Guttanen 'Knecht von der Grimsel.' Sulger went back with Bircher and the two others completed the ascent ('Matériaux,' Tome 5, p. 361). Studer in his *Panorama von Bern* (1850) says: 'nur von zwei Führern begleitet,' but gives no names. But Jaun must be held to have known his companions.

† This Jaun was born in Meyringen in 1806 and died in 1860. He was a wood-carver in winter, chamois hunter in spring and autumn, and guide in summer. He led Agassiz up the Jungfrau in 1841 and repeated the ascent in 1842. He was apparently one of Mr. Hardy's guides in ascending the Finsteraarhorn in 1857. He travelled with Dollfus in the Pyrenees, the Sierra Nevada, the Sierra Morena and the Vosges, and vol. 6 of the above work contains many notes by Jaun indicating high intelligence. See also Dr. Coolidge's note, *A. J.* vol. xxv. pp. 186-7; but Jaun's own article in the 'Matériaux,' 'Ascensions courses et séjours dans les hautes régions par le guide Hans Jaun, 1841 à 1860,' is most instructive.

We have also Herr Sulger's own detailed account, reprinted in the 'Jahresbericht' for 1908 of the Basel Section of the S.A.C., of his successful ascent* on September 6, 1842. He says: 'Resten einer Pyramide die seiner Zeit von den zwei Führern Leuthold und Währen aufgerichtet wurde fanden wir nicht, wohl aber drei dünne eiserne Stäbchen durchaus ohne Rost und etwas aufgewickelten Faden mit einer darin fest eingerosteten Nadel, was nun nicht mehr an der glücklichen Besteigung dieses Kolosses durch genannte Männer zweifeln liess.' ('We found no remains of a pyramid erected at the time by the two guides Leuthold and Währen, but three thin little iron rods, entirely free of rust, and some rolled up thread and a needle fast rusted therein, which thus left no doubt of the successful ascent of this colossus by the men named.')

While therefore Hugi's guides in 1829 are not reported to have made any mention of signs of any previous ascent, Sulger's guides in 1842 do report the signs of an earlier ascent, which they ascribe to the 1829 expedition and with justice, since a ball of thread and a needle would certainly not have lasted for thirty years. We know moreover that Jaun was a colleague and friend of Leuthold, who very probably had mentioned his forgotten needle and thread as guides will. (Desor, 'Excursions et séjours dans les Glaciers,' p. 359).

It is peculiar to note the doubt that apparently existed even of the 1829 expedition; little wonder that the far more serious expedition of the 1812 party was totally unaccepted.

Of course no absolute proof for or against the completion of the ascent in 1812 can ever be forthcoming. I am quite content to leave the matter now. I should not indeed have taken it up but for an ever-growing consciousness that my contribution of thirty years ago to the subject was an unjustifiable assumption. If I have thrown some further light on an Alpine problem of the greatest interest, and particularly if I have succeeded in making my friends, the great master in Grindelwald, the originator of minute critical discussion on Alpine subjects, and that other great authority Dr. Dübi, even reconsider their strongly held opinions, I am more than repaid.

* Strange to say, Sulger never refers to Jaun's ascent in August; in fact, one would conclude that his own ascent was the first since Leuthold's. Sulger survived his expedition nearly seventy years and died lately in Bâle.

NOTE.—After reading Captain Farrar's article very carefully, in the light of my own experiences with him on the Finsteraarhorn in 1907, I find myself in entire agreement with his conclusions. The following points seem to me established beyond doubt :

(1) Meyer's party ascended the E. flank of the S.E. arête by what is practically the route taken now, and reached it at what Captain Farrar has called 'Meyer's Peak.' To diverge to the right in order to strike the arête higher up would be sheer lunacy.

(2) From this point the 'minor peak' would be taken by anybody for the actual summit. I may add that there are many view-points on the S.W. of the mountain from which this peak looks as high as, if not higher than, the summit.

(3) If Meyer saw his guides hoisting a flag, it must have been on the minor peak.

(4) The guides cannot possibly have reached the true summit and returned in the time recorded, which is confirmed by the fact that the party descended the W. face and returned over the Gemslücke to their bivouac before dark.

Perhaps I may be pardoned for adding that, in my opinion, no one who has not actually done the climb in question is quite in a position to judge of the evidence.

H. V. READE.

THE FIRST ASCENT OF MT. SIR SANDFORD, THE
LOFTIEST SUMMIT OF THE SELKIRKS.

BY HOWARD PALMER

(Secretary of the American Alpine Club).

BESIDES the proud honour of being the monarch of all the Selkirks, Mt. Sir Sandford possesses three other claims to distinction among the prominent peaks of Canada. First the fact that directly or indirectly it has repelled more assaults by aspiring climbers than any other mountain in the Canadian Alps, no less than nine separate parties having retired discomfited from before it. Second, the circumstance that of all the known peaks of similar rank within these bounds, Mt. Sir Sandford alone compels its assailants to transport their equipment on human shoulders for the better part of a week as a preliminary to the attack proper, and to rely for their support during its

continuance entirely upon portorage in relays. And lastly, its clear title to be classified among the most majestic and the most beautiful mountains in the Rockies and Selkirks.

Owing to its remote situation in the depths of the unexplored wilderness included within the Big Bend of the Columbia River to the north of the Canadian Pacific Railroad, the mountain remained practically unknown until it was named and triangulated by the Canadian Topographical Survey in 1902, escaping therefore all such exaggerations of height as have so often been current concerning its neighbours in the Rockies. The altitude obtained was 11,634 ft., but as the massif lay well beyond the limits of the map, the prospective visitor was little better off than before as regards its relative position or the best means of approach. Certain it was, however, that natural barriers of no mean difficulty in the shape of narrow valleys, rushing torrents and pathless forests, choked with a disheartening tangle of undergrowth, filled all the intervening distance, and it is undoubtedly owing to these that the peak remained immune from visitation for so many years thereafter, despite the activity displayed by mountaineers in more accessible districts not very far away.

In the summer of 1908 I obtained a distant view of Mt. Sir Sandford from Mt. Hermit near the railroad. So alluring did it look that in the latter part of July I set out with Mr. B. S. Comstock, of New York, to discover, in so far as a brief journey would permit, where the mountain was and how to get to it. Eventually we succeeded in both these objects, locating a promising line of approach. The next season, Professor H. C. Parker having joined us, the mountain was reached by this route, notwithstanding the obstructions of the very dense forests. For much of the distance a trail had to be chopped out and it took twelve days to cover the same number of miles. The W. slopes of Sir Sandford were ascended over glaciers and snow to about 9,000 ft., but here unfavourable conditions forced a retreat which, owing to shortage of supplies, was presently continued to the railway.

The chief consequence of our three weeks' work was the discovery of the large glacier that has since been named the Sir Sandford.* It is probably the most important in the

* See 'Explorations about Mt. Sir Sandford, B.C.,' *The Geographical Journal*, vol. xxxvii. p. 170, February 1911 (Map and Illustrations). Also the same for 'Observations on the Sir Sandford Glacier,' vol. xxxix. p. 446, May 1912.

Selkirks, so that the biggest glacier and the highest mountain in the range are situated close together. Furthermore, a fine chain of lofty granite peaks lying just across the valley from Mt. Sir Sandford to the N.W. was examined at close quarters for the first time. Thus the expedition was not without definite topographical results of some significance.

In addition to its possibilities for interesting mountaineering, the region about Mt. Sir Sandford was seen to possess manifold opportunities for scientific investigation. Accordingly, in the summers of 1910 and 1911, Professors E. W. D. Holway and Frederic K. Butters, of the University of Minnesota, joined me in journeys thither. We aimed to make both lines of work mutually complementary. In the course of some two months we carried out nearly a dozen ascents to points above 9,000 ft., two being of about 10,500 ft. and one of 11,000 ft. We observed the topography, took photographs, measured the new peaks with a transit, and in general collected all data we could for a detailed map. We studied Mt. Sir Sandford constantly from every side within our range of action, examined with powerful glasses each possible way of ascent, and made no less than four assaults upon its exceedingly steep, icy slopes where the clinometer gave readings between 48° and 50° for 1,000 ft. However, it was all to no purpose, for wind, cold, avalanchy snow, or belts of glare ice, singly or in combination, drove us back on each occasion at about 10,000 ft. Despite much bad weather in both seasons, we gained all our ends except the fascinating sharp white apex of Sir Sandford. It is a remarkable characteristic of the mountain that, owing to the lofty cliffs which almost completely engirdle it, there is but a single line of approach offering any inducements to the mountaineer. Accordingly he does not have the option of selecting a route to fit the conditions prevailing at the time of his attack as may often be done on other peaks, but he is limited to one general locality, and when this is in a dangerous state he must perforce await a change for the better.

During these and earlier years we were not the only assailants of Mt. Sir Sandford. Others succumbed to its fascination, no less than six expeditions setting out to win the coveted prize between 1906 and 1911. Only two actually reached the mountain; the others from one cause or another had to retreat when many miles away—in one case with the loss of a life through the overturning of a canoe in the treacherous waters of Gold River and with the near loss of another on account of a broken leg. In all, no less than sixteen assiduous



Howard Palmer, photo.

Swan Electric Engraving Co., Ltd.

SIR SANDFORD, from the N.W.



Howard Palmer, photo.

Swan Electric Engraving Co., Ltd.

SIR SANDFORD, from the North West,

showing route of ascent, and route of previous attempts rendered unavailable in 1912 by ice conditions. Dome-topped rock conspicuous in centre; large buttress in arête to the right just opposite.

The attempt of 1911 by Mr. Culver was made by the left sky-line ridge.

Alpinists, excluding guides, have sought to capture this relentless peak—a record that is believed to be without a parallel in the annals of Canadian mountaineering. It may be appropriate to make brief mention of the two expeditions which succeeded in overcoming the obstacles of approach.

The first consisted of Dr. Charles H. Shaw and Mr. Reuben T. Shaw of Philadelphia. Packing all necessaries for the journey upon their shoulders, this intrepid pair left the railroad at Six Mile Creek station in August 1908, crossed Gold River on a felled tree, and finally, by dint of herculean efforts, reached the top of a small peak (about 9,000 ft.) at the extremity of the S.E. ridge of Sir Sandford. From here it was seen that the tremendous, sullen precipices which guard the massif everywhere on this side offered a problem far beyond their resources, and that under the circumstances there was nothing to do but turn back. This is probably the first visit to the near vicinity of the mountain.

As time went on, by reason of these reverses, Sir Sandford developed a reputation for difficulty among the mountaineering fraternity and a wide-spread interest in the peak began to manifest itself. It is not surprising, therefore, to find men of experience in Alpine work among succeeding suitors for the honour of treading its virgin summit snows. In the summer of 1911, Mr. G. W. Culver, of Winnipeg, entered the lists, having in his party the Swiss guides Edward Feuz, jun., and Rudolph Aemmer. After a very arduous trip via the same route, they established a camp on the S. slopes of the mountain and made spirited onslaughts against the E. and S.E. ridges, but owing to the exceeding steepness and smoothness of the rocks they were unable to get higher than about 10,600 ft. on the former. These guides were the first of their craft to enter this section of the Selkirks.

Such in ruthlessly condensed form is the history of Mt. Sir Sandford down to the close of 1911.

The winter of 1911 and 1912 in British Columbia proved to be of unusual mildness. The snowfall was light, and when spring came it rapidly disappeared under the influence of a long period of clear weather. News of these auspicious conditions came to the writer and fanned his smouldering resentment against Mt. Sir Sandford. The finishing touch to our work in the Selkirks—the capture of this uncompromising peak—yet remained to be accomplished, and now it seemed that the opportunity was at hand. After the atrociously bad weather of 1911 doubtless the pendulum had swung to the other extreme

and the continuance of these settled conditions might reasonably be counted on for some time to come. Accordingly, I broached the matter of another expedition to Messrs. Holway and Butters, but they were unable to entertain the idea at this time. Nevertheless, I decided to persevere and, to this end, engaged two of the Swiss guides imported by the railroad and completed all preliminary arrangements. Happily, at the last moment Professor Holway found himself in a position to go, so I had the pleasure of sharing this culminating success with the companion of many another.

The best route of approach to Mt. Sir Sandford is to leave the railroad at Beavermouth station, descend the Columbia by canoe to its tributary, Gold River, and follow the valley of the latter inland to the base of the mountain, a distance of about 95 miles. After caching the canoes at the head of navigation on Gold River, there are about 15 miles of heavy going before the final camp near timberline within striking distance of the peak is reached. Over this portion of the way everything must be conveyed by pack harness, and for a prolonged stay at this camp supplies must be relayed in by a supporting party.

Our expedition of 1912 set out from Beavermouth on June 17. The party was six strong, including besides the principals, the two Swiss guides just mentioned, and P. Bergenham and S. Brown of Golden, as packers and canoemen. We had provisions for three weeks, but expected to accomplish our objects in much less time. In clear, hot weather, we worked our way up the valleys of Gold River and its W. branch, arriving at the upper camp, elevation about 5,800 ft., on the morning of June 23. The mountain is not visible from this point, so presently we walked out on the glacier to inspect it. Near the farther margin we found a grassy bank whence a good view of the splendid W. face was to be had, and we ensconced ourselves here for a careful study with the glasses. It was plain at once that there was less snow on the peak than ever before in our experience. Its condition looked more appropriate for September than for June. The steep upper slopes were icy, crevasses numerous, and bergschrunds pronounced. Evidently our former route up the roof of the large buttress would serve only as a last resort, owing to the amount of step-cutting necessary, but a traverse beneath a hanging glacier to the dome-topped rock at the left offered a promising alternative, since the danger from falling ice appeared considerably less than in former years. After completing our examination we returned

to camp and set about preparations for the climb, for we determined to try our luck the very next day, lest the settled weather should desert us.

At 1 A.M. on June 24 our silent line of shadowy figures might have been seen wending its way along the stony margin of the great ice stream by the twinkling lights of candle lanterns. At the most favourable place we took to the ice itself and headed out towards the centre in order to obtain the easiest possible going in the dusky half-light. After about two hours we reached the beginning of the ascent proper at the junction of a tributary glacier. Here we came to a halt to leave the lanterns and to put on the rope. The guides, with Feuz in the lead, tied themselves on first, so that they could change places easily in dividing the labour of cutting and trampling steps; I came next, and then Holway. The rope was 100 ft. long and we spaced ourselves at even distances, wearing it continuously except at halts during the whole climb. The palest tints of dawn were now playing delicately over the great uplift ahead, defining an inspiring vision of alpine splendour. From the frigid grip of the tributary glacier that swept down towards us and formed a stately approach like the staircase of some gorgeous temple, the mighty complex of ridges, buttresses and precipices—a truly formidable pile—rose higher and higher, until at last it culminated in the broadly obtuse but none the less sharply defined summit, which seemed infinitely beyond the reach of mortal man. However, Mt. Sir Sandford was a prize without a price, and we proposed before the advent of another day to leave no stone unturned to prove the fallacy of its seeming inaccessibility and to show that mortal man could, as a matter of fact, reach and tread its haughty crest.

Continuing without any real delay, we made for the end of the pronounced snowy shelf which swings down from the summit ice-field on the W. and forms the only obvious connection between the upper and basal glaciers of the mountain, which elsewhere is surrounded by exceedingly difficult, if not impassable, cliffs. On the steep snow slope leading up to the shelf we encountered our first obstacle in the shape of a bergschrund that extended completely across our line of march. Luckily, it occurred in two sections which overlapped and left a horizontal connecting sliver of snow between, else we must needs have retreated and made a wide detour.

The passage of this slender bridge with dark caverns on either hand was exciting work and, owing to the wet, greasy

condition of the snow, imposed extreme care upon the part of all, as we edged along above the yawning jaws. Just above the fissure the snow gave out entirely, exposing an abrupt bit of glacier where a zigzag staircase had to be chopped out with the axes. However, it was short, and presently we found ourselves on the shelf headed directly toward Sir Sandford.

For the next two hours we plodded up this shelf, making altitude rapidly. Once, at a favourable place, we halted in the snow and enjoyed a second breakfast, but otherwise the advance was steady. As we progressed conditions confirmed us in the opinion that the best route was to keep straight on for the protruding tongue of hanging glacier, swinging to the left for the dome-topped rock at the earliest opportunity. Close inspection of the cliffs indicated that the glacier was not discharging avalanches with any frequency. The cleavage surfaces were rounding rather than freshly cut, and although here and there moderately large fragments almost ready to fall could be picked out, there was an entire absence of the soft but incessant crackling sounds from beneath the ice which had been so audible on our last visit to the locality and which had prompted us to discard the route at that time.

Gradually we approached the threatening cliffs. Aemmer, who had relieved Feuz during the halt and was now at the head of the line, avoided the actual channel worn out by falling fragments as long as he could, but at last there was nothing for it except to make directly for the rocks on the other side. Now the snow under foot became hard and rough from the impact of tumbling masses, and almost every step had to be cut. The only sound was the continuous pick, pick of the axe as Aemmer bent to his task. Mere scratches were all that could be afforded, but these Feuz enlarged whenever it seemed necessary.

'Keep one eye up there,' he exclaimed, turning to me for an instant and nodding towards the crystal wall. I needed no prompting, as my eyes had been glued to the cliffs for some time. One piece in particular, about the size of a hog's head, chained my attention, since it projected somewhat and seemed on the verge of dropping off. If it had we could hardly have escaped the thousand pieces into which the rocks would have shattered it. Luckily, the slant was gentle, somewhere about 30° or 35°, so that there was little distraction on this account. Lower down, however, the declivity steepened into a giddy drop over the line of ice cliffs which edged the



On the long slope, leading to the top of the large buttress.



H. Palmer, photo.

S.E.E. Co., Ltd.

MT. SIR SANDFORD.

The awkward place near summit; Aemmer cutting out the path.

shelf. Incentive to maintain a solid footing, therefore, was not lacking.

With shortened rope we crowded close upon each other's heels, ready at a second's warning to seize such chance for safety as the exigency might present. We seemed to crawl along. Actually, however, we must have advanced about as fast as a man would mount a long, steep ladder. Now we are at the rocks. They are round and smooth from the grinding of the ice, but the foothold is sufficient. Aemmer loosens a few cakes of ice from the crevices and is up in a twinkling. The hard part is over. Not so the danger, for ice blocks are scattered all about on the ledges. We others swarm up as best we can, yet not without such scratching of boot nails and whanging of ice axes against the rocks as to call forth echoes from the grim, greenish cliffs. Next ensues a rough-and-tumble run along a rocky shelf to its outer extremity where safety awaits. As expected, it turned out to be the broad top of the dome-faced buttress and by common consent a brief respite was decreed.

It was 6.30 o'clock and the aneroid indicated an altitude of 9,600 ft., almost two-thirds of the way up. There was a rise of some 2,000 ft. to come. We congratulated ourselves upon such good progress and then turned to examine our surroundings. Against the rugged spur which formed our eyrie perch, the vast mass of the upper ice-field cleft itself in twain as it urged its sluggish way valleyward, leaving a gently rising wedge of rock exposed. The tongues thus formed on both sides ended in vertical escarpments of ice having a thickness of perhaps 200 ft. each. One of these it was that had prompted our recent praiseworthy haste. The dome-faced rock itself however, did not appear to be subject to falls of ice, and accordingly we now determined to ascend it and to effect a passage thence to the ice-field somewhere behind the dangerous cliffs.

Putting ourselves in motion once more, we succeeded in accomplishing this without difficulty. The ice, though broken, was not steep, and only a little axe work was required to land us safely on the broad expanse of undulating snow that covers the summit ice-field in a mantle of solid white. It seemed to stretch upwards and outwards interminably, for glittering battlements and leaning towers of ice on the skyline cut off the view overhead, and neither rock nor ridge suggested a boundary anywhere else. But the route, as we knew from previous inspection, led to the right in a long gently ascending

traverse, so no time was lost in turning our steps in this direction.

For the most part, this portion of the way proved to be merely an easy, though fatiguing, walk through soft snow. The only obstruction worthy of mention was a large crevasse about 8 ft. wide that forced each of us to resort to a flying leap in order to pass it. Hereabouts we caught a downward glimpse of the small upper buttress that had so often been the goal of vain efforts in the past. Its steep ice slope was now practically bare of snow, and we could see to good advantage by what a narrow margin wind and cold had triumphed over us. Above and farther back the frosty brow of Sir Sandford's ponderous S. buttress peeped out, with the final arête sharp cut against the glowing sky, swinging ever upwards from its crest.

Altering our line of march thither, it was not until 9 o'clock that we actually ploughed over the edge upon the broad, flat top of the buttress and came face to face with the morning sun and the immense panorama to the S. Naturally, our first concern was the nature of the remainder of the way to the summit, but one glance thither sufficed to dispel apprehension. True, the ridge was badly corniced in both directions, but it did not look at all difficult and not one of us had a suspicion of the actual obstacles in store. Accordingly, we at once took off the rope and devoted ourselves to the pleasant diversion of assimilating both mental and physical refreshment simultaneously.

Of the highly delectable nature of the latter it is needless to speak. Of the view, however, something must be said, for it turned out to be the finest of the day. Seldom have I beheld such a perfect sea of mountains, moulded into every conceivable form and adorned in every conceivable pattern with everlasting snow. Though, owing to Sir Sandford's isolation and supremacy in height, the panorama lacked effective foreground and so suffered somewhat in picturesqueness, yet these very circumstances intensified the feeling of almost overpowering vastness and savage grandeur which it inspired.

A short half hour had passed all too quickly when we set out toward the lower or S. peak over gently ascending snow. Prospects for success appeared excellent and our spirits were correspondingly high. But, alas! we reckoned without Sir Sandford, for as we moved along the ridge what was our surprise to see an unravelling and readjustment of its parts commence,

which revealed only too soon the deception of the previous view. Instead of an easy walk along broad-backed cornices, we now perceived that the arête was like a long, irregular wall, that it was piled up high on the top with snow which overhung for a great distance on the N. and sloped down steeply to the edge on the S., and that our only possible route lay along this very slope.

At first all went well, but as we progressed the tilt steepened and the condition of the snow grew worse. Soft and slushy from its full exposure to the glaring sunlight, it not only afforded the scantiest of holds, but at the same time exhibited a decided tendency to slip off the substratum of hard ice upon which it rested. Aemmer was constantly forced to dig away the snow and cut footholds directly in the ice itself. Not entirely pleasant was it to watch the fragments thus loosened start down the slope, disturbing more snow as they gained headway, until finally, far below, a full-sized avalanche poured over the cliffs.

Under such impediments a party's progress is like that of a garden sloth, yet in time even this becomes surprisingly effective. Turn after turn of the scalloped parapet fell behind us, but still the summit remained pertinaciously hidden. At length, when nearing a rocky, jutting promontory, buttressed by high cliffs below, we felt certain that its disclosure could no longer be postponed. A moment more and Aemmer was on the knob, peering around the edge of slanting snow that formed our skyline. Not a word of encouragement did he vouchsafe, however, but instead commenced a lively interchange of Swiss patois with Feuz, who at once moved up and joined him in an intense study of what lay behind. Standing room being limited, Aemmer presently cut himself a niche in the ice higher up, which allowed me to advance.

'There is a nasty place here,' said Feuz, when I arrived, and nasty enough it looked. I found myself on a projecting rock at a point where the ridge made an abrupt turn at right angles for twenty feet or more, before resuming its course. It was as if, after having been cut vertically, the further section had been shoved bodily sidewise along the cut for this distance, leaving the rock and snow sliced cleanly off, but without any actual break in the continuity. Above this sheer face an ugly-looking cornice depended. From the top a large mass of soggy, melting snow had just fallen, and water was dripping down like a shower bath. Clearly there was no way up there. On our own level, along the line of junction between snow

and rock, the two came together so nearly flush that all chance of passage seemed utterly hopeless, while immediately beneath us a cautious look revealed smooth, ice-coated rocks ending in a tremendous snowy slope which shot the eye directly into the valley a mile below in one breathless jump—all most impressive, but scarcely calculated to afford much assistance to the matter in hand.

I freely confess that I was nonplussed. The whole situation looked almost prohibitively dangerous, for there were no real holds or anchorages whatever, even if some way around the *mauvais pas* could be devised. Aemmer, however, mindful of their defeat on the mountain the previous year, was not to be deterred by such considerations, and while Holway and I were establishing ourselves on the rocky knob he commenced of his own accord to hack away at the ice along the base of the snow wall in an absolutely fearless manner, with Feuz paying out the rope from the ice step near us. We held our breath as we watched him, for to all intents and purposes he was on the brink of eternity. If another piece of that cornice should fall . . .

As for ourselves, we were safe enough sitting there on the rock, even though holds were conspicuously absent, and our feet dangled in empty space, for the rope had been taken off in order to give Aemmer the necessary length. Time seemed to stand still, but after what must have been about fifteen minutes he got out from beneath the cornice and came to the less perilous locality where the ridge resumed its original course. Meanwhile I had managed to extract my camera from the rucksack and took several photographs of him as he worked, an operation in itself not entirely easy under the circumstances.

At length nearly all of the 100-ft. rope was out and it was time for the next man to follow, so, moving up to Feuz, I tied myself to the end. Aemmer now had fairly good footing on the sloping rock, but still lacked axe or hand hold to serve as a quick grip in case of need. Nevertheless, the most hazardous part, the actual construction of the path, was over. The evil spell of the place was broken to that extent. Surely after such a gallant exhibition of pluck and skill in the making of a way, it would be ungracious to balance the pros and cons of safety too nicely, so I started off, Aemmer cautiously taking in the rope as it slacked.

Of the next few moments I have but a vague recollection. I know that the first steps were extremely difficult to negotiate,

owing to a soft, bulging boss of snow beneath which one had to duck sideways, making at the same time a long stretch into a small ice-step full of water beyond. After this came a stride to an outward sloping bit of smooth rock for which the balance could only be maintained by thrusting one's hands straight into the snow. Then the wall eased off, allowing one to stand upright and to face forward once more. The ensuing steps were on the outward-rounding rim of rock, slushy, sandy, icy and wet. But, in comparison, the going was straightforward enough, a matter of careful balance merely, and not many minutes elapsed before I stood beside Aemmer on the rocks. While passing beneath the cornice I heard a vicious swish just behind me, which they said was due to about a bucketful of falling snow—a somewhat thrilling escape.

Having taken off the rope, the next step was to throw it back across the couloir for the use of the others. Fortunately, Aemmer accomplished this on the second cast and then Holway worked over. The following attempts, however, did not succeed until the eighth cast, for so little surplus rope remained and so awkwardly was Aemmer placed that it was extremely difficult to land it within Feuz's reach. When he finally joined us we found that more than an hour had been consumed in gaining this 100-ft. advance.

But the summit was not far away, because we could see a bit of its cornice above the arête ahead. Roping up at once, we started towards it. Presently, beyond the even slope of snow that formed the skyline before us, we looked down upon the ridge that rises gently to the summit from the pointed E. gable, and I knew that the culmination of the four years' siege was at hand. Aemmer now redoubled his precautions, for evidently the actual top was on the cornice that jutted out a goodly distance into space on N. and E. and he desired to get as near as possible without leaving *terra firma*.

Finally he came to a halt and, driving in his axe, said, 'Here is the top.' It was a moment of glad triumph, of course, yet there was no enthusiasm, no congratulation, no shaking of hands, scarcely a spoken word. Neither our position nor the knowledge of what lay in store below was provocative of such demonstration. No doubt apprehensions might have been forgotten for the time being, had our surroundings looked like the top of anything. But they did not. About half the horizon was hidden by the snowy crest that extended for a rod or more above and beyond us and the tremendous overwhelming sensation of standing on

the very highest point of the Selkirks in all that great panorama was lacking. Nor was there time or space for lining up so that someone might venture out on the extreme apex in safety.

Our situation may be compared to the upper corner of a steep roof with one slope carried up beyond the ridge-pole so as to overhang the other, the whole being tilted slightly upward at one end. The overhang would correspond to the cornice along the arête; the projecting eaves, to the descending cornice in the other direction. We were standing in a horizontal line as near to the crest as we could get without trespassing upon the overhang. Below, the slope swept down to the valley at about 45° without visible interruption—a smooth sheet of snow. Only intuition would suggest the precipices to one who did not know. There was not a bit of rock within reach; there was no place to sit down; it was 11 o'clock; nothing urged us to remain, everything urged us to go. So, after complying with the customary formality of burying a tin box containing our record in the snow, we simply turned in our tracks and started back, Feuz now being in the lead. At the first patch of rocks Aemmer piled up a few fragments into a small, insecure cairn.

Arriving at the difficult corner, owing to the impossibility of throwing the rope back uphill, we crossed without unroping, using the most exquisite care and moving only one at a time. Although, before starting, we succeeded in dislodging part of the cornice by hitting it with stones, this traverse in our tracks of the morning was the most delicate and dangerous operation of the day. It proved to be much more serious than before, for the whole party was on the rack at once and had anything happened to one all would have had to suffer the consequences.

Since the situation differed from that presented at the approach, a few additional lines of description may perhaps be permitted here. On the right, a porous bank of melting snow was piled up on the rock wall, leaving exposed nothing but a narrow strip of outward sloping stone along its base. This, Aemmer had previously cleared of ice to the width of about a foot, forming thus a meagre pathway, whose outer edge, to the left, was the precipice. In negotiating this strip of rock the snow bank was too soft to afford any hold and consequently there was none. Everything depended upon balance alone and this in turn upon the absolute solidity of

each step. The rocky ledge ended at the vertical face of snow before mentioned, and across this the steps were in ice with a few cut handholds.

After Feuz got by and upon the rock knob where we had perched earlier in the day, the worst was over, for the others then had at least the moral support of the rope. Although the place teemed with possibilities for catastrophe it seems to me that it transgressed but little, if any, the line where skill, coolness, and absolute faith in one's companions can assure safety. It is questionable whether a party lacking any of these elements is warranted in engaging in serious mountaineering at all; but having them, almost anything within the bounds of possibility can be accomplished and accomplished safely.

Our one concern now was to get down as quickly as we could, for in that warm, intense sunshine we had no business to be lingering on high with slushy slopes and pendulous ice cliffs below. After leaving the ridge, the descent to the rock cleaver was a combination of artless plunges on easy slopes and gingerly negotiated passages on icy slants. The wide crevasse without a bridge yielded to a skilful spring by Feuz, using Aemmer's knee as a take-off. We arrived at the rock at 1.25 P.M., and unroped for a short stay. I immediately adjusted my camera for a few pictures of the cliffs, but, to my alarm, several pieces of ice fell off and rattled down over our line of steps in plain view below. Presently another small fall occurred. Evidently the sun was already playing havoc with this face of the peak. There was nothing for it but to keep on and pass the place at once.

Reassuming the rope, we descended the rocks, and walked across the ledges towards the cliffs to gain the point where our step-ladder commenced. It was a thrilling moment as we entered the danger zone, for the ice tongue looked quite appalling in the glaring sunlight and the lumps of ice about had a most stimulating effect upon the imagination. We were rejoiced to find that the steps had melted little, so comparatively rapid progress was possible without further cutting. Except in a few places, we were able to face forward and thus to make better time. Fifteen or twenty minutes took us out of the line of fire and on the thick snow, where relief from the nervous strain found expression in gay, but duly restrained, charges down its yielding surface.

Although the remainder of the way was not without its

difficulties, it is needless to dwell upon them, for they were as nothing in comparison to what had gone before. By constant alertness everything was safely passed and at half-past four, after an absence of $15\frac{1}{2}$ hours, we were enjoying the comestibles and the congratulations of camp.

Thus fell the haughty monarch of the Selkirks, the last of the big unclimbed peaks of the Canadian Alps within fair working range of the Canadian Pacific Railroad. Virgin peaks of the 10,000-ft. class there are still in moderate abundance, but even these are for the most part remote and difficult of access. Until trails have been opened up into the more distant sections, further reports of first ascents may be expected to be limited to new routes and to mountains of minor height.

I hope that I have made it clear that the character of the work on Sir Sandford is dependent upon the amount and condition of the snow. The route lies almost entirely over glaciers, and when, on the critical slopes, the snow is thick and well attached to the ice, no special difficulty need be apprehended, and the dangerous passage beneath the ice cliff may be avoided advantageously by returning to the W. arête. On the other hand, in years when a scanty snowfall is combined with hot weather, the greater part of the 5000 ft. ascent to the summit arête will be glare ice, even if none of the lower bergschrunds prove impassable. Had we been a month later in 1912, there is little doubt but that this state of affairs would have confronted us. Likewise conditions at the couloir in the final arête depend upon the amount of snow and upon the vagaries of cornice formation. Ultimately it is not unlikely that a route may be discovered up the rocks along the S. face of the W. arête, but the rotten, granular limestone (steps may sometimes be chopped in it) is exceedingly disagreeable to negotiate, and, as often as we tried it, we always returned to the ice.

I may perhaps add as a postscript that two days later (June 26), the same party ascended Mt. Adamant in the fine granite range 5 miles to the N.W. of Sir Sandford. It ranks next to the monarch in the vicinity, being almost 11,000 ft. high by triangulation. Although safer, this peak proved to be much more difficult than Sir Sandford, the expedition consuming $18\frac{1}{2}$ hours, of which ten were spent in the great 2000 ft. couloir that scars the S. face (six upon the ascent and four on the descent; the descent was made at top speed in the face of a severe thunderstorm). Two climbs



Howard Palmer, photo.

Swan Electric Engraving Co., Ltd.

SIR SANDFORD, from the S.W.,
showing precipices that guard this side.



Howard Palmer, photo.

Swan Electric Engraving Co., Ltd.

THE GRANITE PEAKS, from the S.E.
Mt. Adamant (11,000 ft.) at the right, showing 2,000 ft. couloir
by which ascent was made.

could hardly be more diverse in character. Sir Sandford was wholly snow and ice work; Adamant practically all rock work. The guides (from Interlaken) compared it with the Schreckhorn to the disadvantage of the latter. *

SOME NEW CLIMBS AT COGNE.

BY THE EDITOR.

(Read in part before the Alpine Club May 6, 1913.)

PUNTA FENILIA.

FEW of us wish to say anything of last season in the Alps: that summer of our discontent recalls all the pangs of delay and of disappointment which patient merit took of the unworthy weather of 1912. But visitors to the Italian side did not fare quite so badly as those who went to Switzerland. Yet even in Italy one might say of the great peaks, as of conspirators,

Their hats are plucked about their ears,
And half their faces buried in their cloaks,
That by no means I may discover them
By any mark of favour.

Or, to put it in another way, one might say that in the sulky absence of the great mountains the little peaks as understudies essayed to play their parts, and with a considerable amount of success.

On August 9, 1912, we—*i.e.* Benjamin and Augustin Pession and I—got as far as the Grandcrou glacier, when a heavy snow-storm came on, and consequently no expedition came off.

On Saturday morning, August 10, I came down quite late, and, strolling out into the sunshine after breakfast, the Punta Fenilia suddenly attracted my attention. I knew it had not been climbed from the Valnontey: it is evidently

* For a full account of this expedition and of others in the surpassingly fine alpine country of the Northern Selkirks, see the writer's volume *Mountaineering and Exploration in the Selkirks*, with maps and numerous illustrations from photographs, soon to be published.

a very fine view-point, and it is also evidently a crime to waste a fine day. I called Benjamin and Augustin, and, without committing myself definitely to the undertaking, I said to them: 'Suppose we start for the Fenilia, and if I cannot manage it well, we shall at any rate have had a walk.' 'Very good,' said Benjamin, 'we will start, and if eventually you so decide we will repose ourselves.' So without delay off we went at 9.19 A.M.

When we had got a short way past Valnontey we turned up the little path marked on the new map to Grangettes. Presently we passed the big rock which shows so conspicuously from the Cogne meadows, and which some of my friends had talked of visiting and climbing as an interlude on a lazy day. I made some remark about it as we passed to the sympathetic Augustin. 'Mauvais rocher,' said Benjamin, with the gruff brevity of supreme contempt. At 12.21 we stopped for lunch somewhere on the ridge so conspicuous from the meadow a few yards beyond the timber-smothered garden of the Hôtel de la Grivola. The view of Cogne gave animation to our talk, as tomatos and peaches imparted colour to our feast.

We did not keep the ridge, but worked up to the right of it till we got to the last bit of the ascent, when we returned to the crest of the arête so well seen from the Cogne basin. Before we did this we found many beautiful tufts of *Eritrichium nanum*. We counted the blossoms on six or seven of them. They varied from thirty-two to thirty-seven. We also found *Geum reptans*, and I had the pleasure of taking down a plant of it for a fellow garden-enthusiast at the Hôtel Grivola.

I cannot attempt to describe the panorama, but it gave us good views of all the group except the part hidden behind the Punta Valmiana and the two Valettas. There was a striking contrast between the snows and the green meadows and forest below us. Over all towered the Grivola, grim and assertive, not to say almost truculent. The ascent took about five hours.

We went down towards the Valeille considerably to the north of the Colle di Grangetta and keeping to the E. of the P. di Vigiusa of the New Map descended some disagreeable smooth slabs into the Creux de Moncuc. This is a curious cirque almost surrounded by immense slabs of rock. The part we descended resembled the 'plaques' on the N. side of the E. ridge of the Pousset, though they were not so bad, but the continuation of them to the N.W. appeared worse. In the rock face to the right of our slabby descent (there seemed traces

of a path in places) there was a pine of quite a good size growing out of the rock with some of its roots exposed. There were other small trees struggling for existence under the same ruthless conditions; they had tried to cast anchor in the rifted rock, but failed.

We saw eight chamois—they moved slowly and then stopped and began to feed in the style of sheep. As Benjamin could not assail them with anything worse than words he cried: 'Ah! la canaille.' We saw Lilla and then Champlong and its bridge. It at once became evident to me that we ought to keep to the left. This I explained to Benjamin, who chose a route with much discretion. We got down into a great gully overgrown with grass, flowers, and weeds, and then up out of it into the woods between us and Cogne. By and by we struck a path, I think the one indicated on the New Map as running from Cogne up towards the Testa di Moncuc.

When we had cleared the wood we passed a chalet in course of construction, and then a meadow with beautiful closely cropped turf, such as several centuries of skilful tendance is wont to produce in Oxford college gardens. Here there were twenty cows and heifers and a bull. I saw one cow, adopting militant measures, give another a vixenish push with her horns. 'Is that the maitresse, Benjamin?' 'Yes, Monsieur.' Further on we found more cattle and sheep, and, descending the last bit by a rather steep and very stony path, passed the Cogne pump at 7.20. We had taken 3 hours 25 minutes from the summit, halts included.

PUNTA NERA.

On August 14 we ascended the Punta Nera, which is seen closing the valley to the E. as you get near to Cogne when coming up from Aosta. I went to Chavanis on the royal mount previously mentioned. Thence we climbed towards the most westerly of the four great towers which show so conspicuously from Cogne to the left of the Punta Nera itself.

The sun came out after Brouillot as we stayed for a meal, but the wind was cold. The look of the weather did not please the guides. Benjamin ejaculated, 'Ah, malheureux!' We had one bit of interesting rock-climbing before we reached the top of the big tower. The view from this point delighted me. We saw part of Cogne, the Cogne meadows, the patches of corn on Silvenoire, like a bright picture hanging on the middle of a great wall painted in dark-green monochrome,

the heads of great mountains breaking through the clouds; then, turning, we beheld the hills on the edge of the plain almost peacock-blue in hue with their shoulders folded in delicately coloured mist. We spent nearly half an hour on this desirable view-point, and I made my apologies to the Nera for having of old in ignorance confounded her shapely form with the heavy round-shouldered amorphous mass of the Tour de Ponton.

We then ascended the next tower and Augustin went on to the two other gendarmes which lay between us and the col at the foot of the Punta Nera itself. He shouted to us the unwelcome news that we must descend, as the last tower was undercut, so we dropped down into the wild gullies below, where we hurried both in descending and in traversing lest stones should fall. The last tower from the Cogne side looks exactly like a tea caddy.

On the col at the foot of the Punta Nera we found a pole with a proclamation that hunting was forbidden. Snow was frozen hard upon it on the Cogne side.

We passed over the big red rock which is seen conspicuously from the Cogne meadows, and reached the actual summit a little after noon. The Nera is a very fine view-point. We looked into the Val Campiglia, with all its verdure of forests, meadows, and pastures. We saw the Cervin's head in the clouds—very snowy and menacing. My men shake their heads dismally: it spelt a disastrous season for the guides of Val Tournanche. We admired the Grand Paradis and his supporters, the S. ridge of the Erbetet being conspicuous. The three Saints, the SS. Pierre, André, and Orso, were glorious: they appeared much higher and more formidable than from any other summit from which I have seen them. Their white garb seemed to add many cubits to their stature. They looked in truth majestical. We pointed out to Augustin our route of the previous year up the Tour St. André—this year I don't think I should like to have tried it.

The Cogne valley was, of course, a very effective feature in the prospect with the Grivola and the distant Mont Blanc to keep in us a proper spirit of humility.

We found the S. side of the mountain very easy. *Eritrichium nanum* grew all about in profusion. We then took to what I suppose I ought to call the S.W. ridge. We visited three great projecting promontories of rock one after the other, and thence the men scented the way with delightful ease. So we reached the big band of snow, almost like a small glacier,

which was one of the chief features of the mountain this year when seen from Cogne. Down this we glissaded and reached the King's path in the Eaux Rouges Valley in 42 minutes from the summit.

Just before the spot where the path bends towards Bardoney there is a lovely view towards Cogne. Near at hand are the remains of an old forest of Arolla pines, farther westwards larch woods, in the bottom of the valley the torrent shines and makes music, on the edge of the woods meadow-lawns

Spread a green kirtle to the minstrelsy :

a few chalets bask in the sunshine, a few plots of corn—an almost invariable feature of such views near Cogne—are ripening but slowly by the winding path on the other side of the torrent which we had followed in the early morning, and in the background the Grivola towers above everything.

We saw hawks and jays in the wood, and I was glad to notice that the larch disease did not seem to be so prevalent here as on my last visit.

We reached Cogne in 4 hrs. 4 min. from the top, all halts included, and I was able to delight the ladies with a huge bunch of *Gymnadenia fragrantissima*—one of the most sweet-scented of orchises—which adorned the dinner table for at least a week without losing anything of their beauty or fragrance.

PICCOLA UJA DI CIARDONEY.

On the morning of August 14, for 2 hrs. 40 min. I rode a mule. Then the King's path became too difficult owing to the destruction caused by storms, so I dismounted. We went up the moraine and crossed the glacier to the foot of the S. Colle de S. without any difficulty. We had caught sight of the lantern of my friends Messrs. Irving and Tyndale several times, and we now saw them making excellent progress up the steep snow couloir to the Col with the help of their crampons. We followed their tracks more slowly.

When we reached the Col we enjoyed a good view of the Ciardoney glacier. It was beautifully white and clean, and only a very short descent separated us from it. This was a spot which I had long desired to visit. In 1879 I had climbed the Ondezana from Cogne with my then young and now old friend Alphonse Payot, but I had no very clear recollections of the Ciardoney glacier nor of the two Uje di Ciardoney.

We saw our friends Irving and Tyndale on the Colle di Ciardoney and afterwards on the Colle delle Uje.

Then we made for the Colle di Ciardoney and I had the satisfaction of looking down into the Val Soera—wild, stony, unattractive are probably the adjectives that many would apply to it. But I had now replaced ignorance by knowledge, and was content. The point called in the New Map 'Punta di Valsoera' appeared to offer a distinctly good climb, so that my recommendation to my young friends to tackle it seemed thoroughly justified. (They climbed it after returning from their ascent of the Grande Uja di Ciardoney the same day.)

But now that I had at last penetrated to the Ciardoney glacier, conscience began to whisper that I must climb a peak on its south edge, though before I reached the top I got some inkling of

How to Jonah sounded harshish
'Get thee up and go to Tarshish.'

From the Colle S. de Sengie the Piccola Uja di Ciardoney had seemed to me much more attractive (owing to its sharp peak) than the Grande, though I knew that it had been previously ascended from the Colle di Ciardoney by my friend Professor F. W. Oliver, so I decided to climb it. We followed the W. ridge from the Col, and found it with the exceptional amount of snow that was plastered on it not altogether easy. We, climbing leisurely, reached the top in about 1½ hours from the Col.

The top gave me—space without limit, light without taint, colour without flaw—that view of the Viso, the Maritime Alps, and the great plain with its rivers which I always eagerly desire, and had the scorner questioned me

Have ye spoken as brethren together, the sun and the mountains and thou?

I should have replied without hesitation, 'Yes, we have.'

I could now see both parts of the Upper Val Soera. We first examined the western arm and then we had a fine view of the eastern branch. To our right front was the ridge running to the Punta di Valsoera, and further to the south across the entrance to the valley the Moncimour. To our left was the Colle delle Uje, beyond it the Grande Uja di Ciardoney and then to the S.E. the Gialin on the ridge running from the Grande Uja, where it is joined by the ridge from the Moncimour.

When we left the top I could not quite make out why Benjamin wished to return by the same way, as I believe the descent to the Colle delle Uje offers no difficulty, but I had a shrewd suspicion that he had noticed that our friends Irving and Tyndale had got up to the Col by using their crampons and that steps would have to be cut on the way down. Anyhow he expressed a preference for following the W. ridge. When we had gone some distance I more or less came to grief on a little rock wall on the sky-line.

And such a wall as I would have you think
That had in it a crannied hole or chink.

On the ascent I had managed to hold on with my fingers and swing myself on to the gap at the (left) upper end of the rock, but on the descent, when I was holding on with my hands only, my left arm gave way and I somewhat peremptorily called to Augustin to hold tight. There was really no need for anything in the shape of excitement, for the two men had got the rope hitched in such a way that I could not slip. 'You cannot come to harm,' said Benjamin. This was quite true, but my pride could, and did. Thereupon I had humbly to let myself slide down the face till my hands occupied the chink which my toes had filled on the ascent, and then my feet found, not 'terra firma,' but fairly hard snow at the foot of the rock. It was, I think, the only occasion on which the excessive snow of last summer earned a benison from me.

Soon after this incident I suggested to Benjamin that he should go down direct to the glacier instead of continuing to follow our route towards the Colle di Ciardoney. The descent was steep, but was effected without a slip, though the snow in places was of such a character (the results of late storms lying in a shallow layer on the hard strata beneath) as to give every invitation for such a crime.

We had seen our friends descending from the Colle delle Uje, and had noticed that they had been obliged to cut steps. We met on the glacier, had a little talk in which they poured out praises of the climbing on the Punta di Valsoera, which from what I had seen of it I could well believe to be well founded. We then bade them farewell, and whilst they hastened westward we leisurely pursued our way to the Southern Sengie Col. The little ascent to the pass was unpleasant, as everything was loose and one slipped back at almost every step. I think the conformation of the Ciardoney glacier is now fixed in my memory. The descent of the snow couloir to the

Valeille glacier was a trifle exasperating, for, as on the Ciardoney peak, the upper snow rested upon a layer of hard snow or (in places) ice, and consequently every now and again a step crunched out. After that we had no trouble. The Valeille gets very little of the morning sun on its western side, and consequently has a later season for flowers than most of the Cogne valleys, and we took home a great bouquet of the flaming golden flowers of *Arnica montana*.

PUNTA VALETTA (NORTH PEAK).

On August 16 we ascended the North Peak of the Punta di Valetta by way of the Comba della Valetta, which I had not previously visited. When we got to Valmiana we accosted an old peasant woman, who very kindly pointed out to us what she called a 'petite route' to the Valetta Alp—here we found in passing a dilapidated shed or two and a profusion of nettles. We pursued our way very leisurely with much loitering up the very steep glen to the Valetta glacier, which proved larger than I anticipated and beautifully white. It perches on the shoulder of the Valetta peaks in just the same way as the Pêne Blanche glacier does on the Patris. When we had crossed the glacier we gained the summit by the rocks and snow of the W. face. Our times had been very slow. We returned by the same route, seeing two marmots before we reached the Valetta Alp, where Augustin, who, notwithstanding his years and bulk, still enjoys the passing exhilaration of schoolboy mischief, relieved the monotony of the journey by thrusting his ice-axe into a wasps' nest, with the result that we temporarily quickened our pace. We got back to Cogne in the evening without further incident.

PUNTA DEL TUF.

On August 18 we ascended the Punta del Tuf, 11,129 ft., which the Rev. A. E. Aldrich, G. W. Lloyd, and I, with Benjamin Pession, had studied in 1911, from the King's Camp at Lauzon. On that occasion the gamekeepers showed us every courtesy, and gave us every assistance. At supper we were joined by the cat, sharp-clawed and enterprising, who obviously, though he was not unduly starved, was yet not accustomed to a too liberal table. As the scene of supper developed he became more and more friendly, and sought to humour us by a display of jovial good fellowship, which he emphasised by sticking his claws into our legs and hands. This effusive and injudicious

display of attachment hardly procured him as much food as he desired, but he made the best of such gifts as fell to him, and amused us by devouring the string with which a rather travel-battered piece of veal had been tied together for cooking. We had seen him engaged with a mouse, but we were to learn later on that there was a larger reason for his retention at this lofty home.

Supper passed with pleasant conversation, and much answering of questions on both sides, and then it became time to go to bed. Would we sleep in the beds of the gamekeepers or would we prefer to lie on the straw in the next apartment? Both my companions were in favour of the straw, and I was unwilling to strike a dissonant note. So to the straw we went. It was clean and dry, and promised us a comfortable night. Two of us accepted a blanket to lie on and another to cover us. The third preferred to burrow in the straw itself as being both warmer and less likely to involve the presence of other bedfellows. We lay down and before long went to sleep. In the middle of the night we were aroused by an attack by rats on him who had refused a blanket. 'What's the matter?' 'Rats.' 'What, rats! Have they bitten you?' 'No, but I can hear them close under me; I have two pears in my pocket and they have scented them. Cannot you hear them squealing?' Ordinary men would have laughed, but a climber is more condoling, so the blanket-blessed, being at bottom sympathetic fellows, offered a word of consolation to the plain-straw-lover, and went to sleep again. So did he. In the morning he explained that the rats had not persisted in their rearguard attack, but it was not a pleasant experience, and we all now fully understood the need for the cat—and in consequence treated him at breakfast with more favour than his boisterous attempts at friendship perhaps deserved. But, after all, these rats were more modest than those of the Pousset chalets, who had the face to spring upon Mr. Schuster's sleeping countenance.

You will remember Charles Lamb's explanation, 'I always call my sister "Maria" when we are alone together, "Mary" when we are with our friends, and "Moll" before the servants.' Well, this peak is called 'Tuf' by the geologically minded, 'Tut' by those who repeat the errors of their forbears, and 'Teuf' by the most intelligent of the King's gamekeepers. We took about 3 hrs. 40 min. from the King's Camp. We followed the E. ridge the whole way. The wild summit, with its western precipices, impressed us. We descended the N. ridge almost in its entirety to the southern Passo del Tuf.

Some of this ridge is what Benjamin calls 'dans l'air,' though there is no great difficulty about it. There was much fresh snow. Augustin started straight down from the Passo, Benjamin with more caution went more to the left. It looked to me as if there might be ice in the centre of the slope, but when Augustin, though he walked very carefully at first, began to glissade, Benjamin and I followed his example. We soon reached the Lauzon camp after seeing many chamois on our way.

That night we spent at Lauzon, where there was quite a merry party, as we were joined by two French gentlemen and a lady with their guides. We were the first comers, so we had supper first, and for the first time in my climbing career I made myself responsible for the soup. Recollection of G. P. Baker's method of treatment of the soup cakes and the stimulus of the silent criticism of many friendly eyes caused a veritable success. Our friends' repast was much more elaborate. No one could have been more hospitable than the gamekeepers, who left us just before nightfall. With the chief of them I had a very pleasant talk. We looked at the Patri, which wears an imposing appearance from Lauzon. 'Ah,' he said, 'you climbed that two years ago, didn't you?' Then we regarded the three saints. 'You gave the two smaller ones their names, didn't you?' 'Yes,' I replied, and I explained to him that naturally St. Peter's brother ought to be called St. Andrew, and that, of course, the patron Saint of the Cogne pastures should have a place next to the two Apostles. He laughed and agreed. I gave him a copy of the little map which appeared in 'A.J.'

Santa Claus the cat was no longer to be seen, but a big dead marmot lay in the window. It had been trapped and was carried down to Cogne in the capacious pocket of one of the keepers.

In the morning the weather was anything but inviting. There was rain and fog when the other parties left us, so, not thinking it worth while to get up, I went to sleep again.

MONT DE L'AIGLE.

Thus we did not leave Lauzon till about 7.30, when the weather was still very misty. We went up a steep newly repaired narrow path considerably further to the E. than the Colle di Costa Vermiana of the New Map. Everywhere hereabouts, at the right season and in the right weather, the traveller would find multitudes

of mountain flowers. We saw enough to make this clear. After crossing the Col, and climbing as far as I remember a little point, we got down into the country immediately under the T. Crochioneglie, 3009 m., the Testa di Châplane, and the M. Erban. The sun came out for a little and we had lunch. The men with great glee showed me two big bottles of milk. 'Ah,' said I, 'to-day's route must be called "La voie lactée."' I had for my share the tea-kettle full of peaches. This method of carrying them was most successful as far as the fruit was concerned, and the kettle was none the worse for its soft impeachment.

While at lunch we saw a bouquetin on a big rock on the skyline. The creature remained for some minutes as still as chiselled marble, and I am afraid many slaughterous thoughts darkened the minds of my two companions. Later we saw a ptarmigan ('perdrix blanc') with two young that could just fly. By and by we fell in with a shepherd boy attended by a small white dog more or less like a fox terrier, but without the latter's genial curiosity. In fact the poor beast, if you looked at him, tucked himself in apprehensively, as if the sight of a human figure implied the application of an inhuman boot. We asked the boy if there was a path down through the forest to Cogne, but he recommended us to cross by a little pass between the Mont Erban and l'Aiguille (2515 m.) into the Valle di Vermiana. The Aiguille, which used to be styled l'Aiguillette, he called Mont de l'Aigle—a very suitable name, it seemed to me, for it is just a spot whence

He watches from his mountain walls
And like a thunderbolt he falls.

We went up this little summit from the lowest point in the ridge between it and the Mont Herban. On this route there are a few steps of real climbing which can be avoided by making a circuit to the right.

As a view-point the Mont de l'Aigle, to retain the shepherd boy's name, is excellent, as a glance at the map will suggest. We at any rate found it 'an *ad interim* solace and pleasure.' When on the top, seat yourself so that you do not see the rugged and broken rocks immediately under you, but have the forest for a foreground to the charming picture before you. It was a day of smiles and tears, and smiles were in the ascendant while we enjoyed this view. It seemed as if you might almost throw a stone into Cretaz. Epinel, Cogne, Gimillian, Champlong, and Lilla all came into the picture.

Hereabout there were great masses of *Dryas octopetala*. We went down to the Col, and so into the Vermiana Valley.

Anyone 'who dotes upon desolate towers' has only to look up at the ridge of the Aiguillette to satisfy his dotage. Just before we came to the first chalet we found a fine *Anemone alpina* in flower—all its lovely companions had faded and gone to seed. Below this there were hundreds of what I took to be *Primula Pedemontana* out of flower. We then crossed a little stream to our right and so reached a beautiful path through the forest, which eventually joined the route for the Pousset just before one crosses the torrent from the Valnontey a few yards above its junction with the Grand Eiva. In a little sunny glade I came upon some of the finest strawberries imaginable. They were dead ripe, richly-coloured and richly flavoured. How they escaped the sharp eyes of the guides, who were a little ahead of me, I don't know. They grew amongst the daintily poised bells of the common harebell. Here then I enjoyed the bliss of solitude, for I was not hustled in gathering the fruit or hurried in eating it.

We reached Cogne about two o'clock, after quite an enjoyable day, which had added considerably to my local knowledge.

AN ATTEMPT ON KAMET.

MR. W. CECIL SLINGSBY kindly sends us the following very interesting account of an attempt on Kamet:—

On July 29 I received two letters from Garhwal, one from Captain O. E. Todd, dated Panakeshwar, July 3; the other from Lieutenant A. M. Slingsby, dated Ramni, July 1.

Todd, who was to have joined in the attack on Kamet, was unable to do so on account of an accident to his knee. However, he met Lieutenant Slingsby on the snows on the return of the latter and had several magnificent views of Kamet.

Slingsby and his eight men made a very bold attempt to climb Kamet, and I imagine that, but for the exceptionally bad weather, he would probably have been successful.

I quote the following from his long and exceedingly interesting letter, descriptive of a most plucky attempt and marvellous endurance:—

'Since the first week in May, I don't think we have had four fine days consecutively. A tea planter, some six marches

from here, writes saying that on the day and night when we first tried Kamet they had a storm which removed every atom of their fruit and vegetables and ruined a good deal of tea . . . I tried Kamet from the Badrinath side, and Meade tried, or was going to do so, from the Niti side. I heard from him on June 17 that he had not then got up above 17,000 feet.

'I set off on May 29 with six sepoys and two coolies. We spent two nights at 19,600 ft. in that awful storm. We had very good Whymper and Mummery tents, which we had the greatest difficulty to prevent being blown away. They got nearly full of snow inside, and our beddings froze to the floor. During a lull in the hurricane we fled to Ghastoli after two nights of misery.

'On June 8 we made another start, and in clear weather reached our first camp. There it snowed again (goodness knows where the snow came from, as it has no business to "monsoon" up here till July 15). It was fine next day, but snowed again at our 19,600 ft. camp. We crossed the pass which Meade honours me by naming "Slingsby's Pass" next day and camped at about 22,800 ft. That evening it snowed hard. That night, ugh! I've never known such cold. Next morning, full of hope, I looked out at 4 o'clock, but had little encouragement. We struggled up fresh snow towards the Gendarme, but at 23,350 ft. I was obliged to order a retreat, and really, though you may not believe it, my route is possible and not too difficult; the snow slope was nearly completed and the rocks of the Gendarme so near, but yet, under the conditions beginning to prevail, so far away. Oh, how miserable I felt after all that effort and all in vain! Clouds came down on the Gendarme, the wind was fearful, and four of us had frost-bitten feet. We could but sit down and rub them, and then the storm came on, so what use would sitting down be under that awful sky? The storm which it brought lasted nearly ten days and finished with snow at 12,000 ft. We ran down and got into our sleeping bags for half an hour and then went on again to our 19,600 ft. camp. Next day, fearfully done, we descended to Ghastoli. Two years ago I did it in four hours. It now took us, owing to fresh snow &c., eight hours, and we drank bucketsful of nasty glacier water, and having eaten very, very little for four days we were very done. I was unconscious the whole of the following day. The doctor, who happened to be 40 miles away, came up as quickly as possible, but only saw me four days after. I had started on my trip with influenza, so I imagine I was really too much

run down to do what I attempted. I did not know this, and, as an example to spur up my men, I had carried a 34-lb. load on the glacier. Anyhow, whatever I had, it was very severe, and, so far away from any European friends, I was apparently very fortunate to live through it. I am now quite fit again and on my way back to my regiment. I don't know if Meade got up again. He was furious at the weather when he last wrote.

'I'm afraid you will think me a farce, but I really have a good excuse for my second failure. First, Todd going lame, then myself, and the horrible weather. Todd goes home soon, but we hope to try again in 1915, and really will try very hard. I always feel responsible to you more than anyone else when I fail on a job like this, and look on you as the school-master who taught me how to climb mountains, so I must conclude by saying how sorry I am to have failed again. But we'll get up yet, and by my route. I studied it very carefully this year and know the character and position of the difficult places.

'During the last two years Kamet has put out buttresses where before she had slopes, she has inserted valleys, changed cornices into garden terraces. In fact she has done her best to alter her general appearance. Deceitful creature! . . .
--A. MORRIS SLINGSBY.'

In acknowledgment of the receipt of the above letter, my fellow members of the A.C. will not be surprised that I simply telegraphed to the writer in India the words: 'Bravo! Magnificent.'

WM. CECIL SLINGSBY.

ASCENT OF CARSTENSZ IN NEW GUINEA.

PARTICULARS have been received by Reuter's Agency of the successful expedition of Dr. A. F. R. Wollaston, who has for the first time penetrated to the great snow range of New Guinea and ascended Mount Carstensz. From the spot where the expedition landed to the highest point reached was only 60 miles, but almost incessant rain, swollen rivers, and difficult country made the work so hard that to cover this apparently short distance occupied four and a half months.

Dr. Wollaston left England a year ago for the purpose of

ascending Mount Carstensz, the highest peak of the Nassau Range in Dutch New Guinea, which was the objective of the important expedition of three years ago, of which Dr. Wollaston was a member, but which did not succeed in its attempt. On this occasion canoes were made by Dyaks attached to the party, and the Utakwa River was ascended for two days beyond the base, but thereafter the expedition travelled by land. Dépôts were established three days' travel apart, the first being three days' march up the foothills of the Snow Range. From the fourth dépôt the ascent was made to the snow line. Progress was very slow, the ridges being appallingly steep and the track rough. In the high mountains the sun was never visible except for an hour in the morning, and the travellers were always in the clouds.

At about 5000 feet the expedition met some curious but friendly folk of smallish stature, who showed the travellers their track and helped them. They were not, however, pygmies. The highest point (15,000 feet) was reached after five days' march from the last base. The rain descended in a continuous torrent, and although Mount Carstensz is almost exactly on the Equator the fog-laden air was freezingly cold. During the ascent a fine panorama was observed, but the mist again closed in, and when the party were within a very short distance of the top the steep ice and dense fog necessitated a retreat. Two attempts to reach the actual summit were made, but eventually food gave out.

As the last load was being taken to the base camp the canoe containing Dr. Wollaston and six Dyaks struck a snag in the swirling torrent and capsized. Dr. Wollaston was carried a long way down the stream, and was almost completely exhausted. Much valuable property was lost, including maps, cameras, instruments, and three months' diaries. The expedition secured an important collection of birds and plants.—*The Standard*.

THE MOUNT ROBSON CAMP OF THE ALPINE CLUB OF CANADA.

Mr. A. O. Wheeler writes to Captain Farrar under date Banff, August 19, as follows :

'The Robson Camp is now a thing of the past. The net result is one complete ascent, made from the Robson Glacier by the wall of the E. arête, and from that arête up the long

slope to the summit. The party descended the mountain by the S. face, coming down at the end of Kinney Lake.

' Subsequently, two attempts were made to reach the summit by the S. face. The first was made by the ridge you have shown on the sketch * you sent me. The party went to within 400 ft. of the summit, but the time was 6.30 P.M. and a storm was about to burst. So, with victory in sight, it was an absolute necessity to beat a retreat. On the first ascent I have mentioned, one night was spent on the mountain at 9000 ft. while on the descent. In the second attempt, by the S. face, two nights were spent on the mountain, one on the ascent at about 8000 ft., and one on the descent at about 11,000 ft.

' At the close of the Camp, a second attempt was made by the S. face, by a party of four, led by Conrad Kain, with a second professional guide, and two of our best men. On the ascent, they camped at 9000 ft., and though the next day it was storming heavily all the time, a desperate endeavour was made to reach the summit. At the point where it became necessary to desist, they were 500 ft. from the top of the mountain, but were on an ice ridge, and there was such a terrific snow blizzard blowing that it was almost impossible to remain on the steps that were being cut. To have turned the corner, which at that point became necessary, would have practically meant their being blown away, and Conrad, king of guides as he is, declared with great regret that it was impossible to take them further. At that time they could not see ten paces ahead, and the snow was driving in their faces and blinding them. It would have been madness to proceed.

' On this occasion, almost identically the alternative route, which you indicated, was followed. The traverse was made across the long couloir, and the central S. ridge ascended to the point where they had to give it up. The fact, however, of the possibility of ascending by both those ridges, which you marked, was established in each case, as when they stopped on the third ascent they had practically joined the first ascent made from the E. side, and on the whole the object of this last expedition was accomplished.

' The wall of the S.E. arête of the E. side was found to be very much iced and in a very dangerous condition; so much so that Conrad declined to return by it, and on this account

[* *A.J.* xxvi, illustration opp. p. 402. The ridges are that descending from the summit towards the observer, and the snow ridge more to the right.]

made a complete traverse of the mountain, coming down, as was previously stated, at the end of Kinney Lake.

'We fully realise that the long distance and the length of time required is a very great detriment to a party coming out to us. We enjoyed greatly having Mumm, Howard, and Haskett-Smith with us, and we all feel tremendously sorry that Haskett-Smith's slight accident should have taken such a serious turn and caused him such great inconvenience. You perhaps may not have heard that the slight abrasion on his leg became affected and caused inflammation in the limb, resulting in a low physical condition which necessitated our carrying him out on a stretcher 16 miles over a bad trail. However, he is now comfortably established at the hospital at Edmonton, and is in a fair way to recovery, although it may take some time.

'With warm regards,

'Yours faithfully,

'ARTHUR O. WHEELER.'

THE COMPLETION OF THE LÖTSCHBERG LINE.

THE length of the Lötschberg tunnel, the opening of which took place in July, is about $9\frac{1}{4}$ miles, being surpassed only by the St. Gothard, which is 430 yards longer, and by the Simplon, which measures rather more than $12\frac{1}{4}$ miles. It passes under the Lötschberg, between Kandersteg and Goppenstein, and it may be regarded as the natural complement and continuation of the Simplon tunnel.

The Grand Council of Canton Berne took a large part in financing the scheme, and the Swiss Parliament granted a subsidy of 6,000,000 francs on condition that the tunnel and its approaches were prepared for a double-track railway.

Work was started in October 1906, and progress was rapid until July 24, 1908, when operations were stopped by an unfortunate accident. It was supposed, on geological grounds, that the detritus forming the floor of the Gastern valley ended well above the line of the tunnel, which in consequence would be bored in solid rock. This expectation, however, proved wrong, and at a point nearly $1\frac{3}{4}$ miles from the N. portal a dynamite charge opened a cleft containing sand, gravel, and water, with the result that a quarter of a million cubic feet of débris burst into the heading, filling it for nearly a mile and

causing the death of twenty-five Italian workmen. Operations had to be suspended for several months. Finally a new heading was started about $\frac{3}{4}$ mile from the mouth. In this way not only was the length of the tunnel increased by $\frac{1}{2}$ mile, but a wide curve was introduced into its course.

The two headings actually met on March 31, 1911, at a distance of 7·350 kilometres from the N. end and 7·186 kilometres from the S. Each of the working parties in them had been able to hear the detonations of the explosives used by the other since the middle of January.

Apart from the main tunnel itself, important and difficult engineering works have been required by the approach lines. On the N. side, between Frutigen and Kandersteg, a distance of less than 8 miles, the line has to climb 1385 ft., and to avoid exceeding a gradient of 1 in 37 an elaborate double loop has been constructed near Mittholz with a corkscrew tunnel over a mile long. On the S. side, between Goppenstein and Brigue, there are twenty-one tunnels and ten viaducts. The total length of the Bernese Alpine Railway from Spiez, on the Lake of Thun, to Brigue is $48\frac{1}{2}$ miles, and the summit level is reached at about 4100 ft. above the sea in the Lötschberg tunnel. The traffic is to be worked by electric traction, single-phase current, at 15,000 volts, 15 cycles being employed.—Condensed from *The Times Engineering Supplement*.

NOTES ON THE MOUNTAINS OF BUSSAHIR AND SPITI.

BY CAPT. H. C. REEVES, R.G.A.

WHILST shooting in Spiti it occurred to me that a few notes on the mountains might be of interest to climbers.

The mountains of the Sutlej Valley possess the great advantage of being easily accessible. The railway brings Simla to within forty-eight hours of Bombay and from Simla the Hindustan-Thibet road leads to the Sutlej Valley.

The Hindustan-Thibet road is a fine bridle path which bifurcates beyond Narkanda, one branch following the ridge whilst the other plunges down to the Sutlej Valley, and passing through Rampur, the capital of Bussahir State, joins the upper road a few miles from Sarhan.

The lower road is intensely hot, and the upper road is infinitely preferable not only for its coolness, but also for its fine scenery. At every stage there is a bungalow, many of which belong to the Forest Department or Public Works Department. For permission

to use these application has to be made to the officers of these departments. Mules for transport purposes can be obtained in Simla and can be taken through to Wangtu, where the Hindustan-Thibet road crosses the Sutlej.

The stages average about ten miles in length. From Simla to Narkanda is four stages and from Narkanda to Sarhan five stages by the lower road and seven by the upper road.

The first three stages on the upper road are very short and one can do two double marches.

To visit the Sutlej Valley beyond the junction of the Spiti and Sutlej rivers permission has to be obtained from the Deputy Commissioner, Simla, but to visit Spiti permission is required from the Assistant Commissioner, Kulu, and to cross the Spiti river in Spiti further permission from the Deputy Commissioner, Kangra.

Supplies are plentiful in the Sutlej Valley and only English stores need be taken, but in Spiti only milk and sheep are obtainable.

On the S. side of the river between Sarhan and Wangtu are some easy peaks, the highest of which is 17,269 ft. There is one rock tower (17,199 ft.), the nearest snow peak to Simla, which looks very difficult.

On the N. side of the river the mountains are far more interesting, two of them being over 18,000 ft. Beyond Wangtu the mountains are still bigger, the highest being Leu Porguil, about 22,000 ft.

Above Wangtu coolies have to be taken, and as I turned off at Wangtu for the Babehe Pass I saw very little of the mountains beyond.

Very good climbing could be obtained by camping at Muling in the Babehe-Wangtu valley. Supplies could be easily obtained from Yangpa, the highest village, and by keeping six permanent coolies bivouac tents could be carried up the side valleys and the peaks climbed from them in one day.

The mountains surrounding the valley are of granite, so there is good rock climbing besides the snow peaks.

Three easy stages from Wangtu lead to the foot of the Babehe Pass (16,000 ft.), a longer stage the next day brings one to Buldur, the first camping ground in Spiti. The pass is a very easy one with a glacier on the northern side.

The highest mountain in Spiti is the Parang La, No. 2 S, 23,064 ft., a fine pyramid. This peak is situated on the range that divides the Thibetan-Ladakh plateau from the Spiti basin.

The snow peaks at the head of the Kaga nullah, a tributary of the Peen Valley look very difficult and run up to over 21,000 ft.

Near Mani in the S. Mani Peak (21,646 ft.), which could probably be climbed from the Manirung Pass; and N.W. of Mani is the Great Rock (19,665 ft.), a formidable-looking tooth, and Peak (19,454 ft.), the latter would be best climbed from the Ensa nullah.

The rock in Spiti is none too sound, the granite being left behind on the Babehe Pass.

The snow line in Spiti is very high ; round Mani it is over 18,000 ft. Easy glacier passes cross the ranges, and I returned by two which, as far as I could find out, had not been previously used by Europeans.

The inhabitants of Spiti (who are Lamaists) constantly use these passes and would not be adverse to going to a certain height on the snow, but as they do not carry sticks and their footgear consists of heelless boots, they are rather at sea on a steep snow slope.

The Babeh coolies are distinctly better, but they are not as pleasant a people to deal with as the Spiti men. They are Hindus.

IN MEMORIAM.

TWO OLD FRIENDS: GABRIEL LOPPÉ,
FRANCIS F. TUCKETT.

By DOUGLAS W. FRESHFIELD.

THERE are no names among our veterans that will be more missed on the Club list than those of the two friends I am called on to commemorate here. Even though the course of years may have made their visits to London rarer, and their faces unfamiliar to the majority of the Club, their fame had not grown dim among us. They remained cherished survivals of the great years of Exploration and Discovery, links with the earliest era of the Club, with the first days of Alpine enthusiasm.

When two such old friends leave us, even though they may have enjoyed the full span of life, we cannot bid farewell to them without a pang. As the company disperses, we lingerers are left with too many empty places about us. As we watch our companions, our old guides and comrades, disappear one by one over 'le Grand Col,' we desire to wish them 'God-speed,' to clasp hands once more, even though it be only in the spirit and through these pages.

It would be out of proportion to attempt here any detailed biography of either of the distinguished members who have lately departed. These notices can be no more than slight sketches of two long and remarkable careers.

GABRIEL LOPPÉ.

Toussaint Gabriel Loppé was born at Montpellier in July 1825, the son of a captain of Engineers, whose family were natives of Alençon. The first ten years of his life were spent at Toulon and Montpellier, where his father was quartered. On Captain Loppé being transferred to the North of France, Madame Loppé moved to Paris. Gabriel was entered for a short time at the Lycée Henri IV., but in the summer of 1841 was ordered into the country for his health. On his return with his mother and sister to Montpellier he made his first ascent—the 'Pic Saint Loup,' a hill of 2175 feet.

He found on the top two young artists employed in sketching. Their pursuit seemed to him a glorious one. From that moment the youth's vocation in life was fixed; there and then he decided to be a landscape painter. At Embrun, the little mountain town on the Durance, his father's next quarters, the young Loppé had opportunities for improving his health and indulging his taste for scenery.

It was not, however, till 1846, when he was twenty-one, that he got leave to go to Geneva and pursue art in the studio of Diday. Finding the master absent, he shouldered his knapsack and walked on to Meiringen, where he came on quite a colony of painters, headed by Calame, the leading Swiss artist of the time. Here he made a friend of an Englishman, Beresford Walker (a cousin of the Liverpool Walkers), with whom he took his first glacier expedition, the passage of the Strahleck. He was enchanted with the new world of snow and ice, which was to exercise so strong an influence on the tenor of his whole life.

On his return to Diday's studio in the autumn Loppé was set to copy lithographs. Disgusted at this treatment, he left his master and picked up what instruction he could from opportunities to study the living world. He was wont to speak of himself as in the main a self-made painter who owed little to his teachers.

Of this part of his life Loppé himself gives an outline in a letter to Sir Alfred Wills, dated October 26, 1909: 'At eighteen I left Paris and went to live at the town of Embrun, where my father, an Engineer officer, had been sent to carry out some fortification work. I remained in this place for three years, wandering over the mountains which form a large part of the department of the Hautes Alpes. I had a strong leaning towards art, and this picturesque country, although ravaged by the mountain streams, developed my love for landscape; and my parents, being willing to let me choose the career of an artist, sent me to the studio of a painter, very celebrated at this period, Diday. I made use of my summer holidays to go and work from nature in the Bernese Oberland, the rendezvous at this time especially of the Swiss artists, and at the hotel at Meiringen I made the acquaintance of a young Englishman, ten years older than myself, whom I accompanied in his ascents round the lake of Brienz. Having gone to Interlaken to finish the summer season, I met him in this region as I was passing through the village of Unterseen, with my knapsack on my back. He asked me to come with him first to Grindelwald and from there to make an expedition on the glaciers. I had never been onto the ice except for a few steps taken out of curiosity, and it was a revelation to me when two days later I found myself on the Strahleck Pass between the Schreckhorn and the Finsteraarhorn. It was one of the most vivid impressions of nature that I ever received in the Alps. That was on September 9, 1846—63 years ago. I recollect it as plainly as if it were last month. On the evening

of that beautiful day we reached the Grimsel at 7. At that date very few travellers made this expedition.'

Of Diday's art I must confess complete ignorance.* His chief title to a place in the story of Alpine painting would seem to be that Calame, though only a few years his junior, worked in his studio. The pupil was held to have eclipsed his teacher, and gained in the last century a reputation, which may almost be called European, as the chief of a Swiss landscape school. His pictures still occupy a place of honour in public galleries. Conventional and formal in design, somewhat cold in colour, they appeal in vain to modern taste. Yet they show a recognition of the beauty of mountain scenery and a desire to make for it a place in art. But the painter is too much hampered by classical tradition, and has not the force or the courage to express either the realistic details or the romantic spirit of the summits.

Loppé's brief sojourn in Diday's studio must have been some years later than Calame's. The difference between the two men's work is extraordinary. Loppé was the first painter who had the soul of a mountaineer, who yielded to the fascination of the world above the snow level. Like his greater contemporaries, the school of Barbizon, though in another field, he saw Nature with his own eyes, and not through the spectacles of a past generation.

In 1847, after another visit to Meiringen, Loppé went to Paris, frequented the Louvre, copied Cuyp, made student friends, and took some part in the Revolution of '48. His father naturally thought the youth would be safer elsewhere, and we next hear of him at Dijon, then in Savoy, and finally at Annecy, where, in 1851, he married and settled. The picturesque character of the little town, with its numerous water-channels, and the quiet beauty of its lake, which still preserves some of the rural charm that a century ago drew Byron to the head of the Lake of Geneva, were naturally attractive to the young painter. He now began to sell his pictures at Geneva, studies of plants and foregrounds, painted with a precision that showed at least an intimate study of nature. At Annecy also he made friends with Eugène Sue, whom he tended on his death-bed in 1857. In 1862 he moved with his family to Geneva, which offered more resources and opportunities for an artist than the little Savoyard town.

Loppé had made his first visit to Chamonix as early as 1849. From that date hardly a year passed without his paying his respects to Mont Blanc. In the summer of 1861 he climbed the mountain three times and got the material for his fine picture of the Sunrise on Mont Blanc, which, exhibited in London in 1862, now hangs in our Club. It was in this year that he came for the first time to

* Some account of Diday and Calame, with interesting notes as to the slender connexion with mountains of the Barbizon school, may be found in a recent book, Bredt's *Die Alpen und ihre Maler*, Leipzig, Th. Thomas; undated. By an unaccountable oversight no mention is made of Loppé in this work.



GABRIEL LOPPÉ.

England and entered the congenial circle of the Alpine Club, of which he was soon to be one of the Honorary Members. He was elected in 1864, proposed by Sir Alfred Wills, and seconded by Leslie Stephen. It was about this time that he became an habitual frequenter of Chamonix, residing first at the Couronne and afterwards at Couttet's Hotel. At that mountaineering centre he met again and often the friends he had made in England. He became an intimate ally of Sir Alfred Wills and Leslie Stephen. He joined at times in the latter's expeditions, notably in the passage of the Col des Hirondelles and ascent of Mont Mallet, made with Leslie Stephen and Mr. Wallroth, and in the ascent of Mont Blanc to witness the sunset described in the second edition of 'The Playground of Europe.' On that occasion, it is reported, Loppé sat so long on the snow sketching that he had finally to be released with the help of ice-axes. Eleven times he sketched on the top of Mont Blanc; to most of us this would have meant frost-bite, but Loppé was constitutionally impervious to cold. I shall not easily forget the agony I underwent, when, in midwinter, he insisted on photographing Stephen and myself with a background of frosted willows beside the stream below Grindelwald, with the thermometer well below zero Fahrenheit. The result was too painful to be shown.

Loppé was too much occupied with his art to climb much for climbing's sake outside the shadow of Mont Blanc. Mr. Wallroth, however, sends me a characteristic account of an ascent of the Grand Combin he made with him in 1869:—

'After sleeping on the rocks at the Maison Blanche we got to the top next day in weather that was most malignant. We were in the midst of a snowstorm and attacked by a biting wind. Loppé immediately sat down on the snow, produced his paint-box, and waited for opportunities. There he sat, apparently impervious to cold, while we, guides and all, were shivering and longing to go down. It was one of those days when one's first thought after getting to the top is to get away from it. However Loppé, as breaks in the mists occurred, laid on his colours and, when with chattering teeth we suggested that it was no use to wait any longer, some fresh gleam would draw from him "Ah! voilà un effet superbe," and on went the brush again. The sunshine disappeared, but the memory of what he had seen was in his soul, and he went on painting for a quarter of an hour before he said "he thought it was time to go down to Mauvoisin." We all agreed!'

In his winter excursions Loppé was apt to go farther afield, generally in the company of Leslie Stephen. They visited together Zermatt, Grindelwald, Engelberg, and the Grimsel, climbed the Titlis and attempted the Galenstock. Loppé was one of the first to discover the beauty of 'the Alps in Winter.' He began to visit them at that season in the early Fifties. He shares, therefore, with A. W. Moore, who started winter climbing a few years later, the credit of having invented a new pleasure for the dwellers in the

plains and a fresh source of income for the mountain innkeeper. The 'winter sports,' have, it is true, developed in some directions unforeseen by the precursors, who were content to share the Commercial Room and to shiver in unwarmed rooms and passages.

In the year 1877 Loppé determined to follow the example of De Saussure by spending a week on the Col du Géant, which the recent erection of a cabin by the Italian Alpine Club rendered a feat relatively easy of accomplishment. He was accompanied by his daughter, Mademoiselle Aline Loppé, and his guide, Benoît Simon, *dît* Benoni. He gave an account of his adventure in the 'Annuaire du Club Alpin Français' for the same year. He describes a sunrise: 'The sunrise was of an unbelievable beauty. Mont Blanc, the first to catch the light, was first rose, then turned to a red, which passed into yellow; an hour later it was almost white. The chain of the Grivola and Grand Paradis, the mountains of Savoy and Dauphiné, vibrating with light, displayed themselves with marvellous effect on a cloudless sky. The Grand Combin, Vêlan, Mont Cervin, Monte Rosa, the countless crests which surround Val d'Aosta on the east, lost in the sun's rays, showed only their majestic outlines. I worked from dawn to twilight. No one broke in on our solitude, either on that day or the following. My daughter, sole mistress of the cabin, prepared our meals, observed the thermometer, or came to draw by my side. Benoni made himself generally useful, hunted for crystals, or melted snow in the sunshine to keep up our provision of water, which never failed.'

In the year 1874 Loppé lost his first wife, by whom he had three children, two of whom survive him. In 1879 he married Miss Elizabeth Eccles, the sister of one of his English friends. In 1880 he took up his abode in Paris. In 1870 he had set up a permanent exhibition of his works at Chamonix, building himself close by a chalet for his own use. He preferred for more than one reason to assemble his works. In the annual shows he felt that from the special nature of their subjects his pictures were often out of harmony with the other landscapes exhibited. In Chamonix, in their own atmosphere, surrounded by the scenes that had inspired them, they seemed to him to tell their own story, to make their appeal, with greater advantage. Still he was for ten years a constant exhibitor of one or two canvases in the Paris Salon.

This is hardly the moment to attempt any critical estimate of Loppé's position in Alpine art. It has already been done, on the occasion of his holding an Exhibition in the Club-rooms in 1873, at some length in this JOURNAL, vol. vi., p. 285, and I reiterated my own point of view in the last chapter of 'Italian Alps' (Longmans, 1875). I see no reason materially to modify what I then wrote. I may quote a few sentences here. I claimed that Loppé's mission was to depict the glacier, to be the painter of the snow mountains. 'He studies the glacier from its birthplace in the névé region to its tomb under the mud and rock heaps of the terminal moraine.

Now he shows it us in full life with its semi-transparent mottled surfaces, its green caves and keen knife-like edges; now he transports us to the upper snows and bids us admire the delicate gradations and reflections of their imprisoned light, the deep blue depths of their abysses, the confused ruin of tottering towers and fantastic spires, or the ranges of moated ramparts, each white as the purest marble, yet, like marble, delicately streaked with pale veins of colour.'

He was, it must be admitted, less at home among the rock-peaks. Their forms and outline were faithfully reproduced, but he cared less for their texture and structural features than for those of the glacier. When removed from his favourite snows his finished pictures bore some trace of his early training in the dry and somewhat frigid Swiss school of sixty years ago. But in his sketches on the spot, while he was inspired by the emotion of the moment, he was often successful in representing weird atmospheric effects, mists among the séracs, sunset vapours seen floating round the Grands Mulets, or Mont Blanc a shining phantom through winter haze. If he did not reproduce all the magic of the High Alps, he never travestied it, or, after the last fashion, made natural objects the basis for the phantasms of a disordered brain. When I once suggested that he had exaggerated some crevasses his reply was: 'Mais je n'exagère jamais, je diminue plutôt. Mes grimpeurs—regardez leurs figures—n'ont qu'un mètre de hauteur.' Loppé at various dates presented to the Club the important examples of his art which now adorn our walls, and there must be a great number of them scattered in the homes of our members.

In his later years he took up photography, in which he became a proficient. His artistic sense helped him to catch momentary effects and impressions; one of the most vivid of his plates shows several flashes of lightning striking the Tour Eiffel.

Gabriel Loppé was born exactly in due season to become the favourite artist of the Alpine Club, 'the Court Painter of Mont Blanc,' to quote Leslie Stephen. But he had other links with his English friends and comrades. To his passion for the mountains he added a singularly frank and cordial manner, which was the true expression of his nature.

Full of life and energy, he was essentially good company. He had strong opinions on a great many subjects, including art and French politics, which he was wont to express emphatically and without much respect of persons. Intolerant of all abuses, his outspoken criticism of those of the guide-system at Chamonix, criticism not without risk to his personal comfort, was of great avail at the time. He delighted in argument and was not averse to paradox. To a Frenchman's natural flow of words and instinct for conversation he added a quick wit, which responded readily to a companion like Stephen, whom he understood and cheered. He habitually carried about with him an atmosphere both of humour

and good-humour, and left behind him an impression of shrewd sense and hearty good-will.

Born a 'Mérional,' among his English friends he was even more entirely at home than with his own countrymen, and we delighted at all times to have him amongst us. No one caught more exactly the spirit and holiday humour of the epoch of early mountaineering. When he entered the room he brought the Alps in with him.

He opened a new field to art where others will tread in his footsteps. There will, doubtless, be greater Alpine painters, but there will hardly be a better lover of mountains, or a truer friend. This tribute may best conclude with the words of Leslie Stephen's dedication of the second edition of 'The Playground of Europe':—
'To M. Gabriel Loppé.

'MY DEAR LOPPÉ,—Twenty-one years ago we climbed Mont Blanc together to watch the sunset from the summit. Less than a year ago we observed the same phenomenon from the foot of the mountain. The intervening years have probably made little difference to the sunset. If they have made some difference in our powers of reaching the best point of view, they have, I hope, diminished neither our admiration of such spectacles, nor our pleasure in each other's companionship. If, indeed, I have retained my love for the Alps, it has been in no small degree owing to you. Many walks in your company, some of which are described in this volume, have confirmed both our friendship and our common worship of the mountains. I wish, therefore, to connect your name with this new edition of my old attempt to set forth the delights of Alpine rambling. No one understands the delights better than you, and no one, I am sure, will be a more lenient critic of the work of an old friend.

'Yours ever,

'LESLIE STEPHEN.'

FRANCIS FOX TUCKETT.

IN FRANCIS FOX TUCKETT, who died on June 20 last in his eightieth year, the Alpine Club loses one of the most distinguished of its veterans. Elected to the Club in 1859, two years after its foundation, Tuckett at once became a pioneer, both in climbing and in the scientific exploration of the more remote districts of the Alps. His physical energy appeared inexhaustible, and was apt to wear out the endurance both of his companions and guides. It was coupled with an equal mental and literary activity.

F. F. Tuckett was, forty years ago, a familiar entry in every hotel book, and a household word in every valley from the remote distances of the Terglou and Gross Glockner to Monte Viso. His 'New Expeditions' filled pages of the ALPINE JOURNAL. When John Ball set out on his great task of writing



FRANCIS FOX TUCKETT.

a guide-book to the whole chain of the Alps which should meet the requirements of the man of science and topographer as well as those of the climber and tourist, he found in Tuckett an exact and almost omniscient contributor. In the second series of 'Peaks, Passes, and Glaciers' there are no fewer than eight papers by Tuckett, several of a scientific character. It was one of these that incited the flippant remarks of his friend, Leslie Stephen, about the absence of ozone on the Rothhorn; while in another place Stephen declared that Tuckett, starting in the Far East and 'rejoicing to run a race' to the other end of the Alpine chain, would one day be regarded by the learned as a solar myth.

But of late the 'ubiquitous' F. F. T. of the Sixties had become, I fear, 'magni nominis umbra' to the majority of the present members of the Club. His only appearance at its Meetings, or Dinners, in the present century was, I believe, when he came to the Jubilee in 1907. Needful care as to his health had limited his social activities, and was also the main reason for the prolonged travels and sea voyages by which he sought to avoid the rigours of an English winter and spring. But his interest in all Alpine matters remained as keen as ever, and he kept in touch with his old friends and several of his juniors, partly through an immense correspondence, and partly through their visits to his home, where they found him full of a vitality which promised an even longer old age. He submitted with an admirable patience and an ever-ready pen to be treated as an encyclopædia of Alpine knowledge, and even the modern 'historiographer of the Alps,' who still inhabits Grindelwald, has had at times to appeal to the oracle of Frenchay on some moot-point of history or tradition. Nor was it only on such matters that his opinion was sought and valued; should a difficult decision have to be come to, or some contentious spirit have to be repressed, it was to Tuckett that recourse was apt to be had for the sympathy and good sense he was always ready to place at the service of his friends.

Tuckett's birthplace and home was at Frenchay, a quiet village where a number of sedate Georgian houses, a modern church, and a Friends' Meeting House cluster about a Green, which still lies among its elms just outside the spreading streets of suburban Bristol. Here Frank Tuckett was born on February 10, 1834, in the family house in which he subsequently lived, and to which he happily returned to die.

Both by inheritance and early association Tuckett had singular advantages for the formation of a taste for literature and science. His father had been brought up to the profession of a publisher, and retained a discriminating judgment in matters connected with books and pictures, while on the mother's side several of his uncles, notably Robert Were Fox, F.R.S., were in their day men of science. Tuckett's education was partly at home, and being a youth of an accurate, curious, and retentive mind, he from his

early years made the most of his opportunities, and thus started in life with many varied interests and a store of miscellaneous knowledge, to which for seventy years he was engaged in adding. Till middle age he was in business at Bristol, but latterly enjoyed a life of leisure, every moment of which was filled by some form of activity, mental or bodily.

The distinctive feature in Tuckett's mind, as shown to his friends and companions, was the breadth of his interests and sympathies, the combination of a rare intellectual versatility with a patient thoroughness in dealing with any subject he took up or touched on. His capacity for taking pains, for collecting and investigating detail, was prodigious. These characteristics were reproduced in social intercourse. He was an omnivorous reader, and he made the most of all the opportunities of travel. His mind was consequently stored with a mass of ordered knowledge which he was delighted to pour out to his friends, either in talk or through a voluminous correspondence. His conversation, always full, was at times almost overweighted with the wealth of experience, of authority, or of illustrations he would delight in bringing to bear on the matter in hand. If a topic interested him—and what did not?—he would not let it go until he had done his best to throw some fresh light on it, or at least to clear up former obscurities. At the same time no one more thoroughly enjoyed the lighter side of talk which accompanies travel, or was more ready to take a part in the passing jest of the hour. He delighted in making friends with all he met. His guides, amongst them J. J. Bennen, Christian Lauener, Melchior Anderegg, Christian Almer, Michel Croz and François Dévouassoud, who were often his companions for weeks, were devoted to him. Among his many accomplishments was included that of being an adept conjurer. There must still be elders in Tyrolese villages who can recall the strange Englishman who dropped from the clouds onto their Alp about the longest day and made the night memorable by a display of strange and terrifying, if not diabolical, wonders.

As a climber, Tuckett well embodied the ideal of his time—I am afraid it is hardly the same as that of to-day. He was never reckless, or climbed for display. He felt the responsibility of human life, his own and others', and had no morbid passion for playing with it as the stake. If he fearlessly 'walked with Death and Morning on the Silver Horns' he kept a careful eye on his treacherous companion. The pains he never failed to take in everything he undertook made him a sure and safe comrade on the rope. On snow and ice he was admirable; on rocks he was somewhat handicapped by his short sight (he climbed with an eye-glass); he took his time, but then he never made a mistake. If he was not a 'brilliant rock-climber' according to modern developments, he was something better, a capable all-round mountaineer. Much of his mountaineering was done in June, when, though ice-falls are easy, snow-slopes and rock-peaks are apt to be in a dangerous condition, and the weather is

often unstable. That he met with no more serious misadventures was the result of his sound judgment as well as of the capacity of his guides.

As a mountaineer in the wide sense of the word he belonged to the Scientific rather than to the Athletic side. His elaborate notebooks, his careful outline panoramas, his observations—he was wont to climb girt and bristling with instruments—resulted in a very large increase in our knowledge of the mountains and in radical improvements in their cartography. In the Sixties the Government surveys of many parts of the Alps outside Switzerland were still vague and inexact. It was in Dauphiné and the Orteler group that Tuckett's endeavours to correct them were most effectual. In the former district the explorer was exposed, during the careful investigations he undertook, to hardships which materially affected his health for several years, though without producing any perceptible pause in his activity.

I must now endeavour to set out some brief outline of Tuckett's mountaineering career. His father was fond of travel, and as a boy, in 1842 and 1850, Frank Tuckett visited Chamonix and made the tour of Mont Blanc with his parents. But it was in 1856, and in company with his future brother-in-law, Mr. J. H. Fox, that his Alpine career in the strict sense of the word may be said to have begun. A visit to the Val Peltine and passage of the Col de Collon in that year are referred to in the second series of 'Peaks, Passes, and Glaciers,' and Mr. Fox tells me several other glacier passes were traversed. In 1859, climbing with the famous guide J. J. Bennen, whose memorial he was to join with Tyndall in erecting five years later, he opened his list of first ascents with the Aletschhorn, climbed Monte Rosa and the Breithorn, and explored in the Cogne district. In this year he was one of a large batch of new members admitted by the Committee to our Club. In 1860 and 1861 he was again busy in the Oberland and Zermatt district and in the Graians, making several new passes and winding up with the first complete ascent of Mont Blanc from St. Gervais by the Dôme du Goûter and the Bosses with Leslie Stephen. In 1862 he climbed the Grivola, made the second ascent of Monte Viso and slept on the top, found a new way up the Pelvoux, and did much arduous work in Dauphiné, some of the results of which are preserved in a bound collection of his original outline drawings which is in the Club Library, while others are recorded at length in vol. i. of the ALPINE JOURNAL.

I shall not attempt to follow in any detail Tuckett's innumerable and prolonged campaigns at this period. Are they not written in the past volumes of this Journal and catalogued in Mr. Wallroth's invaluable index? In 1864 and the two following summers he directed his footsteps to a region that was to become one of his favourite haunts, and to which he returned as late as 1910—the Dolomites and Eastern Alps. But he was the most 'eccentric' of mountaineers; no centre, no district could hold him for long.

It was in 1864, on my ramble 'From Thonon to Trent,' that I first met Tuckett. Our party had started in the dark from the Baths of Masino, intent on making a long and new pass to the Engadine over the ridge at the head of the then unknown Forno Glacier. As we passed La Rasica, a group of chalets at the head of Val di Mello, we heard the sound of strange voices, and a pair of light flannel trousers, such as no herdsman ever wore, gleamed through the dusk. It was Tuckett with a friend, bent on attacking the Monte della Disgrazia. He addressed me at first in Italian, under the impression that we must be a band of smugglers. It was assuredly a strange coincidence that five Englishmen should meet in a valley where there had probably not been so many since the world began.

This chance meeting led to my receiving an invitation to be one of his party in the following year, and to a lifelong friendship. It was a wonderful six weeks. We started in May in the Dolomites and ended up in the Tödi group in early July. Our course might be compared to a steeplechase. We ignored distances. We began by being benighted among the peaks of Primiero; we climbed the Marmolata, the second ascent, from Caprile in the day; in the Cetzthaler Ferner we had three consecutive days of 13, 12½, and 15½ hours' 'actual walking,' winding up with a midnight drive from Schluderns to Trafoi, which we reached twenty-four hours after leaving Sulden, having climbed both the Langtauferer Spitze and the Weisskugel and made a new pass on the way.

Another prodigious day among the Zillerthaler Ferner won for us the Möselenock. I have already told in these pages how we were benighted in the Zemmer Thal, and Tuckett and I were the only two of the party who got through to Ginzling; how we knocked up the priest at 11 P.M.; how, after a somewhat acrimonious greeting, the charm of Tuckett's conversation more than made up for our untimely arrival, and we enjoyed supper and bed, while our friends and guides, having missed the path, spent the night in a hay-chalet a mile off, and appeared, sleepy and crestfallen, early next morning.

Tuckett's career was full of adventures; he was arrested as a spy on the Austrian frontier in 1866, and again as a Panslavist agitator in Carniola in 1869. In 1871 he narrowly escaped from an avalanche under the Eiger, an incident described in a paper entitled 'A Race for Life,' vol. v. p. 337. On another occasion he and his guides had taken refuge from a storm in the historical chapel, the Cà d'Asti, on the Roche Melon, when the walls were rent in twain and the altar ruined by lightning, while the climbers escaped with nothing worse than more or less severe shocks. The incident was very fully and graphically described in the *JOURNAL*, vol. vii. p. 191. His party had a still more narrow escape from a disaster owing to the treacherous snow of a slope on the Aletschhorn. The modern climber may smile at the implement brought into use. Tuckett records that he 'drove his good 8-foot ashpole as deeply as possible

through the surface layer.' His various weapons are preserved at his home and might well find their place in a museum as an illustration of the growth of mountain craft. Always of an ingenious and inventive mind, the use of the 'rucksack' and sleeping-bag were largely due to him. The former he brought home from Styria in 1869, in the latter he carried to perfection an idea of Francis Galton's.

What may be termed the 'Sturm und Drang' period in Tuckett's career was succeeded in the later Sixties by one in which his holidays contained less strenuous exertion and more social relaxation. His party often included his sisters and other ladies. If each journey still supplied the leader with a crop of 'New Expeditions' for the Journal, it also provided material for the volumes of sketches of Alpine travel by Miss Tuckett, of which 'Zigzagging amongst Dolomites' has been, perhaps, the most popular. Their quiet humour and grace obtained a considerable popular success and won the praise of Ruskin.

In 1872 Tuckett's expeditions included a traverse of the Jungfrau, with a descent on the Wengern Alp, one of the most serious expeditions in the Alps. In 1874 he was in the Graians.

We now approach the third period in Tuckett's mountaineering activity. He was not content to remain 'homo unius montis,' the frequenter of a single chain. In 1877 and 1878 he was in Greece, where he climbed Taygetus and Cyllene in the Morea, Dirphe in Eubœa, and the highest point of Parnassus.

In 1881 and 1883 he was in Corsica and on the peaks of Carrara. In 1884 he compiled a long list of expeditions in the Pyrenees. In 1886 he was climbing in Norway, in 1888 he visited Spain and Algeria. At a later date he wandered to Palestine and Bosnia. In short, every spring saw him in some new corner of the Old World. As, in the course of years and of nature, his mountain ascents diminished, the range of his travels was proportionately enlarged until it finally embraced the globe. He encircled it three times, visiting the two Americas, Australia, New Zealand, Japan, India, and Burma. Egypt was a favourite resort, for there his antiquarian tastes found full employment and he became on intimate terms with most of the leading Egyptian archæologists.

With his earlier journeys mountaineers had been kept in touch by the beautifully precise and accurate pencil panoramas, which were of much use also in his topographical work. At a later date he became an expert photographer, and on his return was wont to distribute among his friends charming views of the more out-of-the-way and picturesque bye-corners he had visited.

In 1896 he married Miss Alice Fox, the daughter of Dillworth C. Fox, of Wellington, and sister of Harry Fox who was lost with Donkin in the Caucasus in 1888, who became the companion of his later travels and who survives him. His death followed a fortnight after his return from his last journey round the

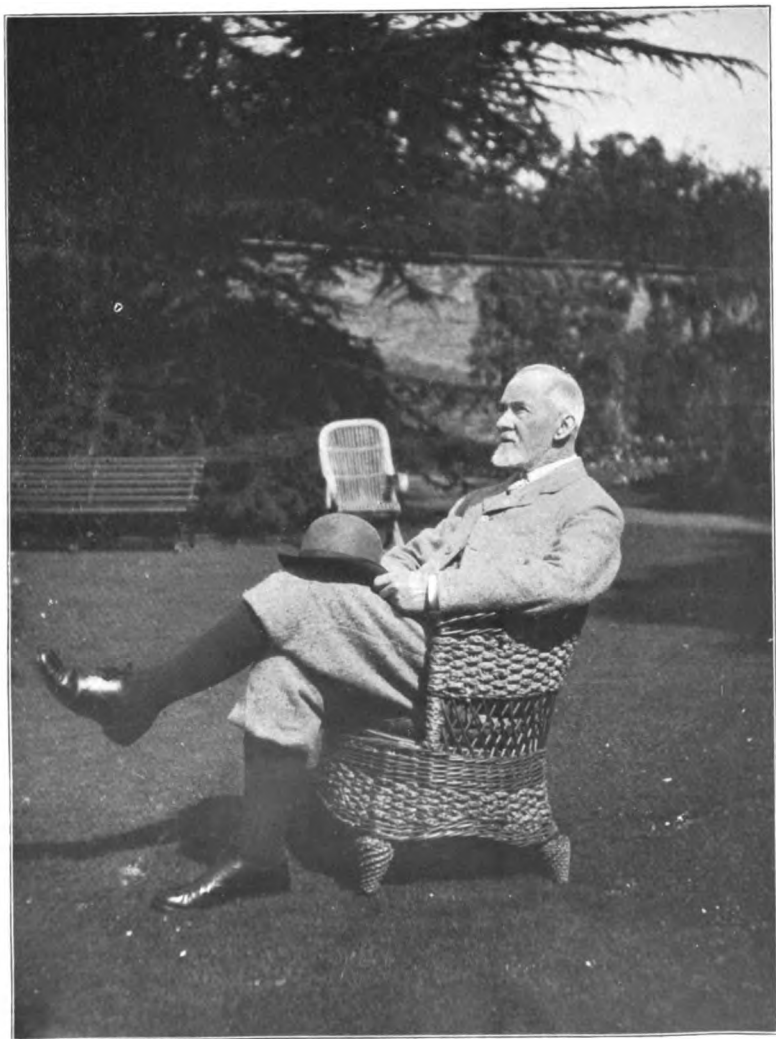
world, and was caused by an attack of erysipelas. I had heard from Mr. Walter Weston in Japan of the vigour Tuckett had shown during his visit to that country. A letter I received from him a week before his death was full of comments on the growth of the Canadian and American cities, to which he had just paid—quite in his old spirit—a series of flying visits. He scarcely mentioned a ‘passing indisposition.’ Fortunate on the whole in his life, he was equally so in a death which, in his eightieth year and without any period of impaired powers or suffering, can hardly be held inopportune, even by the friends who will most miss him. But his loss will be felt while any of his old comrades live, and his memory will last so long as the Alps remain what he, with John Ball, Bonney, Tyndall, Whymper, and Leslie Stephen, helped to make them, the Playground of Europe.

Tuckett’s varied experiences and attainments were to a great extent concealed from the public eye by a retiring disposition that shrank from public speaking and any kind of notoriety. His papers were never collected in a volume in this country. It was left to Leipzig to recognise their solid worth by translating and issuing them in a book in 1873 under the title ‘Hochalpenstudien.’ He was a Vice-President of the Alpine Club in 1866–8, and he more than once refused, to the great disappointment of his colleagues, the Presidency. He was also a Fellow of the Royal Geographical Society. The only public honour he received was the Italian cross of St. Maurice and St. Lazarus, conferred on him by Victor Emmanuel. His name has been affixed by the local authorities to a peak in the Orteler group and a pass among the Brenta Dolomites.

Tuckett remained all his life an active Member of the Society of Friends, finding, no doubt, in that body deep religious feeling combined with a breadth of view and a certain reticence that were congenial to his mind and character.

DEATH OF DR. ADOLF WÄBER.

THE death, on March 20, at the age of seventy-two, of this well-known member of the S.A.C. is announced. He was for many years one of the leading officers in the Berne Section, but he will be best remembered as Editor of the ‘Jahrbuch’ for a long period, and as joint editor with Dr. Dübi of the second edition of Studer’s ‘Ueber Eis und Schnee’ which is the standard history of the first ascents of the principal Swiss summits. So fully was his great usefulness and merit recognised that he was elected in 1893 an honorary member of the S.A.C., whilst in 1906 the University of Berne conferred on him the degree of ‘Doctor Philosophiæ honoris causa.’ Dr. Dübi, in ‘Alpina,’ 1913, pp. 101–3, gives a warm appreciation of the many merits of his colleague.



An old tramp of 76.

*With J. F. Jewett's kindest regards
Menchay Sept 7/10*

THE ALPINE CLUB LIBRARY.

The following books, etc., have been added to the Library since March :—

Club Publications.

- Akad. Alpenklub Zürich.** XVII. Jahres-Bericht f. 1912. 1913
 9 × 6 : pp. 43 : plate.
 Among the new ascents are the following :
M. Finch, Ruchenscharte I. Ueberschr. : *G. Miescher*, allein, Mezzogiorno I. Begeh. d. N.W.-Grat : *W. A. Keller*, Cima Vola I. Begeh. d. S.O.-Wand : *P. Schucan*, Piz Minger, I. Best. ü. d. S.-Wand : Piz Plavna Dadora I. Best. ü. d. N.-Grat : *Miescher*, Aig. Verte, Aufst. d. d. S.W.-Wandrinne Moinegrat : *S. Erismann*, Kara Tau-Pass I. Ueberschr. : Klytsch-Kara Tau I. Best. : *Dombai* I. Begeh. d. N.O.-Wand. Various ascents in Java are also recorded, and an ascent of Ararat.
- Alpine Club of Canada.** Canadian Alpine Journal. Vol. iv. Winnipeg, 1912
 9 × 6 : pp. vi., 151 : maps, plates.
 The articles are :
 A. O. Wheeler, Expedition to Jasper Park.
 G. Kinney, Trail from Maligne Lake to Laggan.
 D. Phillips, Fitzhugh to Laggan.
 Mary Schaffer, Finding of Lake Maligne.
 E. W. Harnden, First ascents in Southern Selkirks.
 J. F. Porter, Ptarmigan Lake Region.
 W. A. Hickson, Near Arolla.
- — — Special number. 1912
 9 × 6 : pp. 96 : plates, maps.
 Contents :
 N. Hollister, Mammals of Mt. Robson region.
 J. H. Riley, Birds of Mt. Robson region.
 P. C. Stanley, Plants of Mt. Robson region.
- — — Officers, Constitution, Members. 1907
 5½ × 3½ : pp. 31.
- — — Constitution and list of members. 1908
 6 × 4 : pp. 22.
- — — Constitution and list of members. 1913
 6½ × 4½ : pp. 31.
- — — Constitution and list of members. 1911
 6½ × 4½ : pp. 28.
- — — Fourth Annual Camp 1909 to be held at Lake O'Hara. 1909
 6½ × 3½ : pp. 10.
- — — Sixth Annual Camp 1911 July 26 to August 4. To be held at Sherbrooke Lake Meadows. 1911
 6½ × 3½ : pp. 10.
- — — Seventh Annual Camp 1912 to be held at Palliser's Vermilion Pass. 1912
 6½ × 3½ : pp. 10.
- — — Eighth Annual Camp 1913 July 28 to August 9, to be held at Mount Robson. 1913
 6½ × 3½ : pp. 10.
- — — Banff Club House and Camp. Rules and Regulations. 1910
 6½ × 3½ : pp. 4.
- — — 1912. pp. 4.
 — — — 1913. pp. 4.
- — — Railway Rates to O'Hara and Robson Camps. 1913
 6½ × 3½ : pp. 4.

- Appalachian Mountain Club.** The Reservations of the Club. By Harvey N. Shepard. Boston, 1913
 $7\frac{1}{2} \times 5\frac{1}{2}$: pp. 14: plates.
- Budapesti Egyetemi Turista Egyesület.** Alapszabalyai. (Rules.) 1910
 $8\frac{1}{2} \times 6$: pp. 7.
- **Turistasag es alpinizmus.** III. Evfolyam 1912-13. Budapest, 1913
 $9\frac{1}{2} \times 6\frac{1}{2}$: pp. viii, 400.
- This is the organ of the University Climbing Club of Budapest and of various other similar clubs. In this volume occur the following:—
- J. Marcell, Aletschhorn.
 V. Hulyak, On Roszudec.
 S. Mervay, Szoliszko.
 T. Szaffka, From the Tátrá.
 G. Komarnicki, Hrubo.
 O. Jordan, Bernese Alps.
 P. Jaross, Alps of Stubai.
 G. A. Hefty, Vöröstavi.
 T. Kregczy, Ortler, Zebur, Königsspitze.
 G. Komarnicki, Triumetal.
 E. Katai, The Wilde Kaiser.
 S. Mervay, Öttó to Lomnici.
- The journal is printed in Magyar.
- C.A.F. Septième Concours international de Ski** organisé à Gérardmer 31 janvier au 4 février 1913. 1913
 $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 32: ill.
- **Soc. des peintres de montagne.** 16^{me} exposition 1913 du 28 février au 22 mars. Catalogue. 1913
 $11 \times 7\frac{1}{2}$: pp. 4.
- **Sud-Ouest.** Bulletin, 3^{me} série, No. 5. Janvier, 1913
 $10 \times 6\frac{1}{2}$: pp. 425-492: plates.
- **Section vosgienne.** Bulletin. 31^{me} année 1912. Nancy, 1912
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 104: ill.
- Among other articles, contains:—
- J. Wehrin, Autour de Sulden.
 — Dans le massif de l'Ortler.
 R. Mougnot, Courses valaisannes.
- C.A.I. Milano.** Regolamento per i rifugi della sezione. Estr. dall' Annuario 1909-1910. 1910
 $6\frac{1}{2} \times 4\frac{1}{2}$: pp. 8.
- Regolamento e tariffe per le Guide ed i Portatori. 1912
 $6\frac{1}{2} \times 4\frac{1}{2}$: pp. 36.
- Conferenze, Gite giovanili, Escursioni sociali. 1913
 $4\frac{1}{2} \times 3\frac{1}{2}$: pp. 8.
- D.u.Oe.A.-V. Kalender für das Jahr 1913.** 26. Jahrgang. München, Lindauer, 1913
 6×4 : pp. 79, 64, 128, 64.
- **Allgäu-Immenstadt.** Jahresberichte, 1910-1912.
 $8\frac{1}{2} \times 5\frac{1}{2}$.
- **Ampezzo.** Cortina. Statuti. Trento, 1882
 6×4 : pp. 15.
- **Anhalt.** Jahresberichte, 1911 u. 1912.
 $9 \times 5\frac{1}{2}$: plates.
- **Asch.** 35. Jahres-Bericht, 1912. 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 24.
- **Bamberg.** Festschrift, 1886-1911. 1911
 $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 136: 2 col. 1 uncol. plate.
- Contains, *inter alia*:—
- Neue Hochtouren in die Sella.
 — Jahres-Bericht pro 1910, pro 1912. 1911, 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$.

- D.u.Oe.A.-V. Barmen.** Satzungen. 1912
 9 × 5½: pp. 2.
- **Mitteilungen aus den Vereinsjahren 1902–1912.** 1912
 8½ × 5½: pp. 30.
- **Wie gelangt man zur Barmer Hütte? . . . Bearbeitet von Prof. Ludwig Fenner.** 3. erweiterte und umgearbeitete Auflage. 1912
 7½ × 4½: pp. 24.
- **Dortmund.** Jahres-Berichte, 12–15. 1910–1913
 8½ × 5½.
- **Dresden.** Sommerliste. 1913
 4½ × 3½: pp. 6.
- **Jahresbericht für 1912.** 1912
 8½ × 5½: pp. 62.
 Contains library Catalogue, pp. 31–45.
- **Erfurt.** Satzungen. 1900
 8½ × 5½: pp. 8.
- **30. Jahresbericht 1912.** 1913
 8½ × 5½: pp. 48.
 The following new ascents are given:—
H. Eichhorn, allein, Gschöllkopf I. Durchkl. Ost-Wand: *H. Eichhorn* u. *A. Bonacossa*, Ebenerjoch I. Erst. ü. d. N.-Grat: *A. Bonacossa* u. *R. Botsford*, Dalfazer Joch, I. Erst. ü. d. O.-Wand: *H. Eichhorn*, allein, Kaltersp. I. Erst. ü. d. O.-Wand: *H. Eichhorn* u. *W. Glöel*, Sonnwendjoch I. Erst. ü. d. O.-Wand, Rosskopf I. Erst. ü. d. Ostplatten u. I. Erst. ü. d. O.-Wand: *A. Bonacossa* u. andere, Rofa Westgipfel I. Erst. ü. d. N.W.-Wand: *H. Eichhorn*, allein, Sagzahn I. Erst. ü. d. O.-Wand.
- **Garmisch-Partenkirchen.** Festschrift zum 25-jährigen Bestehen . . . 1887–1912. 1912
 9 × 6½: pp. 51: ill.
 Contains illustrated articles on:—
 Die Höllentalklamm: Das Kreuzeckhaus: Das Wankhaus: Die Partnachklamm.
- **Gleiwitz.** Tätigkeitsberichte 1908–1912. 1909–1913
 8½ × 5½.
- **Hamburg.** Jahresberichte 32.–36. 1909–1913
 9 × 5½.
- **Kaiserslautern.** Bericht für die Jahre 1893–1907. 1908
 8½ × 5½: pp. 22.
- **Leipzig.** Jahresbericht für 1912. 1913
 8½ × 5½: pp. 84.
- **Lengenfeld i. V.** 1. Nachtrag zum Bücherverzeichnis. Jan. 1909
 8½ × 4½: pp. 11.
- **Mark Brandenburg, Berlin.** Satzung. 1906
 6½ × 4½: pp. 16.
- **Bericht, 1899–1905.** 1906
 8½ × 5½: pp. 89.
- **1906–1907.** 1908
 8½ × 5½: pp. 67.
- **1908–1909.** 1910
 8½ × 5½: pp. 67.
- **1910–1912.** 1913
 8½ × 5½: pp. 213.
- **Passau.** Jahres-Bericht 1912. 38. Vereinsjahr. 1913
 8½ × 5½: pp. 21.
- **Verzeichnis der Bücherei.** 1905
 8½ × 5½: pp. 6.
- **Satzungen.** 1901.
 6½ × 4: pp. 10.

- D.u.Oe. A.-V. Pfalz.** Bericht über Alpenfahrten im Jahre 1912.
 9 × 5½ : pp. 4.
- **Posen.** Satzungen. 1907
 7½ × 4½ : pp. 8.
- **Bibliothek.** 1909
 9 × 5½ : pp. 4.
- Bericht 1898–1908. 1908
 8½ × 5½ : pp. 24.
- **Saarbrücken.** Bericht 1912. 1913
 8½ × 5½ : pp. 35 : plates.
- **Salzburg.** Satzung. n. d.
 6½ × 4½ : pp. 10.
- **Bücher-Verzeichnis.** 1903
 8½ × 5½ : pp. 22.
- **Jahresbericht 1912.** 1913
 9 × 6½ : pp. 30.
- **Stuttgart.** Jahresbericht 1912. 1913
 8½ × 5½ : pp. 20.
- **Teplice-Nordböhmen.** Denkschrift zur Erinnerung an den 25-jährigen Bestand der Sektion 1886–1911. Teplice-Schönau, Weigend (1912)
 10½ × 7½ : pp. vi., 257 ; maps, plates.
- This contains history of the Section and its work : and the following articles :—
- G. Fiedler, Aus d. ersten Hüttenbuche der Leitmeritzer Hütte.
 J. Seiche, Wanderung d. d. Arbeitsgebiet d. Sektion.
 A. Feuchter, Beschreibendes u. Geschichtliches v. k. k. Bergbaue Schneeberg b. Sterzing.
- **Tübingen.** Jahres-Berichte 1907, 1909, 1910, 1911, 1912.
 8½ × 5½.
- **Satzung.** n. d.
 9 × 6 : pp. 4.
- **Turnverein Nürnberg.** Jahres-Bericht. 1912
 8½ × 5½ : pp. 8.
- **Villach.** Jahres-Bericht ü. d. xliii. Vereinsjahr 1912. 1913
 9 × 5½ : pp. 54.
- **Warnsdorf.** Bericht 1912. 1913
 8½ × 5½ : pp. 28.
- **Wartburg.** Mitgliederverzeichnis. (Satzung.) 1913
 6½ × 4 : pp. 12.
- **Wiener Lehrer Sektion.** Satzungen. 1911
 6 × 4 : pp. 8.
- **I. Jahresbericht.** 1912
 11 × 8½ : pp. 8. Typed.
- Magyar Turista Egyesület.** Alapszabalyai. (Rules.) 1911
 9 × 6 : pp. 6.
- Mountain Club of South Africa.** Annual no. 16. 1913
 9½ × 6 : pp. 158 : plates.
- This Club reached last year its coming of age. There are three sections, and in the Cape Town Section there are 371 members. The Annual grows in size and fully keeps up its interest. Besides in climbing itself, the Club takes interest in building huts, marking routes, organising general meets, and in the protection of wild flowers, etc. Among the articles in this volume are the following :—
- W. C. West, First ascent of Cathkin Peak.
 F. W. Fitzsimons, Snakes and mountaineering.
 Miss P. McKeand, A first ascent of Fountain Buttress.
 W. T. Cobern, An attempt to ascend the large chimney on Kloof Buttress.
- Norske Turistforenings Aarbok** for 1913. Kristiania, Grøndahl, 1913
 9 × 6 : pp. 266 : plates.

This contains :—

F. Schjelderup, Strandaatinden.

H. Tonsberg, Trollargyggen : Jutulerne under Skarfjeld, Skarfjeld fra nordost, langs Trollargyggen.

N. B. Grøndahl, Bestigninger i Hornungtinderne og Jotunheimen 1912 : Store Styggedalstinds nordvestryg : Best. av Galdhøpiggen nordvestegg.

Fra sekretærens inspections-reise sommeren 1912. Riingsbræen, Styggedalsbræen, Store Skagastolstind, Smorstabbæen.

Oe.A.-K. Führer durch die Mont-Blanc-Gruppe. Im Auftrage des Österreichischen Alpenklubs verfasst von Dr. W. Martin, Paul Reuschel, Dr. Richard Weitzenböck. I. Teil: Wegbeschreibungen mit 53 Wegzeichnungen im Text und 2 Tafeln, nebst einer Kartenpause zur Mont-Blanc-Karte 1 : 50,000 von Barbey-Imfeld-Kurz 1910. Wien, Verlag d. Oe. A.-K., 1913 6½ × 4 : pp. 252 : ill.

— 2. Teil : Literaturheft.

6½ × 4 : pp. 71.

This guide is very clearly printed on thin paper, light in weight, 6 oz. for the two volumes. These are in a case, which contains a sheet of transparent paper on which all routes are marked, and which can be superimposed on the Barbey-Imfeld-Kurz map of 1910. The first volume contains notes of the routes, with many sketches, on which they are marked. The second volume contains a practical bibliography under headings of peaks, etc. At the end of the second volume is a glossary, in four languages, of about 130 words in common use in describing ascents.

— **Dauphiné Führer.** See under Coolidge.

Russian Alpine Club. Ezhergodnik russkago gornago obshchestva. IX., 1909. Pod redaktsie F. C. Kracilnikova. Moskva, Kushperev, 1913 9 × 6 : pp. 120 : maps, plates.

Among the articles are :—

M. H. Zadner, Alpinism as culture and as sport.

R. Ronchetti, Cirque of the north branch of the Tseska Glacier.

C. Golubev, On foot, Piatigorsk to Elbruz.

F. Noelting, Arzi-choch-kort and Elia-tai.

A. v. Meck, Pic d'Aneto.

S.A.C. Catalog der Bibliothek. Zürich, Aschmann and Schöller, 1912

8½ × 6½ ; pp. 163.

S.A.C. Altels. Mitglieder-Verzeichnis pro 1913.

7½ × 4½ : pp. 7.

— **Association of British Members.** Inauguration of the Cabane Britannia on the Klein Allalinhorne Saas Fee, August 17, 1912. And Obituary Notices and Portrait of Clinton Dent. Guildford, Stent, 1913

8½ × 5½ : pp. 52 : plates.

— **Bachtel.** Statuten. 1908

7½ × 5 : pp. 8.

— Programm der Excursionen pro 1913.

6 × 4 : pp. 4.

— **Bern.** Jahresbericht 1912. 1913

8 × 5½ : pp. 62.

— **Burgdorf.** Clubtouren. 1913

5½ × 3½ : pp. 4.

— **Chaux-de-Fonds.** Bulletin annuel, no. 21. 1912

8½ × 5½ : pp. 188 : plates.

This contains, *inter alia* :—

Au Schreckhorn par l'arête nord.

L'Aig. du Géant et la traversée du Mont Blanc.

Histoire de la Section.

Catalogue de la bibliothèque.

- S.A.C. Einsiedeln. Statuten.** 1908
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 10.
 ——— Touren-Programm, 1913.
- $5\frac{1}{2} \times 3\frac{1}{2}$: pp. 3.
 ——— **Mythen.** Mitglieder-Verzeichnis und Exkursions-Programm. 1913
 $5\frac{1}{2} \times 4$. pp. 4.
 ——— Jahresbericht pro 1912.
 $11 \times 8\frac{1}{2}$: pp. 2, typed.
 ——— **Oberhasli.** Exkursions-Programm für 1913.
 5×4 : pp. 4.
 ——— **Oberland, Interlaken.** Statuten. 1907
 $7\frac{1}{2} \times 4\frac{1}{2}$: pp. 8.
 ——— Touren-Programm, 1913.
 $5\frac{1}{2} \times 3\frac{1}{2}$: pp. 1.
 ——— **Pfannenstiel.** Statuten. 1909
 $7 \times 4\frac{1}{2}$: pp. 4.
 ——— und Alpenklub "Okenia." Touren-Programm 1913.
 6×4 : pp. 3.
 ——— **Piz Sol, Ragaz.** Statuten. 1908
 $7 \times 4\frac{1}{2}$: pp. 7.
 ——— **Randen, Schaffhausen.** Statuten. 1904
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 6.
 ——— Programm d. Sektions-Ausflüge pro 1913.
 6×4 : pp. 3.
 ——— **Rhein.** Sektionstouren 1913.
 $5\frac{1}{2} \times 3\frac{1}{2}$: pp. 4.
 ——— Statuten. 1912
 $6\frac{1}{2} \times 4\frac{1}{2}$: pp. 7.
 ——— **St. Gallen.** Exkursions-Programm 1913.
 $5\frac{1}{2} \times 4$: pp. 4.
 ——— Statuten. 1900
 $8 \times 5\frac{1}{2}$: pp. 4.
 ——— Jahres-Bericht pro 1912. Gossau, 1913
 9×6 : pp. 33.
 ——— **Unterengadine.** Statuts della Secziun "Engiadina bassa." Coira, 1902
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 8.
 ——— **Wintherthur.** Jahres-Bericht pro 1912. 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 25: ill.
 ——— Statuten. 1903
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 3.
 ——— Exkursions-Program für 1913.
 $6 \times 3\frac{1}{2}$: pp. 4.
- Ski-Club Einsiedeln d. S. S. V.** Statuten. 1908
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 11-15.
 In Statuten d. Sektion Einsiedeln d. S.A.C., q.v.
- Svenska Turistföreningens Årsskrift.** 1913
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. viii, 404: plate.
- Soc. d. Alpinisti tridentini.** Bollettino, rivista bimestrale. Anno ix. 1912
 9×6 : pp. 138: ill.
 This contains, among other articles:—
 La sezione meridionale d. Gruppo di Brenta.
 Tra la Tosa e il Care Alto.
 Il gruppo di Sella nella toponomantica.
- Soc. d. Touristes du Dauphiné.** Annuaire no. 38. Grenoble, 1912
 $9\frac{1}{2} \times 6$: pp. 331: plates.
 Among the articles are the following:—
 Gignoux, Tête nord du Replat.
 S. Gayet, L'Olan.
 A. Coutagne, Quatre itinéraires de courses à skis autour d'Allevard.
 J. Rouz, Des deux côtés du Val d'Arly.
 E. Santi, Au Pic de Rochebrune.

Ungar. Karpathenverein. Jahrbuch, xl. Jahrgang 1913. Redigiert von Andor Marcsek und Julius Wiese. Igló, 1913

9 × 6 : pp. xii, 187 : plates.

This contains, *inter alia* :—

T. Posewitz, Aus alten Zeiten in der Táttra.

The first recorded ascent was Georg Buchholz' ascent in 1615. (This was translated and printed in the Jahrbuch for 1891.) The article treats of works up to 1830. There was considerable activity in Tatra exploration in the seventeenth and eighteenth centuries.

I. Gyorffy, Bibliographia botanica tatraensis.

E. Serényi, Wintertouren in der Hohen Táttra.

J. Dobrovics, Von Osten auf die Končysta.

B. Schmidt, Ein Ausflug in die Szuchabela.

J. v. Komarnicki, Die neuen Touren in der Hohen Tatra i. J. 1912.

The list includes :—*M. Baynarowicz*, I. Erst. ü. d. N.-Wand Kozię Czubę : *J. v. Komarnicki*, I. Erst. ü. d. N.-Wand Koprovasp. ; *Dénessp.*, I. Erst. ü. d. Ostgrat : *J. Barcza*, Wagnersp. I. Erst. ü. d. W.N.W.-Grat : *A. Grosz*, Roter Turm v. W. : *J. A. Hefty*, Webersp. I. Erst. ü. d. N.-Wand : *Karfunkelturm* I. Erst. ü. d. S.O.-Wand.

New Books, etc.

Abraham, G. D. Guideless Mountaineering. In Baily's Magazine of Sports, London, vol. 99, no. 639. May, 1913

9 × 5½ : pp. 328-332 : 2 plates.

Le Alpi. Natale e Capo d'Anno dell'Illustrazione Italiana, 1911-1912.

16 × 12 : pp. 40 : col. and other plates. Milano, Fratelli, 1912. L. 3.50

A very fine number, with many good coloured reproductions of Alpine paintings by Segantini, Carozzi, Cressini and others. The text is by O. Brentari.

Avebury, Lord. The scenery of Switzerland and the causes to which it is due. Fifth edition. London, Macmillan, 1913. 6/-

7½ × 5 : pp. xxxv, 491 : map, ill.

This is the fifth edition of this interesting work, first published in 1896.

It treats of the geology of Switzerland so far as that affects the scenery : is written in a popular, readable style, and is fully illustrated. The work, however, has not been brought up to date sufficiently. The map, for instance, does not contain the Simplon tunnel, and the bibliography contains Coaz' 'Lawinen' of 1881, but not later editions. There is the curious misprint in this bibliography of 'Zeit. des Cent. u. Oesteralpnevereins,' and Heer's 'Urwelt' is referred to only in the French translation. Many of the important works mentioned are not dated. These faults are unimportant, but should not have occurred in a fifth edition. The book is probably already well known to many readers of the ALPINE JOURNAL, and the reading of it would certainly add to the pleasure of a visit to Switzerland.

Baillie-Grohman, W. A. Sport in art. An iconography of sport during four hundred years from the beginning of the fifteenth to the end of the eighteenth centuries. London, Ballantyne [1913]. 42/- nett

12½ × 10 : pp. xxiii, 42 : plates.

A remarkable collection of reproductions of various hunting prints, many referring to chamois and ibex. Reproductions of prints of Saussure's ascent of Mont Blanc are given, and the question of the artists of these discussed. In the appendix are short biographies of the various artists and engravers whose work is reproduced.

Beraldi, Henri. Le Passé du Pyrénéisme. Notes d'un Bibliophile. II Ramond avant les Pyrénées 1. Paris, 1913

9 × 5½ : pp. 350.

This is a fresh volume in the series of delightfully written, privately

printed books on the Pyrenees and the history of their delineation written by M. Beraldi. This volume begins with the opening up of Switzerland to the tourist. The connexion with the Pyrenees is that Ramond, who wrote notes to an edition of Coxe's "Switzerland," was among the early tourists, and got his mountain inspirations first from Switzerland and travellers in Switzerland. In pleasing, readable style the work of Pfyffer, Grouner, Bordier, Coxe, Delaborde is described: and most of the book is devoted to Ramond's early life after leaving Strassburg. There are also many delightful extracts from Goethe and other contemporary writers, and charming criticisms thereon.

- Bielovucic, Jean.** How and why I flew across the Alps. In *Pearson's Mag.*, London, vol. 36, no. 1. July, 1913
9½ × 6½: pp. 24-27: ill.
- Browne, Belmore.** Conquering Mount McKinley. In the *Outing Mag.*, New York, vol. lxi, nos. 5-6: vol. lxii, no. 1. February-April, 1913
10 × 6½: plates.
- An Alaskan happy hunting ground. In *Outing*, New York, vol. lxii, no. 2. May, 1913
10 × 6½: pp. 194-209: ill.
- Coolidge, W. A. B.** Die Ueberschreitung des Berner Hochgebirges im Jahre 1912. S.A. Bl. f. bern. Gesch. Bd. ix. 1913
9 × 6: pp. 8.
- Coolidge, W. A. B., Duhamel, H., und Perrin, F.** Das Hochgebirge des Dauphiné. 4. durchgesehene u. l. autorisierte deutsche Ausg., hsg. v. Oesterr. Alpenklub. Wien, 1913
6½ × 4½: pp. 351.
- Cox, Charles.** A fortnight at the Lakes. In the *Treasury Mag.*, London, vol. 21, no. 129. June, 1913
9½ × 6½: pp. 220-228: ill.
- Deutsche Alpen-Zeitung.** XII. Jahrgang (1912/1913). II. Halbband (Oktober 1912-März 1913). Schriftleitung: Eduard Lankes. München, 1913
12 × 8½: pp. 289: plates.
- Among other articles occur the following:
- H. Steinitzer, Berühmte Leute in Chamonix.
 - Reproductions of various old coloured and uncoloured plates, including d'Albe's Paccard.
 - Friedr. Henning, Aig. du Tacul.
 - A. Schmid, Auf d. Dreitorsp. über d. Westgrat.
 - P. Preuss, Der Crozzon di Brenta.
 - Karl Haider, in Memoriam.
 - G. J. Wolf, Der Winter und die alten Meister.
 - H. Schwaighofer, Eine winterliche Zentralalpen-Ueberquerung im Ballon.
- There are coloured reproductions of the following pictures:—
Th. Riss, Tiroler Friedhof: *J. P. Junghanns*, Scheidende Sonne am Hochinsel; *J. Engelhardt*, Eggender Bauer: *A. Holzer*, Der Crozzon di Brenta: *W. Hasemann*, Winterabend im Schwarzwald: *T. Riss*, Tiroler Schütze: *H. B. Wieland*, Talfahrt: *Schmid-Fichtelberg*, Dämmerung am Untersberg.
- The illustrations are throughout of the usual excellent quality that one expects in this paper, and the articles of their usual varied interest.
- **Mitteilungen d. Deutschen Alpenzeitung.** 1913
This contains information as to alpine and winter sport clubs, huts, alpine literature, etc.
- Disentis.** Chur, Ebner, 1913
5½ × 7½: pp. 31: ill.
- Doman, A. Ella.** Lost on Mount Rundle. In *Blackwood's Mag.*, London, vol. 193, no. 672. June, 1913
9½ × 5½: pp. 776-789.

- Ferrure Tricouni.** Montreux, 1913
8 × 5½ : pp. 15 : ill.
Description of a new form of nail for climbing boots.
- Flemwell, C.** Chamonix. Pictured and described by G. Flemwell.
9 × 6½ : pp. 64 : 12 col. plates. London, etc., Blackie, 1913. 2/-
- Lucerne. Pictured and described by G. Flemwell.
9 × 6½ : pp. 64 : 12 col. plates. London, etc., Blackie, 1913. 2/-
These are the first two volumes of a series on Switzerland. As would be expected from the authorship, the illustrations are excellent. Those especially of the scenery of the Lake of the Four Cantons are beautifully done : and the flower pieces are charming, in keeping with the author's "The flower fields of Alpine Switzerland," already noticed in the Journal.
- France.** Les merveilles de la France. Paris, Hachette, 1913. 1 fr. each part
12½ × 9¾ : plates, maps.
No. 8. Les Pyrénées : pp. 169-192.
No. 12. Haute-Provence et Haut-Dauphiné : pp. 265-288.
No. 13. Savoie et Bas-Dauphiné : pp. 289-312.
No. 14. Le Jura et la Saône : pp. 313-336.
- Fremdenblatt vom Haslital**, nos. 1-3. June, 1913. Meiringen, 1913
15 × 10½ : ill.
- Grinlinton, Capt.** Notes on the Poting Glacier, Kumaon Himalaya, June, 1911.
In Records of Geol. Survey India, vol. 42, Pt. 2.
10½ × 7 : pp. 102-126 : plates. Calcutta : London, Kegan Paul, 1912
- Harriman, Alice.** Wilt thou not sing ? A book of verses.
7½ × 5. New York, Harriman Co., 1912
Contains verses on Mt. Rainier, Baker, and Tacoma.
- Hedin, Sven.** Trans-Himalaya. Discoveries and adventures in Tibet.
Volume 3. London, Macmillan, 1913
9 × 5½ : pp. xv, 426 : map, ill.
This volume contains account of travels from the source of the Indus and the ravines of the Sutlej : also the history of early travels in Tibet : and the substantiation of the author's claim to be the first European traveller to remove 'unknown country' from maps of the trans-Himalayan region.
- Henry, Abbé J.** Valpelline et sa vallée, soit Notions et Renseignements à l'usage des promeneurs, des montagnards et des touristes. . . .
6½ × 4½ : pp. 119 : map, ill. Turin, etc., Paravia, 1913
- Herzog, Dr. Theodor.** Vom Urwald zu den Gletschern der Kordillere. Zwei Forschungsreisen in Bolivia. Stuttgart, Strecker & Schröder, 1913. M. 11
9½ × 6½ : pp. xi, 270 : plates.
Between 1907 and 1912 the author spent many months in business travel and also in geographical exploration in Bolivia, exploring especially the Quimzacruz Cordillere, in which he did a considerable amount of climbing, including Jachakunukollo, about 6,000 m. high. The book is remarkably well illustrated.
- Hewat, Rev. Kirkwood.** Leisure hours of a Scottish minister.
7½ × 5 : pp. 265-275, Wanderings in Switzerland. Paisley, Gardner, 1913
The notes of the wanderings stop just before the author's visit to Chamonix, ending : 'Thereafter we journeyed by diligence to Chamonix.'
- The Hotels of Switzerland.** 17th Edition. Zurich, Bollmann, 1913
7½ × 4½ : pp. 240 : map, ill.
- Ittlinger, Josef.** Handbuch des Alpinismus. Bibliothek für Sport and Spiel.
7½ × 5 : pp. 217 : ill. Leipzig, Grethlein (1913). M. 3.80
The history and growth of climbing and its influence on climbers : the knowledge required of the climber : and on the craft of mountaineering, its equipment, technique, dangers, etc.
- Jack, Capt. E. M.** The Mufumbiro mountains, Uganda Protectorate. In Geogr. Journ., London, vol. 41, no. 6. June, 1913
9½ × 6 : pp. 532-550 : map, ill.
Sabinio, about 12,000 ft., is mentioned as a craggy and inaccessible

peak, covered with densest forest to about 10,000 ft., above which the bare rocks and precipices stand out. Karisimbi is the highest peak of the range, being 14,780 ft. It is a beautifully formed sharp cone, nearly always snow-covered.

- Jegerlehner, Johannes.** Petronella. Roman aus dem Hochgebirge. Berlin, Grote, 1912. M. 3
7½ × 5 : pp. 735.
- Klein, W.** Alpinismus und Charakter. Strassburg u. Leipzig, Singer, 1912
7½ × 5 : pp. 35.
- Larden, Walter.** Inscriptions from Swiss chalets. A collection of inscriptions found outside and inside Swiss chalets, storehouses, and sheds. Printed for the author at the University Press, Oxford, 1913
8½ × 5½ : pp. 208 : plates.
This is also published by the Oxford University Press, Amen Corner, London : price 15/-
- Lhotzky, Heinrich.** Im Reiche der Sennerinnen. Roman. Naturgeheimnisse Bd. 1. Ludwigshafen a. Bodensee, Lhotzky, 1913. M.150
7 × 4½ : pp. 197.
An interesting, simply written story of the Styrian Alps, to inculcate a love of mountain scenery and to stimulate the movement for its preservation.
- Lindauer, J.** Alpines Bücherverzeichnis. 4. Aufl. München, 1913
8½ × 5½ : pp. 160.
A list of books, maps and panoramas—very useful.
- Lurani, Francesco.** In memoria di Francesco Lurani Cernuschi. Privately printed, 1913
9¼ × 6½ : pp. 86 : portrait.
- Maderno, Alfred.** Korsika. Wanderbilder Nr. 298-301. Zürich, Orell Füssli, 1913
7½ × 5 : pp. 94 : ill.
- Malby, Reginald A.** With camera and rucksack in the Oberland and Valais. London, Headley [1913]. 10/6 nett
8½ × 5½ : pp. 312 : col. and uncol. plates.
This will greatly interest all who pay special attention to alpine flowers. It is the record of a botanist's tramps through parts of Switzerland, undertaken chiefly with a view to the examination of the alpine flora and its growth *in situ*. The book is profusely and excellently illustrated. The coloured plates of flowers are specially attractive.
- Mann, Josefine.** Was man für eine Schweizer-Reise wissen muss. Zürich, Orell Füssli, 1913. M. 2
7 × 5 : pp. 139 : 3 plates.
- (Monod, Jules.)** La vallée du Rhône et Chamonix. Genève, Atar (1913)
7 × 4½ : pp. 78 : map, ill.
— The Valley of the Rhone, Switzerland and Chamonix. (Geneva, Atar, 1913)
7 × 4½ : pp. 78 : map, ill.
- Chamonix et le Mont-Blanc.** Guide officiel. Nouvelle édition revue. Genève, Burkhardt [1913]
7½ × 4½ : pp. 125 : ill.
- Moriggi, Dr. Josef.** Von Hütte zu Hütte. Führer zu den Schutzhütten der deutschen und österreichischen Alpen. 4. Bändchen. Etschbuchtgebirge—Dolomiten—Gailtaler Alpen. Leipzig, Hirzel, 1913
6 × 4¼ : pp. xiv, 194 : maps.
- Norway.** Wonderful Norway. London, 1913
7¼ × 4¾ : pp. 47 : col. and other plates.
- O'Connor, V. C. Scott.** Travels in the Pyrenees, including Andorra and coast from Barcelona to Carcassonne. London, Long, 1913. 10/6 nett
8½ × 5½ : pp. xvii, 348 : map, ill.
A book of the eastern Pyrenees on both sides of the frontier. The author has lived long in the district and has written a book full of interest for history, description of scenery and of present-day life. The illustrations are very numerous and good. The mountains come in as a background only, not as a climber would see them, but a climber has other interests in such a district than merely climbing, and will be glad to have this account of the people and the illustrations of much most attractive architecture.

- Palmer, Howard.** To the apex of the Selkirks. In *Outing*, New York, vol. 62, no. 2. May, 1913
 10 × 6½: pp. 144-158: ill.
- Du Plessis, Cte. J.** L'Alpe enchanteresse. Salzburg, le Salzkammergut, les Hauts Tauern. Paris, Hachette, 1913. Fr. 4
 7½ × 4½: pp. vi, 232: map, plates.
 An itinerary, pleasantly written and illustrated, through Salzburg, Salzkammergut, Hallstatt, Hallein, Berchtesgaden, Pongau, Gr. Glockner, Gr. Venediger, Pinzgau. Full of practical and of general information.
- Posters.** La route des Alpes: The Matterhorn: Mont Blanc. P. L. & M. Ry., 1913
 ——— Norway. London, Polytechnic Instit., 1913
- Rosenow, Hermann.** Der Wintersport. Ein Handbuch. Bibl. f. Sport u. Spiel. Leipzig, Grothlein, 1912
 7½ × 5: pp. 174: ill.
 This contains, pp. 41-83, Ski, von Dr. Ernst Schottelius.
- The "Route des Alpes"** from Evian to Nice by the Alpine highway. Paris, P. L. & M. Ry., 1913
 9½ × 4½: pp. 9: map, ill.
- Société Dauphinoise d'Études Biologiques.** Bulletins. Grenoble, Allier, 1910-1912
 10 × 6½.
 This contains:—
 t. 2, no. 3, mars 1910. J. Offner, Les territoires de refuge de la flore alpine, pp. 43-48.
 t. 2, no. 6, juin 1910. Lassimonne, Notes de géographie botanique sur Uriage, pp. 126-166.
 t. 2, no. 7, juillet, no. 10, octobre 1910. L. Lavauden, Catalogue des oiseaux du Dauphiné, pp. 173-223.
 t. 3, no. 2, février 1911. M. Mirande, Jardins alpins et leurs buts, pp. 31-56.
 t. 3, no. 4, avril 1911. V. Piraud, La marmotte dans les Alpes dauphinoises, pp. 83-88.
 t. 3, no. 5-6, mai et juin 1911. M. Mirande, Jardin alpin du Lautaret, pp. 123-131.
 t. 4, no. 2, avril-juillet 1912. L. Lavauden, Le bouquetin les Alpes, pp. 67-116: ill.
- Spethmann, Dr. Hans.** Meine beiden Forschungsreisen im östlichen Inner-Island. Studien an Vulkanen und Gletschern. In *Mitt. Ges. f. Erdk.* Leipzig f. 1912. Leipzig, Duncker & Humblot, 1913
 9 × 6: pp. 62-80: plates.
- Switzerland.** La Suisse illustrée. Paris, Larousse, 1913
 13 × 10: maps: plates.
 To be published in 20 parts at 80c. each.
- Trachsel, Albert.** Quelques réflexions sur l'Oberland bernois. Genève, Richter, 1912. 50c.
 7 × 4½: pp. 103.
 A pamphlet on the damage done to the beauty of Switzerland by hideous hotels and unnecessary mountain railways: on the degeneration of the Swiss from contact with crowds of foreign tourists, and on various damaging alterations in their national habits.
- United States.** National Parks. Mesa Verde: Mount Rainier: Sequoia and General Grant. Season 1913
 9 × 6: pp. 24, 22, 24.
- Willis, Bailey.** Report on an investigation of the geological structure of the Alps. *Smithsonian Miscell. Collections*, vol. 56, no. 31.
 9½ × 6½: pp. 13: ill. Washington, Smithsonian Instit., 1912
- Wollaston, A. F. R.** Carstensch-top, New Guinea. In *Tijdsch. k. Nederl. Aardrijksk. Genootschap Deel xxx.*, no. 3. Leiden, 1913
 9½ × 6½: pp. 355-386.
- Wundt, Theodor.** Hinauf! Etwas zum Sinnieren für nachdenkliche Alpenwanderer. Den Freunden von "Spemanns Alpen-Kalender" gewidmet. Stuttgart, Spemann [1913]. M. 3
 9½ × 7: pp. 192: plate on each page.
 This has been printed in connexion with Spemanns Alpenkalender, which

has been annually noticed in the ALPINE JOURNAL. The excellent plates have appeared in the Kalender, which has been arranged annually by Frau Maud Wundt.

Zeitschrift der Gesellschaft für Erdkunde zu Berlin. 1912
10 × 7 : pp. 800 : plates.

Among the articles are :—

H. Spethmann, Forschungen am Vatnajökull.

M. Lange, Kibo-Besteigung.

Older Books.

Amoretti, Carlo. Viaggio da Milano ai tre laghi Maggiore, di Lugano e di Como, e ne' monti che le circondano. 6 ed. Milano, Silvestri, 1824
6½ × 4 : pp. xl, 373.

Baud-Bovy, Daniel. Poème Alpestre. Exposition nationale suisse Genève 1896.
7½ × 4½ : pp. 70. Genève, Eggimann, 1896

Baumgartner. Tausend Höhenangaben. 3. Aufl.
7 × 4½ : pp. 75 : plates. Wr.-Neustadt, Selbstverlag, 1892

Berlepsch, H. A. Die Schweiz. 2. Aufl. von "Berlepsch und Kohl," sowie 14. von "Berlepsch Schweiz." Zürich, Schmidt, 1875
6½ × 4 : pp. xxxii, 512 : maps, plates.

Black's Picturesque tourist of Scotland. Third edition.
6½ × 4 : pp. xii, 440 : maps, ill. Edinburgh, Black, 1843

Black's Picturesque guide to Wales.
6½ × 4½ : pp. xvi, 433 : maps, ill. Edinburgh, Black : Chester, Catherall, 1872

Bogg, Edmund. Two Thousand Miles of Wandering in the Border Country, Lakeland and Ribblesdale. Leeds, Bogg : York, Sampson, 1898
11 × 8½ : pp. xxii, 263.

Contains :—Climbs in lakeland by G. T. L[owe], pp. 161–169 : Gaping Ghyll, etc., by Lewis Moore, pp. 231–243.

Bonghi, Ruggiero. In Viaggio da Pontresina a Londra. Prima serie.
7½ × 5 : pp. 233. Milano, Lombardi, 1889

Brooks, Alfred H. The Mount McKinley region, Alaska. U.S. Geol. Survey : Prof. Paper 70. Washington, Govt. Printing Office, 1911
11½ × 9 : pp. 234 : maps, plates.

Contains, *inter alia*, short history of exploration and climbing of Mt. McKinley. First seen by Vancouver in 1794. First described by W. A. Dickey, a prospector, in 1897, and height guessed as 20,000 ft. and name of McKinley given by him. Compare articles under B. Browne under New Books.

Budworth, Jos. A fortnight's ramble to the lakes in Westmoreland, Lancashire, and Cumberland. 3rd edition. London, Cadell : Bath, Upham, 1910
9 × 5½ : pp. xxxi, 413.

Burger-Hofer, H. Panorama vom Gäbris bei Gais nach der Natur gezeichnet und autographirt von H. Burger-Hofer. Zürich, Hofer, n.d.
6 × 106.

Cagliani, A. Il passaggio di Bonaparte per il Grande Sant-Bernardo.
7½ × 5 : pp. 17. Bex, Droz, 1892

Casella, Georges. La technique alpine. In Sports d'hiver, Paris, t. 4.
12½ × 9½ : ill. *passim*. 1911–1912

— Various articles on mountaineering, guides, etc. ; see Sports d'hiver, 1911–1912, *passim*.

— Edward Whymper. In Sports d'hiver, Paris, t. 4, no. 1. 5 Oct. 1911
12½ × 9½ : pp. 9–13.

Chatenay, A. Caminade. Souvenirs de la Suisse. Paris, Sartorius, 1862
7¼ × 4¾ : pp. 239.

Claray, Jean Baptiste. Opuscule poétique dédié à mon ami, contenant. . . . un Itinéraire en chanson, à l'usage du voyageur qui visite les glaciers de la

- vallée de Chamonix; une Chanson descriptive des montagnes, des Aiguilles et des plaines qu'on aperçoit de la sommité du Buet; . . .
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 16. Genève, Bonnant, 1815
 Contains:—Itinéraire, Chanson descriptive, Hymne à M. H. B. de Saussure, Les filles de la Vallée de Chamonix, Les valaisanes.
- Clarke, Andrew.** Tour in France, Italy, and Switzerland, during the years 1840 and 1841. London, Whittaker, 1843
 $7\frac{3}{4} \times 4\frac{1}{2}$: pp. viii, 374.
- Constant, Lucien.** Quelques jours en Suisse. Paris, Jouaust, 1872
 6×4 : pp. 134.
- Cordier, S. F.** Excursion en Suisse. Privately printed: Ste.-Ménéhould, $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 76. Poignée-Darnauld, 1846.
- Cotta, Bernhard.** Geologische Briefe aus den Alpen. Leipzig, Weigel, 1850
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. viii, 328: ill.
- Coxe, Wm.** Lettres . . . sur l'état politique, civil et naturel de la Suisse; traduites de l'anglois, et augmentées des observations dans le même pays, par le Traducteur. Paris, Belin: Lausanne, Grasset, 1787
 2 vols., $6\frac{1}{2} \times 3\frac{1}{2}$.
- Davos as health-resort.** A handbook. Davos Printing Co. 1906
 $8 \times 5\frac{1}{2}$: pp. iv, 316: plates
 — Another issue. 1907
- Desaix, Général.** Journal de voyage du Général Desaix Suisse et Italie (1797). publié avec introduction et notes par Arthur Chuquet. Paris, Plon-Nourrit, 1907
 $7\frac{1}{2} \times 4\frac{1}{2}$: pp. lxxxviii, 305: portrait.
- Dubois, Albert.** Croquis alpins. Promenades en Suisse et au pays des Dolomites, avec une notice sur la flore alpestre par François Crépin. Mons, Byr et Loret, 1883
 9×6 : pp. 519: map, ill.
- Edwards, Amelia B.** Untrodden peaks and unfrequented valleys. 3rd edition. $8\frac{1}{2} \times 6\frac{1}{2}$: pp. xxv, 389: ill. London, Routledge: New York, Dutton, n.d.
- Edwards, Martin.** Arosa. Arosa, Kurverein, 1911
 8×5 : pp. 32: plates
- Eggen, J. L.** Mon rêve sur les moyens de rendre l'ascension au Mont-Blanc facile et agréable. Genève, Gruaz, 1835
 $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 17.
- Franc, Tom.** Extraits du journal d'un voyageur dans les Alpes. In La Liberté de penser, revue phil. t. 5, Paris. 1849
 9×6 : pp. 62-82.
- Frossard, Emilien.** Vue des Hautes-Pyrénées, prise du sommet du Pic du Midi en Bigorre. Toulouse, Delor, 1851
 12×95 : lithogr.
- Gilpin, William.** Observations, relative chiefly to picturesque beauty, made in the year 1772, on several Parts of England; particularly the mountains and lakes of Cumberland and Westmoreland. 2nd edition. 2 vols., $8\frac{1}{2} \times 5\frac{1}{2}$: pp. xlvii, 237, 268: tinted lithog. London, Blamire 1788
- Goethe.** Jery und Bätely. Ein Singspiel. In Sämtliche Werke, 7. Bd. Stuttgart, Cotta, n.d.
 $7 \times 4\frac{1}{2}$: pp. 102-122.
 A result of Swiss journey in 1779.
- Le Chalet, par Eugène Scribe. Opéra comique. Paris, Dentu, 1878
 $7\frac{1}{2} \times 4\frac{1}{2}$: pp. 51-99.
- Green, William.** The Tourist's New Guide, containing a description of the lakes, mountains, and scenery, in Cumberland, Westmoreland, and Lancashire, . . . being the result of observations made during a residence of eighteen years in Ambleside and Keswick. Kendal, Lough, etc., 1819
 $9 \times 5\frac{1}{2}$: 2 vols.: 10 plates, map.
- Hartmann, H.** Guide to Kandersteg and its surroundings. Bümpliz, Benteli, 1910
 $6 \times 4\frac{1}{2}$: pp. 32: ill.
- D'Haussez, Baron.** Alpes et Danube ou voyage en Suisse, Styrie, Hongrie et Transylvanie. Paris, Dupont, 1837
 2 vols., $8\frac{1}{2} \times 5\frac{1}{2}$.
- H[eldmann], Prof. [Friedrich].** Nouveau guide du voyageur dans les xxii Cantons Suisses, traduit d'un Manuscrit allemand du Professeur H. par

- R. W [althard]. Avec la nouvelle Carte de la Suisse de Mr. le Colonel Weiss. Berne, Bourgdorfer, 1822
 $6\frac{1}{2} \times 4$: pp. xxxiv, 431: map.
- Herman, André.** Vallons de l'Helvétie. Impressions de voyage. Paris, Ollendorff, 1882
 $7\frac{1}{2} \times 4\frac{1}{2}$: pp. ii, 205.
- Hewat, Rev. Kirkwood.** The ascent of Mont Blanc. In Half-hours at the Manse. Paisley, Gardner, 1904
 $7\frac{1}{2} \times 5$: pp. 183-195.
- Hodder, Edwin.** John MacGregor ("Rob Roy"). London, Hodder, 1894
 $9 \times 5\frac{1}{2}$: pp. xiv, 458: plates.
 pp. 130-134 reprint of MacGregor's letter to Times describing ascent of Mont Blanc with Albert Smith in 1853, with two sketches later issued coloured by Baxter.
 p. 139:—'MacGregor prepared a series of lectures on Mont Blanc, Vesuvius, and Etna, for which he drew a set of huge diagrams from the rough sketches he had taken abroad. It was characteristic of him that the first time he delivered his lecture on Mont Blanc it was to an assembly of shoeblacks and ragged children.'
- Hotels der Schweiz.** Verkehrsbur., Basel, 1913
 $11 \times 8\frac{1}{2}$: pp. 16.
- Hutchinson, Alex. H.** Try Cracow and the Carpathians. Second edition. London, Chapman and Hall, 1872
 $7\frac{1}{2} \times 4\frac{1}{2}$: pp. viii, 256: map, plates.
- Kronfeld, Dr. E. M.** Das Edelweiss. Wien, Heller, 1910
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Condensed reprints (in a peculiar phonetic spelling) of articles in books and magazines.
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- Williams, Helene Maria.** Nouveau voyage en Suisse. Traduit par J. B. Say.
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- Wilson, Daniel.** Letters from an absent brother; . . . Fourth edition.
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Items.

- Confessions of a convert.** R. H. Benson. 1913
The following on p. 25 is of some interest here, and may be compared with the experience of Mr. Benson's brother, quoted in the last number of the ALPINE JOURNAL:—'One of my brothers and I were ascending the Piz Palù, a peak of the Bernina range in the Engadine, and upon reaching the summit, after a very laborious climb from a little after midnight until eight o'clock in the morning through very heavy snow, my heart suddenly collapsed. I was dosed with neat brandy, but, owing to very severe training recently undergone at Cambridge to reduce my steering weight, this failed properly to restore me, and for about two hours I was carried along the arête of the mountain apparently unconscious: my brother, indeed, for the greater part of that time thought me actually dead. Now, although I appeared unconscious, and for a while was so, I was perfectly aware, even when my senses failed to act, that I was dying; I even began to speculate what would be the first phenomenon of the supernatural world that would disclose itself to me; and I fancied, owing, no doubt, to the suggestion conveyed to me by the vast icy peaks on which I had closed my eyes, that there would be a vision of the Great White Throne.'
- Der Königssee.** Fine photogravure, 12 × 17, published by Eugen Richter, Berchtesgaden. M. 6

Subject Index of Club Publications and of New Books.

- Africa :** E. M. Jack, Mufumbiro mountains.
— *Mountain Club of S. Africa.*
- Aig. du Géant :** S. A. C. Chaux-de-Fonds.
- Aig. du Tacul :** *Deutsch. Alpenzeit.*
- Alteichhorn :** *Budapesti Eg. Tur. Egyesület.*
- Ararat :** *Akad. A.-C. Zürich.*
- Aviation :** *D. u. Oe. A.-V. Alpenzeit.*
- Bernese Alps :** *Budapesti Eg. Tur. Egyesület.*
- Birds :** *Soc. dauph. d'études biol.*
- Bolivia :** T. Herzog.
- Botany :** *A. C. of Canada.*
- Botany :** *Soc. dauph. d'études biol.*
— *Soc. dauph. d'études biol.*
- Brenta :** *Soc. alp. trid.*
- Britannia Cabans :** *S. A. C. Assoc. Brit. Members.*

- Canada** : *Alpine Club of C.*
Cathkin Peak : *Mountain Club.*
Caucasus : *Akad. A.-C. Zürich.*
 — *Russian A. C.*
Chalets : W. Larden, *Inscriptions.*
Chamonix : J. Monod.
Corsica : A. Maderno.
Dalfazer Joch : *D. u. Oe. A.-V. Erfurt.*
Dreitersp. : *Deutsch. Alpenzeit.*
Eastern Alps : J. Du Plessis.
Ebenerjoch : *D. u. Oe. A.-V. Erfurt.*
Fiction : J. Jegerlehner, *Petronella.*
 — H. Lhotzky, *Im Reiche d. Sennerinnen.*
Geology : Lord Avebury, *Scenery of Switzerland.*
Gschöllkopf : *D. u. Oe. A.-V. Erfurt.*
Himalaya : Grinlinton, *Poting Glacier*
 — Sven Hedin.
Höllentalklamm : *D. u. Oe. A.-V. Garmisch.*
Hornungtinderne : *Norske Turistfor.*
Hungary : *Budapesti Eg. Tur. Egyesület.*
Huts : Morriggl, *Von Hütte zu Hütte.*
Iceland : H. Spethmann.
Java : *Akad. A.-C. Zürich.*
Kaltersp. : *D. u. Oe. A.-V. Erfurt.*
Mezzogiorno : *Akad. A.-C. Zürich.*
Mont Blanc : W. A. Baillie-Grohman,
Sport in art.
 — Oe. A.-K. Führer.
Mt. McKinley : A. H. Brooks.
 — B. Browne.
Mount Rundle : A. E. Doman.
Mt. Sir Sandford : H. Palmer.
Mountaineering : J. Ittlinger, *Alpinismus.*
Mountaineering : W. Klein, *Alpinismus.*
New Guinea : Wollaston, *A.F.R.*
Norway : *Norske Turistfor.*
 — *Wonderful Norway.*
Oberland : R. A. Malby, *With camera and rucksack.*
 — *Trachsel, Réflexions.*
L'Olan : *S. T. D. Ann.*
Ortier : *C. A. F. Sect. vosgienne.*
 — *Budapesti Eg. Tur. Egyesület.*
Partnachklamm : *D. u. Oe. A.-V. Garmisch.*
Pic d'Aneto : *Russian A. C.*
Pic de Rochebrune : *S. T. D. Ann.*
Piz Menger : *Akad. A.-C. Zürich.*
Pyrenees : H. Beraldi, *Le passé du Pyrénéisme.*
 — V. C. S. O'Connor.
Replat : *S. T. D. Ann.*
Rofan : *D. u. Oe. A.-V. Erfurt.*
Roskopf : *D. u. Oe. A.-V. Erfurt.*
Ruchenscharte : *Akad. A.-C. Zürich.*
Sagzahn : *D. u. Oe. A.-V. Erfurt.*
Schreckhorn : *S. A. C. Chaux-de-Fonds.*
Sella : *D. u. Oe. A.-V. Bamberg.*
 — *Soc. alp. trid.*
Ski : *S. T. D. Ann.*
 — H. Rosenow, *Wintersport.*
Ski : F. Schmall, *Skisport in Oesterreich.*
Sonnwendjoch : *D. u. Oe. A.-V. Erfurt.*
Switzerland : J. Mann, *Was man wissen muss.*
Tátra ; *Budapesti Eg. Tur. Egyesület.*
 — *Ungar. Karpathenver.*
Val d'Ary : *S. T. D. Ann.*
Vatnajökull : *Zeit. Ges. Erk. Berlin.*
Views : *Le Alpi.*

ALPINE ACCIDENTS IN 1913.

ACCIDENT ON THE BRENVA ROUTE OF MONT BLANC.

DEATH OF THE GUIDE JEAN RIEDER, OF EVOLENA.

MR. A. STUART JENKINS has kindly furnished the following details : On Tuesday, August 5, the guides Jean Gaudin and Jean Rieder, of Evolena, and myself left the usual Brenva 'bivouac' at 12.50 A.M. in fine weather. The snow and ice were in good condition, and, thanks to crampons, our party reached No. 6 of the illustration facing page 433 of the ALPINE JOURNAL No. 198 between 5.30 and 6 A.M. So far we had followed pretty much Mr. R. W. Lloyd's route of descent. Our order of roping was the following : Rieder first, Gaudin second, and I the last. A few minutes before crossing the ridge to make our way up the slope (5 and 4), the first man was engaged in skirting a wide crevasse surmounted by a large *sérac*, the other two being at a fair distance directly below him on the very steep slope. Step-cutting was here necessary. As Rieder got within some four or five mètres from the edge of the crevasse the mass of *séracs* forming the upper lip fell into the crevasse, provoking such a concussion that the corniced edge, or lower lip, on which he was standing unaware, broke, thus causing him to fall with an enormous quantity of snow. The *sérac* kept on falling for an unappreciable length of time after. The rope, weighted down by Rieder and the broken ice, dragged Gaudin in front of me up the slope, a distance of six or seven mètres and pinned him down to the edge of the crevasse, while I had anchored my axe in the snow and passed a loop of the rope around it. Then all became quiet. I drove Gaudin's axe (within my reach) next to mine in the snow, bound the rope fast to both of them, and rushed to disengage him. Next we looked into the crevasse where Rieder was evidently buried, as the rope plunged under an enormous quantity of *débris*. I let Gaudin down to try to recover the lost man (the two of us could not work together : one had to hold the other). After over an hour's incessant hacking, not only in snow but in *hard sérac ice*, Rieder's head was uncovered, but too late : all signs of life had already left him. One hour later a shoulder and an arm were excavated, also the trunk half-way down the chest. Gaudin, by this time exhausted, came up to where I stood and let me down in turn ; but after a little more work it became evident that only the two of us could not recover the whole body. The awkward space in which Rieder had fallen allowed no free play to the axe, and, besides, all the bits of ice hewn out had to be thrown or even carried where they would not roll back on the body. The situation was hopeless, and after a few

moments of hesitation we decided to descend to Courmayeur in all haste for help. As the rope had *not* been broken, we sectioned it and used the remaining part to gain Courmayeur at about 1 p.m.

That evening the weather turned bad, and the search party was unable to start. Wednesday it snowed the whole day on the mountains, and our men were obliged to turn back a little above the Brenva Chalets.

On Thursday the weather cleared, and twelve guides and porters, Gaudin and myself, slept at the Brenva 'bivouac.' The next day, notwithstanding one foot of fresh avalanchy snow, seven men (including myself) reascended the slope and recovered Rieder's body, whilst the other section of the caravan waited on the snow plateau to receive it.

At nightfall we carried him to Courmayeur, whence, Monday, an automobile took him to Sion, and a cart thence to Evolena.

This is the sad end of a young (30 years old) but *very promising* guide. I had engaged him for the first time a fortnight previously, and was already delighted with his mountaineering capabilities. He was a quiet, modest, and most obliging fellow, who will be much regretted by the few who have climbed with him. Fortunately, he was unmarried and the grief of his loss is limited to his mother, brothers, and sisters.

On March 16, at about 5.30 p.m., Herr Rudolf Mair, Herr **Karl Knoflach** and another member of the A.A.C. Innsbruck were returning from a ski expedition, and had almost reached the rocks below the Rauhenkopfhütte on the **Gepatschferner**, when Knoflach stepped back with his right ski and broke through the mètre-thick ice roof of a very deep crevasse into which he disappeared. The party was not roped—the day was cold and they were following a trail made the previous day. Knoflach was buried deep under the falling ice and all hope of rescue had to be speedily abandoned. Subsequent attempts by the Feuchten guides failed to recover the body, nor were the most desperate researches by his brother and a party of climbing friends, continued for several days, more successful.

On May 4, Herr **Schautze** of Dresden and Herr **Seitz** of Karlsruhe were killed on the **Grand Combin**. They left the Panossière Hut in doubtful weather at 5 a.m. and their bodies were found some days later in a crevasse below the Mur de la Côte. From the steps cut they appear to have reached the summit and to have slipped in descending.

ALPINE NOTES.

'BALL'S ALPINE GUIDE.'—Copies of the new edition (1898) of this work, price 12s. net, can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition (1907) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes those portions of Switzerland to the N. of the Rhône and Rhine valleys. Price 6s. 6d.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition (1911) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes 'those Alpine portions of Switzerland, Italy, and Austria, which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige.' Price 7s. 6d.

THE ALPINE CLUB OBITUARY.—Anderson, Tempest (1893).

THE 50TH ANNIVERSARY OF THE FOUNDATION OF THE ITALIAN ALPINE CLUB.—In the month of September of this year (from the 5th to the 12th) the Italian Alpine Club celebrates the 50th Anniversary of its foundation. A full programme will be found in the 'Rivista Mensile' for August. We offer our hearty congratulations to the Italian Club on the attainment of fifty years of continuous and brilliant success and all good wishes for its prosperity in the future.

MEMORIAL TO THE LATE CLINTON DENT.—The Committee of the Association of British Members of the Swiss Alpine Club have decided to collect subscriptions for a memorial to the late Clinton Dent. The memorial will take the form of 'A stone with an inscription outside the Cabane Britannia' and 'A memorial tablet at Zermatt.' Subscriptions must not exceed 10s. 6d. and should be sent to the Hon. Treasurer, J. A. B. Bruce, Selborne Lodge, Guildford.

MEMORIAL TO THE REV. CHARLES HUDSON.—We have to thank Mr. Sidney Young for the following note: On Sunday, July 13, 1913 (the anniversary of the day on which Edward Whymper and his

party started for the first ascent of the Matterhorn) a tablet was unveiled by Mr. Milne, Hudson's brother-in-law, in the English Church at Zermatt as follows:—'Beneath the Holy Table waiting for the coming of our Lord Jesus Christ now lie the earthly remains of Charles Hudson, Vicar of Skillington, Lincolnshire (killed on the Matterhorn, July 14, 1865), removed hither after resting for forty-six years in the Village Churchyard.'

C.A.I. CONSORZIO INTERSEZIONALE (SEZIONE TORINO, AOSTA, BIELLA, VARALLO) PER L'ARRUOLAMENTO DELLE GUIDE E PORTATORI DELLE ALPI OCCIDENTALI.—This Association has just distributed to the Guides on its roll a new badge (in lieu of the old one, which has been withdrawn)—'une plaque de métal argenté de 3 cm. et $\frac{1}{2}$ de diamètre sur le contour de laquelle est l'inscription "Club Alpino Italiano Consorzio Guide Alpi Occ." et dans le centre le mot "Guida" surmonté d'un aigle aux ailes déployées, au dessous l'écusson du Club Alpin Italien d'azur (en émail) avec une étoile d'argent à cinq pointes.'

CORRIGENDA. THE PHOTOGRAPHS OF THE LANGKOFEL GROUP AND THE MONT AIGUILLE IN 'A.J.' No. 199.—The photograph of the Langkofel Group from Pordoi Pass, reproduced in the February number 1913, is by Mr. Ralph S. Morrish, and not by Sir Alexander B. W. Kennedy, as stated, and

The photograph of the Mont Aiguille, from Chichillianne, reproduced in the same number, is by Sir Alexander B. W. Kennedy, and not by Mr. Ralph S. Morrish, as stated.

In 'A.J.' No. 200.—In the plate facing p. 199, the names of Donald McDonald and Donald McQueen should be transposed.

CENTRAL CAUCASUS.—The 'Ö.A.Z.' 1913, pp. 145–154, 165–168 and 181–187, gives a detailed account of the tours round Saramag carried out by the Schuster-Fischer-Renner party last summer, of which a short résumé was given in 'A.J.' xxvii. 233–234. The sub-titles are—

- I. The first ascent of Lagau-Choch.
- II. The first passage of the Kaltber Pass.
- III. The Kalper.
- IV. The Tepli Group.

Good illustrations of the village of Nar with the Adai-Choch Group, and of the magnificent N. face of the Tepli accompany the text.

THE 'Mitteilungen' 1913, pp. 131–133 and 146–148, give in some detail an account of the journey of the Munich climbers last summer, of which a short summary appeared in 'A.J.' xxvii. pp. 95–98. Both these articles give much valuable information as to the present conditions of travel.

NEW HUTS IN THE BERNINA.—A Club Hut is shortly to be constructed by the C.A.I. on the Fuorcla Crast' agüzza (3598 m. = 11,805 ft., *S. map*). Funds have been left by a deceased member for the purpose. The hut appears to be quite superfluous and the funds would be better employed in putting a room at the disposal of travellers in the custom house of Chiareggio (Val Malenco), as has been done with success at Malghera, Val Grosina.

The recently much enlarged Badile Club Hut (2538 m. = 8347 ft.) was opened on July 25. It is to be known in future as the Rifugio Giannetti.

The new Boval Club Hut—lately destroyed by an avalanche—is to be entirely reconstructed and is *announced* to be ready for occupation on August 1. Meanwhile the old hut is available.

The keys of the (old) Marinelli and Cederna Club Huts have been changed. The keys which no longer correspond are to be obtained from the same sources as formerly.

THE NEW ENGELHÖRNER CLUB HUT.—This hut is expected to be opened in August. The site is in the Ochsenthal, a lateral valley on the W. slope of the group, and is reached from Meiringen by the Kaltenbrunnensäge-Reichenbachalp or Rosenlauri in 5 hours. It contains berths for 24 people, and has been erected principally at the expense of the A.A.C. Berne.

NEW RAILWAYS AND ROADS.—The Lötschberg Railway which connects Spiez with Brieg *via* the Kandersteg Valley and a great tunnel under the Lötschberg was opened on July 15. This new link now makes this the quickest route from England to Milan.

The line Bevers to Schuls in the Lower Engadine was opened on July 1.

The primitive Swiss valley of Samnaun, a sort of enclave in Austria, has at last succeeded in getting a road built connecting it to the Finstermünz main road.

THE BOUQUETIN.—The attempt to re-introduce the bouquetin into Switzerland is likely to prove a success, as the small colony which was established two years ago in the Graue Hörner Group already numbers seven head and is expected to increase this season. The animals are reported to have become thoroughly wild.

REVIEW.

Den Norske Turistforenings Aarboek for 1912.
 " " " " " " 1913.

FOR one who has closely watched the growth of modern mountaineering in Scandinavia, and who made his first glacier pass in Norway forty-one years ago, it is a great pleasure to receive year after year a copy of the 'Aarboek' of the N.T.F. As I have the complete set from the modest little book of 1868 to the more stately volumes of recent years, and have also intimate knowledge of the country, acquired during twenty-one visits to the north, interspersed with campaigns in the Alps, it is an easy matter for me to note the gradual and wise development of the Club. Formerly it was a Tourist Club, the main objects of which were the exploration of wild mountain regions, the improvement of paths, the erection of bridges over glacier and other torrents, the building of substantial huts, and the general unravelling the secrets of Nature in weird districts which, without the facilities provided by the N.T.F., would, in many places, be still locked-up and closely guarded by Trolds and Jotuns. To-day, at any rate from the Continental-European point of view, the N.T.F. may with justice be termed an Alpine Club. As the year book, formerly spelled 'Aarboeg,' is now the 'Aarboek' and the papers therein for the most part are spelt in the up-to-date-and-not-to-be-found-in-any-Norsk-English-dictionary style, it seems to me that the principle of change might with good reason be carried a step, or even a staircase, further, and the 'Norske Turistforening' itself become Den Norske Alpen Klub. There are difficulties which would arise if such a change should be made, notably those to arise from the fact that there are numerous local clubs which are affiliated with the N.T.F. I am of course well aware of the existence of the 'Norske Tinde Klub,' a club which has probably a higher mountaineering qualification than 'The Alpine Club,' and very proud I am to wear the badge of honorary membership, but I do not think that the two clubs could clash in any way.

At any rate there is no one who recognises more than I do the grand and progressive work done in past years, and now being done by the enthusiasts who direct the fortunes of the Club. Few can appreciate more than the present writer the marvellous growth of mountaineering, as a sport, in Norway, and the ever-increasing number of first-class mountaineers. One at least, our friend Rubenson, has brought honour and renown to the Alpine Club by his Kabru expedition in distant Himalayas and by the ascent of Stedtind in Arctic Norway, and ere long surely his life-long friend Ferdinand Schjelderup, who a few years ago, but for the ban of Lord Morley, would have attempted with Rubenson the ascent of Kangchenjunga, will also bring credit to the Alpine Club?

The 'Aarbok for 1912' as well as that for 1913, fully maintain the high standard of recent years. The illustrations and the papers themselves are very good. In that of 1912, a sledge tour in Spitsbergen must have pleased Sir Martin Conway. Each volume introduces us to Trolldheimen, a grand but much neglected region of glaciers and frost-riven rocks a little south of Thronhjøm. The views alone should awaken the interest and stimulate the enthusiasm of mountain lovers of Christiansund and Thronhjøm, as they certainly bring many happy memories to the present writer. Dr. Kurd Endell's paper and seventeen pictures prove that neither Mr. Hastings and his companions nor Mrs. Le Blond quite exhausted the Alps of Lyngen fjord. The ascents of the Laxelvtinder, which many of us have had in our minds, were certainly the best peaks climbed by Dr. Endell. The Kaiser Wilhelmtind, a pretty little aiguille, is really a spur of a higher range, and consequently possesses no dominating character. H. Tönsberg, a first-rate and a very bold climber, who has, a few weeks ago, July 1913, made a magnificent ascent in Arctic Norway, has contributed a paper on Gjuratind, a jolly little glacier-begirt aiguille near the Romsdal. In a paper on Hardanger vidder a view on p. 87 causes me to shudder: 'Skjæggedal med taugbanen.' Yes! I do prefer the Jungfrau railway, and hope to use it one day and do not anticipate bergschrund difficulties.

As a variety there is a four-page paper on mountaineering in a motor-car. Two papers deal with a 'sketur'; beautifully illustrated they are too. Winter sports people, pray take notice of the new way of spelling adopted in the birthland of the sport.

Our fellow Alpine Club member Mr. Bicknell describes in brief, on two and a half pages, three fine expeditions. Surely the ALPINE CLUB JOURNAL can find space for what he *has* not told, but yet *can* tell us about them? The Secretary's strenuous tour of inspection of huts, bridges, &c., in the wilds is very interesting.

The 'Aarbok for 1913' partakes even more of a sporting character than that of 1912. This is saying much.

As is the case now in the Alpine Club, the long tale of years inevitably leads to the necessity for 'In Memoriam' notices. In this number the notices are of two stalwarts who have recently passed away, but who in their time did much to further the cause of the N.T.F. The Bergen railway has opened out a huge tract of country which up to a few years ago was only known to reindeer hunters. Now it is an easy matter to visit the glaciers of Hardanger Jökull and the Dømme vand—or dammed lake,—the great Märjelen See of Norway, and the waterfalls below. Readers are duly introduced to wild country both north and south of this mountain railway. H. Thomas takes us in mind up to and across the Swedish frontier, amongst wild crags and perchance untrodden glaciers where we would like to follow in person.

Probably the most interesting paper is one on 'The ascent of the Strandaatind in Arctic Norway by Schjelderup. The photo-

graphs and diagram well show the severe character of this terrible but yet beautiful aiguille. There are several portraits of Rubenson on the mountain, in one of which is also Schjelderup himself. Lastly there is a portrait of the English member of that party, perched more or less uncomfortably on a point of rock, with a pocket handkerchief tied round his head in lieu of the hat which had been blown 'over the hills and far away.' Another view reproduces the somewhat flamboyant, but still in the main truthful, picture of this mountain facing p. 58 in Professor Forbes's 'Norway and its Glaciers.'

Amongst other interesting papers attention must be called to that of the indefatigable and enthusiastic mountaineer, Ingenior H. Horn, the Secretary of the Club, to whom so much credit for the success of the N.T.F. is due. He was fortunate in finding the ice tunnel which a lateral stream has bored through the Riiings glacier. It was discovered many years ago by Thorgeir Sulheim, but when some years after Sulheim and I looked a long time for it we could not find it.

The two Journals should be read by all who intend to mountaineer in Norway.

WM. CECIL SLINGSBY.

PROCEEDINGS OF THE ALPINE CLUB.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W., on Tuesday evening, May 6, 1913, at 8.30 P.M., Sir Edward Davidson, *President*, in the Chair.

The *PRESIDENT* said: I am sure we shall all be very glad to-night to welcome amongst us Mr. Visser, the Hon. Secretary and a very distinguished member of the Dutch Alpine Club. He is known to many of us as a most expert and accomplished mountaineer, and he also represented the Dutch Alpine Club on the occasion of the Jubilee of our own Club, when he presented an address. We are delighted to see him here.

Now, I have to announce to the Club, although I dare say many of you have already seen it reported in the newspapers, the death of our colleague, A. H. Cawood. For many years past he has not been in the habit of attending our meetings, but he is known to all of us by name, at any rate, in connection with the first ascent without guides of the Matterhorn, which was rather an epoch-making event in the history of mountaineering, and was rightly considered at the time (1876) when it was made a very remarkable feat. The names of the trio who accomplished it began, curiously enough, with the same letter of the alphabet: they were Cawood, Colgrove, and Cust.

It was a very considerable surprise to the guides of those days to find that an expedition of this magnitude could be successfully carried through without professional assistance. We all extremely regret this loss, following so soon, as it does, that of our old friend Cust.

I have been asked to mention to Members of the Club that Messrs. Raeburn and Ling, our very enterprising guideless mountaineers, are organising a climbing expedition to the Caucasus, to begin early in July this year. Any Member desirous of joining the party is requested to communicate at once with Mr. H. Raeburn, 32 Castle Terrace, Edinburgh, from whom all particulars can be obtained.

I should also like to mention that the camps of the Alpine Club of Canada at Lake O'Hara and Robson Pass are being held in July and August this year, for the purpose of accomplishing the ascent of Mount Robson, and Members are notified that all particulars regarding these camps will be found in the *ALPINE JOURNAL*, February number, 1913, pages 123-124. The Alpine Club of Canada have been kind enough to invite several of our Members to be their guests at these camps.

Mr. G. YELD then read a paper on 'Some New Climbs at Cogne,' which was illustrated by lantern slides.

The PRESIDENT said: Mr. Yeld has given us a very interesting paper, and I am sure we should all like to hear what his 'compagnon de voyage,' Mr. Baker, has to say, if he would care to add a few words. He has obtained some very beautiful photographs of the tour, and it comes into my mind to thank him for the care that he has given to the work of hanging the pictures we see round the walls here to-night. The success of this Exhibition, which is already assured, will be due in great measure to Mr. Baker's care and skill.

Mr. G. P. BAKER said: The paper just read to us by Mr. Yeld describes his last three years' work in the Graian Alps and practically completes a lifelong work of some thirty-five years in that district—a labour creditable to him and to us also as a club.

It was my good fortune to be with him in 1881, and although I have visited the Graian Alps since that date it was not till 1909 that I was again able to join him, and then I stipulated that we should camp out somewhere near the base of the peaks we were to climb, in order to avoid the long walks which we were wont to make in the early hours of the morning from the inns to the snows before really beginning the day's work. For we had both reached the autumn of our lives, and did not wish to undertake the long hours of strenuous exertion which came natural to us in 1881. We accordingly provided ourselves with tents, a guide, a porter and a cook. When Mr. McCormick heard of our intended tour he expressed a wish to join us, a proposal to which we gladly assented. We pitched our camps near cowsheds, and in that way provided ourselves with milk and butter. The transport of our baggage first by mule and afterwards by portage we found to be expensive,

but so long as we experienced fine weather we made an ideal trio and had a most enjoyable holiday.

Mr. G. P. BAKER, in acknowledging the thanks of the meeting, remarked that the success of the Exhibition was not entirely due to him, but also to Mr. Sydney Spencer, to the Hon. Secretary and to a distinguished R.A., a member of the Club.

The PRESIDENT said: We are all extremely obliged to our friend Mr. Yeld for the most interesting lecture he has given us and for the very beautiful views he has thrown on the screen. They are some of the finest I have ever seen displayed in these rooms.

I think that we all feel that the constancy shown to the Graian Alps by Mr. Yeld, who has gone back to them year after year, is certainly deserving of the gratitude of the Club, and that we owe him once again our hearty thanks for adding one more to the many interesting papers which he has given us on this district of the Alps, which he has in so especial a manner made his own. I move a very hearty vote of thanks to Mr. Yeld for his very delightful paper, and I am sure you will all carry it with acclamation.

The motion was carried by acclamation.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W., on Tuesday evening, June 10, 1913, Sir Edward Davidson, *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, viz.:—Messrs. J. W. S. Brady, H. C. Parker, H. M. D. Watson, and L. R. Wilberforce.

The PRESIDENT said: I deeply regret to have to announce the death of our dear old friend and valued Honorary Member, Monsieur GABRIEL LOPPÉ, who has been a Member of the Club since 1864. He was born at Montpellier in 1825 and was, therefore, in his 88th year at the time of his death, but he was so fresh and vigorous in mind though not, of late, in body, that even at that comparatively advanced age one feels that his death was in many ways premature. He was ever faithful and bore true allegiance to the Alpine Club. He never forgot that the Club had in its early days, by lending him their rooms for his exhibitions and otherwise, rendered him assistance when he was a young artist struggling into fame. This he repaid again and again in many ways, and several of his pictures are now hanging on our walls in token of his generous recognition. As a painter of snow and ice he is, and will long remain, without a peer: he first revealed to the non-mountaineering world the secrets of the upper snows and of the ice-falls. He was the first to capture and reproduce on canvas that most elusive of all shades of colour, the imprisoned light of the ice crevasse. As has been well said by one of his old friends who is here to-night 'he first depicted the mysterious light of the far off sunrise playing on the highest snows of Mont Blanc'—the glow of the 'awful rose at dawn.'

A man of exceptional constitution and physique, his nimble fingers would ply his brushes unremittingly with results that repaid tenfold all the toil and pains he took, while his companions could scarce endure the icy breath of the mountain blast. In the Alps he subordinated mere climbing to the claims of his art but he was a most experienced and accomplished mountaineer. He crossed the Strahlegg from Grindelwald in 1845 and made in 1873 the first passage of the Col des Hirondelles and the first ascent of Mont Mallet, both with his great friend, Leslie Stephen. He made many ascents of Mont Blanc, chiefly for artistic purposes and had crossed numerous passes in all parts of the Alps. If few new peaks stand to his name, it was not because opportunity or capacity, but rather because desire was wanting, for he was no mere peak-bagger. François Couette (dit 'Baguette') and Benoît Simond, commonly known as 'Benoni' were his favourite guides; the latter still lives and journeyed from Chamonix to Paris to pay a last tribute of respect to his old employer. Loppé was an admirable raconteur, a witty and amusing talker whose conversation sparkled with epigram, and was pungent with gentle satire, and a most delightful letter-writer.

It is a great loss that his devotion to pictorial art left him no time to develop and to display to the public at large that literary skill with which nature had endowed him. His solitary article entitled 'Une semaine au col du Géant,' in the *Annuaire* of the French Club of 1877, shows great charm of style and phrase and makes us long to have had more of his writings. He was a delightful companion. This has been exquisitely expressed by Leslie Stephen in the dedication to Loppé of the second edition of his 'Playground of Europe,' which is a grand testimony of his appreciation of and affection for his old friend. Loppé was the most loyal, generous, and staunch of friends and, to those of us who knew him well, Chamonix, now that he is gone from it, will seem a different place. For the kind and sympathetic lady who contributed so greatly for over thirty years to the happiness of his later life and who is now left to mourn his loss, our sincerest and fullest sympathy goes out in her affliction.

The Rules for the Winter Dinner were put to the Meeting and agreed to.

Mr. G. E. HOWARD read a paper entitled 'Scrambles in Sinai' which was illustrated by lantern slides.

Mr. MUMM said: In the absence of anyone who has been there it may be of interest to refer to Sinai in the previous history of the Club. But first, I must congratulate the reader on his bright and lively paper. The incidents have been put before us in the most vivid and entertaining way. Sinai has been visited by other members on three previous occasions. Chichester Hart was there some years ago partly for botany and partly for climbing. There is an account of this in the publications of the Palestine Exploration

Fund. St. John Tyrwhitt visited it fifty years back. He described the journey in 'Vacation Tourists' and there is a brief reference to it in the ALPINE JOURNAL. The first and I believe the only other occasion on which that part of the world was visited by a member of the Club was by the present Master of Trinity, Dr. Butler. His qualification for the Club consisted of three peaks, Monte Rosa in 1856, Mount Sinai, and Mount Parnassus, a suitable qualification for a climber, a theologian and a scholar.

Mr. ARTHUR SUTTON said: It is a great pleasure to be allowed to be here as a visitor and to have listened to the interesting lecture. It was most unexpected meeting with Mr. Howard in Sinai, coming so suddenly upon him in the Wady Maghara. His way of roughing it made us rather ashamed of the luxury in which we ourselves were travelling; our tents were fitted up by Cook's, and that is sufficient to show we had everything needed for our comfort. We had a delightful time but we did not go in for climbing. I never had experienced anything to compare with the interest of Sinai; a marvellous climate, very hot by day and cold by night, with a remarkable crispness in the air. Sinai is unlike anything I have seen elsewhere for the colour of the rocks, and the almost entire absence of vegetation is most striking. You have heard so much this evening that I do not think there is anything I ought to add. I am sorry Mr. Howard and Mr. Eaton did not pursue their journey a day or two further to Mount Sinai (Jebel Sulsafa), which was to my mind the most interesting spot in the peninsula. After climbing a steep pass you come to the crest of the hill and then for three miles the valley slopes gently downhill and Mount Sinai is seen rising sheer up from the plain. One could imagine an enormous number of Israelites camping in the broad valley at the foot of the mountain. I most sincerely add my thanks to those already expressed for the most interesting lecture we have had to-night from Mr. Howard.

Mr. SOLLY asked what months of the year one should go to Sinai.

The PRESIDENT said: One result of this most interesting paper is that, after what Mr. Howard has said in their praise, there will be a boom in rubber shoes in Alpine circles to-morrow. I should like to ask, in this connexion, whether Tirolese Kletterschuhe or Scarpe-di-Gatto might not be found equally useful footwear for the smooth rocks of Sinai. I am not myself familiar with the district which has been so graphically described to-night, although I am very glad to have the privilege of proposing a hearty vote of thanks to Mr. Howard, and I particularly desire to associate with that vote one equally hearty to Mr. Sutton, whom we are pleased to welcome here, for the beautiful coloured photographs which he has placed at Mr. Howard's and so at our disposal.

Mr. G. E. HOWARD said: Mr. E. N. Buxton made an expedition to Sinai. With regard to the best time of the year, the rain falls at the end of December. It is cold at night then, especially high

up. Probably February and March are as good as any months in the year. With regard to foot-gear, I thought of taking out climbing shoes, but Mr. Buxton thought rubber best. It must be special rubber. I know only one man who keeps it and he charges three guineas for a pair of soles, but they are very durable. In the gullies there is much scree and sharp stones which would probably cut Tirolese shoes. I am glad the President thanked Mr. Sutton for the loan of his slides. Personally I am very grateful to him.

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SOME DOLOMITE CLIMBS.

By H. C. BOWEN.

(Read before the Alpine Club, March 4, 1913.)

LESLIE STEPHEN called the Dolomites 'the fairyland of the Alps,' but that was when the peaks were still untrodden, and the glamour had not yet left those strangely fantastic pinnacles of rock. It is no longer so, and what I shall say to-night cannot, I fear, recall a memory of that magic time of which he wrote. I shall put before you merely a plain account of climbing which includes no new expeditions, and is not noteworthy for any startling adventures. As such it surely needs some justification or apology. I regret to say I can offer you neither the one nor the other. I cannot even state, as our senior Vice-President once did in a paper he read on the Dolomites, that he was bringing them up to date. For the climbs in which I bore a humble part were ones that have been written about and described to the Club once and again. Nor does the district cover any very wide range: it is limited to the Primiero group (the San Martino peaks), the Marmolata, and the Rosengarten Dolomites. But the expeditions are, I believe, representative of Dolomite peaks at their best—at least so I am given to understand by Broome, who arranged the plan of campaign for Rolleston and myself. For the two of us had never been in the country before, and we were glad to avail ourselves of the opportunity of seeing it under the auspices of one who probably has a more intimate acquaintance with Dolomite climbing than any living member of this Club.

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Our number was made complete by the addition of Professor Corning, whose unfailing good temper and knowledge of the country and its inhabitants smoothed over many a difficulty. We were a personally-conducted party: our guides were provided for us, we were told what peaks we had to climb, and all that we had to do in the matter was to carry out our instructions to the best of our ability. Have you ever seen one of those men with a troupe of dogs which he puts through paper hoops or the like at a circus or a London music-hall? A crack of his whip, and they have to go through their performances. At times the little dogs object: they are tired, or think they have done enough: perhaps they think they will refuse the next hoop. But the whip cracks again, and off they go. It was somewhat the same with us. I remember two of us got down from the Vajolet Thürme a little time before the conductor appeared on the scene. The wind was all wrong, and we talked seriously of going straight back to Karer See that evening, instead of waiting for the Rosengarten S.E. face, which had been arranged for us for the following day. We decided to go: little dogs are brave enough when there is no trainer or whip near them. We waited, however, for the others, and with the usual result. Instead of walking back to Karer See that afternoon, we cheerfully went and ordered dinner in the hut. Not a word was said of the weather: the route up the Rosengarten was discussed, and the time of the start arranged. What mattered it that it rained all night and the next day was hopeless? On that occasion Broome was wrong about his weather, but, generally speaking, I am bound to admit he was an excellent prophet. Some of the expeditions at San Martino were got in between the worst days of a thoroughly bad season: but only once during a whole month were we caught on a mountain in a thunderstorm, when it was due probably to obstinacy on the part of all of us, added to the fact that a German lady with one guide was ahead, and had started the climb before we put on Kletterschuhe. A rock-climber of the younger school of to-day, with whom I have been on several occasions in the English Lake District, made his first acquaintance with Dolomite rocks this last summer. He climbed two of the Vajolet Thürme, the Fünffingerspitz by the Schmidt Kamin, besides making some other expeditions which may fairly be ranked as first-rate. He is, I think, an exceedingly fine climber on English rocks, brilliant, and yet perfectly safe, and I was curious to hear his opinion of the Dolomites as compared with them. He told me he considered the Dolomites to be

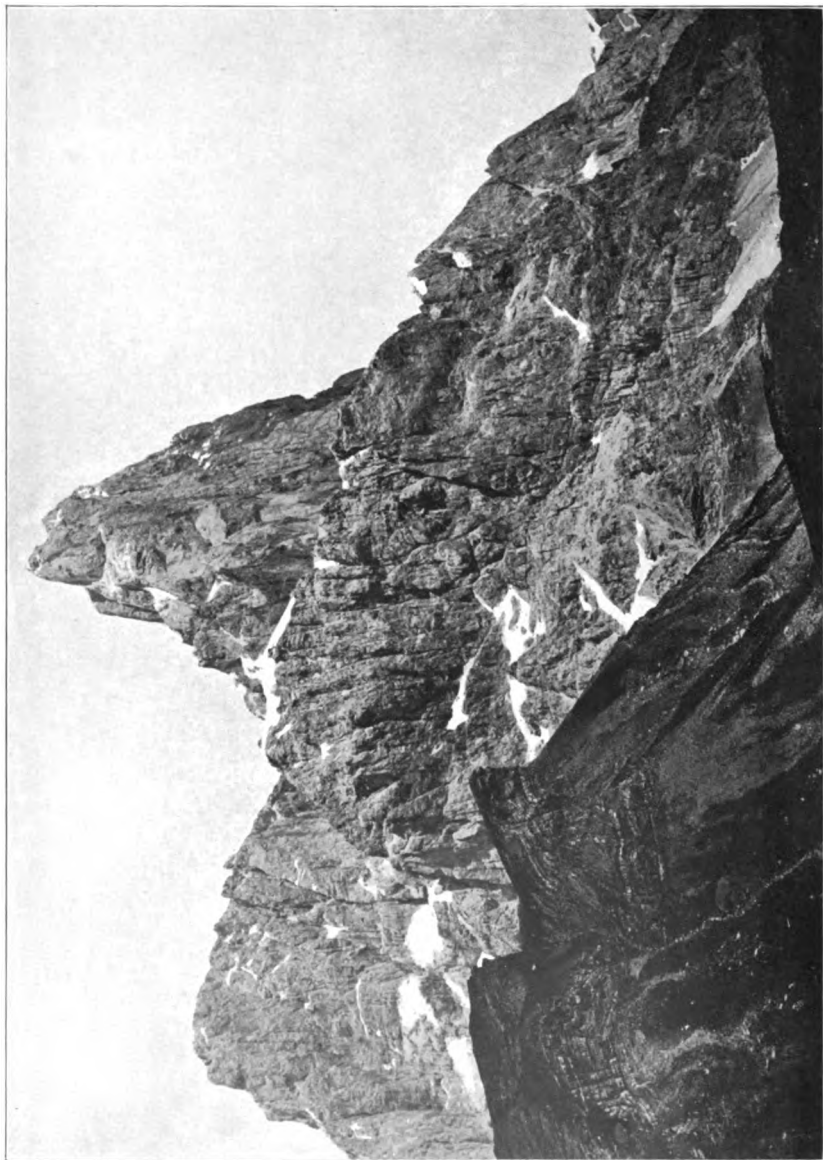
'easy and dangerous' because of the rottenness of the rock—an expression of opinion which rather surprised me : like others who have had no previous experience of the Alps, he expected to find rocks as clean and as solid as one gets on the Pillar Rock or Scaffell. It may fairly be urged that, if one excepts the Chamouni Aiguilles, the Dolomite rock is sounder than most of the great climbs of the Swiss Alps. Given an easy Dolomite face, and you will find it rock-strewn and crumbling, there as elsewhere, but on the good climbs there are no easy faces, and this, I think, in a great measure, sums up the situation.

I trust indulgence will be shown me by Dolomite experts here this evening if I preface my paper with a few remarks, which have no pretence at being scientific, on the character of the climbing found in that district. The limestone rock weathers very smooth, and the hand- and foot-holds are plentiful and are always, or nearly always, of a satisfactory character : hence it is that faces and couloirs which look appallingly steep often turn out to be perfectly safe and comparatively easy. But it also follows that the main line of attack is generally a kamin, deeply cut in the face of the mountain, and smooth and constricted from the method of its formation. Now there are many members here who are excellent at such work—I mean the task of worming their way up a chimney by the aid of their legs and the muscles of their backs, and other portions of their anatomy which may be useful in such cases. I confess I am not such a gifted individual : balance and steadiness on arêtes and face-climbing is one thing, but to struggle in a jammed position for some ten minutes, and then to find that one has, with enormous exertion, risen about ten feet, and has used up all one's strength and pushing power, does not give the same pleasure to me, at any rate, as more open climbing. Then again there are the Dolomite stones : they are found everywhere : the guides kick them down, you kick them down yourself on the man below. They are a constant source of trouble, annoyance, and sometimes danger. Broome, I believe, used to carry several spare garments in his hat to protect himself, and the genial professor made his the receptacle of all sorts of odds and ends. We found one day when the wind blew it off his head that he had lost tobacco pouch, a couple of pipes, and what he had appropriated for a quiet lunch—some bread, and that unspeakable article of food 'salami.' But a greater danger—a danger that is ever present, *et nullo vacuis tempore deficit*—is the arrow that flieth by day, the stones that a rock-peak of the Dolomites is sometimes in the habit of sending down.

It is, I grant, hardly a general feature of these peaks, and it would be a mistake to compare them in wickedness with, say, the E. or W. faces of the Matterhorn in the early afternoon, or the Marinelli couloir on Monte Rosa, but I noticed a few on the Cima della Madonna, and I can never forget, on the Südwand of the Marmolata, where I was generally left by myself at the bottom for long intervals at a time, how the stones came humming down. They were going too fast to see them: it was merely the swift ping of a bullet, or a mosquito flying past one's ear—where, one knew not—one could only plaster oneself against the rock and trust to luck. I must have counted thirty or forty of the humming-birds as they passed me that morning. And lastly, among minor discomforts, I may mention the long delays and waits which Tyrolese guides indulge in: allow as much as you like that the climbing difficulties are great, but surely there is no need for each guide to enter into a long discussion with a comrade of the difficulties he had to contend with, and the way he got over them, before he thinks of bringing up his Herr to the place he has got to himself.

But let me say at once that this is no reflection on the ability of our men. For the Dolomite guide can climb his own rocks all right, that is, at least, if he is an expert like Pompanin, or Scalet from San Martino, or the man who took charge of me, Celestino di Zanna, of Cortina, who had had less experience than the others, but was a fine bold climber, quick and absolutely safe. Pompanin's leading up the Marmolata Südwand was a splendid exhibition of courage and skill, and Scalet on the Campanile and Cima di Val di Roda, where he led throughout, was almost equally good.

We started at San Martino, where we spent a fortnight. After a few preliminary walks up minor peaks, the two tyros, Rolleston and myself, were introduced to our first big climb, the Rosetta, by the S.-W. wall. It began simply enough—an easy scramble up steep but not difficult rocks, and then we got into the inevitable kamin, in which we continued up to the summit. It went all right, but there was one rather desperately difficult part of some 20 to 30 ft., with an overhang at the top which necessitated a traverse out on to the right wall with poor holds. I saw the leader surmount it—a privilege, by the way, that one does not often get in the Dolomites owing to the danger from stones. My own recollection of the place is that one was extremely glad to get a grip on the piton which some previous party had fixed in the rock, and use it first as a hand-hold, and afterwards a foot-hold. One came out on to a flat



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CIMONE DELLA PALA

summit with an easy walk down to the Refuge on the other side, a characteristic feature of many of these climbs: we were 2½ hours from the shoulder to the top.

The Cimone della Pala, the highest peak, with the exception of the Vezzana, of the San Martino group, is in many ways the pleasantest scramble in that neighbourhood. Of course we traversed it from N.-W. to S.-E.: it was an article in our conductor's creed that no mountain was to be ascended and descended by the same route. Apart from some strenuous subterranean struggles in one kamin, it was a true face and arête climb, sensational, but without any serious difficulty. The summit ridge is very like some in the Swiss Alps.

The Cima della Madonna and the Sass Maor were the next part of the programme, but the slowness of progression caused by our party of eight, with a good deal of ice which we met with in the descent of the first-named, caused us to give up the Sass Maor, and be content with the traverse of the Cima alone. We ascended by the Phillimore route from the S.; a long sinuous chimney which afforded good and continuous climbing but, as far as my recollection serves, had no place of superlative difficulty. We came down by the Winkler Kamin—a pleasanter way than the reverse would have been. This chimney is tremendously steep and overhanging, and a slung rope gives one all the sensation required without the hard physical exertion of pulling oneself up by means of tired muscles.

We were beaten on the Pala di San Martino owing to a thunderstorm which caught us on the exposed rock-face, and allow me to tell those who have never been in the Dolomites that iced rocks covered with falling snow are very unpleasant in Kletterschuhe, especially with a tired lady in the party. Under such circumstances even good guides among these Italians are inclined to lose their heads a little, and their mutterings and grumbles increase the interest of the situation.

Our great climb at San Martino was the traverse of the Campanile and Cima di Val di Roda. It was, as usual, for at any rate half the way up the Campanile, a chimney climb on the face of a great precipitous wall, the steepness of which to the climber in the deep-cut kamin was very impressive. In the course of our progress we came to a place not uncommonly found in limestone rock—viz. a hole which looked about twelve inches square. Scalet, with a terrific struggle, managed to get through; then came Rolleston's turn. He is, as I daresay most of you know, a man of some size. After examining the place at close

quarters, he decided he could not get through, and that nothing would induce him to try: the alternative was to come up outside with one or two ropes attached. We other amateurs decided to do the same. Such tactics in a climb in Wales or the English Lakes do not matter very much, when one generally has the day before one, and time is not of supreme importance, but it is a little different in a climb on a larger scale. We lost our way at the top of the kamin, and wasted another hour in recovering it before reaching the forcella between our peak and the lower Campanile. One could not really find great fault with Scalet. He had been there only once before, and the route is very tricky at that point, diving behind a rock, and up a comparatively easy couloir completely hidden from view. By a fine effort he scaled the perpendicular rock-wall to the left, and we were able to pick up the lost route again. At the forcella we thought our difficulties were over, but on the contrary came to the most strenuous portion of the climb—a narrow right-angled cut in the rocks which led up for about 100 ft.: the holds were small and unsatisfactory, and, coming as it did after long and continuous exertion, it tried one's powers considerably. We reached the summit of the Campanile at 3.15 P.M., slung down the steep rocks to the gap between it and the Cima, and, after some more hard work up the vertical N. face of the latter, arrived at its summit at 5.15, the usual time apparently for the termination of most of our climbs in 1912. But Zagonel's boys with our boots were waiting for us, and we were back at the hotel by 8 or thereabouts.

A long drive took us over from San Martino to Canazei, just beyond Campitello. Whatever else was to be done, at any rate the Marmolata S. wall must be climbed. I need say little of this magnificent climb. You have had it described to you by Broome in a paper read before the Club, and can see the account in the pages of the *JOURNAL* (xxiii. 373-5). He enjoys the unique distinction of having been up it three times, and, though not making the first ascent, he knows better its difficulties and its charm than most people. My share in the climb on this occasion was a humble one. I was put at the tail of a long procession of eight, four guides and four amateurs roped two and two, and the day was spent in protracted self-communings, with intervals of rapid and energetic climbing up chimneys: say fifty minutes of the former to ten of the latter. The work up to the first terrace was the most serious of the whole climb, and occupied four hours, 6.45 A.M. to 10.45. I think we must have gone very slowly: Broome, in 1906, took only 2½



C. E. Shea, photo.

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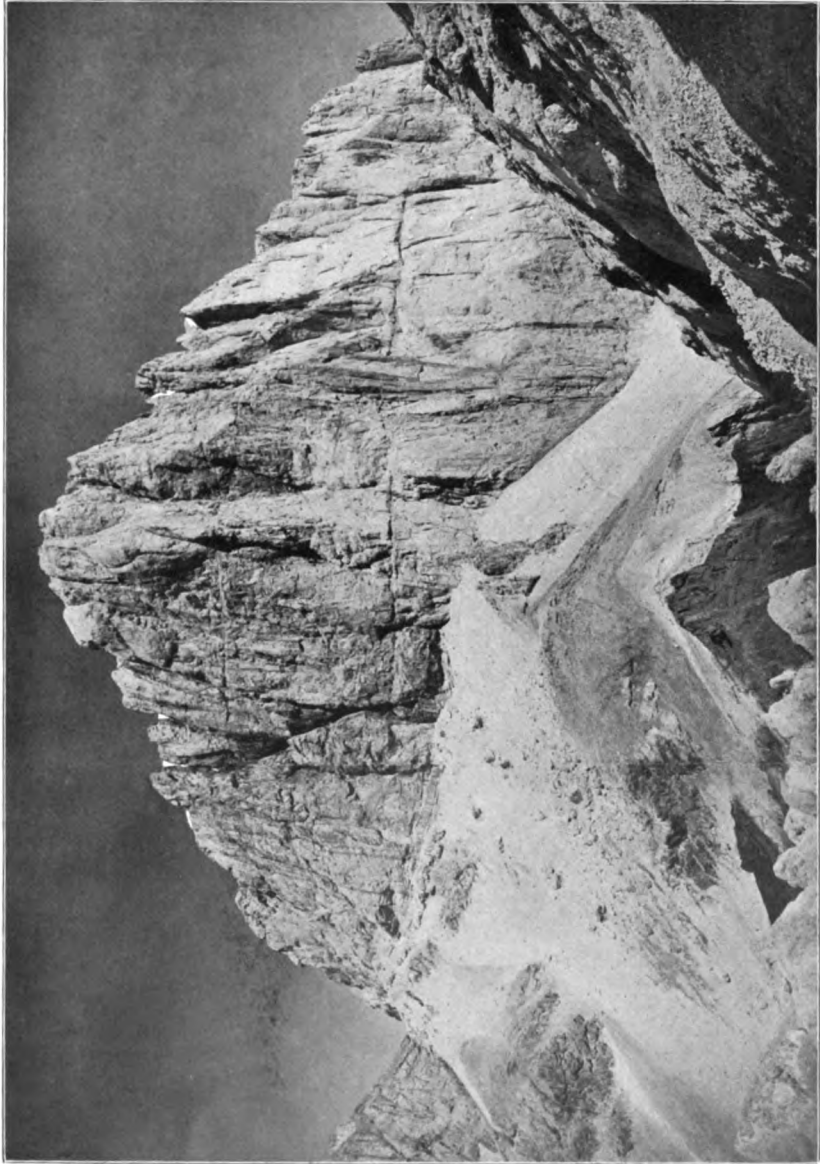
CAMPANILI AND CIMA DI VAL DI RODA.

hours here. When one looked over from there on to the scree from which we had started, it seemed absurd that we had made such little progress. This portion of the climb was to me, I confess, somewhat unattractive. Owing to the steepness of the gradient, and the depth of the chimneys we came up, no means were afforded either of seeing the way before us or of enjoying views of our surroundings. From here onwards the climb became more interesting. We lost our way to start with after this first halt, but after a few desperate traverses regained it. It lies up in the direction of the great couloir until a traverse has to be made to the right. Pompanin had forgotten the exact place where the turn is taken and a slight descent made afterwards. Stones fall down the great couloir, but where we were appeared to be quite safe, as their line of descent lay considerably to our left, and during this part of the climb I never saw or heard one. The rocks were nearly as steep as before, but the climbing was more open in character and easier. Two hours and a half brought us to the second terrace, and the same time to the summit. The higher one went the easier the rocks became, but the snow and ice upon them required considerable care, and we were longer than would have been the case under better conditions. I can to a considerable extent understand the eulogies that have been bestowed upon this climb. The surroundings, when one can see them, are magnificent, and there are few rock-faces which can compare with this side of the Marmolata either in size or steepness. The greatest difficulties are to be found at the start, and up to the first terrace, consisting of a series of steep smooth chimneys which tax all one's resources; in some places there are overhangs, but for the most part, when they come, the holds are good and sufficient. The ordinary route up the Marmolata by which we descended to the Contrinhaus shows the great care and expense that the D.O.A.V. goes to to ensure the safe conveyance of its members. All down the mountain a succession of iron steps and staples have been driven into the rock, and a steel rail with handholds like bicycle handle-ends, at intervals of 2 or 3 ft., placed alongside to aid the passenger.

We made three attempts to climb the Fünffingerspitz by the Schmidt Kamin, but owing to rain and heavy snow, which reached far below the hut, we never got further than the foot of the rocks. It was a great disappointment, as this particular climb possesses, apart from its intrinsic merit, some considerable historic interest.

Comparisons are generally offensive, and often misleading,

but they are inevitable, and while I was climbing the Campanile and the Marmolata, and since, when looking back on these Dolomite peaks, I have been irresistibly tempted to compare them with English rock-climbs, and especially with two typical instances which are familiar to many of my audience. I allude to Walker's Gully, and the N.-W. climb on the Pillar Rock in the English Lake District. These are both now long-standing dishes at Wasdale: Walker's Gully was first climbed by O. G. Jones, Field and the Abrahams as far back as 1899; the N.-W. climb is of more recent date (1908), but still not an achievement of yesterday. I would select these two, because they have, to vary the metaphor, worn well, and are still considered quite in the first class of English lake climbs. A man who can lead with ease and confidence up either or both will be, in Baedeker's phrase, an 'expert.' At the risk of wearying my hearers with a few technicalities and a twice-told tale, I will, as briefly as I am able, touch on the main features of these two climbs. Of the two, Walker's Gully resembles more closely in some ways the Campanile di Val di Roda. It runs up from the foot of the Pillar Rock, a deep-cut, somewhat gruesome-looking chasm, consisting of four well-defined pitches. The latter half of the climb gives it its real distinction. One reaches a cave-pitch, with a roof of large stones firmly packed on one another, but with sundry holes, through any of which a rope can easily be threaded from below. The gully is about 4 ft. wide at this place. The leader can be perfectly secured by the threaded rope, and can even perhaps be pulled up, if need be, but it would be unpleasant. He has to hang across with feet on one wall and back on the other, and edge his way for some 8 ft. in a horizontal line until he is clear of the cave, when, after a struggle upwards of 3 or 4 ft. in the above position, one leg can be dropped on to a distant ledge behind, and he can pull himself up over the top. This part of the climb is tremendously severe. Few men would face it if there was no security from the rope, as at the moment when the pull-up comes one's powers are almost exhausted. At the final pitch again a little clever manipulation of the rope can secure the leader at the outset. The way goes to the right up a smooth wall, and as the difficulties seem to get insuperable, and the threaded rope ceases to be of any assistance, it is found that the rock at one's back has narrowed so much that it can be used as a support for the rest of the way. The pitch is 50 or 60 ft. in height, and there are not many places more impressive or sensational. I would venture to submit that the third pitch is as difficult, and



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MARMOLATA—SÜDWAND.

the exit as impressive, as can be found anywhere on the Campanile di Val di Roda, or indeed on any of the Dolomite climbs with which I am acquainted.

The N.-W. Pillar Rock climb differs entirely in character. The first part of the ascent is up a well-defined buttress which gives moderately difficult scrambling to the foot of the final pinnacle of the rock. From here onwards the work is decidedly severe. After the 'coin' is reached, the route lies up a sort of ill-defined crack or gully, which is very steep, and where the holds are few and small. One pitch succeeds another until the final climb of some 60 or 80 ft. to the foot of the last chimney. The landing on the ledge before this chimney is reached is difficult and risky for the leader. But the climb as a whole is one of the finest of the Lake District. In its surroundings it cannot, of course, compare with the Marmolata: the size and magnificence of the latter are unapproachable; but I hold with a certain amount of diffidence that its difficulties are at least as great, though they are compressed into a much smaller compass. When rocks are so essentially different in texture, it is often misleading to try to gauge their comparative merits and difficulty; but as I was on these lake climbs within four months of going to the Dolomites, the recollections of each are fairly fresh in my mind and I have ventured to detail them to you.

To return to the latter, at Karer See there was a wide choice of peaks to climb, but we were solemnly warned off everything on the S. side, which meant that we were not to try any of the Latemar and Diamantidi group. The difficult routes there were pronounced to be distinctly dangerous. The time was passing, and we decided on the Tscheinerspitze, which lies to the N.-E. of Karer See, immediately to the left of the Rothwand, and between that mountain and the Coronella.

The W. wall climb on it was the particular invention and discovery of our Vice-President. Unluckily Pompanin, the only one of our guides who had been up it, was temporarily indisposed, so Broome thought this a good opportunity to make a rest-cure. Barberia, however, was anxious to go, and, having been well coached by Pompanin beforehand, took the position of leader. All went well for a time: the chimney, in which the climb starts, presented some difficulties, but we all climbed it, or were hauled up somehow, and at last reached a point where it is necessary to leave the main chimney in order to reach a forcella or col, by which the summit was attained on the first ascent. Here there was a long delay. Barberia knew there was a traverse, and thought it was to the left into a particularly

sinister-looking kamin, but he did not like its appearance, and therefore Zanna was deputed to make the attempt; in spite, however, of several gallant efforts he failed to get up to the foot of the kamin. Meanwhile, or immediately afterwards, our San Martino man Scalet began climbing up on the right side: I watched him unrope and finally disappear from view. When I saw him last, he was climbing quietly and confidently, and the little man seemed to find no particular difficulty. Things apparently were at a standstill: eventually Zanna went up to join him, and the rest of us followed. We had by some fluke hit upon the proper route, which we followed to the forcella. A glance back when we had gone a little way, and we could see that the route Barberia had fancied was impracticable. Even if his kamin could have been climbed it led to nowhere, and we should have had to retrace our steps. Two places were particularly exhilarating somewhat higher up: the first, where a jammed stone barred the top of a chimney, and one had to step out and climb some 10 ft. of smooth limestone with no particular holds, until, just as hope was forsaking the aspirant, he was able to press the back of the head against a huge leaf of rock, by means of which further progress was possible. If anyone remembers the final pitch of Walker's Gully, which I spoke of a few moments ago, he can understand the method very well, though the English climb at that place is more sensational, more difficult, and more impressive. Once at the forcella, our troubles were practically over, or ought to have been. By making a short descent it is perfectly feasible to turn the steep corner on the left of the forcella and mount by fairly easy rocks to the summit. But Barberia, flushed with success, would go up a perpendicular crack at this corner, where the holds were very brittle, and had eventually to be hauled out by one of his comrades. These varied adventures naturally took up a good deal of time, and we did not reach the summit of our mountain until nearly 5 P.M.—seven hours having been spent on the actual climb. I have no doubt that a small party (we were six) could do it in much less than half the time if no mistake was made in finding the right route. On the whole, it was one of the best expeditions we had, as the climbing is pretty continuous from the entrance of the first great kamin to the top of the peak.

Our last climb was the Vajolet Thürme: their appearance is, no doubt, familiar to many of my audience, and they are a typical specimen of Dolomite limestone, rising very steeply from the plateau on which they stand. Purtscheller and Hess, in *Der Hochtourist*, say that the traverse in the direction from

the Delago to the Winkler Thurm is the harder route, and, as Broome and Corning had already climbed it that way, they themselves arranged to go in the reverse direction, and meet us somewhere on the summit ridge. This was an excellent plan, and was of material assistance to one of the two parties: my modesty forbids me to say to which. We all began the climbing about 8.30 A.M., Rolleston and myself starting for the Delago, the others for the Winkler. Our difficulties began at once. Celestino negotiated the first portion of the inevitable chimney all right, and came at last to a passage where he had to make a traverse to the right, and so, by means of smooth rocks, reach a place of safety. He then invited me to follow him, and here comes in the pleasant peculiarity of the Dolomite guide. I was not to go his way, but, with the aid of the rope, to climb a horribly smooth crack up to where he was ensconced. Immediately above was another trial, where the chimney narrowed to a deep-cut slit between two walls of rock. It was possible, but very uncomfortable, to get right into this, and push one's way up, with considerable risk of getting completely jammed in so doing. Rolleston wisely would have none of it, and came up on the outside with comparative ease. Open face climbing followed, and we reached the summit of the Delago at 11.30, two hours from the start. The way down to the forcella between the Delago and the middle peak, the Stabeler Thurm, was now before us. It is not a long descent: the whole distance from the summit of the Delago Thurm to the forcella cannot be more than 120 to 150 ft., or less, but it is extremely steep and sensational. An abrupt drop down a chimney landed us on a sloping slab some 60 ft. below, after which easy rocks brought us to the gap. This chimney is the so-called Pichlriess, and after doubling a rope, and then failing to draw it after us, Celestino went up again and tied it securely, leaving it for Broome and Corning, whom we could hear in the misty distance somewhere about the summit of the Winkler Thurm. We took an hour to the Stabeler summit and were descending from it when we met our other party, and learnt they had left one of their ropes for us. Another hour saw us on the Winkler, having picked up our rope on the way. It was a little annoying to find they had left it where it was practically of no use to us. I have no very clear recollection of the descent of the Winkler Thurm. If Dolomite guides understand anything, they know how to use a doubled rope, and this time they made no mistake in pulling it through after them. The descent with this assistance was sensational but easy, and we were putting on our

boots at 3.30 p.m. and back at the Vajolet Hut by 4. Taken in the way we did it, it is a really fine climb, and perhaps, excepting the Val di Roda Campanile, surpasses in interest and sensation any other we accomplished last August, though no doubt competent critics will disagree, and urge, with some justice, the superior claim of the great S. wall of the Marmolata.

Southern Tyrol possesses many charms, and the Karer See Hôtel is placed in surroundings of great beauty. The main features of the landscape there, as in other places, are the splendid woods, principally of pine and fir, seen in that mystic haze only found under an Italian sky, and so often missed in the sharper and clearer atmosphere N. of the great Alpine barrier; and above the woods, and rising sheer out of them, are the savage limestone cliffs of the Dolomites. At Karer See you have them on two sides in close proximity, and far away in the distance the snow-peaks of Adamello, and the Ortler group, a Pisgah view. And if sometimes we gazed across upon those snow-peaks and wished once more to be treading a glacier with a guide who could talk English, or at any rate German, and to feel that we were out for a real mountain, why wonder at us? And what of this Dolomite climbing? But I think enough has been said already, and if its drawbacks and disagreeables have been perhaps unduly emphasized, no one, I trust, will go away with the idea that the writer of this paper is unwilling to admit the many attractions of the Dolomites, and the power they have of drawing back to them again and again their devotees.

I have only to add my cordial thanks to many friends in the Club and outside who so kindly lent me the lantern slides for the paper, and in particular I would mention Messrs. E. A. Broome and C. E. Shea, who have allowed me to use the three illustrations which now appear.

THE GLETSCHERJOCH.

By O. K. WILLIAMSON.

THE imposing row of peaks at the head of the Lauterbrunnen valley, rising in a wall of most impressive stateliness, with its icy slopes of appalling steepness separated by ribs of rock and often raked by avalanches, the offspring of the hanging glaciers above, which extends from the noble Breithorn to the rocky buttresses of the Jungfrau, must have

enveloped all mountaineers who have seen it in the meshes of its fascinating influence.

One summer's afternoon, some years ago, I saw these stately mountains softened by delicate evening mists and in size immeasurably enhanced, so that one could even imagine them as Himalayan summits.

I have long been attracted by this ridge, and having learnt from the 'Climbers' Guide' that the Roththal side of the Gletscherjoch had never been climbed, and that the pass was therefore still to be made, determined to study it from the point of view of a possible attack.

Apart from the repelling appearance of the northern slopes of the pass it would be hard to account for the fact that it had never been, so far as I am aware, attempted until the year 1911, were it not for the fact that the mountains bounding it on either side (members of the Club will remember that the pass, which crosses the main ridge of the Bernese Alps, lies between the Gletscherhorn (3982 m. = 13,065 ft.) to the E. and the Ebnefuh (3964 m. = 13,006 ft.) on the W.) have, comparatively speaking, escaped attention owing to the greater renown and less retiring nature of their even more lofty neighbours which overlook the Wengern Alp.

I. *The Exploration.*

Careful scrutiny of photographs, without being exactly encouraging as to the practicability of the pass, did not put the idea out of practical politics, and it was chiefly for this reason that at the beginning of an Alpine holiday, to wit July 1910, I found myself at Mürren.

Looking at the pass in face from this place or its neighbourhood, the natural route of ascent appeared to be by a flattened rib of rock which, broad and ill defined at first,* merged higher up on the mountain in a short snow arête which in its turn ended abruptly at the foot of a broken and overhanging bulge of ice. The question as to the accessibility of this ice wall seemed to us to be the important problem to be solved. On the left of this rampart the mountain fell away in broken ice slopes of fearful steepness, and the *mauvais pas* could clearly not be turned in this direction. On the

* The lower part of the ridge was hidden by the intervening slopes below the Jungfrau.

other hand, to the right the wall merged in an ice slope which appeared to be set at a high angle. Once above the ice bulge or slopes to its right, the route was clear, although the difficulties would be by no means at an end, for a slope of snow or ice, exceedingly steep it is true, rose to one of gentler angle just before reaching the W. ridge of the Gletscherhorn above the pass. To the right of this slope a rib of rock of sinister aspect, which started above just to the E. of the actual col, descended for a few hundred feet, to end abruptly in the snow slopes below. This was too steep to hold much snow, and whilst it seemed possible that we might be forced to use it as a means of ascent, its aspect was repelling. All thought of ascending more to the right, that is towards the Ebnefluh, was precluded by the nature of the ground, involving, as it would, an intricate route up fearfully steep slopes under and among enormous masses of snow and ice, some of which were obviously the material for impending avalanches. To the right of the rib of rock by which we proposed to start the climb from the Roththal glacier and below the sinister rib was a series of steep snow and ice slopes, separated from those above and below by patches of glacier. Higher up, these slopes merged in a slope of snow or ice continuous with that by which the traverse to the evil rib would have to be made. To the right of and extending downwards from about its level for some distance below this rib, there rose from these slopes a wall of rock and ice separating them from the enormous masses of snow and ice to which I have already alluded, which extended up nearly to the level of the pass.

A day or two after arriving at Mürren I was joined by my trusty guides and companions, Jean Maître and Heinrich Fux. The weather, however, was bad even for the Bernese Oberland, and it was only on the sixth day after I arrived there that we accomplished our first climb, the ascent of the Gspaltenhorn, which was rendered quite difficult by the unusually large amount of snow. On the way back from the Sefinen Furgge we examined the slopes of our proposed pass in profile, and Jean remarked that the kind of rock of which the rib was composed would take a long time to ascend if climbed in its entirety. A day or two later, as the weather had relapsed into what was apparently that season its normal condition, we left for Saas Fee, but about a fortnight later returned to the Lauterbrunnen valley by way of the Balmhorn and Kanderthal and took up our quarters at the Hotel Schmadribach at Trachsellaenen. This is most charmingly situated,

with stately trees on one side, and is encompassed with luxuriant vegetation; between the house and the stream is a pretty fruit garden, flanked by mountain ash shrubs, whilst crowning the valley end, down which falls the fine Schmadribach, is the impressive ridge of the Bernese Alps. One evening, on looking out of window, I saw the guides stretching the rope, whilst the landlord's huge St. Bernard bitch kept taking flying snaps at it, a proceeding which caused Jean Maître to make uncomplimentary remarks about the canine species.

On the afternoon of August 15 we toiled up the sweltering slopes to the new Roththal hut. The weather was fine, but too warm, and ere reaching our destination we saw many enormous masses of snow peel off from the icy face of the Ebnefluh and swish down to the valley. The new hut, which is a short distance below the old one, is remarkably commodious and comfortable. Next morning, after a cloudy night, the weather was far too unsettled to justify a start; and we witnessed with some misgivings the departure for the Jungfrau of Herrn Kinscherf and Wenner with Fräulein Farner, all of Zürich, who later in the day perished on the mountain.

Whilst we were examining our route a huge mass of ice broke away from the hanging glaciers immediately below the actual col (and therefore to the right of our proposed route) and swept the snow and ice slopes below for a breadth, I should say, of nearly 100 yards in a tremendous avalanche. This incident served effectually to dismiss from our minds an idea which one of our party had evolved, viz. that it might be advisable, in order to save time, to ascend these slopes in preference to the first part of the rock-rib which we had proposed to climb in its whole length. Stormy weather dispelled any lingering doubt as to the desirability of staying a second night in the hut, and late in the afternoon we descended rapidly to the valley, the last part of the way in pouring rain.

A visit to Mürren at Christmas 1910, in the course of which the slopes of the pass were carefully scrutinised with the aid of a field-glass, did not serve to afford any additional encouragement, for the *mauvais pas* appeared more difficult than ever.

In the summer of 1911, however, the Gletscherjoch took the first place in an ambitious programme. I met the guides at the Hôtel de la Jungfrau on the Eggishorn, and on July 22, by way of combining a training walk with a reconnoitring expedition, we went up to the Lauuthor.

In perfect weather we had ample opportunity to examine our route in profile. Jean pointed out to me that immediately below the rocks up which we proposed to climb from the Roththal glacier, and also extending on either side of this line for a considerable distance, there was a continuous line of avalanche débris. On carefully looking at the slopes above, he arrived at the definite conclusion that this had fallen from the cornice on the W. ridge of the Gletscherhorn and that there was now no risk of further falls from this cause. The bulge of ice, however, still remained the point of doubt. Was there a practicable break in the wall? Again, could there be any reasonable certainty that the whole mass of ice, or a great part of it, might not at any time part company with the main mountain mass and rake the slopes up which lay our projected route? This question could only be answered by an examination from above, and we accordingly determined that our next expedition should be one to the col itself by way of the easy southern slopes. I confess to having had at this time a feeling of considerable doubt as to the justifiability of the expedition, for whilst being unwilling to be deterred by even great difficulties, I did not feel justified in undertaking an expedition which would expose the party to great objective dangers.

On July 25, starting from the Concordia Inn, we traversed across,

O'er the savage sea,
The glassy ocean of the mountain ice,

crossing some very large and striking crevasses by quite adequate bridges to the S.W. side of the Gletscherhorn glacier. After ascending a steep snow slope we had to negotiate some more very large crevasses, and so reached the ridge at a point close to and just to the E. of the actual col. For a few yards the N. slope was quite gentle, but beyond this it was evident that the tremendously steep and broken slopes to which I have already alluded fell away. We now proceeded to the rocks near by and to the E. of the col, traversing a short ice slope which falls away to the N. We halted for lunch at these rocks, and were now on the upper part of the sinister-looking rock-rib seen from Mürren. Having scrambled a short distance up the crest of the ridge, we obtained a good, though necessarily what was a foreshortened, view of the ice wall and slope between it and the foot of our rib. Jean now stated that the mass which was bounded by the wall of ice was firmly

incorporated with the mountain, and that there was no risk of avalanches starting from it. The practicability of its direct ascent could not, however, be judged of from our present position. To turn the difficulty by an ascent of the slope between the ice wall and the rib, and by this means to reach the ridge in a direct line above the wall, would necessitate many hours' work, for this slope appeared to consist mainly of ice. On the other hand, there were obviously grave objections to the idea of a traverse to the rib, for such a traverse would necessarily be a nearly horizontal one on a slope which was certainly extremely steep and would probably be found to consist of ice, and would occupy a time which my guides estimated at three or four hours. Moreover, there might be very great difficulty in getting on to the rib. I suggested that it might be worth while to endeavour to fix a spare rope so that if possible its end might reach the ice slope below. Accordingly we descended the steep and very loose but not really difficult rocks of the upper part of the rib for a considerable height, and at one point we had to cut a few ice steps. Heinrich Fux went some little distance below the point which Jean and I reached, and, from a red knob of rock visible from above, fixed our spare rope, which was of about 100 ft. in length, and he was under the impression that it reached the ice slope below. The point where he fixed the rope he estimated as 80 m. below the spot at which we had lunched. In the light of what we had now learned we came unanimously to the conclusion that in the event of perfect weather, as well as thorough fitness of the whole party, the attempt to make the pass would be justifiable. It became obvious that to do this it would be necessary to go over to the Lauterbrunnen valley. Accordingly that same afternoon we crossed the Lötchenlücke to the lovely Lötchenthal, a valley to me always fascinating, with its lovely pastures and beautiful trees, and, above all, the glorious ridges danked by precipitous ice slopes. We spent the night at the beautifully situated Fäfleralp Inn. Next morning a late start preceded a pleasant walk over the Petersgrat, although a short cut by Heinrich up the 'pénible' slopes on the W. side of the Inner Fäflerthal caused some mild protests from his elder comrades. We descended to Trachsellauenen—being entertained *en route* by a discourse from Jean on the comparison of the snouts of the pigs of Ober Steinberg with others, for my elder guide is a farmer of experience—with the intention, if it should turn out really fine on the 28th, that we would

once more start for the Roththal hut. Fortune, however, was once more against us, as at noon on the appointed day the meteorological conditions were by no means satisfactory, for we saw

The mists boil up around the glaciers.

It being Friday, and my men being unwilling to effect a climb on a Sunday, it occurred to me that the best use to make of the following day would be, in the event of its turning out fine, to attempt the ascent of the Mönch by the N.W. buttress, an expedition which I had long had in view.

At Trachsellaunen there were numerous pensionnaires, among them a small boy with a squint, who exhibited, among other phenomena suggestive of mental defect, the curious habit of repeatedly turning round in a circle on one foot, and who was, needless to say, regarded by his parents as of quite exceptional mental promise.

We took the train up to the Klein Scheidegg, whence we proceeded in the late afternoon to the new Guggi hut, arriving there just before a storm broke. Next day, however, the weather was magnificent, and we accomplished our climb. A few days later we left Grindelwald, where I had had a pleasant meeting with Messrs. Farrar, Gask, Fynn, and other friends, for Lauterbrunnen, but the following day, August 2, it was again too unsettled to make a start. The day after, having laid in provisions and driven up the level valley as far as Stechelberg, we engaged a porter to accompany us as far as the hut. Jean had an idea that the path from Stechelberg would be preferable to the alternative of first going up to Trachsellaunen. As a matter of fact, the path for some considerable distance passed among trees and was pleasant enough; it then joined the route from Trachsellaunen. Our time to the hut was $4\frac{1}{2}$ hours' actual walking, and I am of opinion that the Trachsellaunen route is the shorter of the two. Next morning the weather was doubtful, certainly not good enough for our climb, so we stayed a second night in the hut, but the following day it was obvious that the rocks were wet, and could not in any case be fit for our expedition on the day after; so after a chat with Messrs. Hope and Kirkpatrick, who had just been up the Jungfrau, we descended disconsolately the now familiar path to Trachsellaunen, whence in the afternoon we walked up to Mürren. Here I had some pleasant chat with Herr Gurtner and other friends,

but I strongly suspect that Heinrich occupied his time in chaffing the local guides in respect to the inferiority of the Bernese Oberland weather over that usually met with in the Vallais. Next day, Sunday, the 6th, another start was made, but this time we did not get beyond Trachsellaenen, as in the early afternoon the great ridge became blotted out by cloud and rain, the colour of the white snow slopes was changed to grey, and a certain oppressive warmth in the air told of a storm to come. We returned to Mürren only just in time to escape a tremendous thunderstorm, and I fancy that it rained most of the following night.

II.—*The Passage of the Gletscherjoch.*

Next day, August 7, however, we awoke to a most perfect day, with every sign of good weather, and it really seemed that at last the ill fortune which had so persistently dogged us had ended. At Trachsellaenen the obliging landlord, Herr Feuz, volunteered to come with us as porter as far as the hut. At 2.10 P.M., with hearty good wishes for our success from the friendly people of the Hôtel Schmadribach, we started. The beauty of the vegetation of the lower slopes—these were gay with wild roses—does much to compensate for their heat, but to-day it was less warm here than usual. After crossing the trough containing the avalanche débris from the snout of the Roththal glacier, the shrubs and flowers become more scanty and one soon reaches the bare upper slopes. After a halt *en route* of 35 minutes, at 6.25 P.M. we once more entered the hut. Here we found some Germans who, with their guides, were bound for the Jungfrau. On this, as on other occasions, questions as to our proposed climb were met by answers which may perhaps be described as being somewhat economical of the truth.

A pleasant evening passed rapidly, and after dinner, as usual, I went outside with the men to talk over final arrangements and, after a last glance at the great wall up which we hoped to force a new route on the morrow, we turned with deliberate steps back to the hut. Our nerves were strung up for the contest, and we were now all three in first-rate condition. I was caused slight anxiety once or twice during the night by the howling of the wind, and heard the remark 'verdammter Wind.' At about 2.30 A.M. the striking of a light by Heinrich was followed by his rise, and my anxious inquiries as to the weather were answered by Jean in the sense that it was 'magnifique.'

Breakfast finished, and, all preparations for our departure being complete, having put on the rope, at 3.25 A.M. we solemnly filed out of the hut. By the light of a lantern we descended the moraine to the Roththal glacier, bearing to the left. We walked across the level glacier towards the foot of the snow couloir which falls away from the Gletscherjoch and were rather surprised to find the snow soft, seeing that the night had been clear and cold. We reached the avalanche débris at the foot of the couloir, and I measured with my clinometer the angle of the mountain near this spot. The instrument gave a reading of approximately 50° . Our intention was, if possible, to reach the steep foot of the wall of rock to the true right of the couloir. However, 'l'homme propose mais Dieu dispose,' and we now became cognisant of the unwelcome fact that the size of the bergschrund would render such a course out of the question. We were consequently forced to adopt the plan, after walking over the avalanche débris, of crossing the schrund at the actual foot of the couloir, a proceeding which we accomplished without difficulty. The risk of avalanches at this early hour was doubtless only a small one, although the foot of this couloir was obviously a place in which to tarry longer than was absolutely necessary would be extremely foolish. Heinrich now made the suggestion that we should endeavour to reach and climb an abominable-looking flat smooth rock above our heads which formed an island in the middle of the couloir. Having reached this, it would be necessary to cut across the couloir to the rocks of its right retaining wall; as, however, this course would have necessarily involved a considerable expenditure of time, and was, moreover, highly inadvisable from the fact that during the whole of this period we should be exposed in an absolutely unsheltered position to the risk of anything which might fall from above, the idea was received distinctly frigidly, and was in fact negatived without a division. We now cut across the steep ice of the couloir as rapidly as possible, with a vertical wall of snow immediately above us on the right. Reaching overhanging rocks at the side, we now had to turn to the right for a few yards along a convenient ledge of snow, up which we rose at a gentle angle at the foot of the rocks and on the top of the vertical wall of snow below which we had passed. We now reached, at 4.30 A.M., an easy rock chimney by which we at last got on to the broad and ill-defined crest of our rib. The snow ledge which we had left continued for a short distance to the right as far as an angle in the rock wall, at which point



O. K. Williamson, photo.

Swan Electric Engraving Co., Ltd.

THE GLETSCHERJOCH AND EBNEFLUH, FROM LAUTHOR.

The letters A and B indicate the beginning and end of the ice traverse.
Compare this illustration with that facing p. 195, A. J., Vol. XXVI.

the couloir turned directly up the slope of the mountain. We followed the rock rib on the true right of its crest, so as to be protected from any avalanches which should fall down the couloir. These rocks were steep and loose, but were easy, and were mostly composed of (apparently) calcareous material, but exhibiting at one place for a few feet a slaty character. They were arranged in terraced fashion, and were somewhat like those met with on the ascent of the Grivola by the S.E. face. We made rapid progress, and in about an hour's time after leaving the bergschrund we bore to the true left of the crest (and therefore nearer to the couloir). Hereabouts a narrow secondary snow couloir fell away from the left-hand side of our rib, and after passing the top of this our rib became merged in the face of the mountain.

We halted from 7.3 till 7.25 A.M. on the face for the meal usually known as the second breakfast. The rock wall which we now proceeded to climb was considerably steeper than the part which we had up till now ascended, and at the same time the material composing it was of sounder quality. The climbing was pleasant, and without being really difficult was harder than that below. Such comparisons are notoriously difficult, but I should say that these rocks were about comparable in difficulty with those met with during the greater part of the ascent of the Nord End of Monte Rosa from Macugnaga. We zigzagged up this wall and bore on the whole to the right, still keeping near to the true right of the couloir. After rising a few hundred feet the angle once more became less severe.

Hallo, what is that? A *crescendo* rumble terminating in an awful roar, and a terrific mass of séracs fell from the hanging glacier near the top of the couloir.

Ye toppling crags of ice !
Ye avalanches whom a breath draws down
In mountainous o'erwhelming.

With an involuntary shudder we proceeded on our way. The rocks were now easier as well as even sounder than below. They again narrowed to a ridge, and now above our heads there loomed the imposing ice wall. A few feet along the nearly level ridge, and at a point where the rock gave place to snow, we halted at 9.30 A.M. at a few yards from the foot of the wall, and I think now first felt the rays of the morning sun.

The overhanging sérac forming the wall was, I should say,

about 50 ft. high, and the only means of outflanking it on the left was by way of an apparently vertical ice gully, which was clearly out of the question as a practicable route. To the left of this there could be no question of proceeding, as to do so would have involved a traverse on overhanging snow and ice. We were perforce driven to turning the obstacle on the right. We were now at about the same level as the evil rib on which Heinrich had in the course of our reconnoitring expedition a fortnight before fixed the spare rope. To the right of the great sérac a sister one of similar uncompromising aspect gave no hope of a direct ascent. Beyond this, to its right, and extending from its level as far as the rib, was a slope of ice, partly hidden from us in our present position, but of which, from what I saw of it later, I should estimate the angle at 70° . The slope below this, which we should have to traverse in order to reach the rib, although inclined at a far more reasonable angle, was certainly not less than of 50° . The two possible alternatives which presented themselves to us were then briefly these: either to traverse the slope until we should be beyond the séracs and then to ascend the extremely steep ice slope and thus reach a point above the ice wall, whence it would be necessary to ascend the slopes of snow or ice to a point on the W. arête of the Gletscherhorn above the col, or on the other hand to continue the traverse, a slightly ascending one, until we should reach the evil rock rib and thence follow it to the pass. Jean thought that if not too lengthy a proceeding the first course would be preferable, as it would avoid a considerable part of the terribly long and nearly horizontal ice traverse; we agreed, however, to defer decision as to which course we should adopt until we should reach a point on the traverse whence we could, more correctly than from our present position, estimate the angle and condition of the slopes above the traverse.

At 9.40 A.M. Heinrich led off on the traverse, which, as we had feared would be the case, consisted of ice. The work of step-cutting fell, of course, upon our young and Herculean leader. Jean and I occupied ourselves, in the intervals when we were not moving forward, in hacking out holds for our hands and ice axes, and a frequent glance behind told me that my companion, with his look expressive at once of strength of character and of *bonhomie*, the pick end of his axe driven into the wall and the rope passed over it, was well prepared in the event of a slip of either of his comrades, though, if such an event had occurred, the chances must, I think, have been against us. If

the necessity for being on the ' *qui vive* ' and for extreme care had been less engrossing we should have had, indeed, more than enough to occupy our minds during the *mauvais quart d'heure* of 3½ hours' duration which the traverse occupied, in the contemplation of the, in my experience, unique grandeur of the magnificent world of ice in which we were placed. Close above our heads was the wondrous, more than vertical ice wall, like a frozen wave on the point of breaking, beyond which soon appeared skyward the Gletscherhorn ridge, whose snow now shone brilliantly revealed in the glorious Alpine sun, now hid itself coyly from us, shrouded in the delicate mist wreaths which were ever and anon wafted across by the gentle northern air; in front the grim ice slope with the wicked-looking rocks beyond, which we seemed, as minutes and even hours passed by, hardly perceptibly to approach; and lastly, below, the impressive couloir, flanked by the rocks up which we had toiled, bending over to end in the blue atmosphere separating us from the Roththal floor with the miniature brown hut now nearly 3000 ft. below us. I might in fact truly say,

The scene was savage,
But the scene was new.

Perhaps somewhat more than halfway across the slope the ice suddenly gave place to snow, which most fortunately turned out to be in absolutely perfect condition.* Needless to say, progress was now much more rapid. Some minutes later, however, when I observed that Heinrich's progress had once more become slower and when I inquired how he was faring, he informed me that he was once more on ' *verdammtes Eis*.' Probably the snow extended for about a quarter of the whole length of the traverse. Everything, however, has an end, and at 1.15 P.M. we stepped on to rock just above the foot of the rib, having, from the moment we saw the ice slope above us, tacitly given up all idea of a direct ascent of it. The obvious route of ascent up these rocks lay on the true right side of the rib, and the angle was, I think, more than 60°. They held snow, of which a good deal was probably fresh from the fall two days before; many were loose, and both foot and hand holds were unsatisfactory. Needless to say, we climbed with the most extreme caution. Some more work of the same kind followed, and we then reached a ledge whence the angle

* The sun had only been on the slope for a short time.

for a height of perhaps 20 ft. above our heads became about vertical. Jean now suggested that the rocks to the right, either straight up the centre or on the other side of the rib, might be preferable, as the latter appeared to him to be more broken; but this idea did not commend itself to the leader, who, after walking a few feet to the left, started up the wall. Progress was necessarily slow, but after a time he disappeared out of sight. Waiting in the cold shadow of the rock with the knowledge of the kind of work upon which the leader was engaged gave leisure for anxious thoughts.

'Wie gehts, Heinrich?' 'Die Felsen sind miserabel schlecht,' was the not encouraging reply. However, a few minutes more and a shout from above announced that our leader had safely overcome the difficulties and was at last firmly placed. I followed, and could appreciate what Heinrich's feelings must have been in tackling these rocks. They were by no means reliable and were mingled with snow, so that, although I worked my hands as far as possible into the snow, I found it impossible to obtain really secure holds either for feet or hands. Had Heinrich fallen whilst ascending this wall neither Jean nor I could have held him. We were indeed glad to rejoin our capable leader and to emerge once more in sunshine at the foot of a snow slope, and, behold, down the upper part of this we saw hanging the rope which Heinrich had fixed to the rock above during our exploring expedition. The height of the rocks which we had just climbed I should give as approximately 200 ft. The angle of the slope was now comparatively mild, and, cutting a few ice steps, we then followed the loose but not difficult rocks on the true left of the snow slope and on the actual crest of the ridge. Thus the rope had not been fixed low enough down to be of any help to us, and we in fact walked up to the 'Gendarme' to which it was fixed without touching it. The mountain evidently was taking its defeat sulkily, for on attempting to remove the rope we found that this could not be done, as it was firmly frozen to the slope.

The difficulties were now practically ended, although the rocks, always loose, demanded constant care; and, climbing up by the same route as we had traversed on our previous exploration, at 3 P.M. three joyful but tired men reached once more the rocks on a level with the col. Perhaps a veil ought to be drawn over what followed, but historical accuracy compels the record of the painful fact that in boyish joy I threw up into the air not only my own but my companions' hats, one

of which latter nearly fell on a spot out of our reach. We extemporised a flag with which to endeavour to acquaint our friends at Mürren with our victory. The height of the pass I should estimate at approximately 12,300 ft. After 1 hr. 35 min. delicious rest, Heinrich and I climbed the Ebnefluh and enjoyed a glorious view in the evening light, the Grosshorn looking particularly fine. Returning the same way, we rejoined Jean on the col at 6.27 p.m., and walked happily down the easy slopes to Concordia. The condition of the Gletscherhorn glacier was in very remarkable contrast to what we had experienced on our previous ascent to the col. Then the huge schrunds were safely bridged, whilst to-day, owing to the action of the sun, they were gaping widely, so that a rather considerable *détour* was necessary in order to turn them. However, at last even the wearisome slush of the 'Place de la Concorde of Nature' was behind us, and at 9.35 p.m. we roused the friendly folk at the Concordia Inn.

On the brilliant ensuing morning we strolled down the Aletsch glacier to the Hôtel de la Jungfrau, talking over the events of the previous day. After the world of ice and snow, the view below, upon rounding the Eggishorn shoulder, of the pleasant pastures and prosperous Vallais villages with the blue mountains of Binn beyond was quite pleasing, albeit the brown parched slopes about us stood in marked contrast to the luxuriant green of the Bernese slopes which we had left behind two days before, and spoke eloquently of the dearth of rain on the southern side.

Jean expresses the confident opinion that, for a combination of length and difficulty, our climb up to the col stands above any other ascent which he has accomplished during the forty years or more over which his climbing experience extends, and I can unhesitatingly say that this is true in my own much shorter experience.

It will be noted that the great difficulties of the climb occurred during the latter part of the ascent, as will be evident from the fact that the final 500 or 600 feet occupied us five hours. Had I known beforehand the nature of the climbing on the lower part of the final rocks I should not have felt justified in carrying out the expedition. If these rocks be excepted, I should consider the climb a justifiable one for a party of three under the very best possible conditions, and that it is practically free from objective risks. It is true that on a high rock face of the nature of that which we had to climb there probably is some slight risk of falling stones, but we saw none,

and on the ice traverse none but the smallest fragments fell past us. We succeeded in obtaining practically perfect conditions, although fortune had certainly not dealt kindly with us in compelling us in such a season as 1911 to wait nearly a fortnight before we were enabled to carry out our project.

Thus ended this expedition, memorable to those who took part in it. I wish to lay stress on the fact that its successful issue is entirely due, first to Jean Maitre's masterly judgment, a judgment in my experience unsurpassed as regards snow and ice work, and secondly to Heinrich Fux's fine step-cutting performance, and to his brilliant leading up the very difficult rocks of the final rib.

ANCIENT FACTS AND MODERN FICTION : THE WEST WING
OF THE BERNINA.

By E. L. STRUTT.

THIS paper is suggested by a number of untoward circumstances, but to the influence of certain distinguished Italian friends its origin is principally due. There are many among the more responsible Italian climbers and topographers who deplore, not less than we of other nationality, both the current denials of well-authenticated ascents and the confusion of nomenclature which the recent issue of the C.A.I. *Guida*, Part iii., as well as certain other publications, have done so much to both perpetuate and augment.

No offence is intended towards the many well-known Italian and Swiss mountaineers who now frequent the district which the chief Alpine authority has christened the 'West Wing of the Bernina,' which is known in this country as the 'Bregaglia Group,' in Switzerland as 'Das Thal Bergell,' and in Italy as the 'Albigna-Disgrazia' district.

These notes, so far as they concern themselves with mountaineering, are mostly a re-statement of facts which were twenty years ago universally accepted, but on which modern scepticism and perhaps an almost pardonable jealousy and rivalry have contrived to throw doubt and, in some cases, absolute denial. It is desirable that these ancient facts should be upheld, and the authorities on the district *must* strive to uphold them.

The first three subjoined 'notes' refer to matters of this kind and form the *raison d'être* of this communication; Note 3, however, leads naturally on to the vexed question of nomenclature, and advantage has been taken of the opportunity to discuss certain of the names which appear for the first time in the *Guida*.

While the writer must unreservedly accept some of these names, and has every intention of adopting them in any future article on the district, strong grounds can be adduced against others, most of which can never, for reasons which will appear, receive universal recognition. The notes which form the latter portion of this paper are not penned in a spirit of carping criticism; rather is the writer buoyed up with the faint hope that they may influence the nomenclature adopted in the forthcoming Swiss guide-book to this portion of the Alps. There is always a danger that, the Italians having so much *Italianized* the frontier ridge and even its northern slopes, the Swiss may go to the opposite extreme, being no whit less patriotic than their southern neighbours. We English, however, acting on strictly neutral grounds and with equal affection for both sides, can give our impartial views as to which names seem most suitable to the peaks and passes which some of us love beyond all others. If this article should in any way help towards an universal nomenclature the writer's satisfaction will be complete.

1. PUNTA RASICA, 3320 m., new edition, 3330 m., older edition, *S. map*; 3328 m., *I. map*; 3307 m., *Lurani* (3320 m. = 10,893 ft.).

This mountain is a very remarkable one and its ascent is among the most interesting in the district.

It may be said to have two summits, the N.W. peak (*c.* 3300 m.), not named, measured, or even indicated on any map, and the S.E. peak, alone officially recognised and measured, as above.

The two peaks are connected by a long knife-edge of serrated granite forming a deep depression between them. This truly terrifying arête has never been traversed in its entirety, but the depression was reached on the occasion of the first ascent of the N.W. peak by a descent of its S.E. arête, and from this gap the Forno glacier was on the same occasion reached direct, the entire descent being effected by a series of 'pitons' and spare ropes. ('A.J.' xxv. 556-7.)

The N.W. peak consists of two faces, N.E. and S.W., of smooth perpendicular granitic slabs, both unclimbed, and of

two arêtes, N.W. (by which the only ascent was accomplished) and S.E. (referred to above), both sharp and serrated to an almost inconceivable extent.

First ascent, which has not been repeated, September 30, 1910. Herren K. Steiner and R. Lejeune.

The S.E. peak consists of three faces, N.E., S.W., and S.E., of exceedingly steep, smooth slabs, and three arêtes, N.W. (unclimbed), S.E., and S.W. (unclimbed). The S.E. and S.W. arêtes unite at a point, a kind of false top, just S.E. of the summit. The actual summit is a strange monolith, some 75-100 ft. high, resembling a knife-blade with the edge bearing S.E. A geologist would probably be of opinion that the original true summit, the point of junction of the three ridges, has long fallen in ruin into the abyss surrounding the mountain.

The history of the Punta Rasica is quite clearly recorded and goes back as far as 1891 ; it is outlined as follows :—

(a) *By the S.E. arête.* June 27, 1892. Herr Anton von Rydzewsky* with Christian Klucker of Sils and Mansueto Barbaria of Cortina d'Ampezzo, Tyrol, not Italy (!), as the *Guida*, p. 140, quaintly puts it.

(b) *By the N.E. face.* September 1, 1898. Messrs. E. J. Garwood and Benjamin Wainwright with Roman Imboden of St. Niklaus and Augustin Clalüna of Val Bregaglia.

(c) *By the S. face.*

(i.) *By the S.E. slope of the S.W. arête.* Same date and party as (b) taken in the descent.

(ii.) *By the N.W. slope of the S.W. arête.* June 30, 1906. Signor Antonio Castelnuovo with Anselmo Fiorelli of San Martino (Masino), not Bartolo Sertori, as the 'Climbers' Guide,' p. 133, has it.

Variation, rather more N. than (ii.). 1907 (?). Signori Angelo Rossini, E. Moraschini, and E. Castelli.

The S.E. arête has also been reached from the S. without going quite as far as the Colle della Rasica, August 20, 1909. Signori Romano and Antonio Balabio, Gaetano Scotti, and Mario de Benedetti.

All these routes unite at the S.E. base of the final pinnacle, which is then climbed by its sharp S.E. edge.

* The *Journal de Genève* of August 29 announces the death on August 25, near Dresden, of this distinguished veteran Russian climber, at the age of seventy-seven.



Archivio, S.U.C.A.I.

CLIMBING THE FINAL PINNACLE OF
PUNTA RASICA.



Archivio S.U.C.A.I.

Swan Electric Engraving Co., Ltd.

PUNTA RASICA AND WESTERN TORRONE.

These routes have mostly been duly recorded, in some cases almost *ad nauseam*; nevertheless route (a), or the first ascent of the mountain, is actually denied by the guides, inhabitants, and irresponsible visitors of Val Masino, while route (c) (i.), being ignored, naturally could never have taken place. According to the guide Anselmo Fiorelli, the first ascent of the mountain was accomplished by himself in 1906 with that fine and adventurous climber the late Signor Castelnuovo. The following 'proofs' were given to the writer this year by Fiorelli:—

- (1) In 1906 (thus 14 years after Klucker's ascent) Rydzewsky's card was not to be found on the summit.
- (2) The final pinnacle is inaccessible without throwing up the rope.
- (3) *Klucker* was not capable of climbing anything so difficult!

Statements such as these are too absurd to contradict, especially when made by a single uneducated and irresponsible peasant, but when they are upheld and maintained by all the inhabitants of the valley and by three well-known Italian mountaineers whom the writer had the pleasure of meeting this summer in the Allievi hut, they must be summarily disposed of.

Klucker's ascent of 1892 is recorded at length in 'S.A.C.J.' xxix. pp. 146-150; *Alpina*, 1894, p. 93; Tanner, *Forno-Albigna-Bondasca*, p. 78; Studer, iii., 1899, pp. 221-2; 'R.M.', 1894, p. 395; 'Climbers' Guide,' Bernina I., pp. 131-2. The *Guida*, p. 178, appears to be very sceptical.

Feeling that these accounts were, in spite of their length and detail, insufficient to convince the good people of Masino, I wrote to my friend Christian Klucker and have received from him the following characteristically lucid and most interesting account of the first ascent, which I give *in toto*, literally translated from the original German.

'FEXTAL: July 24, 1913.

'As to the denial of Herr von Rydzewsky's first ascent of the Punta Rasica by the respective inhabitants and guides of San Martino, it would be as well to let these people think what they like. It is useless fighting against ignorance and wilful want of knowledge. Did not the well-known guide Sertori assert in 1906 to one of my most trusted "Herren" that we had never been up the Ago di Sciora in 1893? In 1911 I met Sertori while descending the Albigna glen and taxed him with this statement; he first denied having made

it, then said that he had mistaken another man "for the famous Klucker" and that this man (the late A. Clalüna) had failed to climb the Ago!

'Now to the story of the Rasica. Professor Schulz of Leipzig in the early eighties first drew my attention to this extraordinary rock tooth, and told me of his proposal to christen it by its present name. In those days the general nomenclature was non-existent or very scarce throughout the frontier ridge. In the Torrone "ridge" there were named alone Torrone Orientale and Torrone Occidentale. We decided on "Punta Rasica" for the point (now) 3320 m.* and "Torrone Centrale" for the point 3299 m.

'When visiting the Forno hut in 1891 with Herr and Frau Tauscher-Geduly and Herr Alexander Rzewuski, I proposed to them to try to attain the then untraversed Colle della Rasica and thence make an attempt on the Punta itself. On July 27 (*not* 26, as it appears in vol. xxvii. of the "S.A.C.J.") we duly reached the col, but owing to the indisposition of Frau Tauscher-Geduly were unable to proceed further as a party. However, I continued alone over the S.E. arête and attained a steep snow patch on its N. slope, whence I could overlook and study the rest of the route as far as the actual summit pinnacle. On returning to the col there could, of course, be no further attempt on the peak for that day, and we descended.

'During the same summer (August 30, 1891), the Colle della Rasica was attained by Messrs. E. Kingscote, E. J. Garwood, and C. C. Branch with Martin Schocher and Anton Rauch, while accomplishing the second ascent of the Torrone Occidentale by a new route, also from the Forno side.

'At 7 A.M. on June 22, 1892, Barbaria and I with Herr von Rydzewsky were once more standing on the Colle della Rasica. Wind, snow, and horrible weather generally, prevented us attempting the ascent of the Punta. Five days later, on June 27, we reached the col at 7.15 A.M. and halted for 20 minutes. We then commenced the ascent of the peak. At first to the left, S., then along the crest of the S.E. arête itself for about 20 minutes, then on the N. slope to the steep snow patch, where I told you I had turned back the previous year; partly traversing and turning this rather to the N.W. we came to a second snow patch. After traversing this we

* Up to the 1906 'revision,' the Siegfried map gave the height of the peak as 3330 m.—E. L. S. (cf. *ante*).

climbed straight up over steep rocks and found ourselves about 9 A.M. on the main ridge at the S.E. base of the final pinnacle, which towered some 30 metres above us. The S.E. edge of the pinnacle is sharp as a knife, and overhangs so much at its base that a man by himself could not climb it without support. Acting on Barbara's proposal we tried for some time to throw our rope, to which we had secured a stone, up to where the sharp edge formed a minute notch some 20 metres above us. We succeeded at length in our attempt and thoroughly secured the rope; I see, however, on consulting my old notes, that when climbing this 20 metres of vertical crest I only used the rope held in my left hand for the very lowest bit, and soon found it safer to climb without it. The rock edge is so sharp that one can comfortably grip it between one's knees, which much assists this bad bit of the ascent.

'The remaining short bit of the ascent we accomplished without special difficulty. The summit provides a small nook ("Nische") facing the E. side, which affords comfortable rest for three persons. The whole tooth is much scarred by electrical discharges, and we found many traces of thunderbolts ("Blitzgranaten"). One glance over the W. slope of the peak convinced me that an ascent or descent was possible there. The steep slabby face is split by many steep cracks, so that, by turning the various smooth projections by narrow ledges and steep crannies, the base of the final pinnacle could be reached with comparative ease. You will recollect, of course, that the subsequent Italian ascents have been made over this face.

'The descent we accomplished by the same route. At 9.35 A.M. we left the summit, *after depositing a small box containing our names*,* and in 1 hour, or more correctly 50 minutes, attained the Colle della Rasica, the Forno hut being reached in 1 hour more. The difficulties of this ascent are all concentrated in the final pinnacle, and although the bergschrund and N. ice slope of the col can give much trouble, I cannot consider that the remainder of the ascent is really difficult. A full account of this ascent is given by Herr von Rydzewsky in "S.A.C.J." vol. xxix.'

Perhaps the most humorous incident connected with the Fiorelli denial of this ascent is the fact that the 1906 ascent of the Rasica by Castelnovo was the *very first* mountain

* The italics are mine.—E. L. S.

expedition ever accomplished by the said Anselmo Fiorelli! This worthy man, no longer in the flush of youth, a cart-driver by profession, was secured quite by accident for the ascent by Castelnuovo. Delighted with his prowess and unabashed at his then utter inexperience, he contradicted and still contradicts the ascent by one of the very greatest mountaineers the Alps can ever see! The Val Masino guides are fine rock climbers, but nothing more; * Anselmo Fiorelli is by no means the best of them. As well compare Mack to Napoleon as a Masino guide to Klucker. It is only fair to add, however, that Signor Castelnuovo wrote some most unfortunate remarks concerning the 1892 ascent in the Allievi Hut visitors' book, and that these remarks, doubtless, still strengthen Fiorelli's ridiculous attitude.

The second ascent and first traverse of the same peak by Messrs. Wainewright and Garwood, led by that brilliant young guide the late Roman Imboden, is generally quite ignored, and although the *Guida*, p. 179, makes allusion to the ascent, and Herr Tanner, p. 62, hints at it, the subsequent new and terribly difficult descent accomplished by the party is not mentioned by the *Guida*, in spite of the 'Climbers' Guide' full account. A mere mention of the descent provokes ribald laughter at San Martino. Why? Again, because the Val Masino guides and several amateur parties have vainly attempted to ascend by this route! Any visitor to the Baths of Masino can read for himself the thrilling account written by the party in the hotel book.

Here is a slightly condensed version :—

‘September 2, 1893.

‘Messrs. Edmund Garwood and Benjamin Wainewright, with Roman Imboden of St. Nikolas and Augustin Clalüna of Maloja (*sic*), arrived here (Baths) this morning.

‘On September 1 we left the Forno hut and crossed the head of the Forno glacier to the couloir leading up to the col to the W. of the Torrone Occidentale, which separates the peak from a point on the ridge to the W., which we understand was ascended by Monsieur Rydzewsky with the guide Christian Klucker of Sils, and called by them Punta della Rasica. This point, marked 3307 m. in the map accompanying Count

* Fiorelli was present on the occasion (1907) of the first ascent of the highest point of the Dames anglaises; it appears doubtful whether he or Castelnuovo was the actual *leader*—both discarded an essential portion of their clothing for the final *mauvais pas*!

Lurani's pamphlet *Le Montagne di Val Masino*, and 3330 m. on sheet 523 of the Swiss survey, is conspicuous from the Forno hut owing to the detached and precipitous appearance of its final 30 ft. (? metres, E. L. S.) which rise from the main ridge and alone entitle it to be considered as a separate peak.

'. . . Owing to the uncovered condition this year of the glacier at the foot of the couloir, in passing which much time was required, and the icy state of the couloir itself, we abandoned the couloir and took to the rocks at its foot immediately under the summit of our peak, and, mounting the face by means of ledges which offered no special difficulty, arrived on the arête immediately to the E. of the final tooth at 7.30 A.M. Here the weather, which had been threatening, broke on us in a severe storm of wind and snow, which continued, with short intervals, for the rest of the day. In consequence of this, after an inspection of the final monolith, some 25-30 ft. (? metres, E. L. S.) high, and after a delay of 1½ hour, it was decided to abandon its ascent, as the only route which appeared practicable, though certainly very difficult, lay on the Swiss side and fully exposed to the fury of the storm. . . . We therefore reluctantly turned our attention to the second part of our programme, viz. the descent on the Italian side.

' A preliminary survey showed that this could not be effected without considerable difficulty, an opinion which our subsequent experience more than justified.

' A few feet from the ridge the descent began by means of a narrow and vertical crack facing the *Torrone Occidentale*; after descending this for about 60 ft. and traversing a short distance across the face, a larger crack was entered which presented no insuperable difficulties to climbing until a large boulder was reached, conspicuous from above. Here the crack ended at a vertical slab, which, though somewhat broken at the lower part, descended for about 90 ft. before a safe platform was reached. As the first 20 ft. were absolutely smooth and vertical, it was decided to lower *Clalüna* to reconnoitre the route ahead, and on receiving a favourable report from him Imboden lowered the rest of his party and *impedimenta* to the platform below, retaining one ice axe (from which he had removed the head) to fix above as a support for the doubled rope to assist his descent, which he accomplished admirably until the easier rocks beneath were reached, and where the rope terminated. Here he endeavoured to free the rope from above, but being unable to do so (the rope having jammed) he reascended and, altering its position, recommenced

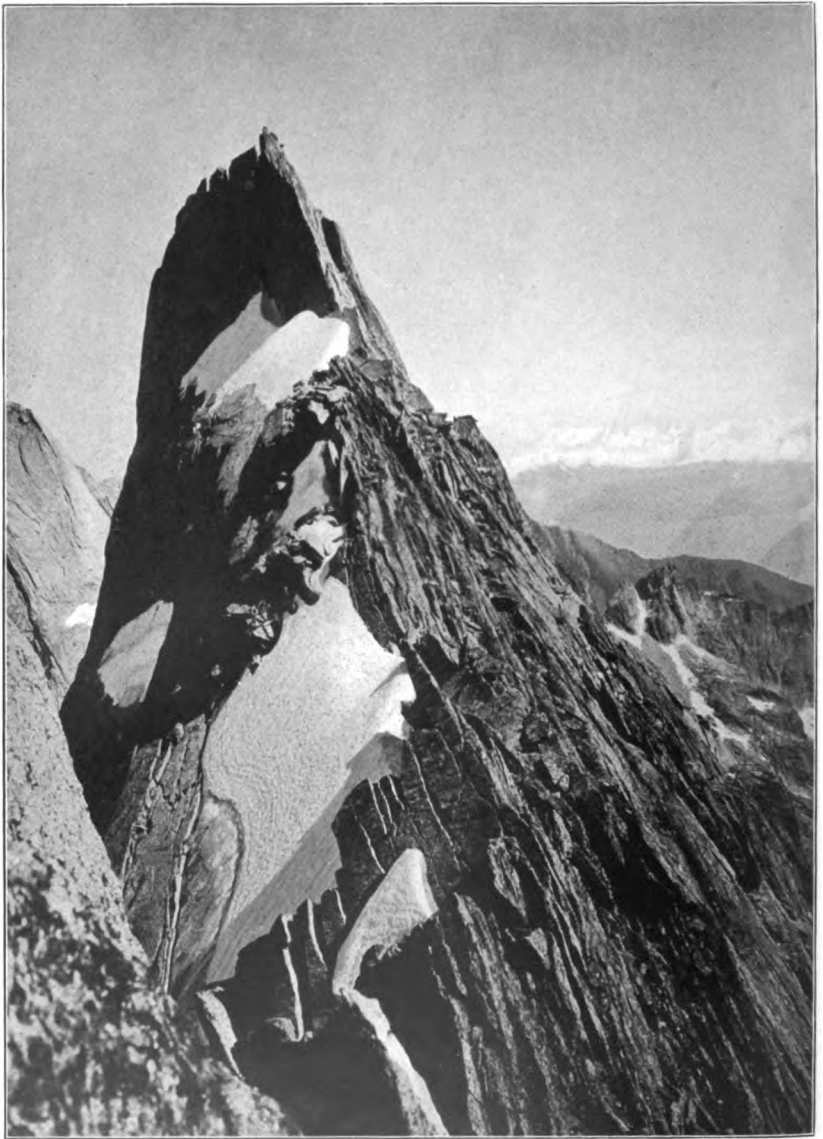
the descent over the vertical slab; but the exertion entailed by the re-ascent (entirely by the rope), combined with that of lowering the party, caused an attack of cramp in the fingers at this point, and for a moment he hung merely by holding the rope in his teeth,* as he did so shouting in a hoarse voice that he was falling. We were in the greatest alarm for his safety for several moments, till he managed to gain a crack where he could rest, our absolute inability to render him any assistance from below making the situation still more terrible. On recovering the use of his hands he accomplished the remainder of the descent in safety. This incident happily terminated, we found that a traverse must be made in the direction of the col, which was accomplished by a series of tiny cracks and joint (*sic*) faces in the granite, which on this Italian side of the range forms nearly vertical cliffs; in the most difficult of these we were obliged to leave a 40-ft. rope. Owing to the difficulties of the descent, darkness overtook us in the Alp above the Val Zocca, where we found shelter for the night under a rock.'

It is of course to be remembered that the actual summit of the Rasica was not reached, so this brilliant expedition remains something in the nature of a failure. So far as I know, till the publication of the 'Climbers' Guide' in 1910, no account of this expedition has appeared in print. Mr. Garwood kindly furnished me with a note in 1910. Several successful ascents were, I believe, made *previous* to 1906 by Klucker's original route, but I can find no trace of any record. There were also many Italian attempts—the *Guida*, p. 178, says over thirty.

2. CIMA DI CASTELLO, 3400 m., *S. map*; 3393 m., *I. map*; 3392 m., *Lurani*. (3400 m. = 11,155 ft.)

The ascent of this peak by the E. face direct from the Colle del Castello (or Colle Lurani) was accomplished on August 14, 1902, by Sir Claud Schuster, led by that very fine guide Heinrich Burgener of Eisten and A. Clalüna of Val Bregaglia. The ascent is duly chronicled and the detail given in the 'Climbers' Guide,' pp. 128-9, and is also vaguely reported in 'A.J.' xxiv. pp. 548-9; the *Guida* does not accept this route because all Italian attempts on this face have hitherto failed. Similarly the inhabitants of San Martino deny the authenticity of

* Mr. Robert Corry will recollect a similar performance by this wonderful guide during the passage of the bergschrund on the Täschrhorn, some few years later.—E. L. S.



Dr. A. Corti, photo

Swan Electric Engraving Co., Ltd.

PUNTA SERTORI (3,198 m.).

Klucker's 1893 route,* rather more to the N.W. ; they do not of course realize that Emile Rey was also present. One of my Italian (responsible) friends is my authority for this statement.

3. CIMA SANT' ANNA OR BADILET. 3169 m., *Lurani*. In spite of its very great topographical importance, this mountain possesses neither name, height, nor indication on the Siegfried or † Italian maps. (3169 m. = 10,397 ft.)

The following is its history ; no other ascents, so far as I can ascertain (August 1913), have ever been made.

(i.) *By the W. arête reached from the S.*

July 26, 1893. Count Francesco Lurani and Signor Carlo Magnaghi with Giovanni (? and Giulio) Fiorelli of San Martino.

(ii.) *By the W. arête reached from the N.*

June 12, 1899. Herr A. von Rydzewsky with Christian Klucker of Sils, and Angelo Dandrea of Cortina d'Ampezzo. Klucker informs me that, owing to the lateness of the hour, the party did not proceed further than the W. peak, or about half an hour from the summit.

Variation : More to the E. June 22, 1904. Herr H. A. Tanner with Christian Klucker ; the actual summit was first attained.

(iii.) *By the S. arête.*

August 11, 1909. Signori Romano Balabio and Gaetano Scotti.

Variation : By the S. arête attained from the E. August 3, 1911. Signori Antonio Balabio and A. Nava.

Regarding the first ascent of this peak, the following facts have not previously been published. Wishing to learn a few intricate topographical details concerning the district, I wrote to my esteemed master, the late Count Lurani. I render his (English) reply so far as this peak is concerned :—

'VIAREGGIO : June 15, 1909.

'Concerning my ascent of the Cima (*sic*) Sant' Anna (I availed myself, as regards the name, of the privilege to be

* The *Guida*, pp. 184-5, duly records and describes—wrongly—this route.

† To what portion of the landscape the figures 3182 m. refer is known only to the surveyor responsible for them. On the latest revision of the I. map, they are placed just N. of the Punta Torelli, 3132 m.

exercised by the first party, as did Payer with the Punta San Matteo*) with Carlo Magnaghi and Fiorelli, the weather was very bad, thick cloud and snow. We reached what we thought was the summit, but owing to mists failed to recognise that there is in the *immediate vicinity* another boulder 3 or 4 feet higher than the one we were on. This very slightly higher point was the one reached subsequently by Herr Tanner. We left our cards some 20 metres below the foot of the highest summit, where Tanner also found them.'

I venture to reproduce the photograph and sketch most kindly sent to me by Count Lurani. Christian Klucker confirms the locality of the cards almost to the very inch.

Under the circumstances, and considering the ludicrously small interval between the point reached and the actual summit, few can hesitate to grant *unreservedly* the honour of the first ascent to the gallant Milanese and his companions.†

The name Cima (or Punta) Sant' Anna, so far at least as Switzerland is concerned, now appears to be doomed. The name was given in 1893 by Lurani in honour of the Saint on whose festival day—July 26—the first ascent was made. The peak has always been known in Val Bregaglia as Badilet, while in Italy its very existence has been generally ignored, at all events prior to the appearance of the *Guida* in 1911.‡ 'Badilet' is the official name now adopted by the Topographical Bureau at Bern. Perhaps a new edition, very badly needed, of the Italian map will happily maintain the alternative name 'Sant' Anna,' more especially as a small tooth between point 3169 m. and Piz Badile has already (*Guida*, p. 235) been christened Badiletto.

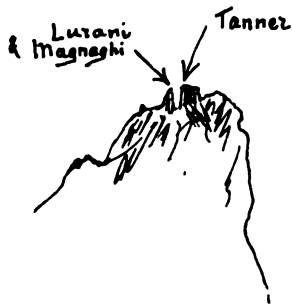
4. COLLE DELL' ALBIGNA, c. 3180 m., *Guida*.

This singularly appropriate name for the pass leading from the upper Albigna glacier to the Bondasca glacier was given in 1897 by its first conqueror, the late Signor Francesco Allievi. The *Guida* has now changed the name to Colle Allievi, although it is well known that the Siegfried surveyors bar 'personal' nomenclature. The pass lies entirely in Switzerland. Signor

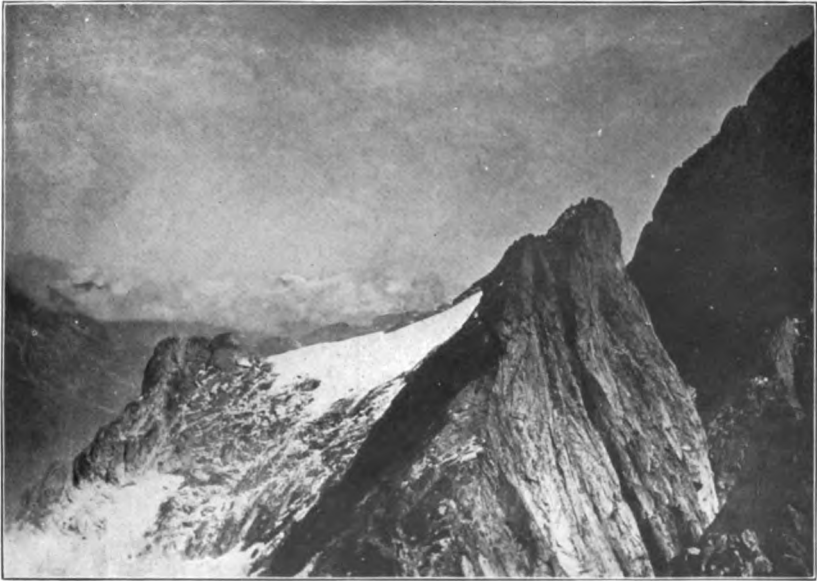
* Southern Ortler Group.—E. L. S.

† The actual or E. summit of the Punta Sertori, 3198 m., *Lurani*, was reached only on July 20, 1913, by Signori Aldo Bonacossa and Carl Prochownick, but have not Sertori and Gugelloni for thirteen long years borne the honours of its first conquest?

‡ The mountain, then not named, received due recognition in 1882 from Lurani; *vide* his map and plates 10 and 11.



SUMMIT OF CIMA SANT' ANNA.
(Drawn by Count Lurani.)



Count Lurani, photo.

Swan Electric Engraving Co., Ltd.

CIMA SANT' ANNA [BADILET] FROM THE PUNTA TORELLI.

Allievi's great services to mountaineering are recorded by the construction of the Club hut bearing his name.

Allievi thus describes, in the Masino visitors' book, the reason for the name Colle dell' Albigna: '*. . . a tale colle—sincato vergine—propingo di dare il nome di "Colle dell' Albigna," osservando che esso non porta alcun nome neppure sulle più recenti carte Svizzere. . .*' Further comment is needless. Colle Allievi must disappear.

5. COLLE LURANI. c. 3200 m., *Guida*.

This name may well be allowed to stand as an *alternative* appellation for the now well-known Colle del Castello, more especially as the S. slope of the pass is Italian. Whatever name be officially adopted for this col, Lurani's will live for ever in the mountains of Masino.

6. PUNTA FRANCESCO. 3307 m. (=10,850 ft.), *Lurani*.

* This name, besides being 'personal,' is perhaps the most unsuitable of all that have recently been given. My lamented friend Dr. Romano Balabio informed me in 1909 that he had named the peak in memory of his father, who 'has no connection whatever with its history.' No special name is required; the point, although important, is merely the E. peak of Piz Cengalo.

7. FERRO ORIENTALE V. PIZ QUALIVO. 3221 m., *S. map*; 3207 m., *I. map*; 3198 m., *Lurani*. (3198 m. = 10,493 ft.)

I am quite in favour of maintaining the old Lurani name of 'Ferro Orientale' as opposed to 'Piz Qualivo,' suggested by Herr Tanner and adopted by us in the 'Climbers' Guide.' Nevertheless, throughout Val Masino this appears to be the one peak (except Monte Disgrazia!), E. of Piz Cengalo, of whose name the natives are quite certain, and they unanimously call it *Punta Qualido*. The *Guida* names it Ferro Orientale on p. 200, but *Punta di Qualido* on p. 149; however the whole of its Part iii. requires very careful re-editing.

8. TORRIONE DEL FERRO. 3174 m., *S. map*; 3178 m., *I. map*; 3238 m., *Lurani*. (3238 m. = 10,624 ft.)

This ingenious name, suggested (? in 1911) by Lurani and adopted by the *Guida*, is in every way admirable, and should supersede all others.

* Of course, the names Punte 'Sertori' and 'Alessandra' for points on the frontier ridge are objectionable, but as no official map is ever likely to name such insignificant teeth, they may perhaps be allowed to stand. The pseudonym 'Forcella Klucker' for the Colle del Badile has never come into use.

I may here mention that, but for our failure to find a suitable name—which *had* to contain the word 'Ferro' in some form—for the then nameless point 3174 m. (*S. map*), or 3238 m. (*Lurani*), the nomenclature adopted by the *Guida*, 1911, would also have been selected for the 'Climbers' Guide,' 1910. It appeared to us necessary to keep the *sequence* of 'Ferro' peaks unbroken, hence it was determined to name the point 3174 m. (*S. map*), or 3238 m. (*Lurani*), 'Ferro Orientale'; while the most eastern peak—the old Ferro Orientale of Lurani—was christened 'Piz Qualivo,' as suggested by Tanner in 1906. It most unfortunately never occurred to us to consult Count Lurani; Dr. Romano Balabio informed me early in 1910 that he had adopted the same nomenclature (for the Ferro peaks) as the 'Climbers' Guide'; this was, however, overruled by Signor Brasca. (Cf. 'R.M.' 1912, pp. 170-1.)

9. POINT 3218 m., *I. map*; 3223 m., *Lurani*. (3223 m. = 10,574 ft.)

This peak was not named till the publication of the 'Climbers' Guide,' when the name Pizzo di Bondo was chosen for it by us. The peak is next to the Bondo pass and overlooks the village of Bondo. The *Guida* suppresses the name '*. . . però lo Strutt non fu il primo salitore . . .**' and because it might be mistaken for *Cima della Bondasca!* † So also doubtless may 'Torrione' del Ferro be mistaken for the pass or one or other of the 'Torrone' peaks (that this *has* actually occurred, see *Alpina*, 1913, p. 146). Granting that 'Pizzo di Bondo' might have been improved on, what can be said of 'Cima del Passo,' which supplants it? Such a name means nothing on geographical or any other grounds (*Guida*, p. 223; 'R.M.' 1912, p. 176). When, however, the *Guida's* 1 : 40,000 map names the glacier surrounding its S. base Vedretta *Camerozzo* (!) we may be thankful that things are no worse.

10. The name COLLE MASINO, c. 2900 m., *Guida*, for the easy ridge—not a pass at all—between the points 3207 m.

* Cf. E. peak, 3307 m. (*Lurani*), of Piz Cengalo. The first ascent was made in 1875 by Count Tommaso de Cambray-Digny, but Balabio named it Punta Francesco after his ascent of 1909! See *ante*.

† The name very appropriately given to the W. peak of the Ferro Centrale (3293 m., *S. map*) by Colonel L. Held in 1876. The name still survives on the Siegfried map, but has locally fallen into disuse.

and 3081 m., *I. map*, is futile. No name is needed,* but no worse name than the present could be imagined; the 'pass' has nothing to do with 'Masino'; it leads to San Martino.

While on the subject of the Ferro peaks, perhaps I may be allowed to answer a few points raised by Signor Luigi Brasca's brilliant monograph, 'Pizzi del Ferro,' in 'R.M.' 1912, pp. 169-176 and 203-5; I accept unhesitatingly the heights suggested by him for unmeasured points. Claude Wilson's definition, 'a group really simple in construction though unjustly regarded as intricate and obscure,' is perfectly correct; the Government surveyors, both Swiss and Italian, are alone responsible for the confusion. I also now consider the Brasca-Balabio definition of the Ferro Centrale as consisting 'of two peaks with an "Anticima" further W.' to be clearer and less ambiguous than mine; the great Grindelwald master was of the same opinion as Signor Brasca, but allowed himself to be overruled by me. The point of articulation of the Ferro-Sciора watershed is 'close to' (just W. of) the E. peak of the Ferro Centrale, and *not* at the W. (and highest) peak. The said snowy watershed, to begin with broad and flattish, first bends N.W., then back again in a great curve to the N.E.—thus describing the segment of a circle—before abutting at its lowest point (Colle dell' Albigna) against the base of the S. arête of the Sciора di dentro, some 600 yards distant from its commencement. The 'Climbers' Guide' is correct in all 'Ferro' detail, although *now* no longer up-to-date, save probably as to 'heights,' which the writer had no means, beyond eyesight, of measuring. The author has been three separate times (1908, 1909, and 1913) on the three peaks (or, more correctly now, the two peaks and the 'anticima') of the Ferro Centrale, as well as along the Ferro-Sciора watershed to the summit of the Sciора di dentro, when the party of five persons were (June 9, 1913) unanimous as to the exact position of this watershed, as opposed to Signor Brasca's contention. It is not a geographical or geological necessity for a secondary ridge to merge with a main ridge exactly at the highest point of the said main ridge, nevertheless the 'highest snows' of a glacier usually descend from the highest snow point overlooking that glacier. Thus the 'highest snows'

* Dr. Wilson suggests the name Cresta Qualivo-Albigna [cf. Cresta dell' Ago di Sciора, 'Climbers' Guide' p. 91, *Guida* p. 208, and the well-known Fuorcla Fex-Scerscen in the Central Bernina range].

of the Bondasca glacier flow unbroken from the highest peak of the Ferro Centrale.*

The dispute is really of the smallest importance and savours altogether of hair-splitting; the E. and W. peaks are barely 100 yards apart.

Signor Brasca, with the greatest respect, should not fall into the error of considering the upper Val Bregaglia to be part of Italy. The canton Tessin is also doubtless geographically Italian, and soon we shall be told that the Eastern Alps begin at the Col Ferret and are part of—*Germany!* Why are the new-old Romansch forms† Bacun, Cantun, Casnil, Päl, etc., in the 1906 revision of the Siegfried map, ignored? Yet the new form Murtaira *vice* Mortara is adopted by the *Guida*. Surely patriotism in nomenclature should not extend beyond the frontier ridge, and the Swiss may do what they like in Switzerland? Acting on this principle, 'peaklets' like Punte Klucker, Theobald, etc., etc., all in Switzerland, must automatically vanish.

The above 'notes' might be almost indefinitely extended, but would not only take up too much space, but also prove tedious reading; a few hints to show how much has been left untouched may, however, be given. One reads in very recent numbers of the 'Rivista Mensile,' probably much the best of all monthly Alpine periodicals, of the 'first traverse' of the 'Colle Masino,' every inch of which route had been accomplished, both in the ascent and descent, by Rydzewsky and Klucker in 1893 when making the first ascent of the Ferro Orientale (Piz Qualivo) from the N.; of the 'first ascent' of the point 3211 m., *I. map* (3204 m., *Lurani*), on the S.E. arête of Monte Sissone, which must have been traversed some fifty times previously; of the name 'Punta Baroni' given to this little pile of shale and débris; of a hopeless new name given by an Italian friend, who surely ought to have known better, to the lower S.W. summit (2958 m., *Lurani*) of the Corni Bruciati; also of a 'new' route up the said *Puntina*, on any part of which surely a child may run!

But was not Moore and Walker's first ascent of Piz Roseg

* Hence its special name, *Cima della Bondasca*. Cf. *ante*.

† It is curious to notice on the present S. map the form *Cime del Largo* still surviving for the peaks, while the ravine situated immediately to the N.W. is called *Vallun del Larg*.

denied in print, although subsequently gracefully and cordially acknowledged ?

Did not a Swiss climber publicly deny Kennedy and Stephen's first ascent of Monte Disgrazia, just because, being too exhausted to reach the summit himself, he must naturally conclude that the Englishmen failed too ? And did not the same climber have the effrontery to name the lower point he *did* manage * to reach after himself and proclaim it as the first ascent ? And does not the name by the irony of fate, although that climber had subsequently to eat his words, survive to this day ? And did Oswald Heer really climb Piz Palü in 1835 ? And have I irremediably offended my excellent and deeply respected Italian friends, some of whom have almost compelled me to inflict this paper ? Time alone can show, but I trust, remembering how prone to error we all are, they may yet forgive me if I have !

IN MEMORIAM.

TEMPEST ANDERSON, M.D., D.Sc.

By the death of Dr. Tempest Anderson on August 26 last, the Alpine Club lost one of its distinguished scientific members. Tempest Anderson had for many years devoted much time and attention to geological pursuits, especially to the study of volcanoes and seismic phenomena. His practical knowledge of this department of science was probably unsurpassed. At the time of his death he was on his way home after paying a long-purposed visit to the volcanoes of Java and the Philippines. An attack of enteric fever seized him in the Red Sea and quickly proved fatal. He was buried at Suez.

He had on various occasions previously had narrow escapes of losing his life when engaged in scientific travel. During a visit to Mexico for the Geological Congress in 1906, ptomaine poisoning caused him a severe illness ; and when, in company with Dr. Flett, on a mission from the Royal Society to Mount Pelée and the Soufrière, he only just escaped destruction from a sudden eruption of the former mountain. It is a pathetic ending to his busy life that, when at last time and opportunity were granted him to visit Java and the Philippines, and after he had secured a large number of those artistic and instructive photographs which have made his

* Kennedy's party, of course, passed *over* this point on their way to the summit ; the *Guida*, unconsciously, repeats the mistake (p. 252).

name so well known to all who are interested in geography and geology, he should have been carried off by death when more than halfway on his voyage home.

Tempest Anderson, the son of a well-known York doctor, William C. Anderson, who belonged to an old Yorkshire family, was born at Stonegate, York, in 1846. He was educated at the ancient school of St. Peter's, York, in which he ever took a kindly interest, and where he was always enthusiastically received by the boys, and at the University of London. He was a student at University College, where he greatly distinguished himself, and of which he was elected a Fellow. He took the London M.D. degree in 1873, and in 1904 the University of Leeds conferred upon him the honorary degree of Doctor of Science. Dr. Anderson took a special interest in all that concerned the eye, and soon acquired in the North of England a great reputation as an oculist. He published various articles on this branch of surgery in the medical periodicals.

He was elected to the Club in 1893. He paid many visits to the mountains and knew the Western Alps thoroughly. He was well known at the frequented alpine centres from the Eggishorn to the Montanvert, and from the Gemmi to the Vittorio Emmanuele Refuge on the Grand Paradis. In these districts he took many beautiful photographs. His photograph of 'The Ridge of the Petit Flambeau,' near the Col du Géant, as readers of this Journal will remember, was chosen as one of the best examples of mountain photographic art at the Alpine Club Photographic Exhibition in May 1913, and was reproduced in these pages in the Journal for last May. The photograph of La Vierge was little inferior in finish and effect.

But it was as an explorer and photographer of volcanoes that he gained a reputation which may, without exaggeration, be described as international. In the preface to his 'Volcanic Studies'* he says: 'For the last eighteen years I have spent the greater part of my holidays in exploring volcanic regions, including Vesuvius (twice), Etna, the Lipari Islands, Auvergne (several times), the Eifel (repeatedly), the Canary Islands, Iceland (two long visits), and various British extinct volcanoes now and again; in 1900, the district of the Grand Cañon of the Colorado in the Arizona Desert, which contains many extinct volcanoes; the Snake River and Columbia Basalts; the Crater Lake in the Cascade Mountains in Oregon, and the Yellowstone Park.'

He visited the Soufrière and Mont Pelée as the accredited representative of the Royal Society in conjunction with Dr. Flett, in 1902, returning to them in 1907 and examining the volcanoes of Guatemala and Mexico; Matavanu in Savaii, Hawaii, New Zealand; and in the journey from which, alas, he never returned home, the volcanoes of Java, Krakatoa, and the Philippines. He had also

* London: John Murray, 1903, page x.



Miss Dorothy Walker, photo.

Swan Electric Engraving Co., Ltd.

TEMPEST ANDERSON.

visited South Africa with the British Association, when he took, amongst other pictures, some fine photographs of the Zambesi Falls.

In addition to communicating to these pages articles on such subjects as Vesuvius, Stromboli, Jaujac (in Auvergne), and the Skaptá Jokull, he read before the Club papers on the Arizona Desert, two ascents of the Soufrière, and an ascent of Matavanu. Had he returned to us from his recent journey he would have been able to bring before our eyes, with his more than eloquent photographs, the features and formation of the terrible Kīakatoa.

It was the present writer's good fortune to accompany him on many occasions, not only in the Alps, but also in the still primitive parts of Auvergne and the Lipari Islands. No one could possibly be a more genial companion. Whether it was a breakfast at which the fowls of the establishment endeavoured as of right to share the food with us, or an entomological night in a ramshackle chamber with walls adorned in the style of the apothecary's shop in 'Romeo and Juliet,' or a long tramp (Anderson was a very good walker) with two mules laden with baggage, and hampered with two unsatisfactory muleteers, he was always prepared to make the best of things, with a humorous resignation which reconciled one to every inconvenience. He had a large fund of anecdote, and could quote from it aptly and effectively.

I soon learnt to share his interest in volcanoes, and we had many adventures together on Vesuvius and Somma; we watched at close quarters for many hours Stromboli erupt at intervals of twenty minutes; we explored Jaujac's basalt columns (a beautiful view of which will be found opposite page 505 of vol. xx. of this Journal) and the dykes of the wonderful Coolins in Skye.

He was for many years the moving spirit in the Yorkshire Philosophical Society, and both as Secretary and President laboured hard for its success. He presented it with a very fine Lecture Theatre, now known as the Tempest Anderson Hall, which was opened by another of our members, Dr. T. G. Bonney, in June 1912, on which occasion he was presented with his portrait, painted by Mr. William Orpen, A.R.A., as a mark of the Society's grateful appreciation of the invaluable work which he had done for it.

To those who lectured before the Society he extended a gracious hospitality in the wonderful old house in which he lived in Stonegate, one of the most famous of York's historic streets of timbered architecture and narrow roadway. Here, under the shadow of the Minster, his family had resided for very many years. The garden was a revelation to his guests, for the lawn reminded one of the turf in an old college quadrangle, and a fig tree flourished under his study window. C. E. Mathews, Dr. T. G. Bonney, the Bishop of Bristol, Douglas W. Freshfield, Dr. T. G. Longstaff, and other members of the Club had been his guests on these occasions, some of them more than once. He was a perfect host.

He had served on the Councils of the Royal Geographical, the

Geological, and Linnean Societies, had been Tyndall Lecturer on volcanoes at the Royal Institution, and a Vice-President of the British Association, at whose meetings he was a regular attendant.

Tempest Anderson was, with reason, very popular in his native city of York, where he did much excellent work both professionally at the York Hospital (where, as mentioned before, he had a very wide reputation as an oculist) and informally in many ways. He was a magistrate and filled the office of Sheriff in 1894. Scientific and Archæological Societies of all sorts found in him a hearty supporter. Town-planning was one of his many interests. The experience acquired during his travels (he was a very observant man) bore fruit in all sorts of ways. For instance, the York Waterworks, of which he was a Director, benefited largely by his visits to American water undertakings, and have become famous for their up-to-date arrangements.

Tempest Anderson had a singularly lovable nature. He had a gift for forming and retaining friendships. Honest as the day himself, he accepted the good faith of those who differed from him, and never used hard words of them. Never extravagant in his expenditure on himself, he gave a liberal support to a large number of societies and institutions, whilst in private his charities were generous and manifold, and only very partially known even to his intimate friends.

He will be deeply regretted by a large circle of friends both in the Club and out of it. G. YELD.

THE ALPINE CLUB LIBRARY.

The following have been added to the Library since July :

Club Publications.

- British Columbia Mountaineering Club**, Oct. 28, 1907. The Northern Cordillera.
9 × 6 : pp. 50 : maps, plates. 1913
- The articles are :—
- J. P., Historical notice.
 - J. S. Bishop, Romance of the mountains.
 - C. J. Heaney, Topography of the Vancouver or Britannia Range.
 - W. J. Gray, The Garibaldi Group.
 - J. Davidson, Botanical work for mountaineers.
 - J. Porter, Geological features of Coast Range.
- The Club began as the Vancouver Mountaineering Club.
- C.A.F. Statuts.** 1912
8½ × 5½ : pp. 8.
- **7me Concours international de Ski** organisé par le C.A.F. 31 janvier
au 4 février 1913, Gérardmer 1913
- 9½ × 6¾ : pp. 32 : ill.
- **Côte d'Or et du Morvan.** 23e bulletin, année 1912. Dijon, 1913
10 × 6½ : pp. 85 : plates.
- **Provence.** Bulletin année 1913. Marseille, 1913
8½ × 5½ : pp. 52.

- C.A.I.** Guide e portatori riconosciuti. 1913
 24 × 20.
 — Cinquantesimo Anniversario del C.A.I. 1913
 9 × 5½ : pp. 6.
 — **Sez. Ligure.** Annuario. 1913
 7½ × 5 : pp. 75.
 — **Milano.** Annuario 1913. 1913
 6½ × 4½ : pp. 147.
 Contains particulars of the Section, of the Gruppo Lombardo Alpinisti senza Guide, and Rules of the C.A.I.
 — **Torino.** Rifugio Torino sul colle del Gigante. 1913
 19 × 13.
D.u.Oe.A.-V. **Baden** bei Wien. viii. Jahres-Bericht für 1912. 1913
 9 × 6 : pp. 16.
 — **Ingolstadt.** Satzungen. 1901, 1910
 8½ × 5½ : pp. 6.
 — Bericht 1912. 1913
 8½ × 5½ : pp. 32. Contains library catalogue, pp. 17-32.
 — **Lindau i. B.** Katalog der Bibliothek. 1901
 9 × 6 : pp. 16.
 — Jahresberichte 1910, 1911 u. 1912. 1912, 1913
 8½ × 5½ : pp. 32, 30.
 — **Reichenberg.** Die Sektion Reichenberg von 1908 bis 1912. 1913
 9 × 6 : pp. 70 : plate.
 Contains:—Neue Klettertouren im Gebiete der Reichenberger Hütte, Cortina.
 — **Verein d. Freunde d. Alpinen Museums.** (Satzungen.) 1913
 9 × 6 : pp. 4.
Japanese Alpine Club. 12 photographic reproductions of fine views of the Japanese Alps: including—Ho-wo-zan, Hodaka-yama, Akaishi-san, Yakushi-dake, view from Yarigadake, Yarigadake, Tateyama, Oku-dai-nichi-dake, Hodaka-yama.
 These have been obtained most kindly for the A.C. Library by the Rev. Walter Weston.
Mecsek-Egyesület. Alapszabalyai. (Rules.) Pecs, 1906
 6½ × 4 : pp. 12.
Nederl. Alpen-Vereeniging. Jaarboek voor 1913. Berner Oberland. Redacteur Ph. C. Visser. Rotterdam, 1913
 9½ × 6½ : pp. 269 : plates.
 Contains the following articles:—
 Ph. C. Visser, Het Berner Oberland.
 J. Visser, Een bezoek aan het Zwitsersche Alpiene Museum te Bern.
 — De Jungfrau.
 D. H. Koetser, De Noordzijde der Jungfrau.
 B. Th. van Heemstra, Een traverseering der Jungfrau.
 Ph. C. Visser, Oberland—Herinneringen.
 — Gross Schreckhorn.
 — Wetterhorn—traverseering.
 — Gr. Lauteraarhorn—traverseering.
 I. en J. de Bruyn, Mönch over het Noordwest
 H. J. Knottenbelt, De Bietschhorn.
 W. Hooft, Strahlegg-pas.
 C. M. J. Tromp, Lauterbrunner Breithorn.
 Th. W. C. Calkoen, Van Lauterbrunnen over de Petersgrat naar Kandersteg.
 R. C. van der Linden, Schmadrijoch.
 I. de Bruyn, Kandersteg en de Blümlisalp.
 C. M. J. Tromp, Het Kiental.
The Scottish Mountaineering Club Journal. Edited by F. S. Goggs. Vol. xii. Edinburgh, 1913
 9 × 6 : pp. 12, 352 : plates, etc.

Among the articles are the following :—

- J. M. A. Thomson, New climbs in Skye.
New Guide Book.
J. A. Parker, The Black Pinnacle of Coire Brochain.
H. W. Hoek, Garbh Bheinn of Ardgour.
J. C. Thomson, Wanderings in the Coolins.
W. W. Naismith, Bidein Druin nan Ramh.
H. Raeburn, The Brack, the Elephant Gully.
G. Sang, Beinn Dearg.
W. Douglas, Bird cliffs of St. Abb's
- Società prealpina Giov. Gniffetti, Novara, 1 gennaio 1899.** 1899
Statuto. 10½ × 8 : pp. 9 : typed
Diffendere, facilitare e rendere popolare le gite in montagna.
- Unione alpinistica Torre Pellice. xiii^o Bollettino.** 1913
6½ × 4 : pp. 32.

New Books, etc.

- Abraham, Ashley P.** Two thrilling British climbs. In *Wide World Mag.*
London, vol. 31, no. 88. August, 1913
9½ × 7 : pp. 458-465 : ill.
- Abraham, G. D.** The Chamonix Aiguilles. In *The Arena*, London.
11 × 8½ : pp. 455-461 : ill. August, 1912
- Adelboden.** Bümpliz, Benteli, n.d.
" 6½ × 4½ : pp. 36 : plates.
- Baedeker, Karl.** Switzerland and the adjacent portions of Italy, Savoy, and Tyrol. 25th ed. Leipzig, Baedeker : London, Unwin, 1913. 8/-
6½ × 4½ : pp. xl, 604 : maps, plans.
- Bonnamaux, H. et Ch.** Manuel pratique de camping. Touring-Club de France. Paris [1913]
7 × 4 : pp. 190 : ill.
- Bossé, Fernand.** Géographie de la Suisse. 2de édition.
8 × 5 : pp. 109 : maps, plates. Lausanne, Pache-Varidel & Bron, 1913
A good short school geography book, well illustrated.
- Buhan, Paul : Maurel, Henri : Dacezac, Emile : Veira, Jean.** Neiges et sommets pyrénéens. Souvenirs d'Excursions dans les Pyrénées Centrales.
13 × 10 : pp. 134 : sketch map, plates. Paris, chez les Auteurs, 1911. Fr. 20
- Casella, Georges.** Sports-bibliothèque. L'alpinisme. Paris, Lafitte, 1913
8 × 6 : pp. xxiii, 428 : ill.
Names, history, publications of Alpine Clubs ; glossary of mountaineering terms ; equipment ; food ; guides and porters ; climbing ; refuges ; camping ; rope, ice-axe, crampons ; snow and ice ; guideless climbing ; dangers ; accidents ; winter climbing ; mal de montagne, etc.
- Coolidge, W. A. B.** Les alpes dans la nature et dans l'histoire. Edition française par Edouard Combe. Lausanne, Payot, 1913. Fr. 7.50
8¾ × 5¾ : pp. xi, 547 : plates.
- von Dalla Torre, Prof. K. W.** Tirol, Vorarlberg und Liechtenstein. Junk's Natur-Führer. Berlin, Junk, 1913. M.6
6½ × 4½ : pp. xxiv, 486 : map.
In the form of an ordinary guide-book, but dealing with the natural history, geology, botany, etc., of the various districts.
- Douglas, R. de Bréugel.** La Dent du Midi. La Haye, Stockum, 1913. 10/-
13 × 9½ : plates, pp. iii, 68.
A monograph on the Dent du Midi, giving full notes of all first ascents to the various points and illustrations on which the various routes are marked. The author has known the district for 25 years.
- Duncan, Jane E.** A Summer Ride through Western Tibet. (New edition.)
6 × 4 : pp. 316 : plates. London and Glasgow, Collins [1913]. 1/-
This work was first published in 1906. It records a journey in 1904 including the Chang La and Chorbat La Passes.

- Francs.** Service des grandes forces hydrauliques, région des Alpes. Compte rendu et résultats des études et travaux au 31 décembre 1911. Tome vi. 11½ × 7 : pp. 495. 1913
- Francé, R. H.** Die Alpen gemeinverständlich dargestellt. 10½ × 7 : pp. 964 : maps, ill. Leipzig, Th. Thomas, 1913. M. 35-38
This offers a full representation of nature and life in the Alps in all their aspects. More than is usual in similar works is given to climbing, its methods, dangers and possible future. The illustrations are good and very numerous, for nearly every page has an illustration on it.
- Garwood, E. J.** Arctic glaciers and British ice sheets. In Geographical Teacher, London, no. 36, vol. 7, part 2. Summer, 1913
9½ × 6½ : pp. 73-89 : plates.
- The Geographical Journal**, vol. 41. London, R.G.S., Jan.-June, 1913
9½ × 6 : pp. viii, 667 : maps, ill.
Among the articles is the following :—
June. The Mufumbiro Mountains, by Capt. E. M. Jack.
- La Géographie.** Bulletin de la Soc. de Géographie Paris. Tome xxvi. 1912
11 × 7 : pp. 456 : maps, ill.
- Grindelwald in winter.** Grindelwald, Verkehrsv. 1912
- Hartmann, Hermann.** Guide pratique pour visiter l'Oberland bernois. 8 × 4½ : pp. 138 : ill. map. Interlaken, Bur. de renseignem. [1913]
- Kandersteg.** Guide to Kandersteg. Bümpliz, Benteli, 1910
6 × 4½ : pp. 32 : ill.
- Kordys, Roman.** Wintersport. Reprinted from Hartleben's Führer d. Galizien. Wien, 1913
6½ × 4½ : pp. 4.
- McLesh, Donald.** On photographing at high altitudes. 1912
11 × 6½ : pp. 191-2 : 12 plates. Extract.
- Montague, C. E.** The morning's war. London, Methuen, 1913. 6/-
7½ × 5 : pp. 308.
A novel with an alpine climbing incident in it.
- Muller, J. W.** First aid to naturers. New York, Platt & Peck, 1913
6½ × 5 : pp. 240 : plates.
This is a deliciously absurd work. It is charmingly foolish, a skit on the lure of the wild. It is cleverly, painfully funny. Unfortunately the part relating to mountaineering is by no means the best part of the book, but here it is, from the chapter on 'How to contract geology' :—
'Geology consists of stones and dirt . . . The large stones are known as mountains. Mountains are of little value, being exceedingly primitive and rudely built. Their chief use is for climbing. The only practical result from climbing a mountain is to climb down again. Naturers who climb mountains for sport are known as mountaineers. Those who descend are known as survivors. There also are professional survivors known as guides.'
The chapter on 'How to surmount a horse' is perhaps the best in the book.
- Norway.** An ideal holiday land. Summer resorts.
7½ × 4½ : pp. 64 : ill. London, Norway Travel Bureau, 1913
— Preliminary information for travel in Norway. 6th ed.
7½ × 5 : pp. 113 : map, ill. Christiania, etc., Bennett, 1913
— Norge. Utgit av Forening for reiselivet i Norge. Bergen, Gries, 1913
12 × 9½ : pp. 65 : maps, ill.
— Tours in Norway. Bergen, etc., Beyer, 1913
8½ × 5½ : pp. 116 : maps, ill.
- Palmer, William T.** Odd corners in English lakeland. Rambles, scrambles, climbs and sports. London, Skeffington, 1913. 2/6 nett
7½ × 5 : plates : pp. vi, 186.
A pleasant book on walking and climbing and on winter sports in the Lake District, well illustrated.

- Platzhoff-Lejeune, Ed.** Die Berner Alpenbahn (Lötschbergbahn). Wanderbilder 321-323. Zürich, Orell Füssli, 1913
7½ × 5 : pp. 74 : map, ill.
- Reid, H. F.** Variations of glaciers, xvii. Reprinted from Journ. of geol. Chicago, vol. 21, no. 5. July-August, 1913
9½ × 7 : pp. 422-426.
- Rey, Guido.** Récits et Impressions d'Alpinisme. Traduit de l'italien par Emile Gaillard. Préface par Henry Bordeaux. 9 × 6 : pp. xxix, 267. Macon, Faure, 1913. Fr. 7.50
This is no. 102 of 320 copies in Holland paper.
- U.S. National Parks.** Proceedings of the National Park Conference held at Yosemite National Park October 14, 15, and 16, 1913. 9 × 6 : pp. 145. Washington, Gov. Printing Office, 1913
- Weber, P. X.** Der Pilatus und seine Geschichte. Luzern, Haag, 1913. Fr. 6
8 × 5½ : pp. xix, 379 ; map, plates.

Older Books.

- Avebury, Lord.** The beauties of nature and the wonders of the world we live in. London and New York, Macmillan, 1892
7½ × 5 : pp. xiv, 427 : plates.
- de Cessole, Victor.** Les Aiguilles de Pélen. Premières ascensions. 9 × 6 : pp. 54 : plates. Corbeil, 1907
Reprinted with corrections and additions from La Montagne, mai-juin 1907.
- Rawnsley, Rev. H. D.** Life and Nature at the English Lakes. 7½ × 4½ : pp. viii, 192. Glasgow, MacLehose, 1899
- United States Geological Survey.** 20th annual report, 1898-99. Part vii—Explorations in Alaska in 1898. Washington, Gov. Print. Office, 1900
10½ × 7½ : pp. 509 : maps, plates.

Items.

- Map. Tirol.** R. Leuzinger ; Reise-Relief-Karte, Tirol, Vorarlberg, Salzburg Oberbayern. Bern, etc., 1913. Fr. 5
- Francis Paget, Bishop of Oxford,** by Stephen Paget. London, Macmillan, 1913
From p. 277 we take the following :—

'Aug. 20, 1908. Courmayeur. I have been having even as good a holiday as all your thought for me could devise. Monday was one of the very best days I have ever had : I started with four other men, and a guide and two porters, at 5.30 in the morning :—we climbed up to the Col du Géant, for 11,000 feet : then crossed the Glacier du Géant, and up a small peak called La Vierge, rising above the glacier, and giving a most glorious view of Mont Blanc, and the other great peaks of the same group, with the Mer de Glace sweeping round towards Chamounix. The splendour of the pure white snow, and the deep intense blue of the sky with the huge heights towering up close round us, were far beyond words. I have had a talk here with Dr. Longstaff, the Himalayan climber and explorer. Aug. 27 . . . a glorious climb yesterday up Mont Dolent, 12,650 feet above the sea. We started the day before, slept in a hay hut, creeping through a gap in the roof to lie on the hay : and then set out at 2.45 in the dark, with lantern ; and after a steep time on the glacier and up the rocks, reached the top at 9.15. Most splendid it was : with such a view as surpasses all imagination and beats all telling. I went up with Canon Arnold, the chaplain here, just we two, with two guides : and one of the guides, Henri Brocherel, had been with Dr. Longstaff in the Himalayas, when they got above any recorded climb :—such a delightful fellow, full of keenness and kindness :—I slept in his sleeping sack, which he had had with him

on the great climb. He had been at Ranikhut, and at Lucknow. The other guide had been with the Duke of the Abruzzi when he went up Mt. Ruwenzori, and with Mackinder up Mt. Kenia, in eastern Africa, the first ascent ever made of it: so we had distinguished as well as delightful companions. I do not think I ever had a day with more glorious things to see or more exciting climbing.'

Subject Index of recent Books and Articles:

- Alps:** R. H. Francé, *Die Alpen*.
Beinn Dearg: *Scot. Mountain Club*.
Bernese Oberland: *Nederl. Alpen-Vereeniging*.
 — H. Hartmann, *Guide pratique*.
Bidein Druin nan Ramh: *Scot. Mountain Club*.
Bietschorn: *Nederl. Alpen-Vereeniging*.
Canada: *Brit. Columbia Mountain Club*.
Chamonix: G. D. Abraham,
Coire Brochan: *Scot. Mountain Club*.
Cortina: *Oe. A.-V. Reichenberg*.
Dent du Midi: R. de Bruegel Douglas.
Equipment: H. Bonnamaux, *Manuel de camping*.
Fiction: C. E. Montague, *The morning's war*.
 — J. W. Muller, *First aid*.
Garbh Bheinn: *Scot. Mountain Club*.
Gr. Lauteraarhorn: *Nederl. Alpen-Vereeniging*.
Gr. Schreckhorn: *Nederl. Alpen-Vereeniging*.
Guide Books: K. Baedeker, *Switzerland*.
Guide Books: K. W. v. Dalla Torre, *Tirol*.
 — H. Hartmann, *Oberland bernois*.
Jungfrau: *Nederl. Alpen-Vereeniging*.
Lake District: W. T. Palmer, *Odd corners*.
Mönch: *Nederl. Alpen-Vereeniging*.
Mountaineering: G. Casella, *L'Alpinisme*.
 — G. Rey, *Récits*.
Mufumbiro: *Geographical Journal*.
Pilatus: P. X. Weber, *Der Pilatus*.
Pyrenees: P. Buhan, *Neiges et sommets*.
Schmadrifjoch: *Nederl. Alpen-Vereeniging*.
Scotland: *Scot. Mountain Club*.
Skye: *Scot. Mountain Club*.
Switzerland: F. Bosse, *Géographie*.
Tibet: J. E. Duncan, *Ride through Tibet*.
Tirol: K. W. v. Dalla Torre, *Tirol*.
Vancouver: *Brit. Columbia Mountain Club*.
Wetterhorn: *Nederl. Alpen-Vereeniging*.

AN ASCENT OF MOUNT MCKINLEY.

THE American papers report another ascent of this mountain. The party, consisting of Archdeacon Hudson Stuck, Episcopal Missionary for Alaska, accompanied by Robert G. Tatum, Harry P. Karstens and Walter Harper, set out from Fairbanks, Alaska, on March 13, and reached the summit of the S. or higher peak on June 7. The actual start was made from McPhee's Pass, about 9000 ft., to which point Karstens had conveyed supplies the previous September. The provisions, a launch load, were taken by launch up the Kantishna River to Nenana, and then by dog team to a camp near the pass.

The Archdeacon, who graduated at King's College, London, in 1883, went to America about ten years later, and has occupied his present position in Alaska since 1904. He is stated to have made many ascents in the Canadian and Colorado Rockies as well as some in the Alps.

The Archdeacon's telegraphic message from Fairbanks to his friends at Seattle read as follows :

' Expedition successful. Accomplished first complete ascent of Mount McKinley June 7. H. P. Karstens, R. G. Tatum, Walter Harper and I reached top of S., the highest of all peaks, on a clear day, when it was possible to read all the angles of the mountain and other points and make certain that the peak we had conquered was the highest of all.

' We successfully carried a mercurial barometer to the top and made complete readings and observations, which, with simultaneous readings at Gibben, should permit a close approximation of the true altitude when proper corrections are applied. Water boiled at 174.9 degrees. The present estimate of the summit's height is upward of 20,500 ft.

' We were able to read angles on all prominent points. With field glasses we clearly saw the flagpole erected in 1910 by the Thomas Lloyd expedition on the N. peak (the lower of the two main peaks).

' After completing observations on the summit we hoisted the American flag on the upper basin, erected a six-foot cross, and said "Te Deum" on the highest point of North America.

' The N.-E. ridge is the only possible approach to the summit. Due to the violent earthquakes of last July, the higher ridges were terribly shattered, and this added largely to the danger, difficulty, and labour of the ascent.

' We spent three weeks, in continuous bad weather, hewing a passage three miles long through this side. This was the chief cause of delay, as we made rapid progress at all other stages of the journey.

' The chief credit for our success is due to Karstens's good judgment, resourcefulness, and caution. We did not have a single mishap.'

It is very satisfactory to read that the party saw the cross on the N. summit left by the party of gallant miners who, under the leadership of Thomas Lloyd, made its ascent in 1910. A full account of this expedition was published in the 'Daily Telegraph' of June 6, 1910, and the opinion expressed in 'A.J.' xxv. 645 as to the authenticity of the ascent is now fully borne out.

Archdeacon Stuck's party, though starting from Fairbanks instead of from Seward, eventually gained the summit by the N.E. ridge already followed by Professor Herschel C. Parker (now a member of the A.C.) and Mr. Belmore Browne on their ascent in 1912, and of which the former wrote an admirable and well-illustrated account in this volume ('A.J.' xxvii. 189-195, 'Conquering Mt. McKinley').

Mr. Belmore Browne also fully described the expedition, with some splendid illustrations, in the American magazine 'Outing' * for April 1913, and it is interesting to quote once more his words which explain the reason why his party did not proceed to the

* This magazine (1s. monthly) often contains excellent mountaineering articles.

actual highest point of the summit ridge now gained by the Archdeacon's party :

' I should like at this time to correct the statement that the peak of Mt. McKinley rose 300 feet above us. If the summit of Mt. McKinley had ended in a peak we could have climbed it, as our only difficulty was our inability to see clearly where to go *and how to get back*. The summit of Mt. McKinley is a long horse-shoe-shaped ridge. On a clear day it would require at least an hour to explore this ridge and make the necessary observations.

' While we were climbing straight up from the narrow north-eastern arête all was well, but on reaching the edge of the flat summit it was impossible for us to find our way to the low rise in the ridge through the clouds of blizzard-driven snow.

' The hummock that formed the highest portion of the summit ridge was only a short distance away, and reaching it under good weather conditions would have required no more labour than one encounters in walking along a city street. Our danger was the intense cold and the difficulty of correctly retracing our steps through the storm. But the dome on which we stood *was the summit of Mt. McKinley.*'

Professor Parker and Mr. Belmore Browne made two previous expeditions to Mt. McKinley before their final success. The second of these expeditions is fully described and the previous attempts reviewed in an article in this Journal, vol. xxv. 644-648. It is undoubtedly due to the splendid pioneer work of these two men, added to the energy and skill of the Archdeacon and his men, who had with them their maps and data, that the Archdeacon's party were able to put on the coping-stone.

Karstens is the Alaskan guide who led the Charles Sheldon expedition in 1907-8, while Tatum is a mission worker under the Archdeacon.

The Archdeacon is to be greatly congratulated on the successful carrying out of this great expedition. It is to be hoped that he will find time to write a full account of it, which will be looked for with as much interest as Mr. Belmore Browne's already announced book on his various expeditions.

J. P. F.

THE FATAL ACCIDENT TO DR. PAUL PREUSS.

THE news will be received with great regret that Dr. Paul Preuss, the well-known Austrian climber, was killed about October 2 on the precipitous hitherto unclimbed N. face of the Manndlkogel, a difficult rock peak in the Salzkammergut. As he was alone the cause of the accident is obscure.

Dr. Preuss's latest achievement was the traverse of the Aig. Blanche de Peuteret from the Col between it and the Dames

Anglaises, a very difficult expedition requiring great judgment as well as first-rate climbing powers.

One has to go back almost to Emil Zsigmondy to match, at such an early age, the great reputation that Dr. Preuss had won for himself as much by his great powers as a climber as by his clear and vivid descriptions of some of his great climbs. He was on the high road to a European reputation and his premature death is much to be lamented.

Freiherr von Saar has been good enough to accede to the request to furnish to the ALPINE JOURNAL an account of the accident and an appreciation of his late friend which unfortunately was not received in time for inclusion in this number and will appear in February, while one of the best known of our members adds below a characteristic testimony.

Dr. Preuss's name will be in the recollection of British mountaineers in connection with the accident to Mr. and Mrs. H. O. Jones on the Monts Rouges de Peuteret in August 1912. For those who were concerned, his promptitude and courage at the time, and subsequently his admirable tact and sympathy, will remain a lasting memory.

Among Continental mountaineers, Austrian, Italian and German, his name was already widely known. He stood alone in his generation, both for the number and the difficulty of his ascents in the Eastern Alps. As a master of every principle, detail and variety of rock climbing he was without an equal in the extent of his experience and without a superior, among amateurs, in the finish and power of his performance.

His ascents were made largely alone. The mountains came first, and he could find few companions who would not be comparatively an encumbrance. He belonged to, and led, a strong school of thought in the Austrian Alps which holds that the constant 'moral' use of the rope encourages careless climbing and multiplies unequal associations unfitted for exceptionally difficult climbs. He based his practice, and his considered teaching, on the principles that have been worked out and found applicable by himself and other experts in this their own region. He did much to encourage and instruct beginners in climbing, and was insistent upon its serious aspects; on the necessity of preliminary training, fitness, careful previous reconnoitring and constant precaution.

It was not until 1912, I believe, that he was first attracted to the greater Western Alps, but the rapidity with which he mastered the technique of ice and snow on some of the most difficult glaciers around Mont Blanc was remarkable. Independently and alone, in a few days, he worked out the problem upon which H. O. Jones and I were engaged, to find a 'safe' route up the Aiguille Blanche de Peuteret, a question which we settled by our exploration on La Pointe Isolée. He returned in 1913 and made the ascent with

the Count Bonacossa and Signor Prockownick. It may have been due to other considerations, but I should like to mention it as very characteristic of his delicacy of feeling, that he avoided the approach to the S. ridge which our ascent had established as safe and easy, but which would have taken him back to the Gamba Hut and the Fresnay Glacier, the scene of the accident, and took what was known to be the more dangerous and difficult wall of approach from a bivouac on the Brenva Glacier.

His reliance upon his own skill was justifiable. He had a sounder knowledge of mountaineering principles and practice, assimilated from all quarters as well as from personal experience, than most of us who are now content to sit back and advise others. If he has fallen, it has been from no ill-considered daring or neglect of the precautions held necessary by his school. Accidents in mountaineering occur to the ablest no less than to the least enterprising. Solitary climbing will always have its critics as well as its devotees. But with the feeling of regret for the premature death of a great climber and a fine personality comes also the feeling of pride that there are still men of the highest intellect in our generation who, with full knowledge of all the easier and more profitable alternatives that life has to offer, continue to match their skill as it increases against increasing difficulty, and accept the issue with calm courage.

G. WINTHROP YOUNG.

ALPINE ACCIDENTS IN 1913.

ACCIDENT ON THE TÜRMLIHORN (2491 m.) IN THE SIMMENTHAL. DEATH OF THE REV. PAUL BAUMGÄRTNER.

ON June 22, by a most unfortunate accident, this young and enthusiastic mountaineer, one of the best of the young Swiss, lost his life. He and Herr Bratschi were engaged in ascending the Türmlihorn (about 8200 ft.), N.W. of Adelboden, by its jagged E. arête. The climb is difficult, but well within the powers of the party. Herr Baumgärtner was pastor of St. Stephan, an adjoining village in the Simmenthal, and had often made the ascent.

Everything went well until they arrived above the gap between the two E. gendarmes. Here they roped. Bratschi then descended into the gap. Baumgärtner was following when a loosened block of rock swept his legs away from underneath him. The quite good rope broke, probably cut by a stone, as the edges were quite sharp, and Baumgärtner fell past his companion first into a little couloir and then over the high rocks down to the screes of the Rüggenenthal. His companion reached him within half an hour, but from the terrible injuries to the head death must have been instantaneous. The body was carried down by a party of the deceased's parishioners.

By a somewhat tragic coincidence the first ascent of the Türmlihorn

was made by Pfarrer Hürner, one of Baumgärtner's predecessors at St. Stephan and afterwards pastor of Gadmen, a brilliant and enthusiastic mountaineer who, it will be remembered, was killed on the Gabelhorn and lies buried at Zermatt.

The fatalities in the ranks of Herr Baumgärtner's former fellow students at the University of Berne have been very severe. Paul König was killed with Flender in the winter of 1902 on the Grenz glacier; Egon v. Steiger was killed in 1903 on the Balmhorn; Dr. Bühlmann died from injuries inflicted when ski-ing; and Ernst Krebs, injured on the Doldenhorn in 1904, eventually succumbed in 1911. Now Baumgärtner himself, one of the most capable of them all, has followed.

No blame can attach in the slightest degree. It is one of those occurrences which are pure accidents, and which are not altogether avoidable in mountaineering even by thoroughly competent mountaineers, fully justified in what they are undertaking.

On June 5 the Herren Odermatt, Stierlin, and **Max Blau**, of Muri, an officer in the mountain troops, set out at 5.15 A.M. from the Blümlisalp Hut to make the ascent of the **Weisse Frau**. The night was very cold, but the conditions were not bad. The party arrived at the so-called Schnappstein, where they roped, Blau leading. Owing to the hard snow they advanced slowly up the arête, the leader kicking steps. Odermatt then took over the lead from Blau, who followed last. In this order they reached the so-called Dreieck, about twenty minutes from the summit of the mountain and about 3500 m. high. Suddenly a Staublawine broke away from the summit and detached the whole surface of new snow, leaving the bare ice. The whole mass, with a front of about 800 yards, slid bodily down and over an 80-metre high snow wall to the Blümlisalp glacier, carrying the three men down. The rope held. Blau was buried head downwards, with only his boots projecting; the others were held fast by the legs, one of Stierlin's being broken.

The two Herren Vogl, of Munich, who had observed the accident from the Wilde Frau, hurried down to assist, but it was only after 3½ hours of hard work that Blau could be uncovered, of course dead.

On July 8 the students **Karl Hess**, of Paunsdorf, Saxony, and **Alfred Müller**, of Engelsdorf, Saxony, left the summit of the **Zugspitze** at 4 P.M. to descend to the Wiener-Neustädter Hut. They were heard by parties at the hut to shout for help, but it is stated that nothing could be done that night by reason of a snow-storm. Next morning a rescue party found the bodies some distance above the hut. The young men had apparently lost themselves in attempting the descent, which requires care, especially with fresh snow, and had fallen down the rocks.

On July 14 the Herren **F. Kumposcht**, of Vienna, and E. Werner

ascended the **Grosser Buchstein** in the Ennsthal from the Buchauertal. In attempting the descent to Gstatterboden through the 'Rohr' they were surprised by fog and compelled to bivouac. Next morning, after renewed attempts to descend, they started to re-ascend, but were again involved in fog and a heavy thunderstorm. Kumposcht was so exhausted that a second bivouac was unavoidable. Next morning Kumposcht's state of exhaustion was such that Werner, leaving all the food and enjoining his companion not to move, returned over the summit to their starting place. Here the landlord of the Eisenzieher-Wirtshaus at once sent out men, Werner being too exhausted to accompany them. It was, however, only on the 22nd that a party, organised by the Vienna and Graz Alpine Rescue Committee and led by Herren R. Hamburger and R. Iberer, found the body. It would appear that the unfortunate man had attempted to descend further, but had finally become so exhausted that he could not even touch the food that still remained. From a note found on him it seems that on the 17th he put an end to his life by opening the artery in the wrist. He is described as without any mountaineering experience whatsoever, and even his companion, according to the papers, had had little experience and none of recent date, while the line of descent attempted is said to require surefootedness and experience in route-finding.—'Mittheilungen D. & G.A.V.' 1913, 206-7.

On July 26 three young climbers, MM. **Jeniet, Barthélemy, and Badins**, of Paris, started from Salanfe to attempt the **Tour Sallière**, which from that side requires great care. They got up to about 2700 metres, where the steep wall leading to the summit has to be attacked. They failed to ascend by various couloirs, when about 6 P.M. the guide, Pierre Délez, who keeps the Inn at Salanfe and who had followed their movements with a glass, saw them overwhelmed by a Staublawine. Délez organised a search party with the promptitude to be expected of a man of his experience and character, and at daybreak next morning found the mangled bodies at the foot of the face.

On August 3 Herr **A. Ktienzle-Engler**, of St. Gallen, a well-known personage in S.A.C. circles, was killed on the **Dents Blanches** near Champéry. He made the ascent alone from Barmaz and proceeded to visit some other points of the massif. Unfortunately he slipped down a steep snow-slope about forty yards, and was dashed against the rocks and killed. His watch had stopped at 4.25. The mountain under ordinary conditions is perfectly easy, mostly grass.

On August 6 **Dr. Th. Husche**, aged 46, of Rostock, followed a guided party up the **Kleine Zinne**. At one of the less difficult passages he lost his hold and fell down the precipice several hundred feet.

On August 10 three young Swiss went up the **Aig. du Goûter**, but owing to thick mist they failed to find the hut. One of them, **O. Wäckerlin**, unfortunately died of exhaustion and cold before his comrades could eventually find the hut.

On August 13, when ascending the **Finsteraarhorn** with two friends, Herr **Hans Lieb**, of Bâle, fell into a crevasse about 30 feet deep, a little way from the breakfast place. Even with the assistance of two other tourists the party failed to extricate him, as the rope cut deep into the snow. Upon the arrival of a third tourist with the guide Furrer-Moor he was eventually got out, but was dead. The autopsy showed that death was due to weakness of the heart and shock to the system.

On August 15 **Dr. August Luetjens** and the student **Eberhard Müller**, members of the A.A.V. München, were killed on the **W. Grasleitenturm**. Shortly before midday the guide Villgrattner met them near the Junischarte, rather off the right track, which he indicated to them. As they did not return at night Villgrattner went out to look for them, and found the shattered bodies at the foot of the peak.

On August 18 Professor **Rudolf Mittermann**, aged 40, of Villach, was going up to the Bamberger hut (Sella group, Dolomites) with three friends, all, like himself, members of the A.A.V. Wien, which denotes considerable experience. They followed the new and very steep **Pösnecker Weg**, which is provided with wire ropes and iron ladders. Suddenly, at the second ladder, he fell backwards down the very steep rocks, and was picked up dead 500 feet below. It is surmised that he had a sudden heart attack.

On August 18 the young student **Ernst Markus**, of Vienna, set out from Schluderbach, alone, to ascend the **Monte Cristallo**. The body was eventually recovered on September 2, out of a very deep bergschrund.

On August 19 Lieutenant **Josef Molling** was killed on the S.W. route up the **Zwölferkofel**. He was an officer in the Gendarmerie, stationed at Sexten, and an enthusiastic lover of the mountains, with considerable experience in the Dolomites. As he was climbing alone the cause of the accident is not clear. He may either have slipped in crossing the great ice couloir or, as several fractures of and a round hole in the skull would seem to indicate, have been struck by stones. The body was noticed by a guideless party which reached the Zsigmondy hut late at night on the 20th, and was recovered the next day by a party of his men with the guide Franz Wenter of Tiers, near Bozen, Tirol, about 100 metres below the ordinary starting place up the rocks in the bergschrund of the great ice couloir. The conduct of Wenter is described as most creditable. He refused any payment, but was finally with difficulty prevailed on to accept a small sum for damage to his clothes and for food.

In view of the outrageous claims so often made by the salvors in similar cases this instance deserves particular mention. Wenter, who is well known as one of the very best Dolomite climbers and is now in his thirty-sixth year, has also travelled extensively in the Alps, Pyrenees, and Tian-Schan.

On August 27 Herr **Otto Krahlick**, aged 20, of Vienna, under-

took, alone, the ascent of the **Bischofsmütze**, a rock peak near the Dachstein. He appears, in descending, to have slipped and fallen on to a terrace of the N. face, where he lay, severely injured. About noon of the 28th two climbers heard weak shouts, but could find nobody. They reported the matter at the Hofpürgl hut, the knecht of which, in the absence of the gardien, at once went out to see, but could find nothing. The gardien, the guide Franz Vierthaler, returned early next morning and finally succeeded in finding the body at the foot of the N. face. The unfortunate man appears, after endeavouring by shouts to attract attention, to have fallen eventually right down the precipices of the N. face.

On August 28 the well-known guide, gardien of the Kasseler hut, **Peter Willeit**, aged 41, was killed by stones when descending the **Hochgall**. He and his brother were accompanying three tourists. The first two had just got off the rocks when Willeit was killed on the spot by a stone coming apparently from a great height, as no one heard it.

On August 31 Herr **Max Grimmer**, of Munich, attempting to glissade down the Oestr. Schneekear on the **Zugspitze**, came suddenly on ice and, unable to stop himself, was hurled against the rocks and killed.

On September 2 the bodies of **Dr. Hans Rachfall** and Herr **H. Hirschberger**, of Berlin, described as competent climbers, were recovered by a party of guides in the Bayr. Schneekear on the **Zugspitze**.

On September 3 Herr **Fritz Melan**, of Prague, made, with two friends, all described as novices, an ascent of the **Habicht**. They attempted a glissade, with fatal results to the one member and considerable damage to the others. But for the rope catching round a rock it is probable that the whole party would have been killed.

On September 7 two young Dutch workmen, in lightly nailed boots and with walking-sticks, attempted the ascent of the **Jungfrau** from the Rothtal hut. They turned back at the first rope, but one of them, **Cleef**, slipped and fell 500 to 600 metres into the 'Schaf-lauene,' being of course killed.

On September 13 the Herren **Caspar**, the one secretary of the Hôtel Bernina, Samaden, the other postmaster in Celerina, **Milczewski** and Fräulein **Bünzli** set out to ascend the **Piz Palü** via the Diavolezza. They were last seen about 10 A.M. on the first summit. The weather was misty and unsettled. Notwithstanding the subsequent very bad weather the most vigorous search was made for them.

Eventually, on September 26, the body of Milczewski was found on the second Palü summit. By his side lay the only rope which the party had with them. In the rope were three loops, one slightly loosened, the others still tied fast, whilst one loop had been cut off. Four pairs of gloves, a coat, a hat, three rucksacks with complete equipment, enough food and a cooking apparatus also lay about. It would appear that the party had been compelled to bivouac,

but died from cold and exhaustion—the other bodies being blown over the rocks on to the glacier below. No trace of them, no doubt due to the heavy snowfall, could be found.

Many other accidents are reported, but where the details are not known, or where they offer no mountaineering interest or instruction, they are not here repeated.

NEW EXPEDITIONS IN 1913.

Graian Alps.

POINTE DU POUSSET (3046 m. = 9994 ft.), FROM THE TRAJO ICE-FALL, August 11.—Mr. G. Yeld, with Benjamin Pession of Val Tourlanche and Pierre Gerard of Cogne, having reached the Colle Nera, 3480 m. = 11,417 ft., from the King's Camp at Lauzon, descended the Trajo Glacier to the top of the séracs, but found it impossible to discover a way down to Epinel as they had intended to do. They therefore went up to the Pousset ridge (well over 10,000 ft.) and then proceeded to the Pointe du Pousset itself. 'This very long route up the Pousset is hardly likely to be repeated, but it gave us very fine ice-scenery and splendid views.'—G.Y.

BECCA DENTAVU (2593 m. = 8507 ft.), August 15.—The same party, without Pier e Gerard, ascended this point, the last (most E.) in the long ridge of the Punta Rom or Punta Trajo, all the other points in which were climbed by the same party in 1910.

They went down to Epinel and then practically walked straight up to the top, in part through forest. The climb, which was very pleasant, presented no difficulty. The view from the summit rivals, if it does not surpass, that from the Pousset. The party, having so lately ascended the Pousset (August 11), were in a position to compare the two. On both occasions the weather was perfect. The most striking feature of the view was the Grivola, standing between and above its satellites, the Grivoletta (11,569 ft.) and the Punta Crevasse (10,850 ft.). The ascent took four hours from Cogne. The descent (not altogether easy) was made to Trajo, and Cogne was regained through the forest and the bridge near Cretaz in three hours. 'The view of the Grivola from the summit is exceptionally impressive.'—G. Y.

COGNE TO LOCANA BY THE VAL SOERA. THE PUNTA DI VAL SOERA (3191 m. = 10,469 ft.). **THE COLLE DEI RONCHI** (over 10,000 ft.), August 17.—The same party made this long but very interesting expedition. They left Cogne by moonlight at 2.40 A.M. (the traveller riding a mule, for about three hours, nearly to the end of the King's hunting path in the Valeille) and reached Locana, also by moonlight, at 10.30 P.M.

They crossed the Valeille Glacier to the S. Colle di Sengie





E. Diaget, photo.

Swan Electric Engraving Co., Ltd.

DÔME DE NEIGE DES ÉCRINS.
(N.W. FACE.)

(3206 m. = 10,519 ft.), then descended to the Ciardoney Glacier and mounted the Colle delle Uje (3161 m. = 10,371 ft.). Then they crossed the little snowfield in the eastern basin of the Val Soera to the rocks to the S. of the Punta di Val Soera.

They went up these steep rocks to the pass between the Punta di Val Soera and the next point to the S., and afterwards climbed the Punta di Val Soera, first ascended from the N. by Messrs. Irving and Tyndale in 1912 ('A.J.' xxvi. 461), then returned to the pass, and, after a careful examination of the rocks on the W. side of it, decided to attempt the descent to the W. basin of the Val Soera. The descent was not easy and took considerable time, as it was necessary to keep close to a sort of overhang which ran in a S. direction, obliquely across the face of the mountain, in order to be able to obtain shelter in case stones should fall. None fell while the party were on this part of the mountain. The last part was over a wilderness of big blocks. Thus they accomplished a new pass and a new descent of the Punta di Val Soera at the same time, and visited both the E. and W. branches of the Val Soera. After a meal by the stream in the bottom of the valley the party continued their journey past the Lakes of Val Soera and Bubna through very wild, desolate, but impressive scenery. Below the Val Soera Lake the flora was attractive. They descended into the Val Piantonetto at S. Giacomo, and so, striking the Val d'Orco at Perebecche, reached Locana by moonlight at 10.30 P.M. after a long but exceptionally interesting day.

Dauphiné.

DÔME DE NEIGE DES ECRINS (3980 m. = 13,058 ft.), BY THE N.W. FACE.*

July 14, 1913, Dr. Guido Mayer, of Vienna, with Angelo Dibona of Cortina.

'The summit ridge of the Ecrins carries three named points, the highest or E. peak, the central peak (Pic Lory), and the W. peak (Dôme de Neige). Two great walls give the mountain its bold shape: the S. face of the highest peak, climbed in 1893 by A. Reynier with Maximin Gaspard and Joseph Turc (cf. Coolidge, "The Central Alps of the Dauphiny," p. 108), and the N.W. face of the W. peak. The latter, owing to the alarming appearance of its extremely steep and 1100 m. high slabby armour, in which a 70° ice couloir ending in vertical walls is cut, had so far defied all attacks. The route of Messrs. Jones, Todhunter, and Young, with the guides L. Croux, H. Brocherel, and J. Knubel, however, approaches, in the S. rocks of the W. arête, the neighbourhood of the N.W. face. (Cf. "A. J." xxv. 736.)

'Leaving La Bérarde at midnight the foot of the great couloir about 2900 m.) was gained at 3 A.M., when the porters, Pierre

* The fine illustration has been kindly supplied by M. Emile Piaget of Lyons, the well-known mountain photographer, through M. Fouilland, editor of *La Revue Alpine*, to both of whom thanks are tendered.

Turc and Roderon, were sent back. Started at 3.30 A.M., day-break. The general line of ascent is up the rocks of the N. half of the wall, and reaches the summit ridge up vertical impassable-looking walls 30 m. to the N. of the summit. (See illustration.)

'Cross the bergschrund to the left by means of avalanche snow, with difficulty, to the edge of the rocks. Keep along the edge of these up very steep névé and crossing a few slabby ribs to the beginning of the narrowest part of the great couloir, the ice-bed of which, here hardly 10 m. wide, ascends almost vertically. Continue for about 60 m., very dangerous, and as soon as possible bear left up 60° slabs to the top of the great rock-wave. Up very steep névé to a little rock island and straight through a chimney of bare black ice (avalanche run) to passable rocks. Here oblique to the left and in wide curve to an overhanging iced rock-girdle, above which a system of steep gullies, bounded on either side by jagged rotten ridges, leads upward for about 500 m. Then with varying difficulty (some places very difficult), in terrain very exposed to stones, for about 300 m. to the rotten rib which, starting at the great couloir, mounts like a tower or steeple. On the flank of this a violent storm delayed us for an hour, and gave way later to changeable weather with occasional hailstorms and blizzards of snow. Continuing in direct line for the summit, one aims for a little rocky bay at the height of the upper edge of the great ice couloir, and gains up very difficult iced rocks a well-marked ledge (first resting-place). Then to the right up a short overhanging wall (the leader on the other's shoulders), and along the right flank of a kind of rocky jutting-out rounded top right up to yellow overhanging walls, near which on the left a depression in the wall shows itself, which runs out above in a big shallow gully. Then an extremely difficult and dangerous traverse on a vertical ice-wall, with overhangs above, about 30 m. to the left, and mount in very rotten cracks obliquely to the N. until close to the next rib of the arête. Here bear away right-handed into the bed of the gully, by the side of which soon appears a sharply-inclined ridge with many gendarmes which, as a very sharp crest (N.N.W. arête), merges into the ice slopes 30 m. to the N. of the summit. Follow the S.W. flank of this ridge to the little gap separating two vertical pitches. Gain the gap by an overhanging narrow iced crack (extremely difficult) crossing a series of notches and many iced places. Then along the crest with great difficulty about 30 m. to a deep gash in the arête, on the N. side of which descend about 5 m. on to broad snow and éboulis fields to the left of the crest (second resting-place) and cross obliquely some iced rock slopes to the summit cornice. Over this, with great difficulty, about 35-40 m. to the summit (3.30 P.M.). Descent to the Brèche Lory and down the N. ice slopes of the main peak (glissading over the great bergschrund!) to the Col des Ecrins (5 to 5.30 P.M.) and over steep snow and the Glacier de la Bonne Pierre to La Bérarde (8.30 P.M.).

'The expedition here described is one of the most important and

daring in Dauphiné, and demanded in the wet summer of 1913 20 hours of almost continuous work.

'Even with favourable conditions this time will probably not be much reduced. Kletterschuhe were worn during the greater part of the ascent.'

(Translated verbatim from Dr. Guido Mayer's MS.) *

AILEFROIDE (W. peak 3959 m. = 12,989 ft.; Central peak c. 3925 m. = 12,878 ft.; E. peak 3854 m. = 12,645 ft.). ASCENT OF THE CENTRAL PEAK BY THE N. ARÊTE.†—July 1 and 2, 1913, Dr. Guido Mayer, with Angelo Dibona, of Cortina.

'The massif of the Ailefroide, with its 3 kilometre long summit-ridge of over 3800 m. in height, is one of the greatest of the French mountains. At its central peak the N.-S. watershed (Meije-Barre des Ecrins-Ailefroide) and the E.-W. main arête (Pelvoux-Ailefroide) of the group meet. The Duhamel map appears to be quite incorrect, as the main summit of the Ailefroide stands really at the point marked on the map *Pointe des Frères Chamois*, or about 1 k. more to the W. than marked.

'The central peak, connected to its neighbours on the E. and W. by indescribably savage arêtes, lies exactly S. of the Col de la Coste Rouge, which is the deepest depression between the Vénéon valley and the Glacier Noir. From this col a much-gendarmed arête leads to the central summit 600 m. above. All previous ascents of the Ailefroide (including the route by the W. arête) have been made from the S. by way of the Ailefroide glacier, which is about 2 k. wide. Professor Bonney in 1860, in the classic work "Peaks, Passes, and Glaciers," p. 211, declared the ascent from the N. to be hopeless. Of the attempts by the guide Emile Rey, and later by the guide Supersaxo of Saas, little can be gleaned. Further attempts were made by L. Purtscheller, G. Leser, and P. Engelbach on August 6, 1886; by J. Maitre with guides, July 23, 1888; by Beeching and Pryor with R. Imboden and H. Rodier on July 20, 1896; by F. L. Littledale with C. and E. Turc in 1898; by H. W. Dollar with C. Turc père et fils in September, 1907, &c., &c. Cf. also W. A. B. Coolidge's monograph in the "Revue des Alpes Dauphinoises," i. 232-3.

'Left La Bérarde on June 30, 10 A.M., with the porters Roderon and Pierre Rodier, for the Col de la Coste Rouge. Followed the S.

* The magnificent expeditions in the Dauphiné and in the Mont Blanc chain carried out by Dr. Mayer testify to the splendid powers of his leader, the Dolomite guide, Angelo Dibona, and to his own abilities and endurance. The notes were received through the kind interest of Mr. H. J. Mothersill. I have since had an extended correspondence with Dr. Mayer on various points, and he has added immensely to the value of his notes by marking his approximate routes on the accompanying illustrations. This is certain to be appreciated by any non-readers of the ALPINE JOURNAL. J. P. F.

† The illustration is from one of Cav. V. Sella's splendid series kindly placed at the disposal of the ALPINE JOURNAL. Dr. Mayer points out that the upper hanging glacier is now much smaller.

edge of the Glacier de la Coste Rouge and gained the Col in 7 hours. Bivouac on the S. edge of the glacier near the Col at about 3150 m. from 9.30 P.M. until 4 A.M. (very cold).

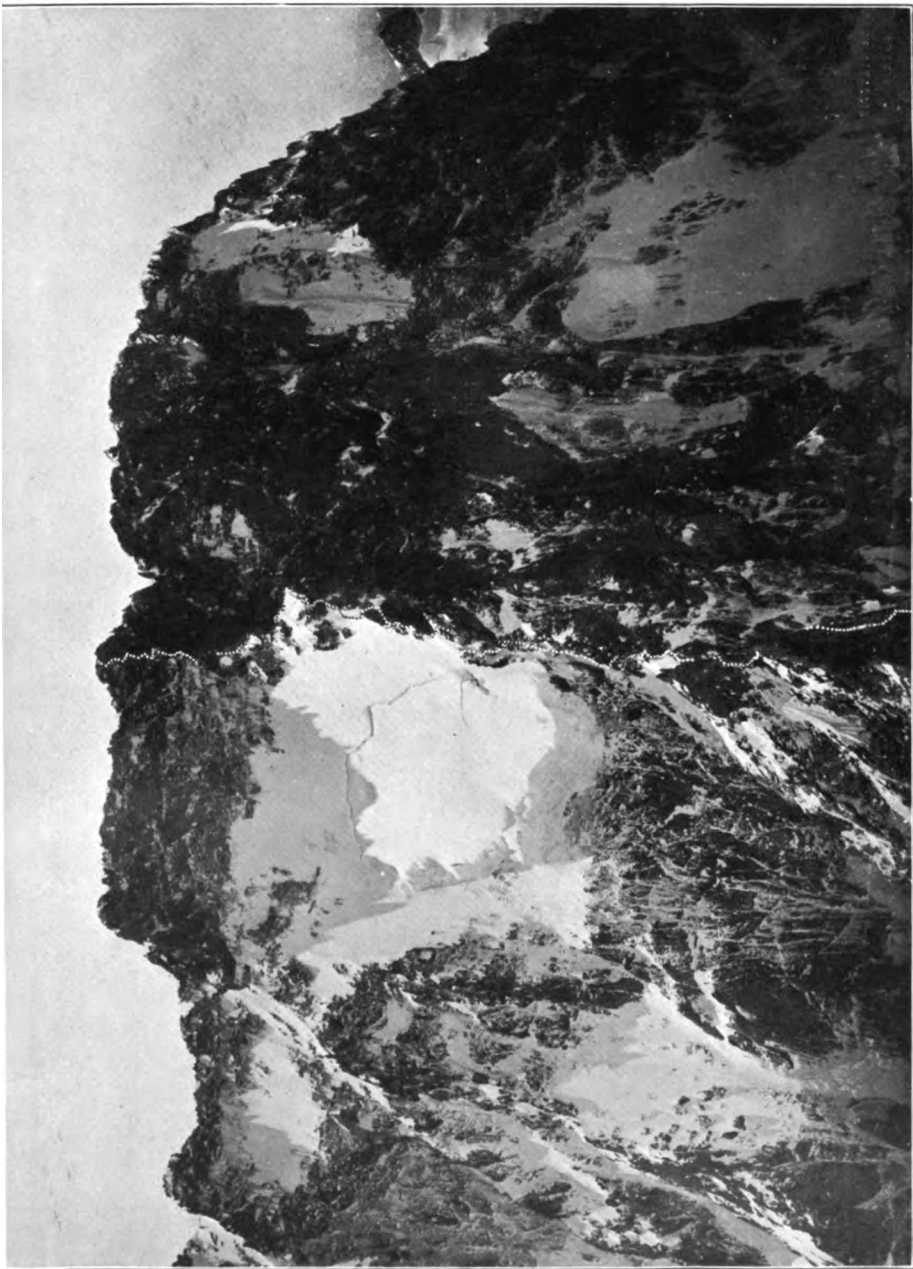
‘On July 1 the porters were sent back and the climb commenced at 4.30 A.M. The N. edge of the mountain may be divided into five sections: the lowest bit of arête, divided from the second series of gendarmes by a very sharp gap; the great buttress-like giant tower which forms the third rise; the fourth great gendarme and the final precipice, which are connected by a horizontal, very sharp arête.

‘The climb starts W. of the Col de la Coste Rouge and left of a fairly big couloir (not to be confounded with the great couloir of Hippolyte Rodier). Climb then slightly to the right to a rock-rib and in the same direction along narrow ledges (at this point Kletter-schuhe were put on) and over a pitch to a series of very difficult cracks which, in very rotten rock and interrupted by little ledges and overhanging pitches, permit progress. Higher up to the right into the savage gap behind the first bit of arête. The next rise had to be turned on the W.: 60–80 m. in very rotten rock to the right (exposed and risky, and extremely difficult) into the gap behind the great gendarmes. In face of the now following, about 300 m. high, rock tower, which on every side exhibits red rocks and overhanging gullies, traverse into a great couloir of the flank, in which mount for about 60 m. At the end of this bear to the left to a shoulder whence are visible above, to the left, the magnificent séracs of the great hanging glacier of the E. half of the face (very steep, rotten and, at times, iced rocks). Then up snow-covered low pitches into the next gap.

‘The then following 150 m. high rise is climbed by its E. flank, whereby one finally reaches direct up very hard iced rocks the top of the buttress. Here we saw facing us an uncommonly sharp and serrated arête which led to the still distant summit-wall. The difficulties are turned partly on the iced and snow-covered E. flank, but mainly on the extremely exposed W. side. Then one reaches a club-shaped tower which is seen from the Glacier de la Pilatte to stand on the final part of the arête. This splendid needle is climbed on the W. side up apparently inaccessible rocks—very exposed.

‘From the gap behind it—difficult to reach—with the 1000–1200 m. deep precipice on the W. absolutely exposed, one gains the foot of the formidable final wall which, above a little shoulder or pulpit, appears impossible. Then with difficulty to this little shoulder and almost direct up the main arête by means of the red block-shaped rotten rocks of gaps, little overhangs and vertical walls to the summit of the central peak. Very venturesome climb. (4.30 P.M., 12 hours from the start, including halts.)

‘For the descent both the German and English editions of the Dauphiné guide failed completely, as the descriptions for almost all routes of the Ailefroide appear of little



V. Sella, photo.

THE N. FACE OF THE AILEFROIDE, FROM PIC COOLIDGE.

Swan Electric Engraving Co., Ltd.

use.* We descended from the central peak with some difficulty direct S. to a great glacier tongue, which, however, was cut off from the valley on all sides by savage ice-falls. We therefore crossed the S. flanks of the Ailefroide over steep rock and snow slopes, so as to reach a route of the highest or W. peak, and were finally compelled to bivouac a second time near a little hanging glacier in very broken rocks (from 9.30 P.M. to 3 A.M. about 3700 m.).

1↓ 2↓



L'Ailefroide from Col du Sélé.

. . . . Dr. Mayer's descent.

o C. Dr. Mayer's bivouac, close to which the hanging glacier breaks away in a vertical iced wall.

+++ Best line of descent, as the party eventually saw.

Dr. Mayer desires to say that he is not perfectly certain about the exact line followed on the upper 100 metres of the descent, and that Dibona thinks it was the point marked 2 which was actually gained by the party.

The photo is one of Mr. Alfred Holmes's series, kindly placed at the disposal of the ALPINE JOURNAL.

'JULY 2.—We retraced our steps for a bit and gained up a high vertical wall a peculiar scree terrace which, bounded by overhangs, ran horizontally for several hundred metres to the Glacier de l'Ailefroide. Got off the rocks 5.30 A.M. and ascended to the Col du Sélé (8 A.M.), reaching La Béarde at 11.30 A.M. after three days' work.

'We had thus carried out one of the most important expeditions in the district which had been tried almost yearly. The beauties of the tour, so far as the views are concerned, are not equalled by those of any other ascent with which I am acquainted.'

(Translated verbatim from Dr. Guido Mayer's MS.)

* It is notoriously always difficult to make out a *descent* from the description of an *ascent*. The accuracy of the climbers' guides, more particularly in cases where the author had himself made the expedition, is proverbial.—J.P.F.

COL DU FLAMBEAU (about 3150 m. = 10,332 ft. aneroid). First passage.

June 24, 1913. Dr. Guido Mayer and Herr Max Mayer, with Angelo Dibona of Cortina.

'The pass leads from the Vallée de la Bonne Pierre to the Vera Pervoz glacier, and lies between the Flambeau des Écrins (3523 m. = 11,559 ft.) and the Pointe de Pié Bérarde (3188 m. = 10,460 ft.). The height (3045 m.) given for the col in the German edition of the Coolidge guide issued by the Ö.A.C. is too low.

'The pass was crossed by us when reconnoitring for a route up the N.W. face of the Écrins. From La Bérarde reach in 3 hours the plateau of the Glacier de la Bonne Pierre (c. 2750 m.) and then bear direct to the foot of the wall of the Flambeau des Écrins. Now sharp right-handed up steep névé (two bergschrunds) to the edge of the rocks, which ascend until a high chimney becomes visible in the smooth wall. Ascend this chimney with great difficulty and bear away to the right over small snow-covered terraces and steep steps to the upper, very steep, névé slopes. Now, somewhat exposed to avalanches, slightly to the left to a little rock-rib which emerges from the snow and to the sharp gap in the savage main arête (about 2 hours from the glacier). Descent to the S. Either round the W. gendarme on the S. side (exposed) or, rather better, on the N. side and down a steep chimney about 30 m. to a ledge in the S. face. Then to the W. down a steep rotten gully and, 60 m. lower, down a steep snow couloir by which the Gl. de la Vera Pervoz is gained. Down the E. bank of the deep cutting to the Vénéon valley and to La Bérarde (about 3 hours from the col).

'A very interesting expedition, interfered with by bad weather.'
(Translated verbatim from Dr. Guido Mayer's MS.)

Mont Blanc Group.

MONTS ROUGES DE TRIOLET. TRAVERSE FROM THE HIGHER (3311 m. = 10,889 ft.) TO THE LOWER SUMMIT (3274 m. = 10,742 ft.).

July 29, 1913, Mr. R. Todhunter with Josef Knubel.

'We descended from the higher peak, slightly on the E. or Pré de Bar side of the face, and climbed over the big gendarme shown in H. O. Jones's photo, 'A.J.' xxv. 514.'

For particulars of the ascent of the two peaks by the late H. O. Jones with Laurent Croux and Henri Brocherel respectively cf. 'A.J.' xxv. 357-8 and 512-15.

MONT GRUETTA (3686 m. = 12,090 ft.). TRAVERSE FROM MONT ROUGE DE GRUETTA (3457 m. = 11,408 ft.).

August 2, 1913, Mr. R. Todhunter with Josef Knubel.

'We traversed Gruetta by way of Mt. Rouge de Gruetta, thus joining up Dr. Claude Wilson's route up Mt. Rouge ("A.J." xxv. 357 and 506-8) with mine up Gruetta ("A.J." xxv. 741). The only absolutely new part of this expedition is the descent from Mt. Rouge

to the col between it and Gruetta, but it has the merit of making a sound route which could be followed under any reasonable conditions—eliminating the risk of stones and avalanche in the couloir leading to the col. We also found a much better way down the Frébouzie glacier—Henri Brocherel and I took 8 hours from the top of Gruetta to La Vachey in 1911—by going some way along the arête towards the Aig. de Leschaux and descending rocks in the middle of the glacier, but I do not suppose there is anything new in this.

‘The traverse of Gruetta by our route of this year is, I think, the most attractive expedition within easy reach of Courmayeur. We took 2½ hours from La Vachey to foot of Gruetta glacier, 3 hours (including breakfast) up the glacier and couloir to the col on right of Mt. Rouge, and 3 hours more (all on good rock) to the top of Gruetta, 2 hours 5 minutes from the top to foot of Frébouzie glacier.’

AIGUILLE DU PLAN (3673 m. = 12,047 ft.) BY THE S.E. ARÊTE.
August 18, 1913. Dr. Guido Mayer with Angelo Dibona of Cortina.

‘The Aiguille forms the junction of four arêtes: the S.W. arête connecting it to the Aig. du Midi, the N.E. arête to the Blaitière, the N.W. arête, which carries the little known points called the Aig. des deux Aigles, des Pèlerins, du Peigne, &c., and the S.E. arête, leading to the celebrated Dent du Requin. The Col du Requin separates the Plan from the Requin, and the connecting arête was one of the great remaining problems and had already been the subject of determined attacks (cf. “Mont Blanc Führer des Ö.A.C.,” route 231) [and ‘A.J.’ xxiv. 477. “From the Aiguille du Plan on the S.E. and almost at right angles descends an impracticable ridge to the buttress of the Requin overhanging the Mer de Glace”].

‘From the Dent du Requin the savagely torn arête descends in a gentle curve to a deep gap, the Col du Requin (3304 m., Vallot), in which stands a wild-looking gendarme. Beyond the gap the arête rises in steep slabs to a savage needle, the “Grand Gendarme” (3520 m.).

‘The arête was gained below this rise. We then followed the S. flank a few metres below the crest of the extremely wild and torn arête fairly horizontally to the next gap (c. 3470 m.), from where a steep wall was climbed direct to the top of the “Pain de Sucre” (highest point of the arête, 3607 m.). From here we made a steep descent to the snowy summit ridge of the Aig. du Plan.

‘The details are as follows: After long-continuing snowfall we left Courmayeur on August 17 for the Col du Géant. Starting from here at 4.30 A.M. on August 18 we gained by the usual route the snow-saddle above the Petit Rognon and, following the S. edge of the Glacier d’Envers du Plan, gained through the séracs the upper plateau.

' We crossed this in the direction of the great rise in the S.E. arête near the Col du Requin. We crossed the bergschrund in a little couloir which leads towards the S.E. arête W. of the Col du Requin, but soon runs out in vertical snow-covered rocks. Then up snow and rock-ribs to the steep rock-wall, and at first straight up, then by a shelf, a slab, and a smooth very difficult crack to the arête, attained to the left of a great cornice. Now, contrary to expectation, without great difficulty, up the almost vertical step in the arête ("Grat-abbruch"), which offered, however, good holds, to close to a needle about 10 m. broad and 40 m. high. This we turned on the left on stepped snow-covered rocks, and gained by a dangerous traverse, a little under the serrated crest, a little couloir. Immediately below the head of this bear upwards to the left to the overhanging wall of the last tooth, and descend from the crest of the rib thus reached (very dangerous on account of the fresh snow) into a completely snow-filled gully. This was crossed below the crest of the arête on the S. side (dangerous). Following the crest was rendered impossible, on the easier portions, by cornices. We then climbed in the direction of the step in the arête below the "Pain de Sucre." Up increasingly steep rocks to an almost holdless step in the main arête, which was climbed direct with extreme difficulty. A horizontal bit of arête led to the next step, which was climbed by means of smooth cracks on the N. side. Now, very exposed, to the third step and with extreme difficulty up a steep wall to the less inclined slabs of the E. arête of the "Pain de Sucre" and up this in fine style to its sharp summit (midday—4 hours from the "Einstieg"). As the summit was too sharp for a rest we went back to the last little gap.

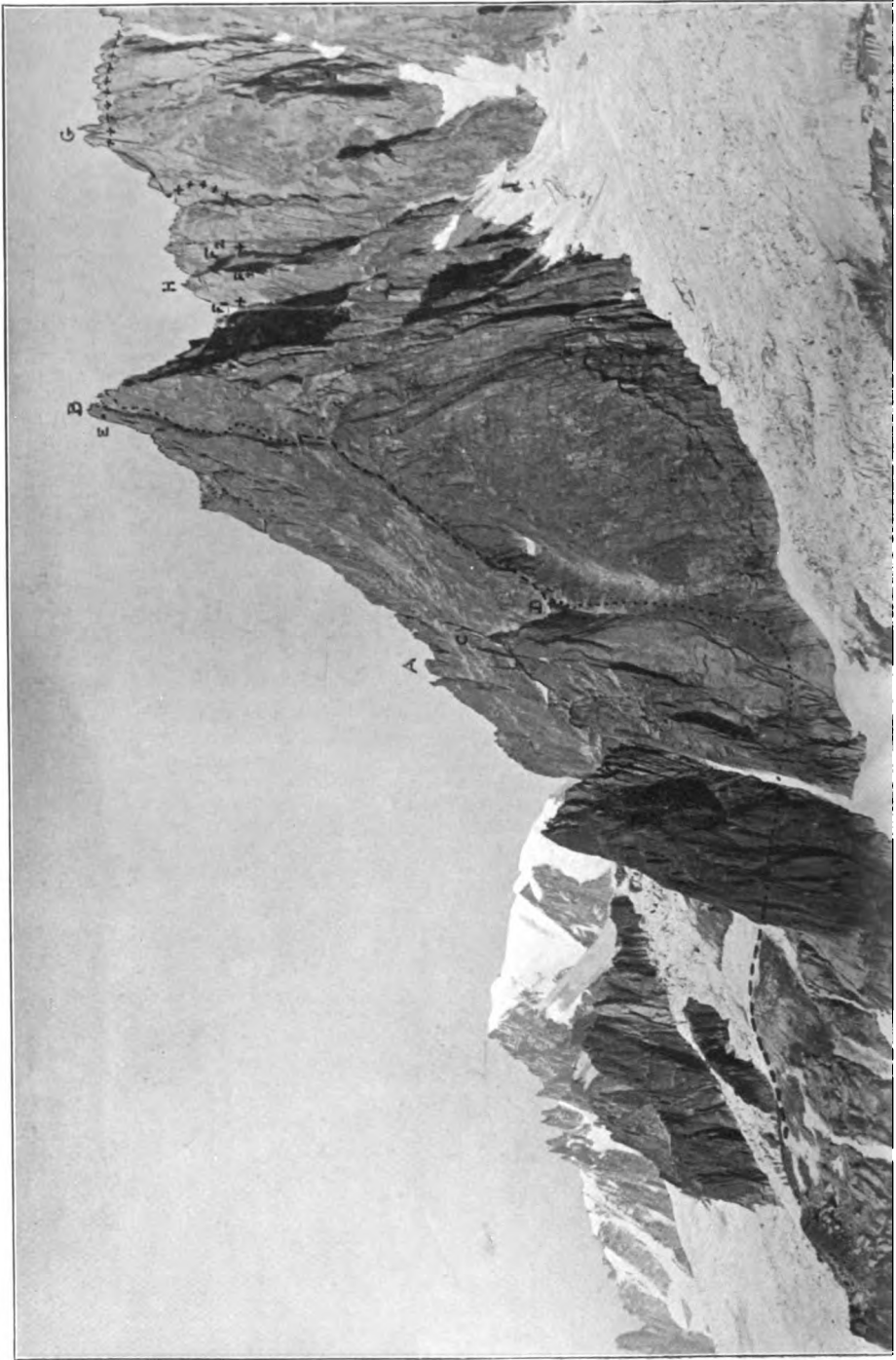
' Descent into the gap between the "Pain de Sucre" and the Aig. du Plan: over steep slabs about 30 m. into a little gap between the peak climbed and the next teeth on the arête. From here S. down an overhanging deep chimney, until the flanks of the teeth appeared passable. Now out to the W. and gain by an easy traverse the snow col before the Aig. du Plan. The then following connecting ridge, consisting of a 40 to 50 m. long snow-crest, joins the S.W. arête of the ordinary route below the summit. As the problem was now solved we descended by the ordinary way ("Mont Blanc Führer," route 223) without proceeding to the summit of the Plan in view of the deep snow on the glacier which we still had to cross, and the séracs of which gave us the greatest trouble.

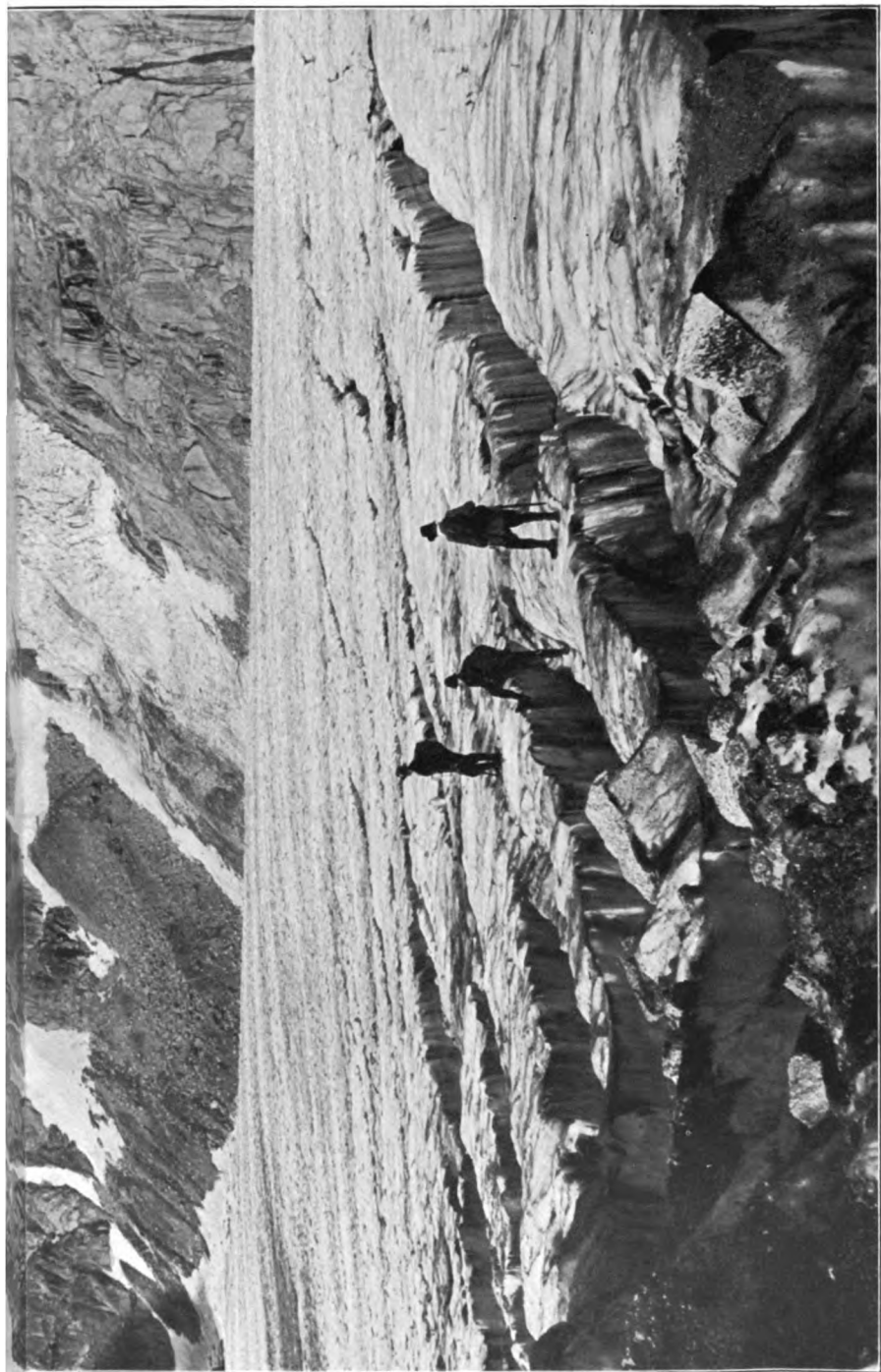
' (Left the summit ridge 1 P.M. Col du Géant 5 P.M. Courmayeur 8 P.M.)

' Particularly fine and extremely difficult rock climb, rendered more difficult by masses of snow.'

(Translated from Dr. Guido Mayer's MS.)

[The lower part of the route is seen in the fine picture of the Requin.]





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DENT DU REQUIN, FROM GLACIER DU GÉANT.

Donald McLeish, copyright photo.

DENT DU REQUIN (3419 m. = 11,124 ft.) BY THE E.N.E. ARÊTE.*
 August 22, 1913. Dr. Guido Mayer, of Vienna, with the Cortina
 guide, Angelo Dibona.

'The Dent du Requin, well known for its great difficulties, forms the imposing S. pier of the S.E. ridge of the Aig. du Plan, which ridge was ascended four days earlier by the same climbers, as detailed elsewhere.

'At the Dent du Requin the arête forks and forms the narrow S. arête, which hardly emerges out of the 300-400 m. high S. precipices, and the extremely sharp and savage E.N.E. arête which, with apparently inaccessible walls and towers, bears to the N.E., but at the so-called Capucin du Requin (3047 m., Vallot) suddenly bears S.E. and only dips to the valley level when above the Mer de Glace. In the flanks on either side of the S. arête, over the shoulder of which, 30 m. below the summit, the old and present routes lie, two ascents were made up 300 m. high walls under the respective guidance of Blanc le Grœffier of Bonneval and of Simond of Montanvert. (Reports of local guides.) Nearer to the N.E. arête lies the line of descent over the S.E. face of the party of 1907, which was only rendered possible by repeated roping down. ("D.A.Z.," 1907-8, ii. p. 62, and cf. the new Ö.A.C., Mont Blanc guide, routes 236-239.)

'Our route started from the small glacier lying to the E. of the summit and bounded by the first great gendarme (Pt. 2784, Vallot), led up the great, often overhanging, couloir to the gap close to the "Capucin," then at first along the arête itself as far as the yellow towers, and turned the vertical pitches at first on the E. and later on the N. flank.

'Left Courmayeur August 21 for the Col du Géant inn. Left inn 3 A.M. August 22. Descended the Glacier du Géant as far as the lower part of the séracs, about 200 m. below the base of the Petit

* The accompanying copyright picture of the Dent du Requin has been placed at the disposal of the ALPINE JOURNAL by Mr. Donald McLeish of 63 Marquess Road, Canonbury, N., the well-known professional Alpine photographer, to whom the best thanks are due. Dr. Mayer has kindly marked his routes. The following is an explanation of the marks :

A. The three gendarmes to the E. of the descent down the S.E. face made in 1907.

B. Summit of the Dent du Requin.

C. Capucin du Requin.

D. Gap where Dr. Mayer gained the E. arête (this gap was gained from the other side).

E. ^{oc}. The finish of the ordinary route which lies up the other side.

F₁, F₂. Col du Requin divided by the great tower H.

G. The great gendarme (3520 m., Vallot) on the S.E. arête of the Aig. du Plan.

----- Visible portion of the ascent of the Requin.

..... Invisible portion of the ascent of the Requin, i.e. the route lies on the S. side up a couloir behind the Capucin.

_____ Visible portion of the ascent of the S.E. arête of the Plan.

++ + Invisible portion of the same, i.e. the route lay on the other side of the arête.

Rognon, then worked horizontally through the maze of crevasses on to the great névé lying between Pt. 2977 and 2784, which, sweeping past the S. edge of the mountain, joins the Glacier d'Envers du Plan.

'From the N. edge of the little glacier up the great couloir, the ice lining of which is interrupted by three great and several small pitches. Cut up to the first pitch, which turn by its right (proper) wall (extremely difficult). The second pitch is overcome by means of a difficult, shallow, horizontally projecting crack. In front of the third pitch is an overhanging ice-wall which we turned by the right (proper) wall. The pitch was turned on the same flank. Up to here quite exceptionally difficult. Above this the couloir gets wider. It allowed us to follow it towards the W. until below the gap in the N.E. arête, then in firm good rock along broad ledges close to the crest of the main arête as far as the first overhanging pitch. The first great gendarme was turned, somewhat exposed though without particular difficulty, notwithstanding the impassable-looking rocks. Then up the couloir between the first and second tower until about 5 m. below the gap (very exposed), and climb the vertical wall of the second gendarme by means of a narrow crack bearing slightly to the left. Seen from the valley this crack looks like a fine line.

'From the Kanzel or pulpit below the top of this work horizontally to the left to an overhanging cleft, and (always very exposed and extremely difficult, impracticable-looking terrain) diagonally to the left over yellow walls parallel to the crest of the arête. Very narrow oblique cracks, together with vertical, hardly hand's-breadth fissures, permit the advance. Finally, a larger couloir which leads to the gap between the third and fourth towers was attained. Mount with great difficulty and soon bear left into another couloir between the fourth and fifth towers. As the arête above the fourth tower rises up precipitously, the point gained is about 60 m. below the gap. A vertical, in places almost smooth, cleft leads to this gap, from which a difficult traverse to the left leads to the next and last gap in the arête.

'Continue along the N. side of the sharp crest or *à cheval* along the crest itself (iced rocks) to the final tower of the Dent du Requin, where the ordinary route is joined. Now over much easier but dangerously-iced rocks 20 m. to the summit.

'Back by the great chimney and the ordinary way to Courmayeur.

'Exceptionally fine and extremely difficult rock-climb in very firm, apparently impassable, rock. Height of arête 600 to 700 m. About 10 m. before reaching the ordinary route we came across a piton.

'Times:—Started the ascent to the N.E. arête 6 A.M. Summit 2 to 2.30 P.M. At bergschrund 3.30 to 5 P.M. Col du Géant 8.30 to 9 P.M. Mont Fréty 10 P.M.'

(Translated from Dr. Guido Mayer's MS.)

PETITES JORASSES (3658 m. = 11,998 ft.) FROM THE S.W.
 August 26, 1913. Dr. Guido Mayer, of Vienna, with the Cortina guide, Angelo Dibona. Left La Vachey 3 A.M. and ascended in the dark the lower part of the Frébouzie glacier, then to the left up the middle, very much crevassed, arm of the glacier (the W. arm leads to the Col des Hirondelles, the E. arm to the Aig. de Leschaux). From the further end of the ice plateau thus reached, sharp right to a very steep slope of névé, about 300 m. high and swept by stones, which was then ascended, six or eight bergschrunds being encountered (very dangerous). Take to the rocks on the right as soon as possible and gain the S. arête of the mountain up a steep wall—about 300 m. rock climbing. The highest point could not be actually ascended owing to an enormous cornice of snow hanging over on the S. face ready to fall. Descent by the same way. Time of ascent about 8 hours. Descent 5 hours. An arduous and dangerous expedition, of no great importance, however.

(Translated from Dr. Guido Mayer's MS.)

Pennines.

COMBINED TRAVERSE OF THE GRAN BECCA DI BLANCIEN (3680 m.) AND SOUTH SUMMIT OF LA SENGLA (3690 m. *circa*).—On July 30, 1913, Mr. A. Stuart Jenkins, with the guides Jean Gaudin and Jean Rieder, of Evolène, left Prarayé at 1.10 A.M.; ascended the Col di Sassa from the Combe d'Oren (danger of stone-fall!) and thence reached the summit of the Gran Becca di Blancien over loose but fairly easy rock (7.30 A.M.).

The main ridge leading to the Sengla, not especially difficult but thoroughly unsond, was followed, much care being required in climbing numerous shattered gendarmes, or turning them on either the Swiss or Italian sides. The arête, in all probability, had been unclimbed. It is very deceptive, much longer than expected, and compels very slow progress.

On the southern summit of the Sengla (10.30 A.M.), the party renounced to proceed to the Col de la Reuse d'Arolla as had hitherto been its intention. The conditions of the mountain were good, the day quite young, but considering that the so far travelled distance represented barely a half of the total ridge, the now uncertain weather made the risk of a night on the rocks too great.

After an hour's rest, some fairly difficult climbing on the E. face brought us to the arête descending to the Combe d'Oren, climbed for the first time in 1898 by SS. E. Canzio, F. Mondini, and N. Vigna. This route offered no especial difficulty, and leaving it about half-way down to our left we gained the Combe d'Oren by a broad snow couloir (3.30 P.M.).

[The Blancien-Sengla arête is well shown in the illustrations 'Boll. C.A.I.' xxxii. pp. 121 and 131, which also contains the admirable monograph 'In Valpellina' together with the best large-scale (1 : 50,000) map of the district.]

Bregaglia Group.

PIZZO DEL FERRO CENTRALE (Cima della Bondasca), 3293 m. = 10,804 ft., *S. map*; 3300 m., *I. map*; 3290 m., *Lurani*. By the E. arête, reached from the N., Captain E. L. Strutt, with Josef Pollinger, of St. Niklaus, June 11, 1913.—Party left Albigna Club hut at 3.25 A.M., then straight up Albigna glacier to S.W. recesses of said glacier; bergschrund attained 5.40 (25 min. halt). Crossed bergschrund 6.5, easy; exceedingly steep snow couloir, 55°–65°, rises now directly in front, leading to well-marked gap in frontier ridge between Ferro Centrale, E. peak, and Torrione del Ferro [*Guida* = Ferro Orientale, 'Climbers' Guide']. Up this couloir, bearing ever very slightly left to right, N.E. to S.W., exposed to falling stones going high over party's heads from Torrione del Ferro, and falling ice—very serious—from Ferro Centrale, E. peak. Couloir about 1000 ft. high, last 150 ft. of extraordinary steepness; snow admirable gap attained 7.20, two stones superimposed; descent towards S. *appears* impossible. E. arête of Ferro Centrale, E. peak, rises hence like a cliff. Small diagonal crack, firm rock, seams edge of cliff from left to right, S.E. to N.W.; up this crack, excessively difficult, about 80 ft. high, to minute ledge only attained by leader (J. P.) jamming axe repeatedly in crack and then climbing over it—the 'ice-axe grip' (!)—ledge slightly on N. slope of arête then attained. Absolutely smooth and unbroken slabs now lead upwards; first a traverse of 5–6 ft. to right, N.W., to narrow patch of snow and ice doubtfully adhering to slabs [not safe], then straight up this snow for about 150 ft. to broken rocks above—*without* snow ascent of slabs probably impossible—then easy traverse to left, S., to crest of arête. Over narrow and interesting crest, quite easy, to top of E. peak [c. 3270 m., *Guida*], attained 8.55, thence over easy snow gap to summit of W. peak, 9.0 A.M. Descent by ordinary route over Bondasca glacier to Promontogno. Weather and conditions ideal, but base of couloir should be attained at *dawn*.

VARIOUS EXPEDITIONS IN 1913.

Mont Blanc Group.

AIGUILLE DU PLAN (3673 m. = 12,047 ft.). TRAVERSE FROM THE HEAD OF THE GLACIER DES PÈLERINS.—This fine expedition, which has never been described in English, deserves to be better known.

The Chamonix face of the Aiguille du Plan is divided by a N.W. ridge into a W. face rising from the Glacier des Pèlerins and N.E. face rising from the Glacier de Blaitière. The N.E. face was the

scene of the early attempts of Baumann in 1880 * and Mummery in 1893. † In 1894 Collie, Hastings, Mummery and Slingsby made a successful ascent by climbing from the right bank of the Glacier des Pèlerins to a col on the N.W. ridge, just above a great rock tower (since named the Aiguille des deux Aigles), and then up the ridge to the top. ‡ The expedition which is the subject of the present note was first made by Mons. E. Fontaine, with Joseph and Jules Simond, in 1898.

The head of the Glacier des Pèlerins is enclosed by a great rock face, the top of which is the ridge connecting the Aiguille du Midi and the Aiguille du Plan. In this ridge there are two principal gaps. The lower, perversely named Col du Plan, connects the Glacier des Pèlerins and the Vallée Blanche, and lies between the Aiguille du Midi and a nameless rock point, which is the top of the Petit Rognon ridge. The higher, which has perforce been distinguished as Col Supérieur du Plan, is further to the N.E. at the head of the Glacier du Plan, and lies between the nameless point and the Aiguille du Plan. At the extreme head of the Glacier des Pèlerins a conspicuous snow bay runs up into the rocks of the face directly below the Col Supérieur. Mons. Fontaine's route starts about half-way up the N.E. side of this bay and goes in as direct a line as possible to a point on the main ridge slightly to the N.E. of the Col Supérieur, where the usual route from the Glacier du Plan is joined.

At Chamonix and the Montanvert exaggerated ideas seem to prevail as to the difficulties and dangers of the face. This is probably in some part due to the two fatal accidents which occurred there in 1911.

On August 1, 1913, Harold Porter and I went right to the head of the Glacier des Pèlerins to examine the route and remained there for several hours till the sun was full on the face. During that time we neither saw nor heard anything fall on the route to the Col Supérieur, though the face further to the S.W., below the Col du Plan, was several times swept by falls of ice and stones. The next morning we left the inn on the Plan de l'Aiguille at 1.15, walked up the crest of the right lateral moraine of the glacier, then up the glacier close under the cliff which bounds its right bank, crossed the bergschrund at its head and got on to the rocks half-way up the snow bay at 4 o'clock. After a rest of ten minutes we went on, and, climbing quickly and without any further halt, reached the Col Supérieur at 9.30, before the sun had touched the face. The rocks, which were in excellent condition, being nearly free from snow and only occasionally glazed, offered no great difficulties except in one place which could have been avoided. The intervening ice patches, which are much more extensive than

* *A.J.* x. 443.

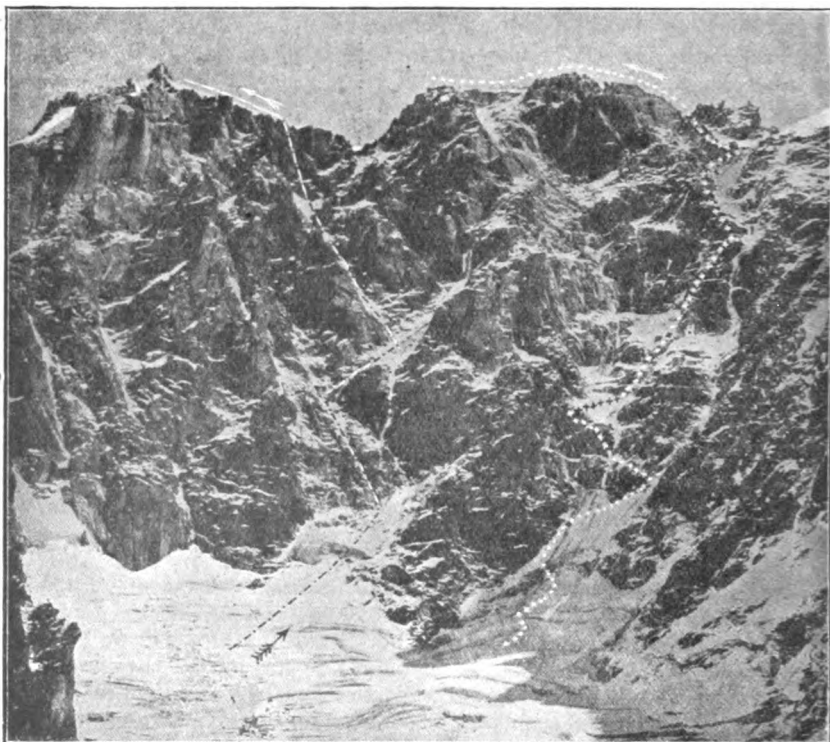
† *A.J.* xvi. 422.

‡ *My Climbs in the Alps and Caucasus*, chap. viii.

might be imagined from below, were for the most part covered with excellent snow, on which rapid progress could be made by kicking or light step-cutting. Nothing fell on the line of ascent, with the exception of one small stone, which we heard pass high

La Crocodilla Aiguille du Plan
3640 m. 3673 m

Col supérieur du Plan
3535 m T. et 3537 m.



Cliché E. Fontaine.

Muraille de l'Aiguille du Plan (3673 m.), versant Ouest.

+ + + Itinéraire A. Brun.
- - - - - Itinéraire E. Fontaine.

over our heads; and we saw nothing to make us think that the climb is a dangerous one, if it is made under favourable conditions by a party who can find the way and go fast enough to complete it in the early morning.

The photograph, reproduced by the kind permission of the Editor

of 'l'Écho des Alpes,' shows to the left Mons. Fontaine's line of ascent. We followed this line closely till within a few hundred feet of the ridge, at which point we thought that we saved both time and difficulty by turning right and going to the Col Supérieur instead of climbing the rock wall in front of us. The line on the photograph further to the right is that followed by Mons. Brun in 1904. Our observations of this part of the face made us think that it is better left alone, but in any case the ascent is to the wrong side of the nameless point and is a devious way of reaching the Aiguille du Plan.

After a prolonged rest a leisurely progress was made up the very easy snow ridge and final rock tower, the top being reached in about $\frac{3}{4}$ hr. from the col. We descended by the ordinary route down the right side of the Glacier du Plan, then crossing to the right and going over easy snow slopes at first above and then down to the S. of the Petit Rognon, joining the Glacier du Géant well above its ice-fall. Kurz's Guide recommends a route on the opposite or N. side of the Petit Rognon, but after seeing, both from above and below, the ice-fall which lies there, we thought that the route which we had taken was much easier and quicker.

R. BICKNELL.

COL DU MIDI (3555 m. = 11,660 ft.) (variation).—On July 17, 1913, the Rev. W. E. Durham, with Christian Jossi (Sohn), left the Pierre Pointue at 3.20 A.M. They crossed the foot of the Glacier Rond and went up its proper left side, and then, after some trouble with the bergschrund, gained a buttress or rib of rocks, mostly rotten, which led to a kind of col on the S. arête of the Aig. du Midi, whence they could see the Cabane 400 to 500 ft. below them on the right.

Pennines.

VISIT TO THE MATTERHORN GLACIER.—July 21, 1913, Mr. R. W. Lloyd, with Josef Pollinger and Franz Lechmatter.

'I had long wished to visit the Matterhorn glacier, but a suitable opportunity did not present itself until July of this year, when I found myself at Zermatt in weather not sufficiently settled for any attempt of the more ambitious *ager da* which were on my programme. We were not quite agreed as to the best way to get on to the glacier. I wished to go up the face and through the crevasses, while Josef preferred to try by the rocks from the Matterhorn, and after some discussion we decided to try this way first.

'We passed the Matterhorn Hut, and continuing up the arête above we proceeded to traverse along the side of the Matterhorn, intending to cross the big couloir to the upper plateau of the glacier.

'We very soon found ourselves in bad slippery snow with ice

underneath and on the rocks. After a little time, Josef, who was leading, declared the line ahead to be very bad, the rocks being badly iced, and that if we got over at all it would take hours, and we should be for a long time exposed to stones in the couloir.

'Accordingly we turned and descended to what I may call the middle plateau between the upper and lower ice-fall. This we easily reached, but found the ice-wall above us for a long way quite impassable. After going more than halfway round the face and making our way with much difficulty under and through the ice-fall, we came to a succession of huge crevasses with immense snow bridges, quite exciting to cross. Then we got stopped by a big crevasse, which, however, was partly filled with snow and ice. After a careful look round, Josef descended into this, and fortunately found quite good, firm footing, where the lip had fallen in. On the far side, a narrow arête of snow reached to within about 6 ft. of the upper edge of the crevasse. We worked our way carefully up this to the highest point, when Josef mounted on my shoulders and scrambled out of the crevasse.

'We soon reached the upper plateau of the glacier, whence we had a fine view of the Matterhorn.

'We descended by the same way without any great difficulty, and, having good snow, made our way down the very steep side of the lower ice-fall at the Hörnli end to the Staffel Alp.

'The expedition is a very fine one and most interesting. The crevasses are the most formidable I have ever met with, and the interest is sustained during the whole of the expedition.

'So far as I am aware, since the expedition to recover the bodies of Mr. Whymper's unfortunate companions in 1865, the upper plateau of this glacier has only been visited twice: first by our President, Sir Edward Davidson, who, in August 1896, accompanied by Christian Klucker and the late Cæsar Knobel, crossed from the Lower Matterhorn Hut to the Tiefenmatten Gletscher over the Z'mutt Grat; and on the second occasion by Mr. Moore's party, who repeated the expedition in 1908 (see "Jahrbuch des S.A.C." (1910) xlv. 283.)'

TRAVERSE OF BOTH SUMMITS OF LA MAYA (AROLLA) (3047 m. = 9994 ft.).—On July 21, Messrs. J. L. Pitcher, A. W. Bartlett, and myself left Hôtel Mont Collon, Arolla, and followed the 'Za' route to the terminal moraine of the Glacier de la Za. Then, turning to the right, we mounted by steep snow to a well-marked col separating La Maya from the western arête of the Doves Blanches. The ascent of the La Maya arête from this col is practically perpendicular, but the rock is firm and the handholds good. Keeping always on the arête we traversed the main summit, and descended to another small col between the higher and lower peaks. The arête confronting you here is very peculiar, resembling a broken stone wall. Looked at in profile, as one could do

later on when we had got off the mountain, the end of the arête on the western side of the col appears slightly to overhang, but by taking it by its southern angle we ascended about half-way and then made a traverse by a rather sketchy crack, as we doubted whether the rock could be trusted. We soon regained the arête and found no further serious difficulty, though it was not altogether easy to find a way off the lower rocks. We finally rejoined our route up and reached the hotel after an interesting expedition of 9 hours, including an hour's halts.—A. SLOMAN.

TRAVERSE OF THE STELLIHORN (3445 m. = 11,299 ft.).—With Heinrich Supersaxo as guide, I left Saas-Fee at 2 A.M. on August 2. At the Mattmark Hotel we turned up the slopes on the left, at first straight up, then bearing S. and S.E., finally due E. up the Ofenthal. We then made for the arête to the N., on gaining which we bore along it to our left (*i.e.* N.W. by W.) and reached the summit of the Stellihorn about 9.30 A.M. Only then did we discover where we were. We had started for the Jazzihorn, a smaller adjacent peak, but as Heinrich was entirely unacquainted with either mountain from the Ofenthal side we had to trust entirely to a map, with the above result. We descended over the Nollen glacier to the Antrona pass path, getting back to Saas-Fee at 2.30 P.M. There is good climbing on this south-eastern arête of the Stellihorn, and the rock is for the most part firm.—A. SLOMAN.

Bernina Group.

TRAVERSE OF PEAKS OF PIZZI DI PALÜ (3912 m., 12,835 ft.); BELLAVISTA (3927 m., 12,884 ft.); AND PIZ ZUPÔ (4002 m., 13,131 ft.).—July 30, 1913. With the guide Johann Gross and his brother Dominic as porter I left the Diavolezza Inn at 3.30 A.M. We ascended to the N.E. arête of the E. summit of the Pizzi di Palü by practically the route of the Fuorcla Pers Palü as described in the 'Climbers' Guide.' Having halted altogether for 35 min. we ascended the N.E. arête (snow) to the E. summit (7.28 A.M.—7.55 A.M.). Halted on central summit, 8.13–8.16 A.M. Went along ridge (snow and a little rock), which was in places narrow and sharp, over the W. peak and by the pleasant rock ridge to the Fuorcla Bellavista (8.57–9.20 A.M.). By the broad easy rock ridge reached the first summit of the Bellavista, thence by a broad and easy snow ridge over the second and third summits. The ridge became narrow (snow and a little rock) before reaching top of S.W. peak (10.53–11.17 A.M.). We descended the pleasant rock arête to the Zupô pass (about 11.45 A.M.), thence ascended the N. arête of Piz Zupô (rock at first loose, but not difficult, then snow). Top 12.30–12.55 P.M. Descended by W. face and so reached the Bernina route. After a further halt of 18 min. the Morteratsch Restaurant was reached at about 4.55 P.M. The snow, after about 10 A.M.,

was somewhat avalanchy on the southern slopes, but in good order on those facing northwards. I was fortunate in striking the most brilliant day of the few really fine ones met with during the month when I was in the mountains.

Time of actual going, 10 hrs. 52 min.; halts, 2 hrs. 33 min.; total, 13 hrs. 25 min.

The expedition is an interesting one and affords magnificent views.

OLIVER K. WILLIAMSON.

Bregaglia Group.

MONTE ZOCCA (3179 m. = 10,430 ft., *S. map*; 3190 m., *I. map*; 3174 m., *Lurani*).—By the entire S.W. arête, attained from the N. June 16, 1913, Captain E. L. Strutt with Josef Pollinger, of St. Niklaus. Left Albigna Club hut at 4.30 A.M., up Albigna glacier to bergschrund at base of frontier ridge, between Monte Zocca and Pizzo di Zocca [*'Climbers' Guide'* = point 3081 m., *I. map*], i.e. at N. foot of *'Bocchetto di Zocca'* (*Guida*, c. 3050 m.), 6.30 A.M. Left 6.40, straight up easy snow couloir to Bocchetto, attained 7.10—first ascent from N. Thence by easy E. arête to Pizzo di Zocca, 3081 m., attained 7.20—first ascent by this route. Left 7.21, by same route back to Bocchetto, thence N.E. by S.W. arête of Monte Zocca, big tooth turned by a descent and traverse to the S. over steep and very insecure rocks [far better climb straight over tooth, as did the first and only previous party, *'A.J.'* xxv. 458]; crest regained at a marked depression; over crest to W. and lower top. Down steep snow to deep gap where ordinary route from N. falls in, then up and over easy S.W. arête to the summit, 8.35 A.M. Descent by ordinary N. route, down upper Albigna glacier, then up over N. Cacciabella pass to Val Bondasca and so to Promontogno. Weather and conditions perfect.

ALPINE NOTES.

'BALL'S ALPINE GUIDE.' VOL. I. *'THE WESTERN ALPS.'*—Copies of the new edition (1898) of this work, price 12s. net, can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition (1907) of this portion of *'The Alpine Guide,'* by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, is now

ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes those portions of Switzerland to the N. of the Rhône and Rhine valleys. Price 6s. 6d.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition (1911) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes 'those Alpine portions of Switzerland, Italy, and Austria, which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige.' Price 7s. 6d.

THE ALPINE CLUB OBITUARY.—East, Sir Alfred (1899).

'SPORT IN ART.'—This book, by Mr. W. A. Baillie-Grohman, consists of pp. xxiii, 421 and contains 243 plates. The account on page 353 of the August 'A.J.' gives the number of pages wrongly and omits the number of illustrations.

DR. DE FILIPPI'S EXPEDITION TO THE KARAKORAM.—Dr. de Filippi's expedition to the Western Himalaya and Karakoram left for India in July.

The following are the members: Dr. F. de Filippi, organizer and responsible leader; Commander A. Alessio, second in command, in charge of the geodetic-astronomical work and of pendulum and magnetic observations; Signor G. Abetti undertakes astrophysical researches; Signori O. Marinelli and G. Dainelli undertake the geological survey of the districts traversed; Signor A. Amerio undertakes observations in solar radiation and atmospheric electricity; Marchese N. Venturi Ginori assists in the above researches and will undertake studies in photometry, and with Professor Amerio will also take charge of the meteorological station; Lieutenant C. Antilli takes charge of the photographic and telephotographical work; Mr. J. A. Spranger, B.A., Trinity College, Cambridge, acts as assistant topographer.

An officer of the India Trigonometrical Survey is to accompany the expedition and take part in the survey work, and Joseph Petigax, the well-known Alpine guide of Courmayeur, who accompanied the Duke of the Abruzzi in all his enterprises, is also of the party.

The Italian Government is providing the necessary scientific apparatus. Besides a handsome subsidy and the loan of a survey officer, the Indian Government has promised special Customs privileges for the scientific equipment and is giving the expedition all its support.

The list of subscribers includes the King of Italy, £400; the

Government of India, £1000; the Royal Society, £25; the Royal Geographical Society, £100; Mr. A. FitzGerald and Major E. FitzGerald, each £1000; Sir Hugh Bell, £100; Dr. F. de Filippi, £2000; Comandante L. de Filippi, £200; Commander R. W. Spranger, £1600; and various members of the Venturi Ginori family, £600.

SIGNOR MARIO PIACENZA'S EXPEDITION TO KASHMIR. FIRST ASCENT OF NUN KUN (HIGHER SUMMIT).—The 'Stampa' publishes the news received from Kargil, Kashmir, that Signor Piacenza, who is accompanied by Joseph Gaspard of Val Tournanche and other guides, has succeeded in gaining the hitherto unclimbed summit of Nun Kun, the height of which is stated to be 7200 m. = 23,616 ft.

During six days the party bivouacked at a height of 6500 m. = 21,320 ft.

The ascent is described as of great difficulty, and the party planted a small Italian flag on the summit.

Dr. Collie has kindly furnished the following information as to the previous history of the mountain:

'The Nun Kun peaks (there are two of them, 23,447 ft. and 23,264 ft.) lie E. of Kashmir.

(1) Bruce was the first mountaineer to visit them, in 1898, when he made some minor ascents and passes with his Gurkhas to about 19,000 ft.

(2) Dr. Arthur Neve went there several times, made also some ascents to about 19,000 ft. and also crossed some passes. Dr. Neve has done more work in this district than anyone else.

(3) The Workmans went there in 1906, and Mrs. Workman climbed the lower of the two peaks, 23,264 ft.

(4) Signor Piacenza seems to have climbed the higher of the two peaks, 23,447 ft.

'Besides what there is in the "ALPINE JOURNAL," there are also several letters and, I think, papers in the "Geographical Journal" by Neve and the Workmans.'

The following are the later references to Nun Kun in the 'ALPINE JOURNAL':—

'A.J.' xxii. 348–352, 'Nun Kun Revisited,' by Dr. Arthur Neve (with an illustration).

'A.J.' xxiii. 334–336. A note on Mrs. Bullock Workman's and Dr. Hunter Workman's exploration of the massif and the first ascent of the lower peak by the former.

'A.J.' xxvi. 409. A reference by Dr. Arthur Neve.

Dr. Arthur Neve's recently published book 'Thirty Years in Kashmir' (Edward Arnold, 1913. 12s. 6d.) contains two chapters: 'A First Exploration of Nun Kun' and 'Nun Kun Revisited.'

Further details will be looked for with much interest.

TWO NEW CHALETS IN THE MONT BLANC DISTRICT.—Last August Mr. Tyndale and I found out two chalets of which climbers may be glad to know. Both had been recently opened. One is at Pré de Bar, and is kept by Alexis Proment, who speaks Scotch fluently and takes in the 'Glasgow Weekly Herald.' Good beds, good milk, real ham and eggs, and a very warm welcome may be obtained there at a very moderate price.

The other is the Chalet du Miage, about half a mile nearer Courmayeur than the Cantine de la Visaille. There also we experienced excellent treatment. It is kept by the wife of the guide Napoléon Berthod. We happened to meet the latter three or four times in different parts of the Mont Blanc range. We have not seen him at work on a mountain, but his experience of the whole district, his extremely pleasant and obliging manners, and his good knowledge of English, justify us in bringing his name to the notice of the climbing public.

R. L. G. IRVING.

THE MONT D'OR TUNNEL.—This, the ninth important tunnel in Europe, has now been pierced through the Jura. It is about $3\frac{1}{2}$ miles long, and will shorten the distance between Paris and Milan via the Simplon by about 10 miles.

The present line runs from Frasné to Pontarlier, and thence to Vallorbe, thus describing a very circuitous route, which, moreover, is greatly impeded in winter by snowstorms. The new line runs direct, almost as the crow flies, from Frasné to Vallorbe, which will, after the opening, become an important frontier station, and will, in fact, take the place of Pontarlier.

The Mont d'Or tunnel and the Frasné-Vallorbe line, of which it forms a part, have a total length of 15 miles 4 furlongs. It is being built by the P.L.M. Company, and will cost about £1,500,000. It was commenced in 1910, and ought to have been completed by now.

The reason for the delay has been the constant interruptions in the work, due principally to waterbursts. Again and again, during blasting, water has been tapped, and on at least one occasion a dam had to be constructed in the tunnel, and the water afterwards diverted.

On another occasion running mud was struck, and for some days work had to be stopped. For its size, indeed, no tunnel perhaps has given more trouble than the Mont d'Or.

THE TUCKETTHÜTTE.—In the admirable 'In Memoriam' of Mr. Tuckett in the last number of the 'ALPINE JOURNAL' (page 346) the writer says: 'His name has been affixed by the local authorities to a peak in the Orteler Group, and a pass among the Brenta Dolomites.' I beg to call your attention to the fact

that a hut as well bears Mr. Tuckett's name, viz. the Tuckethütte near the Brenta Glacier, about one hour below the Tuckettpass, and belonging to the Section Berlin, D.Oe A.V.

OTTO LECHER, A.C.

We regret that, owing to pressure upon our space, several Reviews have had to be held over.—EDITOR, 'A.J.'

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(Issued in terms of the recommendation of the Committee, 'Alpine Journal,' vol. xxiv. p. 517, 'so as to facilitate the exchange of information.')

AMPHLETT, G. T.—

From Stellenbosch to sources of Eerste River and Berg River, returning by the Banhoek Kloof (3 days).

From Gourton, Natal. First Ascent of Cathkin Peak, Drakensberg, say 10,200 ft., in company with Rev. Father Kelly, W. C. West and T. Casement.

From Worcester, Cape. Ascent of Brandwacht (6349 ft.) in snow, with two ladies (second ascent made by middle Ridge route, and first with ladies).

From Wellington, Cape, to Worcester *via* Du Toit's Kloof (walking trip 2 days).

From Sir Lowry's Pass, Cape. Ascent of Kogelberg (4152 ft.), Caledon district.

Some 40 ascents of Table Mountain (3582 ft.), by various climbing routes, including, with W. C. West, K. Cameron, and a lady, an ascent by the Arrow Face route—upper portion (first made by a lady).

BEECHING, H. A.—

Petites Dents de Veisivi (traversed).

Pigno d'Arolla.

Dent Perroc.

Aiguille de la Za (with 3 children under 12).

Pointe des Chamois (Dents de Bertol) by S.W. arête. See Larden p. 109.

Roussette by N.E. arête.

Col du Collon, etc.

Weather, the worst I can remember for thirty seasons, prevented any better expeditions.

BELCHER, H. W.—

Traverse of Mittaghorn and Egginer.

Fletschhorn.

Sonnighorn.

Weissmies by N. arête.

BELL, J. M.—

April-August. — Extended trips in the neighbourhood of Turgai, on the Khirgiz steppes regions of S.W. Siberia and Turkestan.

September and October.—Various parts of Eastern Canada in regions N. of Lake Superior.

October and November.—Southern British Columbia.

(All these trips undertaken in connection with mineral investigations.)

BENNETT, C. F.—

From Tungaesæter to Briksdal. Left at 6 A.M. with the guides Rasmus and Einar Aabrekke, crossed Jostedalabrae (snow in very good condition), reached Briksdal 2.30 P.M.

From Grodaas to Fibelstad Haugen. Crossed Hornindalsrokken with the guide Hans Raftevoll and reached Haugen *via* Kvitelvedalskar.

From Öie—Ascended Brekkeitind with C. W. Patchell. Very little snow, and glacier much shrunken.

From Öie—Ascended Vellesaeterhorn with C. W. Patchell, in very dense mist.

BICKNELL, R. P.—

Guideless ascents of Aiguille d'Argentière and Aiguille de Blaitière with C. E. Elliott.

Tacul by Périades Glacier.

With W. N. Ling and others from Argentière to Praz de Fort by Col du Tour and Fenêtre de Saleinaz.

Praz de Fort to Courmayeur by Col du Ban d'Arrey. Back over Col du Géant.

BLACKDEN, Lieut.-Col. L. S.—

Dent de Satarma.

La Roussette.

Traverse of Petites Dents de Veisivi.

Aiguille de la Za.

Dent Perroc.

Guide for last four was Laurent Gaudin.

In the last two expeditions both rocks and wind were very cold.

Jack F. Blackden, aged twelve, accompanied me on all the above expeditions.

BRADBY, E. H. F., see under WILSON, C.

BRADLEY, M. G., see under LARDEN, W.

BRIGG, JOHN J.—

From Feirån—Jebel Serbål (6500 ft.).

From Monastery of St. Katharine—Jebel Musa (7363 ft.).

From Monastery of St. Katharine—Jebel Kathrein (8550 ft.).

All peaks in the Sinai Peninsula.

BULLOCK, G. H., see under TYNDALE, H. E. G.

CÆSAR, W. R.—

Kleine Simelistock.

Froschkopf.

Wetterhorn.

Katz and other rock scrambles in Gastlosen.

Herbetet, up E. and down N.
 Col de Lauzon (snow and rain).
 Col Valpelline (snowstorm).

DAVIDSON, J. M.—

From Maderanerthal—Traverse Oberalpstock.
 Hüfi Hut—Traverse Claridenstock.
 Hüfi Hut—Traverse Tödi. Ascent by Sandgrat, S. face and
 W. arête. Descent by Porta da Spescha to Val Rusein—
 thence to Culm Tgietschen and along the connecting ridge
 and a gentle snow-slope to point 3063 on the Siegfried
 Map (? Heimstock)—descent to Hüfi Glacier.
 Gr. Windgälle.
 Finsteraarhorn—descent by Rothornsattel, Oberaarjoch and
 Scheuchzerjoch to Pavillon Dollfuss.
 Traverse Ewigschneehorn—Gauli Glacier to Wetterlimmi—
 descent of the Rosenlaur Glacier to Rosenlaur.
 King's Peak.
 Gr. Simelstock.
 Unterwellhorn.
 All guideless; in company of J. V. Hazard. Weather and
 snow conditions bad throughout.

DURHAM, W. E.—

Pointe de Vouasson.
 Pigne d'Arolla.
 Col de Garin.
 Punta Rossa (bad weather prevented our going on along the
 ridge).
 Grand Paradis (traverse from Chalet de l'Herbetet to Val
 Savaranche) in bad weather.
 Grivola (traverse, Val Savaranche to Cogne).
 Mt. Herbetet (traverse).
 Mt. Emilius.
 Mt. Blanc (by Dôme Glacier).
 Aig. du Moine.
 Aig. du Midi (traverse, from Pierre Pointue).
 Aig. du Tacul.
 Weisshorn-lücke—Sierre to Rohrbachhütte.
 Wildstrubel.
 Balmhorn.
 Blümlisalhorn.
 Gspaltenhorn and Sefinen-furgge.
 All the above, except the first two, with Chr. Jossi (Sohn).

EATON, J. E. C.—

Alphubel, up by Rothengrat, down to Alphubeljoch. Bad
 storm.
 Four S. peaks of Monte Rosa.
 Lyskamm traverse, two *consecutive* fine days!!
 Riffelhorn from glacier.

FARRAR, J. P.—

Kammlijoch—Claridenstock (lower summit) from Klausenpass to Clariden hut.

Cheval Blanc (from Finhaut to Pierre à Béranger)

GARDINER, FREDERICK.—

July 3: Arrive at Kandersteg; torrents of rain. July 3: Kandersteg to Club hut, Hohthürli Pass, misty. July 5: Ascended Morgenhorn, cloudy, bad snow. July 6: Ascended Wilde Frau, cold wind, bad weather afternoon. July 7: Rest day Kandersteg, bad weather.

July 8: At Kandersteg, bad weather. July 9: Ascended Klein Lohner, misty weather. July 10: To Gasterenthal, heavy rain in afternoon. July 11: Lötschen Pass and Hockenhorn to Ried, fairly fine, cold wind. July 12: Rest day at Ried, fairly fine.

July 13: Ascended Sackhorn, misty, cold wind. July 14: Rest day at Ried, fine day.

July 15.—Bivouac at Schönbühl, fine hot day. July 16: Ascended Hohgleifen, misty, very hot day. July 17: Ascended Petersgrat and Birghorn, thunderstorm afternoon. July 18: To Fafler Alp, storm afternoon. July 19: Cross Beichgrat to Bel Alp, snowstorm, very bad weather. July 20: Ascended Sparrenhorn, very bad snowstorm in afternoon. July 21: Rest day, Bel Alp, very heavy fall of snow.

July 22: Bad weather at Bel Alp. July 23: Ascended Unterbächhorn, misty weather. July 24: Ascended Gisighorn, misty weather. July 25: To Eggishorn by Rieder Furka, heavy rain afternoon. July 26: To Concordia, fine weather. July 27: At Concordia, unsettled. July 28: Ascended peaks of Trugberg and back to Eggishorn, misty. July 29: Very bad weather at Eggishorn. July 30: Eggishorn, Fiesch and Münster, unsettled weather. July 31: Ascended Löffelhorn, misty. August 1: Ascended Ulricherstock, bad weather, afternoon. August 2: Rest day Münster, torrents of rain all day.

August 3: Ascended Blashorn, fairly fine day, misty. August 4: Crossed Gries Pass to Tosa Falls, bad weather, misty. August 5: Rest day, Tosa Falls, heavy snowfall, torrents of rain afternoon.

August 6: Ascended Bettelmatthorn, bad weather, snow. August 7: At Tosa Falls, torrents of rain most of the day. August 8: Ascended Thälihorn, fairly fine, very cold. August 9: Tosa Falls to Foppiano, Domo d'Ossola and Brieg, cold and misty. August 10: At Brieg, very stormy weather, cold. August 11: At Brieg, very stormy weather, cold. August 12: Brieg to Domo d'Ossola and Macugnaga, very cold and misty. August 13: Attempted ascent of

Pizzo Bianco, very bad weather, heavy rain. August 14: By Monte Moro Pass to Mattmark, stormy weather. August 15: Ascended Stelli and Stelihorn, fairly fine, misty. August 16: Excursion on Schwarzenberg Glacier, fine day, deep snow. August 17: Mattmark to Saas Grund, finest day of the whole summer. August 18: Antrona Pass to Cinquimo Chalets, thick mist, rain later. August 19: Ofenthal Pass to Mattmark, very bad weather. August 20: Rest day, Saas Grund, very bad weather.

August 21: To Hotel Weissmies, unsettled weather. August 22: Ascended Weissmies, bitterly cold wind, snow afternoon. August 23: At Hotel Weissmies, snow in morning, finer later. August 24: Ascended Laquinhorn, fine day, very cold wind. August 25: Started for Rossbodenhorn, returned owing to very unsettled weather. August 26: At Saas Grund, heavy gale and rain. August 27: To Almagel, rain until afternoon, much fresh snow. August 28: Excursion to Almageller Alp, unsettled weather all day. August 29: To Antrona Pass, ascended Latelhorn, misty, very cold wind. August 30: To Portje Pass, ascended Mittelrück, cloudy, rain later. August 31: Saas Grund to Saas Fee, dull and misty. September 1: Ascended Mittaghorn, misty, much fresh snow. September 2: Excursion to Langenfluh, bad weather, snow, very cold. September 3: At Saas Fee, snowstorm, very cold. September 4: Excursion to Mellig, much snow. September 5: At Saas Fee, unsettled weather, very cold. September 6: By Kessjenjoch to Club hut, bitterly cold. September 7: Ascended Egginerhorn, much fresh snow, bitterly cold. September 8: At Saas Fee, very cold. September 9: Saas Fee to Stalden, misty weather. September 10: Stalden to Montreux, misty weather, unsettled.

From July 3 until September 15, 1912, the weather was unsettled and unreliable, and during that period there were only four perfectly fine days. On other days which were partially fine there was always some drawback, such as mist, bitterly cold wind, or deep fresh snow. I had intended to remain at Saas Fee until September 15, but after the 10th of that month climbing, even of the most modest kind, was impracticable. In sharp contrast to the climbing season of 1911, that of 1912 may be considered about the worst on record.—FREDERICK GARDINER.

GATTY, VICTOR H.—

June. Pyrenees.

Gabas. Weather bad, snow at 6000 ft.

Gavarnie. Snow at first below 7000 ft. Temperature on Pimené midday 29° F. Weather afterwards hot and

cloudless. Brèche de Roland to Val d'Arazas, back by Port de Boucharo. Taillon.

Several minor peaks and passes, pleasant little snow expeditions at this date.

Ax-les-thermes Porté. Pic Carlitte. Much less snow in Eastern Pyrenees than in centre and west of range.

HOPE, R. PHILIP.—

Alpeiner Scharte.

Unterweisszint Scharte.

Hochfeiler, up S.E. arête, down S.W. arête (ordinary route).

Rossrückjoch and Rossrückspitze.

Schwarzenstein.

Dreiherrnspitze by N.W. arête—Birnlücke.

Krimmler Thörl.

Gross Venediger and Rainer Thörl.

Zwölferkofel by S.W. face.

Sorapiss by Grohmannweg. (Turned back by snowstorm at Forcelletta del Pian della Foppa.)

Sorapiss by Forcella Grande.

Seekofel.

Boëspitze.

All without guides.

HOWARD, GEOFFREY E.—

March. Sinai Peninsula. With J. E. C. Eaton. From Jebel Tanka *via* Wady Homra. Climbed Jebels Abu Adunat, Wedmat, Shajā'at, Ibn Sakkar, etc. Thence southward; climbed mountains round Wady Dhafari. Up Wady Feiran for ascent of Jebel Serbal. Returning *via* Wady Mukatteb; climbed Jebel Tair-Azrak and reached starting-point *via* desert of El Markha after a journey of about three weeks.

(N.B.—Although on many of the mountains climbed there were no traces of previous ascents, they had all doubtless been climbed by hunting Bedouins on many occasions.)

IRVING, R. L. G., see under TYNDALE, H. E. G.

JACKSON, W. S.—

Traverse summit and centre, Aiguille de L'M.

Petits Charmoz.

Aiguille du Moine.

Aiguille du Midi, traversed from Pierre Pointue (first of year).

Aiguille du Tacul.

Traverse of Aiguille des Grands Charmoz (first of year).

Aiguille de la Blaitière, to cornice below summit.

In all these, guided by Henri Garny, with porter for traverses of Aiguille du Midi and Grands Charmoz.

JENKINS, A. STUART.—

La Luette (3544 m.), winter ascent, January 1 and 2, from Val des Dix hut to Arolla, *via* Pas du Chèvre.

(N.B.—The path from Prazlong to Val des Dix hut is dangerous in winter.)

Petit Darrei.

La Salle and Pleureur (traverse from Val des Dix hut to Chanrion).

Gran Becca di Blancien from Chanrion to Prarayé, *via* Col di Sassa.

Becca di Guin.

Torre di Gran S. Pietro (traverse), from Col coupé di Money over Torre di S. Orso, Torre S. Andrea, and Colle di Money — to bivouac near Rif. Piantonetto.

Ascended first summit of Becca di Gay from Colle Baretti. (As far as we got, the way is, I believe, new. Sig. Ettore Santi and friend completed the climb a few days after by ascending the highest summit of Becca di Gay, also from Colle Baretti.)

Dt. du Requin (traverse)—(bad conditions).

Mt. Dolent.

Aig. Noire de Peuteret (good conditions).

Bivouac on E. face of Dames Anglaises (about 3050 m.). (Bad weather prevented success of expedition.)

Aig. de Triolet (traverse) and Petites Aig. de Triolet (traverse). (Bad conditions.)

Pt. Dt. de Veisivi (traverse), 5 hours and 5 minutes from Kurhaus to Col. de Zarmine, top, and back to hotel.

Dt. des Bouquetins. (Bad weather.)

KIRKPATRICK, W. T., see under HOPE, R. P.

LARDEN, WALTER.—

Sonnighorn-grat traverse.

Portjen-grat.

Mittag-Egginer traverse.

Same, guideless and ropeless, with M. G. Bradley. 10 hrs., including halt.

Adler pass.

Ptes. Dents de Veisivi traverse, guideless, with one friend. As before, I prefer much traversing *from* valley *toward* Col de Zarmine.

Col du Collon to Prarayé. An easy and leisurely walk of 6 hours from Arolla, including all halts.

Col de Valpelline from Prarayé to Findelen restaurant, beyond Zermatt. A magnificent, though easy, pass. Much finer expedition for scenery than from Arolla by Cols du Mt. Brûlé and de Valpelline.

Adler.

Alphubeljoch.

Col d'Hérens.

LING, W. N.—

Périades—Capucin ridge.

- Col du Tour—Fenêtre de Saleinaz.
 Col du Ban d'Arrey.
 Bec di Zambenia—Cima d'Entrelor—Cima dell'Auille.
 Col de Mesoncles.
 Herbetet.
 Col Pousset (twice for Grivola, storms).
 Punta Forzo.
 { Col Patri.
 { Punta Patri, Nord.
 { Punta Patri, Sud.
 Punta Garin by W. ridge.
- LLOYD, R. W.—
 Col d'Entrèves.
 Goûter Hut (bad weather).
 Traverse of Mont Blanc from Grands Mulets to Courmayeur,
 descent by the Brenva face.
 Col du Géant.
 Les Courtes.
 Dom.
 Pointe de Zinal and Mt. Durand.
- MINCHINTON, H. D.—
 Winter ascent of Dent du Midi (Haute Cime) from Salanfe hut
 (— 28° C. in hut at night).
 Many ski expeditions from Champéry.
 Norway (April), several expeditions, the hardest being Stetter-
 fjeld, Skaget, Hardangerjokul, Flauketten, &c.
 Wetterhorn, Kl. Simmelistock, King's Peak, Gr. Simmelistock.
 Tschingelhorn—Petersgrat.
 Col d'Orny—Fenêtre de Saleinaz.
 Col de Chardonnet—Aig. d'Argentière.
- MONTAGNIER, HENRY F.—
 From Madone de la Fenestre—Cime des Gelas to Madone de
 la Fenestre.
 Refuge de Nice—Grand Capelet to Refuge de Nice.
 From Refuge de Nice—Mont Clapier and the Maledia to Madone
 de la Fenestre.
 From Boréon—Brocan to Boréon.
 From Boréon—Nasta and the Baus to Refuge de Gênes.
 From Refuge de Gênes—Pointe de l'Argentera (four summits)
 to Bagni di Valdieri.
 From Bagni di Valdieri—Monte Matto to Bagni di Valdieri.
 From Bagni di Valdieri—Col de la Ciriegia to St. Martin-
 Vésubie.
 From St. Martin d'Entraunes—Aiguille des Pélens (with the
 Chevalier de Cessole. This was the second ascent of the
 Pélens, the first having been made by M. de Cessole
 and M. C. Lée Brossé, August 16, 1905), to St. Martin
 d'Entraunes.
 From Entraunes—Mont Pélat to Refuge du Lac d'Allos.

From Refuge des Rabuons—Grand Chignon des Rabuons to St. Etienne de Tinée.

From St. Etienne de Tinée—Enchastraye to Argentera.

From Argentera—Tête de Moyse to Larche.

From Fouillouze—Cime de Saint-Ours to Fouillouze.

From Fouillouze—Rocca Blanca to Fouillouze.

From Fouillouze—Attempted the Brec de Chambeyron by the French side. Bad weather. To Fouillouze.

From Fouillouze—Pointe de la Meyna to Fouillouze.

From Fouillouze—Brec de Chambeyron. First ascent by the French side, with the Chevalier de Cessole and the guides Jean Plent and Hippolyte Bernard of St. Martin-Vésubie, to Fouillouze.

From Abriès—Bricfroid to Abriès.

From Abriès—Col de la Traversette to Pian del Re.

From Rifugio Quintino Sella—Monte Viso to Rifugio Quintino Sella.

From Rifugio Quintino Sella—Col del Colour del Porco to Abriès. (Passports are necessary on the Italian side of the frontier from Valdieri to Crissolo. There is no inn in Fouillouze, but very fair accommodation may be found in the house of Monsieur A. Meyran. Climbers intending to visit this delightful and little known valley should ascertain well in advance whether he can lodge them. Owing to the fortifications in the neighbourhood of the Pointe de la Meyna, it is advisable to inquire at the Mairie in Larche whether the ascent is permitted by the military authorities. Cameras should be left behind.)

MONTAGU, C. E.—

Weisshorn.

Col des Grands Montets, Col du Chardonnet, Col du Tour, Fenêtre de Saleinaz, Adler Pass, Ried Pass; traverse of Ulrichshorn. With Mrs. C. E. Montagu (no guides).

MUIR, J. C.—

Portjengrat from Portje. Very misty. Failed to reach summit owing to mist and fear of cornice—probably groundless.

Hinterallalinhorn. Much new soft snow.

Fletschhorn by S.W. arête.

Weissmies by N. arête, descent by S.E. arête.

Egginergrat.

Riffelhorn by Matterhorn couloir.

These expeditions were guideless, with Dr. A. E. Porter and Mr. D. G. Murray.

NEVE, A.—

August. Kashmir. Visited the valley leading from Dras to D⁴. Captain Corry explored the N.W. nullah from Tungas in 1911; I took the N.E., found it delightful.

Camp at 15,000 ft. (fuel nil above 13,000 ft.).

Next day up a snow col 16,500 ft. overlooking Shingo : then N.E. by small glacier, roped, to another col overlooking Kharbu.

With one good Kashmiri, Asad Mir, and one Balti, tried D⁴, a fine rock tower with one ice couloir. Stones came down so turned a little way up a crack ; I stopped at 17,400 ft. A fine climb for a strong rock party. The summit is 18,400 ft.

A week later in Zoji La, near Pan Dras, ascended to a glacier due W. of Pan Dras, camped with wife on the ice at 15,000 ft. Next day ascended the ridge to W., about 17,000 ft. ; traversed crest for an hour ; a higher survey point seen to W. with a pole 18,200 ft., but not time to go, though easy. Descended different line, and down to camp in Zoji, 10 hours going.

Investigated part of other nullahs to see glacial snouts.

NOELTING, DR. F. A. M.—

Tian-Shan (Central Asia).

July 4–13. Vierny, through Ala-tau mountains, to Naryn-kol.

July 14–20. Naryn-kol. Expedition into Great Musart valley.

Visited glaciers at head of its side-valleys Khamer-Davan and Oiden-Kol (also called Adinger-Sai). Climbed Col (13,150 ft.*) at head of W. Khamer Davan glacier.

July 29–August 13. Naryn-Kol to Przevalsk through Baian-Kol valley, Asu-Toer Col (12,800 ft.), Sary-Djass valley, Ottuk Col (12,150 ft.) Külü valley, Külü col (14,000 ft.), Djirtash valley, Kyzyl-Su col (13,150 ft.), and Kyzyl-Su valley.

July 30–August 2. Visit of glaciers at head of *Main* Asu-Toer valley (also called Tekele-Aighyk) and ascent of unnamed peak (14,000 ft.*).

August 5. Visit to *Main* Tüs-Asv glacier.

August 9. Attempt to climb peak at head of Kindyk-Su (right tributary of Külü). Reached heights of 14,100 ft.,* but had to retire owing to great depth of powdery snow.

August 10. Expedition to glacier at head of uppermost right tributary of Külü, supposed to lead to Karakol pass. Failing to find the latter, had to cross Külü col (14,000 ft.) instead.

August 12. Crossed Kyzyl-Su col (13,000 ft.).

August 24–September 8. From Issik-kul lake to At-Bashl.

August 25. Crossed Zuka col (12,200 or 14,000 ft. I found 12,700 ft.*).

August 26. Crossed Ak-Bel col (12,140 ft.).

August 28. Crossed Tehakyr-Korum col (12,400 ft.*).

August 30–September 2. Visit of various glens and glaciers at head of Karakol valley. Reached height of 14,000 ft.* on central Karakol glacier.

September 3. Crossed Kübergenty col (12,550 ft.) into Kogele-Tchab (12,300 ft.*) valley. Compelled to recross it on the 5th owing to snowstorms and want of food for horses.

September 6. Crossed unnamed col (12,500 ft.*) into Dengerama (or Ianghi-Ierr) valley.

September 9. Reached village of At-Bashi.

September 12-18. From At-Bashi to Kashgar (Chinese Turkestan) through Tchатыr-Kul lake and Turugart Col (11,700 ft.).

September 27-October 4. From Kashgar to Andijan (Russian Turkestan, terminus of railway) through Alai mountains, Terek Davan col (12,800 ft.).

Heights marked * are only approximate, having been roughly calculated before the aneroids were tested. The other ones taken from Merzbacher's, Friedrichsen-Sapothnikof's, and 40 verst Russian maps.

I travelled with a Turki (Sart) dragoman-cook and Kirghiz attendants (on horseback.)

In July there was plenty of rain; in the second half of August and beginning of September enough cold weather, wind and snow.

OLIVER, E. G.

Blümlisalhorn.

Wildstrubel (traverse) — Lämmern Joch — Col des Six Morts.

Grivola (N. arête and traverse).

Col des Maisons Blanches—Col des Otanes.

Col d' Evêque—Col du Petit Mont Collon—N. Col du Mont Brûlé—Col de Valpelline.

Riffelhorn (glacier couloir).

Alphubel by W. arête, (Rothen Grat) and traverse.

Riffelhorn (glacier couloir).

Parrotspitze, Ludwigshöhe, Schwarzhorn, Vincent Pyramide Punta Giordani.

Lyskamm—S. and W. arêtes—Felikjoch.

Riffelhorn (Matterhorn Couloir).

Four times through Gorner Ice fall—once through Findelen ice fall.

OSBORNE, R. E.—

Cristallo.

Croda da Lago by Pompanin Kamin.

Punta Fiammes by S. face.

Delago Turm (traversed), Stabeler Turm.

Leitergrat (traverse of whole of summit ridge).

All with Miss Osborne, Ladies A.C., and with Fritz Amatter and Hans Kaufmann as guides.

PATCHELL, C. W., see under BENNETT, C. F.

PORTER, Dr. A. E., see under MUIR, J. C.

POWELL, LEGH S.—

Visit to Val Intrasca. Cross the Toce by ferry at Ornavasso and ascend the rather monotonous slope to the ridge, 3 hours. Striking view over the wild and extensively wooded valley. Descend N.E. to Bove chalets, whence good high level path leads to Rovegro. A new path has been made along the bottom of the valley, and further down the bulk of the water is led off by a channel constructed along the steep mountain, with a series of tunnels which afford the only egress to the traveller.

From Premosello *via* Passo di Colmi to la Piana.

Passo San Jorio, from Giubrasca to Gravedona.

Passo Croce Domini from Breno to Bazolino.

Justisthal Pass.

READE, H. V.—

Col du Géant. 3 ft. of snow about 1000 ft. below the inn.

Aiguille de L'M.

ROBERTS, E. E.—

Stockhorn.

Klein Matterhorn, and by Verra Glacier to the Schwarzthor.

Monte Rosa (Dufourspitze).

Riffelhorn by Matterhorn couloir.

Theodulhorn.

Attempt on Schwarzthor defeated by the depth of soft snow.

Cima di Jazzi and Schwarzberg Weissthor.

Trifhorn from Triftjoch to Mountet.

Lo Besso.

By Col de Zinal to Pointe de Zinal and Zermatt.

ROBERTS, W. M.—

Stockhorn and Hochtäligrat.

Klein Matterhorn and round the Breithorn by Verra Glacier and Schwarzthor.

Dufourspitze.

Theodulhorn.

Breithorn.

ROGER-SMITH, DR. HUGH, AND ROWS, DR. R. G.—

Traversed big tower of Cinque Torre from S. W. side and climbed second tower.

Punta di Fiammes.

Croda da Lago by the Pompanin Kamin, and descent by ordinary way.

Piz Popena by S. arête, descending by N.E.

Cadin del Malquoira, 'A.J.' xxvii. 90.

Ascent of Tofana di Mezzo by ordinary route; the *Via Inglese* was impossible; all the rocks were glazed.

Figlio della Rosetta and Cima di Cuseglio by ordinary route.

Rosetta by S. face.

Cima della Madonna by the Phillimoreweg and descent by Winkler Kamin.

RUNGE, HARRY.—

Wildelsigen Grat Balmhorn—Altels traverse.

Simeli Stock.

Froschkopf.

Wetterhorn.

Katzkopf and other scrambles in the Gastlosen group.

Theodul pass.

Herbetet traverse, up E., down N. ridge.

Col de Lauzon (snow and rain).

Col de Valpelline (heavy snowstorm).

SCHIESS, E.—

Strahleggorn (winter).

Strahlegg, Fletschhorn—Laquinhorn, Allalinhorn, Tête de Valpelline—Pointe de Zinal, Wellenkuppe, Leiterspitze, Col de Valpelline, Col des Bouquetins and de Bertol, Aig. du Tacul, Col du Géant—Grand Flambeau—Pointe Helbronner, M. Blanc du Tacul, Petits Charmoz, Tour noir (attempt), Watzmann (3 peaks).

SCOONES, P.—

Veitestrandskar (E.V.S.) from Fjærland to Tungesaeter.

*Austerdalsbrae, and Josterdalsbrae (E.V.S. and guide Lasse Næsset) from Tungesaeter to Brigsdal.

*Point 5538, glacier W. of the foot of Tinderfjeld, top of Skaala (R.S.), from Bödalsaeter to Loen.

Grasdalskar (E.V.S. and R.S.) from Hjelle to Merok.

Stégane from Langdal to Aandalsnaes.

*Troidtinder, by the glacier and rocks (E.V.S.), from Aandalsnaes to Aandalsnaes.

*Store Vengetind. In mist all day. (E.V.S., C.F.S., E.G.W.), from Aandalsnaes to Aandalsnaes.

*Romsdalshorn (E.V.S., C.F.S., R.S., E.G.W.), from Aandalsnaes to Aandalsnaes.

*Mjøltnir, traverse from N. to S. (E.V.S., C.F.S., E.G.W.), from Indre Dalen to Aandalsnaes.

*Smørskredtind, traverse from N.E. to S.W. (C.F.S.), from Öie to Öie.

*Brekketind, (C.F.S., E.W.), from Urke to Öie.

Slogen, Slingsby's gully, which was very dangerous, very little snow, and many loose rocks. (E.V.S., C.F.S., E.G.W., V. le N.F.), from Öie to Öie.

*N.E. arête of Raana (E.V.S., E.G.W., C.F.S.), from Trandal to Urke.

*Smørskredtind, traverse S.E. arête and N.W. face (C.F.S.), from Öie to Öie.

* All fine expeditions.

*Kviteggen, Slingsby's route (E.V.S., E.G.W., C.F.S.), from Öie to Öie.

*Ravnefjeld (E.V.S., C.F.S., V. le N.F.), from Loen to Loen.

*Skaala and Tinderfjeld (E.V.S., C.F.S.), from Loen to Loen.

Fosdalskar (E.V.S., V. le N.F.), from Loen to Hjelle.

*To Bödalsaeter, *via* glacier E. of Tinderfjeld, i.e. Tinderfjeldbrae, and so to Loen. (E.V.S., V. le N.F.)

Storskredfjeld from Loen to Loen.

All guideless except the second expedition. I have given my companions' initials. Rev. E. G. Wells, A.C.; E. V.

Slater, A.C.; R. Spence, C. F. Stoehr, V. le Neve Foster.

SLATER, E. V.—

August 5.—From Fjærland to Tungesaeter.

August 6.—From Tungesaeter over the Josterdalsbrae to Brigsdal.

August 14.—From Romsdal—Troldtinder by the rocks to the right of the big gully mentioned by Slingsby, p. 412. Crossed the face diagonally from the foot of the next gully to the right to the top of the big gully. This is probably the best route in any circumstances, and certainly this year, when the big gully was full of ice. Returned the same route.

August 17.—From Kolfot—Vengetind (the higher summit), probably not by the usual route, as we climbed in mist.

August 19.—From Kolfot—Romsdalthorn.

August 21.—From Dale—Mjólnir; ascended practically the same route as that described by Slingsby; descended first by the S.E. arête and then by the S.W. face to Kolfot.

August 26.—From Öie—Slogen by Slingsby's route. (The gully is exceedingly loose and unpleasant when free from snow, as it was this year. Above the skar there is no difficulty if the original route is adhered to.)

August 27.—From Trandal—Raana by the N.E. arête; return by the ordinary route.

August 29.—From Öie—Smörskredtind, by arête first climbed by Messrs Patchell and Todd: descent by S.W. arête.

August 31.—From Fibelstad—Kviteggen by Slingsby's arête.

September 3.—From Loen—Ravnefjeld by Aufem and the Aufemfjeld.

September 5.—From Loen—Tindfjeld by Skaala and the gap on the W. of the peak; apparently the usual route. Descent to Hogrenning.

* All fine expeditions.

September 7.—From Loen, Fosdalskar to Hjelle.

September 9.—From Hjelle up Fosdal, thence on to the Tindarfjeldbrae, under the Tindarfjelde to gap below Yngar Nielsen's Tind, thence to Bødalsaeter.

SOLLY, GODFREY A.—

Traverse of Stockhorn. Snowing all the time, and at least a foot of new snow at the summit.

Tour of Monte Rosa: Monte Moro—Turlo—D'Olen—Betta Furca. Theodule.

There was deep snow on all the passes, and we could hardly have got over the Theodule had there been more new snow. (September 28 to October 7.)

STEIN, J. W.—

Egginer, Laquinhorn, Gr. Allalinhorn (mostly on skis), Sonneggrat, Untergabelhorn, Trifhorn, Wellenkuppe, Nordend.

TYNDALE, H. E. G.—

All the recorded expeditions were made from Cogné as a centre, unless specially noted.

Pène Blanche: Pointe Susse—ridge-traverse, descent from Col de l'Invergneux to Chavanis pastures.

Punta Forzo: Colle di Arolla—from Valeille, first ascent of W. ridge of Punta Forzo; descent to Passo Muraille Rouge: return viâ Bardoney glen.

Camp on Chavanis pastures.

Bassa di Peratza: Cima di Peratza: Testa di Nouva: Punta Scatiglion: Cima del Lago di Miserin. Ridge-traverse of some five hours' climbing: descent from Testa di Nouva to Col de l'Arietta not easy. First ascent of last-named point.

Punta Lavinetta: Torre di Lavina by S.W. ridge. First ascents: ridge stuck just N.E. of Col Bardoney, thence 4½ hours (much difficult climbing) rock arête to summit: descent by N. ridge, thence to Col des Eaux Rouges.

Up Valeille to S. Col des Sengies: over this to Grande Uja di Ciardoney: across small (Valsoera) glacier to Punta di Valsoera, first ascent: *via* Colle delle Uje, Colle Ciardoney and Bocchetta di Ciardoney to Teleccio huts: up to Piantonetto hut (14 hours going).

Colle della Losa: Becca della Losa: Colle della Losa: Colle di Teleccio. Very bad snowstorm: went up Becca in search for Col de Grandcroux: in the afternoon crossed two miles of boulders covered with a foot of fresh snow (from Piantonetto hut).

Tour de Grauson by N. buttress (first ascent): first traverse of its three peaks, going W.: thence over Punta Garin to Arpisson basin.

Tour St. André: Tour St. Pierre: descent to Colle di Teleccio.

Bocchetta del Monte Nero : Rocchia Viva : over Gemelli to Bec de la Patience : *via* B. del M. Nero and Col Monei to Cogne (from Piantonetto hut to Cogne).

Tersiva : up S.W. ridge, down N. ridge.

To Col Bonney : traverse of Punta Budden and Becca di Montandayné : descent to Tribulation gl. from Bocchetta di Tsassetta : over Col de la Lune and Col du Grand Paradis (14 hours : very high wind).

Grand Paradis (from V.E. hut) from W. : down N. ridge to Petit Paradis : thence N. along ridge to Bocchetta di Tsassetta—11 hours, much powdery snow (descent *via* Tribulation glacier).

Col de Grandcroux : Bocchetta del Ges : Colle Sià (.5 hours to C. de Grandcroux : no steps cut) from Cogne to Ceresole.

Eastern Levanna : up N.E. ridge, down to Colle Perduto (very bad conditions), from Ceresole to Bonneval.

Ciamarella : Punta Chalanson : heavy storm.

Col d'Arnas. Balme to Lanslebourg.

All these expeditions were made without guides : all except two latter with Mr. R. L. G. Irving : after Tour St. André with Mr. G. H. Bullock also.

WELLS, Rev. E. G.—

August 13.—From Aandalsnaes—Romsdal—Store Troldtinder. Ascent by the great gully from the glacier, which was full of ice and took a long time. Descent from the ridge further W. easy. C. F. Stoehr, V. le N. Foster, Rev. E. G. Wells.

August 15.—From Romsdal—Kongen and Dronningen (wrongly named Sostrene on the map), on the ridge between Isterdal and Indfjord, to Indfjord.

The first peak, which we believe to be Kongen, was easy. Dronningen, about 500 ft. higher, we ascended direct by the face from the gap between the two, a very interesting rock climb. The cairn is some distance to the S.W. of the top of this climb. It would be interesting to know if this was a new route. The last portion was very precipitous and sensational, but the rock firm. We took nearly 4 hours from the summit of Kongen to that of Dronningen, 1 hour descent to gap, 3 hours ascent. The descent to gap was interesting but not difficult. This time is a very liberal one. Descent from the gap between Dronningen and Bispen to N.W. over an easy watershed to Indfjord. C. F. Stoehr, V. le N. Foster, Rev. E. G. Wells. August 17. Kolflot—Vengetind. E. V. Slater, P. Scoones, C. F. Stoehr, Rev. E. G. Wells. Climbed in thick mist. The route itself presents no difficulties.

August 19.—From Kolflot—Romsdalahorn. The same party.

- August 21.—From Dalen—Mjolnir by Slingsby's route up the face, descent by S.E. to Svart Vand and Vengedal. Same party.
- August 24.—From Öie—Brekketind, an interesting traverse in very bad weather. P. Scoones, C. F. Stoehr, E. G. Wells.
- August 26.—From Öie—Slogen by Slingsby's gully. The gully was almost free from snow, and very loose and rotten, full of stones. Same party with V. le N. Foster. From top of the gully we varied the route to the summit, following the ridge as closely as possible all the way from the skar.
- August 27.—From Trandal—Raana by N.E. arête—a very fine rock climb in excellent conditions. Messrs. Stoehr and Wells (one rope), Scoones and Slater (another).
- August 29.—From Öie—Smörskredtind. Ascent by N. ridge; descent by W., interesting rocks under excellent conditions. E. G. Wells and E. V. Slater.
- August 31.—From Fibelstad—Kviteggen. Ascent by N.E. arête (Slingsby's route, with slight variation possibly near the top); descent by easy route. Messrs Scoones, Slater, Stoehr, Foster, Wells.

WESTON, REV. W.—

In 1911: Weisse Frau.

Büttlassen, from Büttlassenlücke, to Sefinen-furgge.

* Gspaltenhorn.

From Obersteinberg—Schmadrijoch (Obersteinberg to Faffer-alp).

Traverse of Tschingelhorn from Wetterlücke to Petersgrat.

* Tschingelhorn.

Wildstrubel.

* Balmhorn and traverse of Altels (from the Gemmi).

In 1912: Japanese Alps.

Traverse of Yarigatake (10,400 ft.) by new route from N. without guides.

First ascent of highest peak of Hodaka-yama (10,250 ft.).

First ascent by European traveller of Ariake-San.

* First ascent of Tsubakuradake.

* First traverse of Fude Iwa.

* With Mrs. Weston.

WHEELER, E. O.—

From camp on upper Elk river, about 40 miles in from Campbell River village, Vancouver Island, Canada. 9 A.C., Canada members, including A. O. Wheeler, carried bivouac kit up for ascent of Mt. Elkhorn, which is rather a nice-looking rock peak in new 'Strathcona Park.' Bivouac on grass ledge N. of a small glacier on Mt. Elkhorn. Alt. about 4700 ft.

From bivouac—Mt. Elkhorn. A short, and in parts fairly interesting, rock climb, alt. 7250 (by aneroid barometer). There are few peaks about here higher than this—several have glaciers on them.

WICKS, J. H., see under WILSON, C.

WILLIAMSON, DR. O. K.—

Kessjenjoch.

Hohberghorn from Dom hut. Descent to Galenjoch.

Condition of snow as in winter. Snow lower than hut.

New Weissthor.

WILLS, W. A., see under WILSON, C.

WILSON, DR. CLAUDE.—

Col des Ecandies, Fenêtre des Chamois, Col du Tricot, Col d'Orny. J. H. Wicks, W. A. Wills, C. Wilson.

Col des Plines. W. A. Wills, C. Wilson.

Col des Maisons Blanches. J. H. Wicks, W. A. Wills, C. Wilson.

Mont Pleureur by S. arête, descending by W. arête and S. face. J. H. Wicks, W. A. Wills, E. H. F. Bradby, and C. Wilson.

Grand Combin from Panossière hut viâ Corridor. (Same party as last.)

Wellenkuppe (traverse). Same party.

Attempt on S. face of Kienhorn by new route. Same party.

Trifhorn. Same party.

Wicks and Bradby and a guide traversed Leiterspitze.

WORKMAN, DR. W. HUNTER.—June 5 to Sept. 25: On June 5

Mrs. F. Bullock Workman and Dr. W. Hunter Workman, with Mr. Grant Peterkin as topographer, guides Cyprien Savoye, Adolph Rey, S. Quaizier, and porters César Chenoz and Julien Rey, left Srinagar, Kashmir, and proceeded to Khapalu, in the Shyok valley in Baltistan, whence they ascended the Bilaphond glacier, crossed the Bilaphond La, descended the Lolphond glacier to the Siachen, which last glacier was explored throughout its whole length of 48 miles, as were also most of its main branches. Late in August the return journey was made by crossing a newly-discovered pass leading from the W. head of the Siachen to the Kabery glacier, which last was descended for the first time to the Kondus valley. Srinagar was reached on September 25.

For further details *vide* the 'Alpine Journal,' November 1912, pp. 441-2.

YELD, G.—

Punta Fenilia, traversed to Valeille.

Colle S. di Sengie, Piccola Uja di Ciardoney.

Punta di Valetta, N. peak, by Comba della Valetta.

Punta del Tuf, S. Passo del Tuf, Lauzon side only.

Punta Nera of the Eaux Rouges Valley traversed.

L'Aiguillette, descent by Vermiana glen.

YOUNG, G. WINTHROP.—

Mönch : deep snow.

Furg-joch.

Exploration Chérillon glacier to Col Tournanche.

Furg-grat (direct ascent of wall).

Col d'Hérens (thick fog).

Col du Géant.

Dames Anglaises : l' Isolée (first ascent).

Col Tournanche (guideless), with traverse of Tête du Lion.

An interesting record of mountaineering under difficulties.

J. P. FARRAR.

May 19, 1913.

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RECORD OF EXPEDITIONS IN 1913.

(Issued in terms of the recommendation of the Committee, 'Alpine Journal,' vol. xxiv. p. 517, 'so as to facilitate the exchange of information.')

ALLEN, FREEMAN.—

Col du Géant.

Aiguille de la Brenva.

Aiguille Joseph Croux.

Dent du Géant.

Grandes Jorasses, left hut 2 A.M., arrived summit 6 A.M.,
Courmayeur 12.15 P.M.

August 13-26.

BACKHOUSE, EDWARD.—

Norway: Kolflot—Romsdalshorn—Kolflot.

Romsdal—Trolldind—Isterdal.

Dale—Mjöltnir, traverse N. to S.—Dale.

Dale—Stor Vengetind—Kolflot.

Grövdal—Gjuratind—Grövdal.

Öje—Smörskretind—Öje.

With one or other of H. Nygaard, L. Flydal or Stefan Öje.
Bad weather, lasting till August 10, prevented any further
expeditions.

July 22-August 2.

BELCHER, H. W.—

Chamonix—Le Brévent, by the face—Chamonix.

Chamonix—Aiguilles de l'M and Petits Charmoz—Chamonix.

Montanvert—La Tour Ronde—Rifugio Torino.

Rifugio Torino—Aiguille du Plan, obliged to pass under
dangerous séracs—Montanvert.

Montanvert—Aiguille du Moine by S.E. arête—Montanvert.

Montanvert—Aiguille de Grépon, traverse—Montanvert.

August.

BENNETT, C. F., see under CLAPHAM, J. H.

BICKNELL, R.—

Aiguille du Plan, traverse from Glacier des Pélerins.

Montanvert—Col de Voza—Contamines.

Contamines—Col de Miage—Courmayeur.

Courmayeur—Col Ferret—Champex.

Champex—Col du Tour—Montanvert.

Ober Gabelhorn, up and down N.W. arête from Zinal.

Attempted S.W. (Moine) arête of Aiguille Verte, Grandes
Jorasses, Swiss face of Mont Dolent, and Zinal Rothhorn ;

in each case turned back by bad weather. Chain of Mont Blanc with Mr. H. E. L. Porter, Gabelhorn with Mr. C. A. Elliott.

BONACOSSA, COUNT ALDO.—

March: Airolo—Blindenhorn.

Goeschenen—Galenstock (ski tours).

Schyn.

May: Campodolcino—Pizzo Ferré (traverse), first ascent by S. face; first by N.E. arête.

June: Ponte [Valtellina]—Pizzo di Coca by N. couloir.

Passo di Coca.

July: Bondione—Pizzo di Coca first traverse to Dente di Coca, first traverse of Dente.

Badile Hut—Punta Sertori, first ascent of the actual highest point, July 15.

Simplon—Rossboden Pass—Saas.

Simplon—Laquinhorn, first ascent by the E. face.

Bormio—Monte Confinale, first ascent by the N. arête, August 16.

Cima della Manzina, first ascent by the N. face, August 17.

Monte Zebù, first ascent by the S.W. face or wall, August 18.

Aiguille Joseph Croux (traverse).

Aiguille Blanche de Pétéret, first ascent by the S.E. arête with Dr. Paul Preuss and Herr C. Prochownick, August 28.

Aletschhorn,* first ascent by the W.S.W. face.

Schienhorn, first ascent by the E. arête.

Montanvert—Aiguille de l'M, first ascent by the N. face.

Aiguille des Petits Charmoz.

Aiguille du Moine.

BOWEN, H. C.—

Salanfe—Cime de l'Est and Dent Jaune of Dents du Midi.

From Montanvert—Aiguille du Moine.

From Montanvert—Aiguille du Midi.

From Montanvert—Aiguilles de Grépon and Grands Charmoz, traverse S.—N.; 'variation' on Grépon.

From Montanvert—Aiguille Verte by 'Moine' arête: conditions very bad.

August.

BRADBY, E. H. F., see under WILSON, C.

BRADLEY, M. G.—

Klein Simelistock.

King's Peak.

Tannenspitze.

Klein Wellhorn.

Rosenhorn.

Sustenhorn.

Fünffingerstock, II.

* Many routes have been accomplished in the neighbourhood of this face, cf. Coolidge, 'Climbers' Guide,' vol. i., part ii (1910) pp. 183-4.—*Ed.*

Balmhorn—Altels (traverse).
Doldenhorn.
Blümlisalhorn.
Gspaltenhorn.
Klein Schreckhorn, by the E. face.
Roseneegg—Dossenhorn.
All guideless.

BRIGG, W. A.—

Tyrol, with Messrs. J. J. Brigg and Eric Greenwood.
Oetz-thal to Vent, climbed Similaun on way to Karthaus in the Schnalser Thal; by Meran and Botzen to Sterzing and Ridnaun; slept in Teplitzer Hut, but driven down again by bad weather. To St. Jakob in Pfitsch Thal and by Pfitscher Joch to Breitlahner Hôtel and Berliner Hut; climbed Schwarzenstein (mist) and back to Ginzling and Innsbruck.

July 13–30.

BROOME, E. A.—

Ober Gabeljoch.
Riffelhorn, from glacier.
Allalinhorn, from Allalin Pass
Theodul.
Aiguille Noire de Pétéret.
Col du Géant (twice).
Cima di Jazzi—New Weissthor.
Monte Moro Pass—St. Joderhorn.
With Mr. H. K. Corning.

CÆSAR, W. R.—

From Rosenloui—Sattelspitze.
From Rosenloui—Tannenspitze.
From Rosenloui—Rosenlouistock.
Guggi Hut—Jungfrau—Grindelwald.
La Grave—S. Aiguille d'Arves—La Grave.
Chalet de l'Alpe—Montagne des Agneaux—Roche de Jabel—
Col du Casset—Pic des Prés les Fonds—La Grave.
All with Mr. H. Runge.

July 30–August 18.

CARFRAE, C. F. K.—

September 19: Pyrenees. Bagnères de Luchon over the Pointe de Venasque to hospice in the Esera valley, Spain. An easy rock climb rendered somewhat difficult by a foot or so of fresh snow.
September 20: From the Esera hospice over the Col des Taonas, climbing the small peak to the W. of the pass; rocks steeper but in better condition than those of the Pointe de Venasque: back to Luchon.
These little climbs were accomplished in the intervals of watching the French Army manœuvres.

CLAPHAM, J. H.—

Dent Parrachée, from chalets above Aussois to Arpont chalets.
Arpont—Vanoise glacier to N. of Dôme de Chasseforêt—
Pralognan (snowstorm).

Grande Casse (traverse).

Bonneval—Colle Perdute—Ceresole.

Bocchetta della Losa, &c.—Piantonetto Hut.

Tour du Grand St. Pierre, traverse S. to N.

Cogne—Mont Emilius—Aosta.

Theodul Pass (bad weather).

Rimpfischhorn, from Adler Pass.

Mattmark—Monte Moro—Macugnaga.

Colle delle Loccie—Col d'Olen.

Punta Gnifetti—Zumsteinspitze—Dufourspitze.

Party: Messrs. C. A. Werner, C. F. Bennett, J. C. Muir, and
for the Rimpfischhorn, Mr. H. V. Reade.

August 8-27.

CLARK, C. INGLIS—

Grödnertal Dolomites.

From Regensburg Hut—Pela de Vit, new route on buttress of
La Pizza.

From Regensburg Hut—Kleine Fermeda, July 25.

From Regensburg Hut—Fermadatürme (traverse).

From Regensburg Hut—Kleine Tschierspitze, by the 'Rudi-
fenia' chimney—Grödner Joch hospice.

From Grödner Joch hospice—'Clarkspitze,' between the
Grosse and E. Tschierspitzen, by the original route, third
ascent.

From Grödner Joch hospice—Sass Songher, by the S. face.

From Grödner Joch hospice—S.E. peak of Tschierspitzen by a
new route—Sella Joch Haus, July 31.

From Sella Joch Haus—Gross Murfrait Turm.

From Sella Joch Haus—Sella Türme, traverse of second and
third peaks.

From Sella Joch Haus—Fünffingerspitze by the 'Daumen-
scharte.'

From Sella Joch Haus—Grohmannspitze—Wolkenstein.

With Matthias Runggaldier of St. Ulrich.

July 25—August 5.

CLARK, W. INGLIS.—

From St. Ulrich, *via* Raschötz, to Villnöss and the Schlüter
Hut, thence by the Wasserscharte to the Regensburg and
Puez huts. By Corvara and a traverse of the Sella to
Grödner hospice, Sella Haus, and Seiser Alp to the Schlern
via Jungbrunn-Tal to Tiers and across to Welschnofen.

From Mezzolombardo to Molveno.

From Pinzolo to the Mandron glacier.

From Lovere by Clusone to Schilpario and the Dezzo gorge.

From Bergamo to the head of Val Brembana and Val Seriana to Bondione.

From Foppiano to Tosa Falls.

July and August.

COMPTON, E. T.—

July 4: Lac de Champex—Col des Ecandies—Col d'Orny—Combe d'Orny—Champex.

July 14: Cabane Dupuis—Col des Plines—Fenêtre de Saleinaz—Champex.

September 4: Klagenfurt—Stou—Votatscha—Klagenfurter-Hütte.

September 12: Oberdrauburg—Hochstadt—Laserts-Törl—Laserts-Wand—Karlsbader-Hütte—Lienz.

October 12: St. Gertraud im Ulten—Grünsee and highest hut—St. Gertraud.

October 17: Gmünd [Carinthia]—Gössgraben—Giessener Hut.

October 18: Giessener Hut—Sänleck—Dössener Scharte—Pflügelhof.

October 24: Berchtesgaden—Untersberg—Berchtesgaden.

COMPTON, REV. W. C.—

S. Aiguille d'Arves.

Pic Gaspard.

Cornes de Pié Bérarde.

Les Ecrins, traverse La Bérarde—Ailefroide.

Ailefroide—Pic Coolidge—La Bérarde.

All with Rev. A. V. Valentine-Richards.

August 27—September 6.

CORNING, H. K., see under BROOME, E. A.

CORRY, CAPTAIN J. B., D.S.O.—

November 1912—May 1913: some valley walking in the Mishmi hills, N.E. Assam.

Tschengelser Hochwand, with Messrs. Solly, Heard, and R. Corry.

Königspitze—Kreilspitze—Schrötterhorn, with same party.

Las Sours [Pontresina Schwestern]—Piz Muragl (traverse).

Piz Palü—Bellavista peaks (traverse).

Piz Tschierva (traverse).

Piz Roseg by N. arête; descent to Sella Pass.

Crast' agüzza (traverse).

Sella Pass—Piz Scerscen—Piz Bernina (traverse); descent by S.E. arête of Piz Bernina; from the Mortel to the Boval Hut. These last three tours, with Christian Zippert and Florian Grass of Pontresina.

Piz Corvatsch.

July 27—September 1.

CORRY, R.—

Suldenspitze.

Vertainspitze by N.W. arête.

Tschengelser Hochwand by E. arête.
 Königspitze—Kreilspitze—Schrötterhorn.
 Hochjoch—Ortler Pass.
 All guideless.
 July 25—August 4.

COURTAULD, S. L., see under OLIVER, E. G.

DAVIDSON, J. M.—

Gr. Simelistock.
 Tannenspitze.
 Rosenlauhorn.
 Unter Wellhorn.
 Very bad weather.

DENT, H. L. R.—

August: From Arolla—La Roussette (traverse), ascent by N.W. face with Messrs. Pulling, Hollingsworth and many others (novices).

Petites Dents, from the summit to Col de Zarmine, with a lady. L'Évêque and tour of Mont Collon with Mr. Furneaux.

Aiguille de la Za, by the face; this ascent occupied over 12 hours, one chimney (? new) taking 1½ hours alone. Many falling stones on ordinary route; with Messrs. Pulling, Hollingsworth, and Furneaux.

Aiguilles Rouges, traverse with Mr. Hollingsworth; nett time, 10 hours from and back to hôtel.

Col des Ignes, returning by Pas de Chèvres, with Messrs. Hollingsworth, Furneaux, Vernon, and many others (novices).

Cassiorte, in a snowstorm, with Messrs. Furneaux, L. Clarke, and some ladies.

September: * Col du Torrent—St. Luc.

* Meiden Pass—Gruben.

* Augstbord Pass—Schwarzhorn—St. Niklaus.

* Bel Alp—Eggishorn—Concordia hut.

* Grünhorn Lücke—Gemslücke—Oberaarjoch—Grimsel.

* Nägeli's Grätli—Rhone glacier—Furka Pass.

* By Orsino Pass—St. Gotthard.

* Hospenthal by Oberalp—Sedrun.

* Curaglia—Dissentis.

* Thusis—Lenzer Heide.

* Arosa—Casana Pass—Klosters.

* From Buchs—Wildhaus over Kurfürsten to Wallenstadt.

* With Mrs. and Miss Dent.

DENT, J. Y., see under, DENT, H. L. R.

DURHAM, REV. W. E.—

Gemmi—Wildstrubel—Lenk.

Kandersteg—Bonderspitz—Kandersteg.

Zermatt—Trifhorn—Zermatt.

Täsch Alp—Leiterspitz—Zermatt.

Zermatt—Ober Rothhorn—Fluhhorn—Zermatt.

Täsch Alp—Feejoch—Saas Fee (bad weather).
 Mischabel Hut—Ulrichshorn—Balfrinhorn—St. Niklaus.
 Zermatt—Riffelhorn (twice)—Bétemps Hut.
 Zermatt—Unter Gabelhorn—Zermatt.
 Bétemps Hut—Monte Rosa—Zermatt (bad weather).
 Kien Hut—Täschhorn—Zermatt (very bad weather).
 Schönbühl Hut—Col d'Hérens—Cols des Bouquetins and Mont
 Brulé—Arolla. Very bad weather; reached Arolla at
 3.45 A.M.
 Arolla—Petite Dent de Veisivi—Arolla.
 Arolla—Aiguille de la Za, by the face—Arolla.
 Arolla—Pigne d'Arolla, by N. face—Arolla.
 Kandersteg—Brattelspitze—Kandersteg.
 Kandersteg—Doldenhorn—Kandersteg.
 Mostly with Christian Jossi, jr.
 The weather at end of June and throughout July was abomin-
 able; fresh snow two or three times a week.
 June 24—August 4.

EATON, J. E. C.—

Pic de la Grave.
 Montagne des Agneaux (attempt).
 La Grave—Brèche de la Meije—La Meije, traverse—La Grave.
 S. Aiguille d'Arves.

ELLIS, W. H.—

Chandolin—Bella Tola—Pas de Boeuf—Gruben.
 Gruben—Barrhorn.
 Gruben—Bieshorn.
 Gruben—Biesjoch—Brunnegghorn—Biesjoch—Brunneggjoch—
 Abberg glacier—Herbrigen (16-hours' day).
 Weisshorn Hut—Weisshorn—Randa. Beautiful conditions—
 17-hours' day.
 Riffelhaus—Felikjoch—Castor—Felikjoch—Sella Hut.
 Sella Hut—Zwillingsjoch—Pollux, traverse—Schwarzthor—
 Schwärze glacier—Zermatt.
 Schönbühl Hut—Stockje—Tête Blanche—Ferpècle glacier—
 Bricolla.
 Bricolla—Pointe de Bricolla by the rocks, interesting climb—
 Col de la Pointe de Bricolla—Moiry glacier—Bouquetin
 —Pigne de l'Allée—Zinal.
 All expeditions with the guides Joseph Kuster and Joseph
 Autille; every climbing day a good one, and every off day
 practically a bad one.
 July 28—August 12.

ENGLAND, G. F. A.—

Ferpècle—Col de Zarmine—Grande Dent de Veisivi—Arolla
 (much fresh snow).
 Bertol Hut—Col des Bouquetins—Prarayé (much fresh snow).

Prarayé—Col de Valcournera—Breuil. Care should be taken to cross the Col de Dza *as well as* the Valcournera.

Col des Cîmes Blanches.

Theodul Hut—Breithorn—Klein Matterhorn—Zermatt.

With a lady; guides Antoine Georges of Haudères and Josef Kronig of Zermatt.

July 22–30.¹

FARRAR, CAPTAIN J. P., D.S.O.—

Val des Dix Hut—Cols de Seilon and Mont Rouge—Chanrion.

From Chanrion over Col du Sonadon up to Plateau du Couloir of Grand Combin, returned by Col d'Amianthe to By.

From Valsorey Hut, crossed Grand Combin, descent from summit through a break in the ice cliffs, leaving the Mur de la Côte far to our right—Panossière Hut—Mauvoisin.

From Chanrion—Cols de l'Evêque, Mont Brulé, and Valpelline—Zermatt. Snow from Col de l'Evêque to Stockje very bad (16 hours all told).

From Finsteraarhorn Hut ascended crest of S.E. arête of Finsteraarhorn about 13,500 ft. [cf. 'A.J.' xxvii. pp. 263 *seq.*], descent to Fiesch, through ice-falls of Fiescher glacier, bad. August 2.

Gandegg Hut—Theodul—Breuil.

Breuil—Furgg Grat—Breuil.

Breuil—Theodul—Zermatt.

Riffel Haus—Pollux *via* Schwarzthor—Riffelhaus.

Weather generally indifferent, and more snow on the mountains than I have ever seen at the season.

July 21–August 16.

FIELD, A. E.—

From Val d'Isère—Pointe de la Sana.

From Val d'Isère—Dôme du Val d'Isère.

Col de Rhêmes—Pointe de Bazel—Col de la Tsanteleina. Aiguille Pers.

August 16–24.

GARDINER, FREDERICK.—

July 10: From Grimmi Alp ascent of Seehorn, bad weather.

July 11: part ascent of Mannlifuh, very bad weather.

July 13: ascent of Mannlifuh, fine weather. July 14:

Grimmi Pass and Furggi Pass or Krinden Pass to Adelboden, fine weather.

July 16: From Engstligen Alp by Engstligengrat and Rothe Kumme Pass to Gemmi Pass, bad weather. July 18:

From Gemmi Pass to Strubeljoch and Steghorn, fine weather. July 20: Rother Tolz, very bad weather.

July 21: From Leuker Bad by Gitzifurige Pass and

Lötschen Pass to Kippel in Lötschen Thal, fine weather.

July 22: From Kippel to Ferden Pass and Ferden Rothorn, stormy weather.

July 25 : From Ried, Tenbachhorn, fine weather, much fresh snow. July 26 : Tellispitzen, unsettled weather. July 29 : From Bietsch Hut to Bietsch Pass, Wiler Joch, Wilerhorn, and Ijollilücke, high wind and cloudy. July 30 : Bietsch Pass, Klein Nesthorn, fine weather, storm later.

August 2 : From Visperterminen by Ferche Pass and Bistenen Pass to Simplon Kulm, fine weather. August 3 : From Simplon Kulm to Breithorn Pass and Monte Leone, fine weather. August 5 : Passo Terra Rossa, Wasenhorn, stormy.

August 8 : From Gruben to Jung Pass and Furggwanghorn, fine weather. August 11 : Augstbord Pass, Schwarzhorn, fine weather. August 12 : Dreizehnenhorn, very bad weather. August 14 : Augstbord Pass, Steinhälihorn, very bad weather. August 16 : Pas de Boeuf, Bella Tola, fine day. August 18 : Col de Tracuit, Diablons, unsettled weather. August 21 : Z'meiden Pass and Hôtel Weisshorn, unsettled weather.

August 25 : From Bel Alp up Fushorn, unsettled weather. August 26 : From Ober Aletsch Hut to Sattelücke and Sattelhorn, fine weather. August 27 : From Bel Alp up Sparrhorn, fine weather. August 29 : From Triest Alp, attempt on Geisshorn defeated by bad weather.

The weather during July was most unsettled. August was also bad, and the quantity of fresh snow during the whole climbing season was abnormal. This is my 46th season, 1200th ascent in the mountains, and 81st visit to the Alps.

FREDERICK GARDINER.

GATTY, V. H.—

Pralognan—Refuge des Lacs—Dôme de Chasseforêt—Vanoise glacier—Refuge Vanoise.

Pointe de la Glière.

Pointe de la Rechasse.

Col de la Grande Casse.

Little St. Bernard Pass.

Mont Miravidi. An excellent view point reached in 5 hours from the Pass.

Mont Valaisan.

Accompanied by Rev. R. P. Dansey on all expeditions ; on the first two by a local guide.

GREENWOOD, E., see under BRIGG, W. A.

HARRIS, E. B.—

Plan de l'Aiguille—Aiguille de l'M—Petits Charmoz—Chamonix. Continuous bad weather.

Binn—Ofenhorn—Tosa Falls.

Tosa Falls—Albrun Pass—Binn.

Concordia Hut—Jungfrau—Jungfraujoch Station.

Jungfraujoch Station—Mönch—Concordia Hut.

Concordia Hut—Lötschenlücke—Ried. (Bad weather August 5-14.)

Bétemps Hut—Castor—Pollux—Verra and Theodul glaciers—Zermatt. (Schwarzthor reported impassable.) 12.30 A.M.—7.15 P.M.

Bétemps Hut—Punta Gnifetti. Slept in Capanna Margherita ; next day—Dufourspitze—Zermatt.

Trift Hôtel—Rothhornjoch—Zinal Rothhorn, by S.W. arête, descending by ordinary route—Trift Hôtel—Zermatt. Left Trift 1.55 A.M., returned there 4.30 P.M. August 29.

Bietschhorn Hut—Bietschhorn, up and down W. arête, snow too bad to try N. arête.

Simplon Kulm—Monte Leone.

The weather was bad practically the whole of July and half of August. The first two weeks of September not very good.

July 15—September 9.

HARTREE, CYRIL—

Wellenkuppe.

Riffelhorn (twice) *via* 'Matterhorn,' and glacier couloirs, and N. face.

Allalinhorn (traverse).

Rimpfischhorn by N. arête (traverse).

Alphubel, traverse by S.W. arête, 'Rothengrat.'

Ulrichshorn—Balfrinhorn (traverse).

Arben glacier—Ober Gabelhorn by S. face. Direct ascent reaching 'Arbengrat' about $\frac{1}{2}$ hour below summit, descent by ordinary route—Zermatt.

Mischabeljoch.

Portjengrat (traverse).

Weissmies (traverse).

Guides, Alois Pollinger and Franz Josef Imboden.

August 19—September 13.

HEARD, Rev. H. J., see under CORRY, R.

HOPE, R. P., see under KIRKPATRICK, W. T.—

In addition :-

Täsch Alp—Alphubel by S.W. face—Alphubeljoch—Zermatt, with Mr. H. V. Reade.

Les Plans sur Bex—Dent de Morcles—Les Plans.

Les Plans—Dent aux Favres—Les Plans.

Anzeindaz—Diablerets by S. face—Gryon.

July 20—September 13.

HOWARD, GEOFFREY—

August: Attended the A.C.C. Camp at Robson Pass, B.C., for four days. Climbed small nameless peak. Took a pack train from Jasper and joined Mr. A. L. Mumm in an expedition up the Athabaska and Whirlpool Rivers. Ascended minor summits for topographical purposes.

Limited time prevented my accompanying Mumm for more than half the trip.

IRVING, R. L. G., see under TYNDALE, H. E. G., and Scoones, P.

JARDINE, J. W.—

Ofenhorn.

Ofenjoch

Scatta Minojo.

Passo di Valtendra.

Kaltwasser Pass.

Lysjoch.

Theodul Pass.

August 1-15.

JENKINS, A. STUART—

Chanrion—Bec d'Epicoun N. arête—Chanrion.

Chanrion—Col d'Otemma [between Mt. Oulie and Sciossa
not Col d'Otemma of S. map]—Chanrion.

Chanrion—Col de Crête Sèche—Oyace.

Oyace—Mont Morion—Oyace.

Cogne—Colle di Teleccio—Rifugio Piantonetto.

Rifugio. Piantonetto—Roccia Viva, from Colle Baretti—
Rifugio Piantonetto.

Becca di Gay, from Colle Baretti, traversed to Colle Gran
Crou; a good climb—Cogne.

Les Invergneux—La Tersiva, traverse by S. and W. arêtes—
Cogne.

Arolla—Doves Blanches by W. arête from Plan de Bertol—
Arolla.

Bertol Hut—Dent des Bouquetins (highest summit); ascent
by ordinary route, descent on Col des Bouquetins by
E. arête—Arolla.

Prarayé—Gran Becco di Blancien by Colle di Sassa, traverse
to—La Sengla S. summit; traverse probably new,
descent to Combe d'Oren by E. arête—Prarayé. July 30.

Prarayé—Les Jumeaux de Valtournanche, ridge traverse
from Becca di Guin, then retraced our steps back to—
Prarayé. August 2.

Brenva glacier bivouac—attempt on Mont Blanc *via* Brenva
route; accident occurred about 4000 m. [cf. 'A.J.' xxvii.
pp. 364-5]. August 5.

June 27-August 7.

JOHNS, W. G., see under RAEBURN, H.

KIRKPATRICK, W. T.—

Celles—Mont Aiguille—Celles.

La Chalp—Col de la Traversette—Piano del Re.

Quintino Sella Hut—Passo delle Sagnette—Monte Viso by S.
face.

Casteldelfino—Coletta di Chiapera—Col de Roure—Maljasset.
Fouillouze—Brec de Chambeyron by E. face—St. Paul.

Les Auberts en Champoléon—Col de Vallonpierre—Le Clot en Valgaudemar.

Le Clot—Sirac—Le Clot.

Le Clot—Col de la Muande—St. Christophe.

Rochetaillée Allemont—Fare Hut (snowstorm).

Sevolière Chalets—Roches glacier—Nancroit : tried for 5 hours to find Mont Pourri (fog).

King's Camp Lauzon—Grivola, S.E. face—Lauzon.

Lauzon—Cima del Gran Sertz—Cogne.

Herbetet hut—Punta di Ceresole—Cogne.

Orny hut—Aiguille du Tour—Col du Tour—Argentière.

The above expeditions guideless with Mr. R. P. Hope.

July 20—August 30.

LARDEN, WALTER.—

Pizzo Fizzo, guideless, with a friend.

Hohsand Pass, guideless, with a friend (fog).

Klein Simelistock, guideless, with two friends.

Rosenlauistock, guideless, with two friends.

King's Peak, guideless, with two friends.

Simeli Sattel, guideless, with two friends.

The last four expeditions were accomplished in *Kletterschuhe*; doubled rope much used in the descent: would prove interesting for Lake climbers. Decidedly 'crag climbing' as opposed to 'mountaineering.'

Klein Wellhorn, guideless, with four friends. A good 'mountaineering' rock climb, done in nailed boots. Track leading to actual climb is hard to find.

Rosenhorn, guideless, with two friends. 'Crampons' enabled us to traverse some steep snow easily. I used the large 8-spiked ones for the first time, and at once felt comfortable both on snow and rock.

From Arolla—

Aiguilles Rouges, traversed with a guide: more tiring than Mont Collon or the Zinal Rothhorn.

Pigne d'Arolla, guideless, with two friends and a lady.

Petites Dents de Veisivi traverse, guideless, with three friends.

Mont Collon traverse, guideless, with three friends: a good climb, but little scope for ice work.

Mont Blanc de Seilon traverse, guideless, with three friends: difficulties with the corniche and avalanching snow; much interesting rock. I wore 'crampons' throughout the climb.

Dent Perroc, guideless, with two friends: main difficulty consists in finding the best way up; latter part of the approach is very rough.

June 30—August 16.

LAWFORD, B.—

Col de Breney—Pigne d'Arolla—Pas de Chèvres.

Aiguille de la Za.

Tête Blanche—Col d'Hérens.

Festijoch—Hohberghorn—Hohberg Pass—Ried Pass—Ulrichshorn—Windjoch.

Adler Pass (very cold).

Rimpfischhorn (very bad weather).

Schwarzberg Weissthor—New Weissthor (very cold).

Colle and Monte delle Loccie—Colle delle Pisse.

Lysjoch—Zumsteinspitze (doubtful weather).

Theodul Pass.

Château des Dames (traverse).

Dent d'Hérens from Aosta Hut.

Mont Blanc, traverse from Courmayeur to Chamonix (very cold). All, except the first, with Mr. W. S. Sharpe.

August 1–26.

LEYDEN, VICTOR VON—

Pontresina—Piz Vadret, W. face—Pontresina.

Pontresina—Piz Albris—Paun da Zücher—Pontresina.

Zermatt—Theodul Pass—Breuil (weather bad).

Breuil—Cima di Cian traverse—Prarayé (fine).

Aosta Hut—Dent d'Hérens traverse by W. arête, S. face—
Mont Tabor glacier—Breuil (fine weather, snow bad).

August 17.

Breuil—Theodul—Zermatt (bad weather).

Trift Hôtel—Zinal Rothhorn (attempt, bad weather).

Schönbühl Hut—Tête Blanche—Col de Bertol—Arolla (fine).

Mont Collon, traverse by E. and W. arêtes (fine day, falling stones).

Bricolla—Grand Cornier, traverse—Mountet Hut (snow bad, weather fine).

Mountet Hut—Zinal Rothhorn, traverse—Zermatt, fine weather and conditions

Schönbühl Hut—Matterhorn, up Z'mutt arête, down S.W. arête to Luigi di Savoia Hut (weather doubtful) August 29.

Luigi di Savoia Hut—Furggjoch—Zermatt (very bad weather).

Schönbühl hut—Dent Blanche—Zermatt (conditions bad).

Concordia hut—Hintere and Grosse Fiescherhörner—Jungfraujoch (fine weather, conditions not easy).

Jungfraujoch—Jungfrau—Grindelwald (fine morning).

Herr R. Richter was present on most of the above expeditions.

Guides, Peter Almer and Antoine Maquignaz.

August 4—September 7.

LINDSELL, MAJOR P. B.—

February : Piz Nair pitschen, traverse, guideless.

March : Novate Mezzola—Val Codera—Alp Cöeder.

June : Sciora di dentro (traverse).

Cima di Castello—Cima di Cantun.

Monte Zocca—N. Cacciabella Pass.

Bocchetta di Val Canina (first by travellers). June 14.
 Piz della Margna (traverse).
 Pizzo Camerozzo.
 Piz Cengalo.
 Pizzo Ligoncio.
 Monte Disgrazia by 'Via Schenatti.'
 Piz Corvatsch.
 Cima di Rosso—Monte Sissone.
 Lyskamm.
 Pointe de Zinal, by ridge.
 Trifhorn (traverse).
 Grand Cornier, Col de la Dent Blanche.
 Aiguilles Rouges d'Arolla (traverse).
 Mont Collon (traverse).
 Petite Dent de Veisivi.
 Pas de Chèvres—Mont Blanc de Seilon.
 Cols de Seilon and de Giétroz.
 Grand Combin.
 Col de Sevreu—Pointe de Rosa Blanche.
 Col de Bertol—Col d'Hérens (twice).
 Weather generally bad.
 June 7—September 10.

LING, W. N., see under RÆBURN, H.

LLOYD, R. W.—

L'Innominata (traverse).

Dent du Géant.

Crossed an unmarked and very steep col to the lower Brenva glacier.

Col Pierre Joseph (very bad weather) and Col Ferret (deep snow).

Valsorey Hut—Grand Combin—Panossière Hut.

Allalinhorn.

Visit to the Matterhorn glacier through the séracs.

Col de Valpelline to Prarayé.

Prarayé—Dent d'Hérens, 8 hours from hôtel, very bad conditions—Aosta Hut.

Aosta Hut—Col de Valpelline—Zermatt (atrocious snow).

Lyskamm (traverse); descending by Felikjoch (excessively bad snow).

Attempted traverse of Breithorn from the Schwarzthor, but after several hours had to return owing to the rocks being so very badly iced that it was impossible to go on.

With one or other or both of Josef Pollinger and Franz Lochmatter.

July and August.

MEADE, C. F.—

June, 1913: Attempted Kamet from the Niti side with Pierre Blanc and Bhotias, camping at 17,000 ft. (over a fortnight), 21,000 ft. and 23,000 ft. Soft snow and exhaustion obliged

us to turn back on the saddle between Kamet and the peak triangulated as 24,170 ft. The season, like that of 1912, was phenomenally bad.

MULLINGTON, H. A., see under PARKER, J. K.

MINCHINTON, H. D.—

June 3 : Dharmsala [Punjab]—‘ S ’ Pass Peak, about 16,500 ft.
First ascent.

Slept at camp about 11,000 ft. ; 14-hour day with Rifleman Jaising Gurung.

June 6 : ‘ The Dharmsala Matterhorn, ’ about 16,700 ft.

First ascent. This mountain is referred to by Major Bruce in ‘ Twenty Years Climbing in the Himalayas. ’ It was the sixth attempt on the peak, and my third ; Major Bruce tried three times also. From camp at 11,000 ft. over Andrea Pass to bivouac at about 13,500 ft. ; climbed peak with Rifleman Jaising ; second night at same bivouac : back to camp.

Both above ascents very long and tiring snow climbs ; chiefly soft snow : last 2 hours of Matterhorn along a nasty snow arête.

October 5 : Bug Pass, about 14,000 ft., from camp at Kareri Dal (10,500 ft.), with my wife and orderlies ; easy.

H. D. MINCHINTON, Lieut.,

1st K.G.O. Goorkha Rifles.

MOTHERSILL, H. J.—

La Bérarde—Sommet des Rouies—La Bérarde.

La Bérarde—Pic Coolidge, by S.W face—Col de la Temple—Ailefroide.

Lemercier Hut—Trois Dents [Pelvoux] (thick mists)—Ville Vallouise.

Entraigues—By col at base of Les Aupillous (dense mists)—Le Clot en Valgaudemar.

Le Clot—Col du Chardon—La Bérarde.

June 30—July 7. For later tours see under PILKINGTON, E. F.

July 18 : Promontoire Hut—La Meije (attempt stopped by ice)
—Col du Clot des Cavales—Chalet de l’Alpe.

Chalet de l’Alpe—La Meije, Pic Central (attempt, very bad weather)—La Grave.

Chancel Hut—Col de la Lauze—St. Christophe.

Promontoire Hut—La Meije (another attempt again stopped by ice)—Brèche du Râteau—St. Christophe.

July 18—26.

With my brother and the guides Henri and Adolfe Rey.

MUIR, J. C., see under CLAPHAM, J. H.

MUMM, A. L.—

August 9 : From camp at foot of Robson Glacier—First ascent of an unnamed snow-peak (c. 10,000 ft.) immediately north of Mt. Robson, with F. W. Godsall of Cowley,

Alberta, Miss P. Pearce of Calgary, and Moritz Inderbinen of Zermatt.

August 20th: From a camp on the Whirlpool River—With G. E. Howard, John Yates of Lac St. Anne, Alberta, and Moritz Inderbinen, ascended a fine view point (c. 8,000 ft.), at the junction of the North Whirlpool and Whirlpool rivers.

August 25: From The Committee's Punch-Bowl—The same party, except Howard, ascended Mount Brown. Though this mountain has been reduced from 16,000 to 9,000 ft., it is a magnificent view point.

August 29: From a camp on the Whirlpool.—The same party visited a large glacier on the right bank of the Whirlpool, but were unable to discover even a moderately safe way through the séracs to the snowfields from which it descended.

September 8: From a camp near the junction of the Whirlpool and North Whirlpool rivers.—The same party made an attempt on Mt. Geikie (over 11,000 ft.) from the S.W. A hurricane of extraordinary violence compelled them to turn back when 300 or 400 ft. below the summit.

OLIVER, E. G.—

Col de l'Avernet.

L'Innominata by W. face.

La Tour Ronde.

Breithorn.

Col Durand and Pointe de Zinal.

Trifhorn (traverse).

Rimpfischhorn by N. arête (traverse).

Matterhorn and Breuiljoch.

Col du Géant and Aiguille du Midi.

Col de Talèfre.

Aiguille Joseph Croux (traverse); up S. arête, down S.W. face, with Mr V. A. Fynn.

Col du Géant and Grand Flambeau.

Furgg-Grat and Theodulhorn.

Mr. S. L. Courtauld accompanied me on the first nine expeditions.

OPPENHEIM, CAPTAIN L. C. F.—

From Binn—Helsenhorn.

From Binn—Hüllehorn.

From Binn—Cherbadung.

From Binn—Ofenhorn.

From Binn—Pizzo Fizzo.

From Binn—Schwarzhorn.

From Zermatt—Riffelhorn, from glacier.

From Arolla—Mont Collon, from N.

From Arolla—Dent Perroc (traverse).

From Arolla—Aiguilles Rouges (traverse).

- Mostly with Franz Imboden of St. Niklaus.
August and September.
- OSBORNE, R. E.—
Piz Led.
Piz Corvatsch (traverse).
Piz Bernina *via* 'Bernina Scharte.'
Piz Roseg.
Il Chapütschin.
Piz Tremoggia (traverse).
Unter Wellhorn.
King's Peak.
Simelistock.
First two guideless, others with Fritz Amatter and Hans Kaufmann; all with Miss Osborne.
August.
- PARKER, J. K.
Cresta [Avers]—Passo di Val Lunga*—Casaccia.
Val Bregalga and other valleys 'closed' on account of cattle disease.
Cima di Castello.
N. Cacciabella Pass (weather very bad).
Piz Badile (traverse); up S. face, down E. arête and Punta Sertozi, *highest* point.
Zocca Pass—Monte Zocca by N. face route.
Passo di Cornarossa, Cecilia Hut to Chiesa (weather very bad): vainly attempted Monte Disgrazia.
All with Mr. H. A. Millington, and (except first) with Heinrich Pollinger and Gaspar Moser of St. Niklaus.
August 16–30.
- PIGOU, A. C.—
Norway: Guideless, with T. Hickman; rocks in excellent condition, although mostly first ascents of the year.
Framnaes—Uranaastind by N. arête.
Framnaes through Koldedal to Skogadalsböen.
Skogadalsböen over Kaiser Pass to Turtegrö.
Mellemste Ringstind traverse, by chimney on N. side.
Skagadölstind ridge traverse, descent by 'Hefty's Chimney.'
S. Dryhaugstind by variation on E. face.
From hut (which had to be broken into) at Baerdalsaeter up Austabottind (snowstorm).
Store Skagadölstind by Andrew's route, traverse of Centraltind, Skyggedalstind [*sic*], and Gjertvastind, returning to Turtegrö by the Kaiser Pass (6.30 A.M.—1.30 A.M.).
Midtmaradalstind by N. arête.
Eastern Alps, Kaisergebirge.
Totenkirchel by 'Führer Kamin,' with T. Hickman and P. J. Baker.

* *Qu. Lunghino.—Ed.*

Totensesselspitze, lower peak, by the gully—rocks extremely rotten—with Messrs. P. J. and M. Baker.

June 26–July-28.

PILKINGTON, E. F.—

Grenoble—Uriage—Chalet de la Pra.

Chalet de la Pra—Col de Belledone—Allemont.

La Bérarde—Grande Aiguille—La Bérarde.

La Bérarde—Brèche de la Meije—La Grave (storm).

Chalet de l'Alpe—Pic de Neige Cordier—Col Émile Pic—
Glacier Blanc—Col des Ecrins—La Béra.de.

La Bérarde—Les Bans—bivouac for Ailefroide.

Promontoire Hut—attempt on La Meije; too much new snow—
La Bérarde.

La Bérarde—Aiguille du Plat, traverse—St. Christophe.

La Bérarde—Ailefroide, traverse—Ailefroide village.

Ailefroide—Col de la Temple—Carrelet Hut.

Carrelet Hut—Pic Coolidge—Carrelet Hut.

Carrelet Hut—Col des Avalanches—Flambeau des Ecrins (much fresh snow).

La Bérarde—Râteau—La Bérarde.

La Bérarde—Les Ecrins, traverse Col des Avalanches to
Col des Ecrins—La Bérarde.

With Messrs. H. J. and F. Mothersill till July 19; July 21
and afterwards with Mr. C. S. Worthington. Guides
Henri and Adolphe Rey, occasionally Christophe Turc
and Pierre Brun.

July 5–26.

RAEBURN, HAROLD—

Central Caucasus—Vladikavkaz to head of Tsaya valley and ascent of two new peaks of 13,800 ft. (aneroid). Over Mamison Pass to S. side of range; first ascent of Mamison and Tshantshachi Chochs and ascent of Saramag Tau. Round to Gebi horse passes from Rion valley to Schkaenis Schkali [this is an attempt to get near the pronunciation, *H.R.*]. Through the Forests and over Sagar (horse) Pass to Ushkul.

First ascent of Nuamquam (all three peaks traversed). Walk to Betsho. Attempt on Ushba, N. peak, by N.E. face (new route); exploration of W. Chalât glacier stopped at 14,000 ft. by falling stones.

Second attempt on Ushba, S. peak, by Schultze's route; stopped at 13,500 ft. by ice and stone avalanches [bare ice on 'Untere Schneefeld'].

Up the Nakra river and over the Dongus-Orun Pass (horses) to glacier. Up Elbrus, or rather Mingi-Tau (the real name), E. peak, from a bivouac at 10,700 ft. Ride down Baksan valley and to Naltshik to railway opened there in June 1913.

Expedition composed of Messrs. W. N. Ling, H. Raeburn, W. G. Johns, J. R. Young, with Rembert Martinson of Vladikavkaz as climbing companion and interpreter.

July and August.

READE, H. V.—

Zermatt—Theodul—Breuil.

Breuil—Furgg Grat, traverse—Theodul—Zermatt.

Zermatt—Riffelhorn by 'Matterhorn' chimney.

Riffelhaus—Pollux, from Schwarzthor.

Bétemps Hut—Dufourspitze, from Grenz glacier (S. face).

Fluh Alp—Rimpfischhorn from Adler Pass—Britannia Hut.

Zermatt—Wellenkuppe, traverse by Triftjoch, N. arête.

Riffelhorn, by *two* 'Glacier' chimneys.

Täsch Alp—Alphubel (traverse); up W.S.W. arête, down E. face—Alphubeljoch.

August 11—September 4.

RICHTER, R., see under LEYDEN, V. VON.

ROBERTS, E. E.—

From Rosenloui—Simelistock.

From Rosenloui—King's Peak.

From Rosenloui—Tannenspitze.

From Rosenloui—Unter Wellhorn.

From Rosenloui—Frosch Kopf.

From Dossen Hut—Wetterhorn.

From Dossen Hut—Gross Engelhorn.

From Dossen Hut—Rosenhorn.

From Dossen Hut—Berglijoch.

From Gauli Hut—Hühnerthälhorn, by N.W. arête; down W. face. This straightforward route is apparently not recorded in the 'Climbers' Guides.'

From Val d'Isère—Col de la Galise—Pointe de la Galise—Roc de Bassagne—Col de Calabre.

From Val d'Isère—Pointe de la Sana.

From Val d'Isère—Grande Motte.

From Val d'Isère—Col de Rhêmes—Pointe de Bazel—Cime de Quart Dessus—Tsanteleina—Col de la Goletta. This fine expedition has possibly not been taken before as a whole.
August 22.

From Val d'Isère—Aiguille Pers.

July 21—August 24.

ROBERTS, W. M.—

Rochers de Bellevarde.

Signal de Mont Iseran.

Other ascents from Val d'Isère see under E. E. ROBERTS: all guideless with one or other of A. E. Field, E. E. Roberts, and Rev. H. D. Roberts.

ROGER-SMITH, H. R.—

La Bérarde—Col de Chéret by Chardon glacier, direct descent by rock couloir to Pilatte valley—La Bérarde.

Carrelet Hut—Pic Coolidge traverse, descent by S.E. face direct to Glacier Noir—Ailefroide.

Lemercier Hut—Mont Pelvoux by Sans Nom glacier, descent by Glacier des Violettes—Ailefroide. August 16. This traverse is very interesting, and apparently is not so well known as it deserves to be.

These expeditions made with Messrs. R. G. Rows, Millington, and T. Picton.

Ailefroide—Col du Sélé—La Bérarde.

Carrelet Hut—Col des Avalanches—Les Ecrins, traverse—Col des Ecrins—La Bérarde.

Same party as before without Mr Millington.

Promontoire Hut—La Meije, traverse—La Grave.

La Grave—S. Aiguille d'Arves—La Grave.

August 10–29.

ROLLESTON, L. W.

Salanfe—Dents du Midi, Cîme de l'Est, and Dent Jaune—Salanfe.

Montanvert—Aiguille du Moine, S.E. arête—Montanvert.

Montanvert—Two small nameless points at W. foot of Aiguille de Blaitière; new, but very short, and hardly worth recording—Montanvert. August 22.

Montanvert—Dent du Requin—Montanvert.

Montanvert—Aiguilles de Grépon and Grands Charmoz, traverse * S. to N. New 'variation route' up Grépon from 'C. P.' by chimney to the N. of the 'Dunod' chimney—Montanvert. August 26.

Couvercle—Aiguille Verte, ascent and descent by S.W. [Moine] arête.

August 16–28

ROWS, R. G., see under ROGER-SMITH, H. R.

RUNGE, HARRY—

Ochsenthal, Rosenloui—Sattelspitze—Rosenloui.

Rosenloui—Tannenspitze—Rosenlouispitze—Rosenloui.

Guggi Hut—Schneehorn—Klein Silberhorn—Jungfrau—Jungfrauoch—Grindelwald.

La Grave—S. Aiguille d'Arves—La Grave.

Chalet de l'Alpe—Montagne des Agneaux—Roche de Jabel—Pic des Prés les Fonds—Chalet de l'Alpe.

Kandersteg—Brattelspitze, traverse by 'Drew' chimney—Kandersteg.

July 30–August 22.

* The great cleft in the ridge between the two peaks of the Grépon was passed with the assistance of a party proceeding N.-S.—L. W. R.

SCHIESS, E.—

- Windgällen Hut—Grosse Windgälle (both peaks).
 Hüfi Hut—Piz Cambriales.
 Hüfi Hut—Tödi, traverse—Puntaiglas Hut, Truns.
 Zervreila—Rheinwaldhorn—Dangio.
 Macugnaga—Monte Moro—St. Joderhorn—Mattmark.
 Mattmark—Adler Pass—Zermatt.
 Schönbühl Hut—Dent d'Hérens—Aosta Hut.
 Aosta Hut—Col de Valpelline—Zermatt.
 Festi Hut—Dom. Dürrenhorn, last traversed—Randa.
 Bétemps Hut—Ludwigshöhe—Schwarzhorn—Balmenhorn—
 Vincent Pyramide—Punta Giordani, traversed to Gnifetti
 Hut.
 Gnifetti Hut—Lyskamm, E. peak *via* 'die Nase'—W. peak—
 Felikjoch—Zermatt.
 Trift Hôtel—Wellenkuppe—attempt on Ober Gabelhorn—
 Trift Hôtel.
 Schönbühl Hut—Matterhorn *via* Z'mutt arête, down N.E.
 arête—Zermatt.
 Oberaletsch Hut—Gr. Aletschhorn—Rieder Furka.
 Concordia Hut—Klein Grünhorn—Gross Grünhorn—Grüneck-
 horn, traverse—Concordia Hut.
 Concordia Hut—Gr. Aletschhorn—Concordia Hut.
 Concordia Hut—Klein Fiescherhorn [Ochs]—Mönchjoch—
 Jungfrauoch.
 Jungfrauoch—Mönch, up W. arête, traverse—Ober Mönchjoch.
 Ochsenthal Hut—Simelistock, &c.—Rosenlauri.
 Grindelwald—Simelihorn—Rötihorn—Grindelwald.
 August 4—September 10.

SCONES, PAUL—

- Bric Bouchet.
 Col de la Traversette.
 Monte Viso. Ascent by E. face with Mr. R. L. G. Irving.
 Col del Colour del Porco.
 Mont Pelvoux. Ascent by Tuckett's Couloir.
 Col de la Temple.
 Tête de Chéret (traverse).
 Brèche de la Meije.
 Col du Clot des Cavales.
 Col de la Pilatte and lower N.W. summit of Les Bans.
 Col des Ecrins.
 Col Émile Pic—Pic de Neige Cordier.
 Col de la Casse Déserte—Grande Ruine.]
 Les Ecrins (traverse).
 July 31—August 23.

SHARPE, W. S., see under LAWFORD, B.

SLATER, E. V.—

- La Bélarde—Tête de Chéret—La Bélarde.

Chatelleret Hut—Brèche de la Meije—Chalet de l'Alpe.
 Chalet de l'Alpe—Col du Clot des Cavales—La Bérarde.
 La Bérarde—a northerly summit of Les Bans by the third prominent rock rib to the N. of Col des Bans—La Bérarde.
 August 16.
 La Bérarde—Col des Ecrins—Caron Hut.
 Caron Hut—Col Émile Pic—Pic de Neige Cordier—Chalet de l'Alpe.
 Chalet de l'Alpe—Grande Ruine—Col de la Casse Déserte—La Bérarde.
 La Bérarde—Les Ecrins, traverse—La Bérarde.
 La Grave—Brèche de la Meije—Promontoire Hut.
 Promontoire Hut—La Meije, traverse—La Grave.
 La Grave—S. Aiguille d'Arves—La Grave.
 August 11–29.

SLINGSBY, A. M.—

May 1913—Attempt on Kamet (25,542 ft.), Garhwal.

- i. May 28–31. *First Attempt* from Ghistoli. Reached a height of 19,600 ft. on May 29. Stopped there in snow-storm, May 29, 30, 31. Returned to Ghistoli on May 31
- ii. *Second Attempt*, June 6–10. Got to camp [hypso-meter readings not yet verified] 22,800 ft. Eventually reached height between 23,000 and 23,500 ft.—but exact height unknown as barometer is too inaccurate so high—on slope of 'Gendarme' of Kamet said to be Strachey's peak. Thence, owing to frostbite and a heavy storm which came on, had to descend again to Ghistoli.

A. M. SLINGSBY, Lieut.,
 56th Rifles, F.F.

SLINGSBY, W. CECIL.—

October: Several glacier expeditions from Chamonix with my second son and youngest daughter; the party, with Mr. G. Winthrop Young crossed to Courmayeur; later again party crossed Theodul and visited the Breithorn. Subsequently a few mountain walks above Lago d. Como and in the Apennines.

SOLLY, G. A.—

Suldenspitze (traverse).
 Vertainspitze by N.W. arête.
 Königspitze—Kreilspitze—Schrötterhorn.
 Tschengelser Hochwand by E. arête.
 Sulden—Hochjoch—Ortler Pass—Trafoi.
 Hintere Schöntaufspitze, from Rosimthal.
 In nearly all these expeditions the snow was in very bad condition; several which are really very easy became, under the circumstances, quite big tours. All guideless.
 July 24–August 16.

STRUTT, CAPTAIN E. L.—

February : Maloja—Forno glacier—Monte Sissone—(attempt)
Maloja, ski tour (guideless) with Lieut.-Colonel Hon. J. R.
Brownlow ; skis worthless on steeper slopes.

St. Moritz—Piz Nair pitschen, traverse (twice). Piz Nair.
Snow-shoe expeditions (guideless) with Major Lindsell and
Mr. G. Stevens. Same tours subsequently repeated alone
on ski when time required proved to be far greater.

March.—Novate Mezzola—Val Codera—Alp Cœder, with
Major Lindsell ; time $3\frac{1}{2}$ hours (very fast). [‘Times’ in
‘Climbers’ Guide,’ Bernina, i. pp. 6–7, are *too short*.] For
savage grandeur, as well as the sense of utter and complete
desolation which it inspires, this valley can have but few
rivals in Europe.

June.—Sciora Hut—Sciora di dentro, traverse—Promontogno.
Very fine.

Albigna Hut—Ferro Centrale by E. arête reached from N.,
first ascent—Promontogno. Very fine.

Teggiola Alp—Bocchetta di Val Canina [said to be first crossing
by travellers, but *Doganieri* bivouac found on summit of
pass]—attempt on Cima Codera by E. arête—Promontogno.
Very fine. June 14.

Albigna Hut—Bocchetto di Zocca, first ascent from N.—
Pizzo di Zocca, first ascent by E. arête—Monte Zocca, by
entire S.W. arête, second ascent—Cacciabella Pass—
Promontogno. Very fine.

Maloja—Piz della Margna, traverse—Maloja. (Bad weather.)

Masino—Pizzo Camerozzo—Masino. (Fog.)

Masino—Pizzi Gemelli, traverse, attempt on Piz Cengalo,
E. Peak—Masino. (Snowstorm.)

Masino—Cime del Calvo—Masino. Traverse of the three peaks
S.E. to N.W. Views superb, weather fine, deep snow.

July.—Masino—San Martino—Val Ferro, attempt on Torrione
del Ferro, with Messrs. J. H. Wicks, C. Wilson and guide
Franz Imboden, defeated by falling ice—Upper Val Ferro
—Passo del Ferro—Ferro Occidentale, E. and N.W. ridges
—Passo di Bondo—Masino. (Fine, but storm later.)

All except winter and last expedition alone with Josef Pollinger
of St. Niklaus. Weather perfect for middle fortnight
of June, hopeless after June 22 : deep snow at 4500-ft.
level.

June 7–July 11.

TRAVERS-JACKSON, G. F.—

1913—March 8–9 : From Somerset West, ascent of Helderberg,
3750 ft., including all four summits.

March 21 : From Tulbagh, attempt to ascend the 3000-ft. face
of the Little Winterhoek, 6550 ft., repulsed by overhanging
crags.

- March 23: From Tulbagh, ascent of Great Winterhoek, 6840 ft., *via* the Knife-edge ridge, and down the Central gully.
- April 13: From Stellenbosch, ascent of Jonkershoek Twins, 4900 ft., third ascent of deep gorge between the two summits, first ascent by a lady member (Mountain Club).
- May 24-25: From Tulbagh, ascent of Little Winterhoek, 6550 ft. (winter conditions).
- May 31: From De Doorns, ascent of Matroosberg, 7434 ft., highest summit in Eastern Province.
- June 1: From De Doorns, third ascent of Zonklip Mountain, 6580 ft., by way of cliffs facing Matroosberg.
- July 20: From Houts' Bay, ascent of Haug Berg, Capitan Peak, and Karbonkel Berg.
- August 2: From Wellington, second ascent of Du Toits Kloof, Peak, 6557 ft., from the Wellington side of mountain.
- October 5: From Goudini, ascent of Chavonnesberg, 5036 ft.
- November 16: From Fish Hoek, ascent of Chapman's Peak.
- Also some 42 ascents of Table Mountain, 3582 ft., by 37 different routes: all these expeditions accomplished by me in company with members of the Mountain Club.—G. F. T.-J.

TYNDALE, H. E. G.—

- Saleinaz Hut—Petit Darrei—Saleinaz Hut.
- Saleinaz Hut—Fenêtre du Tour—Col du Passon—Lognan.
- Lognan—Col du Chardonnet, turned back by gale 250 ft. below summit of Aiguille d'Argentière—Praz de Fort.
- Praz de Fort—Col du Grand Ferret—Pré-de-Bar.
- Pré-de-Bar—Ridge of Mont Grepillon—Pré-de-Bar.
- Sella Hut—Mont Blanc, by Rocher du Mont Blanc—Chamonix.
- Couvercle—Head of Mont Mallet glacier—Couvercle.
- Le Tour—Col du Tour—Orsières.
- August 9-20 (guideless) with Mr. R. I. G. Irving.
- Fee—Monte Moro—St. Joderhorn—Macugnaga.
- Macugnaga—Passo Turlo—Riva Valdobbia.
- Riva—Col de Valdobbia—Gressoney-la-Trinité.
- Gressoney—Betta Forca—Col N. des Cîmes Blanches—Breuil.
- Breuil—Theodul—Furgg-Grat—Breuiljoch—Breuil.
- Breuil—Col de Dza—Punta di Cian—Colle di Cian—Lignan [Val St. Barthélemy].
- Lignan—Col de Vessona—Monte Faroma—Valpelline.
- Valpelline—Grand St. Bernard—Orsières.
- August 22-29. Alone.

VALENTINE-RICHARDS, REV. A. V., see under COMPTON, REV. W. C.

WELLS, REV. E. G.—

- Tête de Chéret, traverse from Chardon to Pilatte glacier.
- La Bérarde—Brèche de la Meije—La Grave.
- Chalet de l'Alpe—Col du Clot des Cavales—La Bérarde.

N.W. peak of Les Bans by N.W. arête. A very interesting expedition, apparently very seldom accomplished, and not described in the guide books. August 16.

La Bérarde—Col des Ecrins—Refuge Caron.

Refuge Caron—Pic de Neige Cordier—Col Émile Pic—La Grave.

La Grave—Col de la Lauze.

Pralognan—Grande Casse, up N., descent by S.W. face—Refuge Félix Faure.

Refuge Félix Faure—Dôme de Chasseforêt—Pralognan.

August 11–27.

WERNER, C. A., see under CLAPHAM, J. H.

WESTON, REV. WALTER—

May: * First ascents of the two highest peaks in the Myogi-san range, the 'Japanese Dolomites.'

July: 'Stone-gateways' of Myogi-San, with Mr. and Mrs. James Bryce.

August: * Traverse of Yari-ga-take (10,400 ft.); variation of new route of 1912.

Crossing of Tokugo Pass (7100 ft.).

* Highest peak of Hodaka-yama (10,250 ft.); variation of new route of 1912.

Ascent of Yake-dake (8100 ft.); active volcano.

Crossing of Abo and Nagao Passes.

Second ascent of Yake-dake.

* Ascent of Kasumi-dake (8700 ft.)

Two passages of Tokugo Pass.

Passage of Shirouma-dake (9700 ft.)

'Stone-gateways' and Teppo-iwa of Myogi-san, with Mr. Douglas Freshfield.

All the above expeditions, except the last, were shared with Mrs. Weston.

* First ascent by a lady.

WICKS, J. H., see under WILSON, C.

WILLIAMS, WILLIAM—

Zermatt—Alphubeljoch—Saas Fee.

Zermatt—Pollux—Zermatt.

Zermatt—Untergabelhorn—Zermatt.

Chamonix—Aiguille d'Argentière.

Chamonix—Col de Talèfre—Courmayeur.

Mont Blanc.

Aiguille des Grands Charmoz, traverse.

August.

WILLIAMSON, O. K.—

Düsseldorf Hut—Tschengelser Hochwand (guideless, much snow.)

Diavolezza Inn—Piz Palù—Bellavista peaks—Piz Zupô (combined traverse)—Hôtel Morteratsch.

Pontresina—Las Sours [Schwestern]—Pontresina.
July 14—August 1.

WILLS, W. A., see under WILSON, C.

WILSON, DR. CLAUDE.—

Messrs. J. H. Wicks, W. A. Wills, E. H. F. Bradby and myself were at Masinobagni and Promontogno during July, when the weather seldom permitted of any but minor ascents. The following are some of the successful expeditions and the only ones worthy of record :—

Pizzo Ligoncio, J. H. Wicks and C. Wilson.

Punta Fiorelli, (?) third ascent, J. H. Wicks, E. H. F. Bradby, C. Wilson, Miss Overton.

Cima di Cavalcorto, E. H. F. Bradby and C. Wilson.

Traverse of two nameless peaks (points 2627 m. and 2631 m., *I. map*) at head of Merdarola glen, J. H. Wicks, W. A. Wills, E. H. F. Bradby, C. Wilson.

Cime del Calvo, traverse S.E.—N.W., W. A. Wills, E. H. F. Bradby, C. Wilson, Miss Overton.

Punta Medaccio, traverse N.—S., J. H. Wicks, W. A. Wills, E. H. F. Bradby, C. Wilson, Miss Overton.

Punta della Sfinge by S. arête; second ascent, E. H. F. Bradby, C. Wilson.

Masino—Passo di Bondo—Promontogno, W. A. Wills, E. H. F. Bradby, C. Wilson.

Promontogno—Piz Duan—Promontogno, E. H. F. Bradby. Cima Codera (2790 m., *I. map*) third ascent, W. A. Wills, E. H. F. Bradby, C. Wilson, Miss Overton: 6 hours 5 minutes from Promontogno. August 1.

In the latter half of August, J. H. Wicks with Henri Rey made ascents of :

Galenstock.

Nonne (traverse).

Aiguille de Grépon, by Rolleston's 'variation.'

WOLLASTON, A. F. R.—

Nassau Range, Dutch New Guinea. Starting from the Utaqua River in October 1912, the snow line (14,200 ft.) of Mt. Carstenz was reached by Messrs. A. F. R. Wollaston and A. Van de Water on January 30, 1913, and on February 1, Messrs. Wollaston and C. B. Kloss ascended to 14,886 ft. between the E. and W. peaks.

WYATT, J. W.—

February 1913: Saanenmöser—Hundsrück (twice)—Weissenbach.

Lauenen—Trüttlisberg Pass—Lenk.

Saanenmöser—Horn Tauben—Laasenberg—St. Stephan.

March: Lenk—Wildhorn—Wildstrubel—Kandersteg. Guideless ski tours.

June: Champéry—Col de la Tour Sallières—Finhauts.

July : Champex—Tour Noir, traverse—Col de la Grande Luis—
Col Supérieur du Tour Noir—Col d'Argentière—Col du
Pesson—Col du Tour—Fenêtre des Chamois—Champex.

Col des Ecandies—Glacier du Trient—Pointe d'Orny.

Petite Fourche—Tête Blanche.

Aiguille Javelle.

August : Grande Fourche, traverse.

Grand and Petit Darrei, traverse.

Attempt on Aiguille du Chardonnet : turned back on account
of dangerous conditions.

N. and S. Aiguilles du Tour.

Valsorey Hut—Col du Meiten—Col de Pannoseyre—Liddes.

Aiguille du Chardonnet by N.E. arête : unsafe conditions.

Portalet, traverse.

YELD, G.—

Colle Nera.

Pointe du Pousset, from the Trajo icefall.

Becca Dentavu.

Cogne—S. Colle di Sengie—Colle delle Uje—Punta di Val
Soera—Colle dei Ronchi—Locana in Val d'Orco. A really
good day.

Col des Eaux Rouges (variation).

On the whole, a satisfactory record, considering that the season
of 1913 was very nearly as bad as that of 1912.

Several 'records' were received far too late for insertion.

E. L. S.

December 9, 1913.

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