

The  
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THE ALPINE CLUB OF CANADA

1910

HEADQUARTERS  
BANFF, ALBERTA

VOLUME II, No. 2

THE  
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ALPINE JOURNAL

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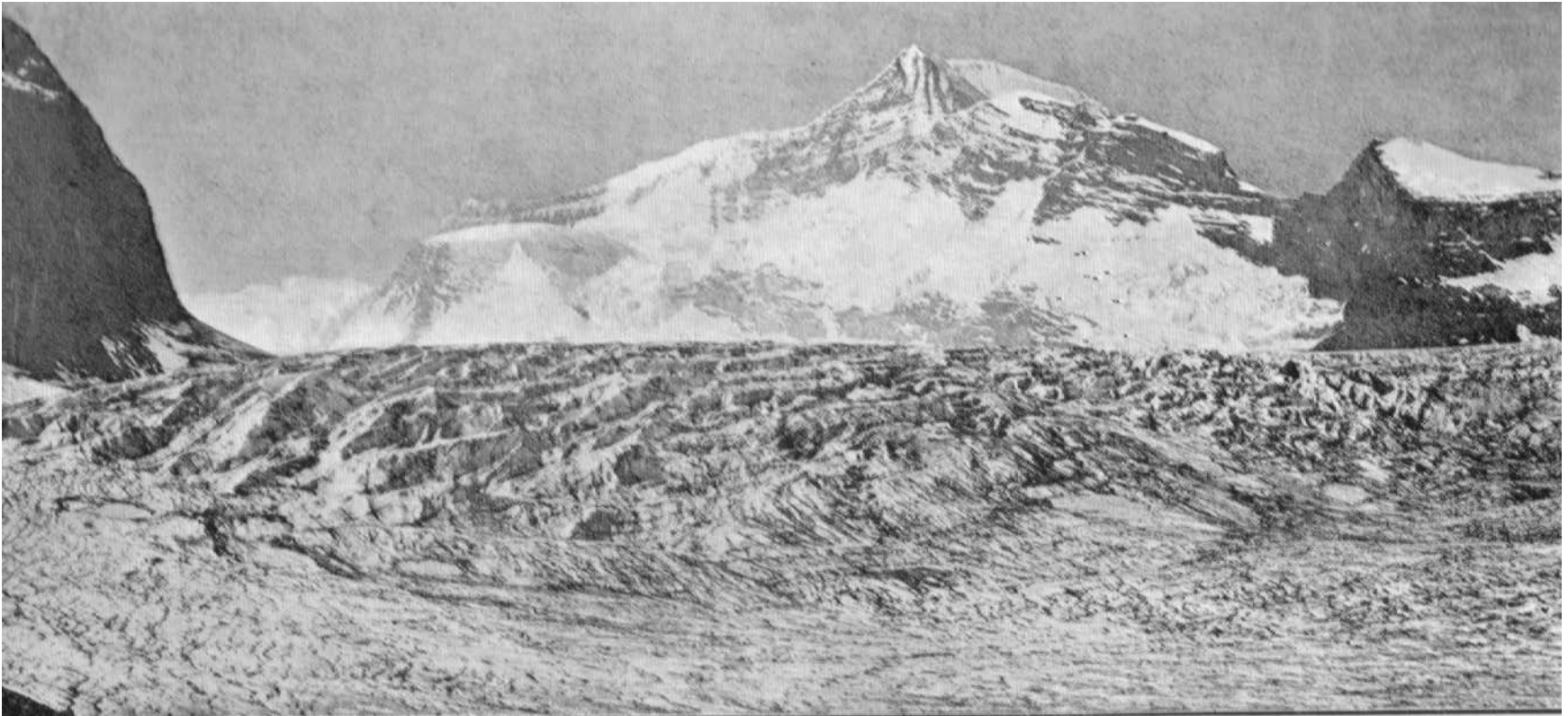
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**Mt. Robson From Robson Glacier. A.L. Mumm, Photo.**

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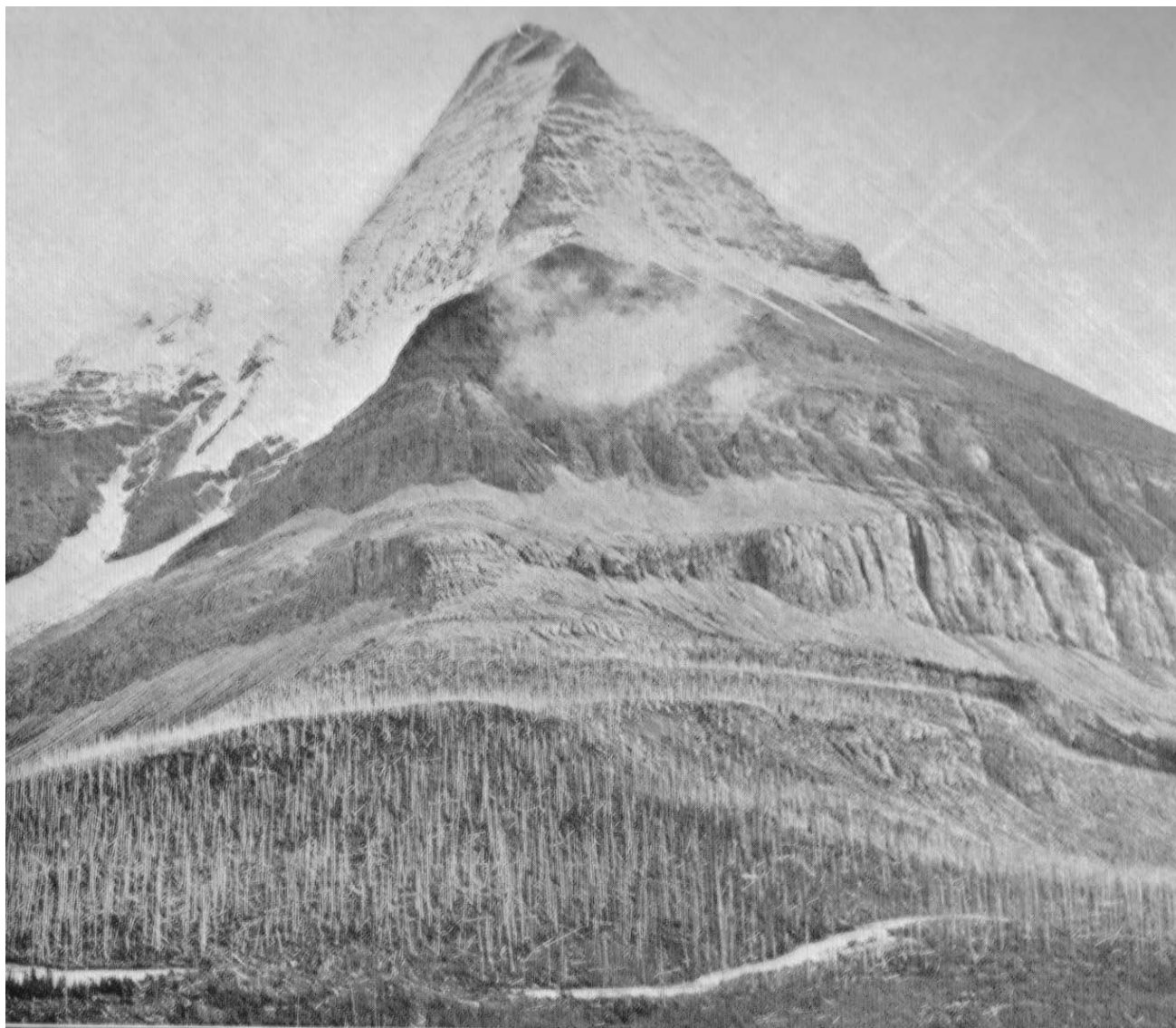
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**North-Western Face Of Mt. Robson From Upper Plateau Of The Grand Forks. A.L.  
Mumm, Photo.**

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## MOUNTAINEERING SECTION.

### **An Expedition To Mount Robson.**

*By A. L. Mumm.*

Fortunately for me, I am under no necessity to commence this paper with a disquisition on the whereabouts of Mount Robson, or the attempts made to reach its summit prior to 1909; neither need I say anything of the circumstances under which the members of the expedition which I am about to describe found themselves last summer in the Camp at Lake O'Hara. Readers of this journal are already familiar with these matters and I can, therefore, plunge at once in medias res with the statement that on Friday, August 6th, Messrs. L. S. Amery, G. Hastings and I left the camp for Lake Louise and Laggan via Abbot's Pass, while Moritz Inderbinen, a Zermatt guide, and my friend and companion in the Alps and elsewhere for more than twenty years, went round by Hector to see after the luggage.

Amery had already been to Edmonton, in order to inquire as to the journey thence to Mount Robson, and, if it seemed possible to get there within a reasonable time, to make the necessary preparations for the expedition. The time at his disposal was ridiculously short, and it reflects great credit on his energy and foresight that his arrangements worked out entirely satisfactorily. The inconveniences due to the unavoidable hurry were too trifling to be worth mentioning. Even he, however, could have scarcely got things in train for a start on August 8th if it had not been for the assistance of Mr. M. H. Evans, of Edmonton, for whose kindness we cannot be sufficiently grateful.

My own expectations with regard to Mount Robson had not been pitched very high and when Amery appeared at the Lake O'Hara Camp on Thursday morning, I had fully expected to hear that it was far too late to try for it, and that he had abandoned the idea. If I had known my Amery then as well as I do now, I should have realized that no obstacles deter him when he is once on the war path. No doubts or hesitations coloured his reports. I even think, in the first flush of optimism, he went so far as to say that we might, if all went well, reach Mount Robson in fourteen or fifteen days from Edmonton, and turned a deaf ear when Mr. Wheeler shook a sagacious head and murmured something about six weeks.

Our adventures began at once; we missed the afternoon train at Laggan, reached Calgary at 2 a.m. on Saturday, and wandered about in the small hours—a most suspicious looking band, equipped with ruck sacks, ice-axes and full mountaineering kit—hunting for the Braemar Lodge Hotel, into which we effected a semi burglarious entrance soon after three o'clock. However, we managed to get on that night to Edmonton where we found Mr. A. G. Priestly, a friend of Hastings, who was coming with us in the hope of getting some shooting in British Columbia; and on Sunday morning at 10 the party started in two buggies and two democrats for Wolf Creek.

I could write pages about that drive, the most remarkable in some respects of all our Canadian experiences. At one time I felt as though the rest of our lives would be spent in struggling

through the Lobstick woods, and heartily wished that I was in the Yoho Valley with Mr. Wheeler and the rest of our party; however, Wolf Creek was reached at last, after the longest week I have ever known. We had expected to get there in three, or, at most, four days, and it was borne in upon us that it would be wise to multiply most of our original time estimates by two or two and a half; but once fairly started on the trail, we soon left off worrying about dates and such like matters and began really to enjoy ourselves.

Mr. John Yates, of Lac Ste. Anne, was waiting for us on the Athabaska (this is one of the many things for which we have to thank Mr. Evans), and I need hardly say that we could not possibly have been in better hands. In the rest of our journey over the Yellowhead Pass there are only two things that call for mention. The first of these was the news of Mr. Kinney's ascent of Mount Robson which met us at the ferry above Jasper Lake on August 23rd. Next day Amery and Hastings had the pleasure of meeting Mr. Kinney himself and offering him their congratulations on his gallant achievement. Surely no mountaineering success was ever more richly deserved, or won by a finer exhibition of courage, skill and indomitable perseverance. The other notable incident was our first view of the summit of Mount Robson which came in sight a few miles above the junction of the Moose and Fraser Rivers on August 29th. This is worth recording, inasmuch as it has hitherto been accepted as a fact that Mount Robson is not visible along this route until the now well-known view is obtained at the opening of the Grand Forks Valley.

We camped that night on the bank of the Moose River, a short distance from the actual junction with the Fraser, and Yates made a spirited attempt to elucidate the topography of the Robson massif by means of a map which he drew on the back of a plate after dinner. The feature which principally arrested our attention was an extensive snow plateau above the head of the west fork of the Moose River, which according to the reports of Indian hunters was twenty miles across, and which, it seemed, might afford a possible route to the base of Mount Robson.

On August 30th we ascended the Moose Valley and camped high up on the left bank of the western branch of the river. A proposal was carried by acclamation that the 31st should be an off-day; it was the second since leaving Edmonton, and was so thoroughly appreciated that I do not think anyone went more than one hundred yards from the camp. Not very much could be seen of our surroundings; by far the most prominent object in the view was a fine glacier at the head of the valley which strongly drew our attention. It was pretty steep and much crevassed in places, but there appeared to be a practicable route up it, and for a party wearing crampons, a fairly rapid one, to the sky line, beyond which lay the great snow plateau already referred to.

All of us felt we ought to have a look at the plateau and Mount Robson without delay, and that the ascent of the glacier would be a very sporting way of accomplishing that object; and Yates proposed that we should go up the valley as far as possible that afternoon with ponies and a light tent, but the latter suggestion was vetoed by Hastings, who holds very pronounced views as to the desirability of starting from the main camp whenever practicable. Accordingly we went early to bed, the alarm being set for 11.45; we got off at 12.45 a.m. on September 1st, and a few minutes later were in the forest.

For about two hours all went well and smoothly; the moon shone brightly and there was not much undergrowth. Hastings' lantern appeared to be a veritable magic lantern, beneath whose beams ways opened up unexpectedly in the most unpromising places, and I was mentally composing a panegyric on his sagacity and unerring instinct for direction when "Hello!" he shouted, "What's the moon doing over there?" We had curved round nearly in a half-circle and were heading almost straight down the valley. Very little ground had been lost, but from that moment the going became



**Camp On West Fork Of Moose River. A.L. Mumm, Photo.**

continuously worse and worse; wind-falls beset us unceasingly, and progress was extremely slow. Finally we emerged from the woods at about 5 o'clock, and after expending some time and a vast amount of energy in trying to bridge the river with a tree trunk, continued our way up the left bank, scrambled through a narrow rocky ravine out of which it rushed with great violence, and arrived in a stony flat where we were able to cross fairly easily.

We made a fire and breakfasted in very leisurely fashion not much troubled by the fact that the distance from camp as the crow flies was deplorably short. It was a most interesting place: the glacier was visible from top to bottom straight ahead of us, and on our left opened the mouth of a deep valley, most of which was hidden behind a great rocky spur that descends from the main ridge to the spot where we were sitting. I was, and am still, intensely curious as to what that valley is like, and whether it is possible to ascend to the head of it. If this can be done one could certainly get down without serious difficulty on the other side, and this would make the most direct, and in other respects a very attractive way of reaching the Robson Glacier. If I am ever in the Moose Valley again—but we had no leisure for reflections of that kind, nor did we at that time know what the other side was like. We started again at 7.15, reached the glacier—which was farther off than it looked, after the manner of glaciers—in an hour, and put on our crampons.

I have worn crampons so seldom that tramping securely up a steepish slope of hard ice still gives me a sensation of pleased surprise. We had an enjoyable spell of it, but presently the crevasses became very large and labyrinthine, and the passages between them grew more and more broken and razor-like. A feeling of amour propre impelled us to spend some time in a fruitless effort to force a way through, but eventually we were obliged to take to the rocks and moraine on the left bank for a short distance. After that it was easy to cross the glacier above the big crevasses to its right hand side, where snow slopes led upwards till the much talked of plateau, or a section of it, spread out before us, falling away gently to the north.

A precipitous rocky wall, a continuation of the spur already mentioned, encloses the plateau on the west and blocked us completely in the direction of Mount Robson, but a gap about a couple of miles ahead seemed to hold out a chance of a view. Some distance away to the right the horizon was bounded by another much lower ridge of rocks, only rising slightly above the snow. Amery and Inderbinnen volunteered to go on to the gap and at 1.30 p.m. we separated for a time. They obtained an excellent view of Mount Robson across the Robson Glacier which lay immediately below them. It could be reached from the gap without the slightest difficulty, so that there is at any rate one direct mountaineers' pass from the Moose Valley to that of the Smoky River. Some day when the era of the Club huts arrives, and routes and times are more accurately known, it is quite likely that energetic climbers will ascend Mount Robson, making the Moose Valley their starting-point, but for our purposes it was clear that the distance was altogether too great. In the meantime Hastings and I went to the ridge on the right. Though it is only a break in the plateau, which extends many miles beyond it, it is sufficiently elevated to be a remarkably fine view-point. We plodded through the snow, which was growing softish, for an hour and a quarter, and Hastings' reason for visiting it—that he was tired and wanted some rocks to lie down on—seemed to me singularly inadequate. That, however, is by the way. The day was an absolutely perfect one, and we had the rare treat of enjoying an entirely novel view of great beauty and variety, under conditions absolutely favourable. The summit of Mount Robson rose grandly above the rock-wall, and a veritable sea of unknown and unnamed mountains spread around us in all directions. I managed to photograph somewhat less than half the panorama; most unluckily, I had not my full complement of plates with me that day. We rejoined our companions, who had waited for us for some time on

the snow with exemplary patience, soon after half past four.

The question when and how we were going to get back had been exercising my mind for some time, and now the others began to develop a tardy interest in it also. I think it was Hastings who suggested that we should go right round the head of the valley eastward, follow the hillside above the timber line till we were above the camp, and then drop straight down to it through the forest. This was a really brilliant conception and showed a remarkable grasp of the topographical conditions. The head of the valley is far wider than appears from the camp, and two other glaciers, about the same size as the one which had served as a half way in the morning, descend into it from the plateau. We tried to get down to the central one, but were pulled up short by a tremendous precipice and had to retrace our steps for a considerable distance. (Just at this point there were numerous caribou tracks on the snow.) An attempt at a short cut to the farthest glacier was also a failure, and it was finally reached after a circuit at a very high level round the whole of the head of the valley. Fortunately the going was excellent; we raced down it, got off the ice at 7.30, and hurried over some steep, rough ground during the last hour of daylight, arriving at the edge of the forest at 8.30.

And here the strictly alpine interest of this expedition comes to an end, but I cannot resist dwelling at some length on the remainder of it, for it is that which gives it a place apart among all my mountaineering experiences. It was now about nine hours since we had had a square meal; the place was pleasantly sheltered, with fuel and water at hand; so a fire was lighted, and we prepared to consume, luxuriously and leisurely, the rest of our provisions. As the moon could be relied upon for hours and it was not very material whether we got back to camp at 1 or 2 a.m., we reposed till 11, and then started upwards through the forest, looking forward cheerfully to an easy walk of a couple of hours or so, and, incidentally, to a magnificent moonlight view of Mount Robson. But a Canadian forest is not so easily circumvented. We had not been going long when the trees ended abruptly, and we found ourselves looking across a gap, which descended very nearly to the valley floor. It was perhaps eighty to a hundred yards broad at this point—but it is difficult to give more than a very vague estimate—and was entirely filled by an immense smooth slab of gray rock, stretching upwards for many hundreds, perhaps thousands of feet, and without a sign of a break in its slippery cast-iron surface. I should not like to assert that to get across it would have been absolutely impossible, but it was anything but a tempting route, especially in that light, and after a futile explosion of disgust, we proceeded, with somewhat ruffled feelings, to go down. A crack saved us from going the whole way to the bottom, and once more we started hopefully upwards.

Not many minutes had gone by when the trees appeared to be getting ominously thinner again. Could it be another slab? The thought was too horrible. But another slab it was, as hard and smooth and forbidding as the first one. This time we fairly owned ourselves beaten; it was no use contending with a forest that could produce obstacles of this kind, and there might be more to come, for aught we knew. So, too subdued in spirit to use bad language we went down, right down to the bottom this time, and swallowed the unpalatable fact that the morning's performance would have to be gone through again, only at considerably greater length.

While we were descending the second gap there came, as if in mockery, a really wonderful glimpse of Mount Robson, gleaming silvery in the moonshine; and that as far as I was concerned, and I think I may say the same for the others, was the last occasion on which we took the slightest notice of anything but what was immediately in front of us. That was what made the whole thing such a nightmare, the absolute compulsion to attend, ceaselessly, unremittingly to what one was doing and where one was putting one's feet. Mere walking would have been, relatively, delightful,

but walking there was practically none, only clambering, crawling, balancing, dodging, through the unending complexities of almost continuous windfalls. Once a tremendous roar ahead of us announced that we were coming to a torrent, one that we must have passed in the morning on the level, and forgotten. Great trees made the passage easy, and we rested thankfully for a few moments on the far bank, and drank some of the ice-cold water. Then on again, and a yet louder roar told us that we were on an island with the larger branch of the stream still in front of us. A single tree trunk bridged it. I saw Hastings and Amery pause and speak for a moment, then walk over with apparent unconcern. Inderbinen followed; in ordinary circumstances he would have been looking round the instant he reached the other side, to make sure that all was well with me and to offer me the end of his ice axe; but now he walked stolidly on without a single glance behind him. I looked at the bridge and the raging flood below and crawled over on my hands and knees. "Will you walk over if I do?"—"All right." This, I learned later was the conversation which had taken place between Hastings and Amery. I can recall no other incident, scarcely another remark, save when at intervals Amery or I called for a halt because one of our puttees was coming undone. Once, when we had reached the more open forest, I suddenly saw four ponies. They were in a most improbable place, and I knew they could not be our ponies because one of them was a bright strawberry color quite unlike any of ours, or I should think any cayuse that ever lived, but I accepted them without surprise, as one accepts strange things in dreams, and watched them for what appeared to be quite a long time before they resolved themselves into bushes and scrub.

But all things come to an end at last, and towards 6 o'clock there appeared, first, some ponies that were indubitably real ones, and then, the tents. We were really back again after an absence of just over 29 hours, a record for me, and I sincerely hope it will remain so, but Hastings beats it easily with an outing of 35 hours on Nanga Parbat.

A dozen times during that unspeakable night I had made unalterable resolutions that nothing should induce me to move another step in the direction of Mount Robson, but they melted away as such resolutions will, and at tea that afternoon it was decided *nem. con.* to proceed thither at once. We started for the east fork of the Moose River next morning and at 3 o'clock on September 5th, Yates brought us to the camping-place of the Robson Glacier where he had established Messrs. Kinney and A. P. and L. Q. Coleman almost exactly twelve months before. It was twenty-nine days since we left Edmonton, and on twenty-five of them we had been on the march.

On this last day, as there was only a short distance to be covered, Yates took us over a spur overlooking the Smoky River Valley at a point considerably higher than it was actually necessary to go, in order that we might enjoy to the full the view of the whole mass of Mount Robson. A superb view it was, and we incontinently resolved to make an attempt on that side of the mountain without delay, being urged thereto by the weightiest of all possible reasons, namely, that Mr. Kinney had been up the other one.

Mount Robson on this eastern side presents a most uncompromising front. If we could once get to the top of that long wall running from the summit southward, though to follow the crest to the highest point might perhaps not be perfectly easy throughout, we could see nothing to suggest obstacles that were likely to prove insurmountable. But the scaling of the wall itself—that unquestionably would be by far the most difficult portion of the route, and any estimate worth having of the chances of succeeding there could only be obtained on closer inspection. From the spot where we were standing one could see a beautiful snowy col at the head of the Robson Glacier, and our first idea, hastily formed and subject of course to revision, was that the best way to get at the wall would be to ascend to the col, and from there to go along what appeared to be

a continuous snow terrace running towards and along the base. At that time we had not seen any account of the attempts made on this side by the 1908 party, and I do not think that we had realized that Yates had taken part in them.

On the following morning we walked up the glacier as far as a conspicuous mass of rock named by our predecessors "the Extinguisher," and carefully examined the proposed route. We now learned for the first time from Yates, who came with us, that he, Mr. Kinney and the brothers Coleman had effected a direct passage to the base of the wall through a tumbled mass of snow and glacier which intervenes between it and the floor of the main glacier and is held up by a snow capped buttress to which he gave the name of "the Helmet." This was clearly a much shorter way than ours, and we resolved to try it. Some of the next day's provisions were deposited under a stone and we returned, well satisfied with our reconnaissance. Inderbinen was extraordinarily sanguine, and went so far as to express the opinion that we should reach the top in nine hours.

That afternoon we had a little surprise. I must retrace my steps here for a moment to explain that Amery, not content with organizing our own expedition at lightning speed, had also been making arrangements for his brother (who, when we arrived at Quebec, was just starting on his way home on leave from the Sudan), to follow on after us as quickly as possible. With this object in view he had been keeping up a dropping fire of letters and telegrams in all directions ever since his arrival in Canada. His plans, in this as in all other respects, worked out with machine-like precision, and about 2 o'clock, two or three days before we had begun to look out for them, Captain Amery and his outfit arrived. With a single halt of forty-eight hours in London, he had travelled straight through from Khartum.

On September 7th Amery, Hastings, Inderbinen and I started at 1.15 a.m., and in twenty minutes we had got our crampons on and taken to the ice. I could scarcely believe that after all these weeks we were actually starting for Mount Robson. Would we really get up, I wondered; I had not fully realized till then how intensely eager I was to do so. The night was starry and for some time remained clear; the only disturbing element in the situation was that it was preposterously warm—always an ominous sign. However, one could but hope that the wonderful weather we had been enjoying would hold out for twenty-four hours more. There was considerable difficulty in finding the cache of provisions. In the day time it had seemed as if we could not possibly miss it, but the look of everything was completely transformed by moonlight, and we did not hit off the place till past 4. After a halt and a second breakfast, we went up a sort of huge step in the main glacier, and in a little over an hour came to the point where the real ascent begins. Here Hastings announced that he could not keep his eyes open any longer and positively must have half an hour's sleep. There were no rocks for him to lie down on here, but he seemed to manage very well on the ice, and presently rose like a giant refreshed. We roped, Inderbinen leading, and set off again at 6.30. And now the evil effects of the abnormal warmth made themselves felt. Twenty-four hours earlier when we were starting up the glacier, the air has still been cold, and the surface of the ice as hard as iron, but now a warm wind, like the Föhn, was blowing, and the snow was in the worst condition possible, crusted on the top and just not firm enough to bear. Going was slow, and very laborious, Inderbinen especially having an immense amount of hard work to do in making the steps. I have kept no record of how long this continued, but it must have cost us a great deal of extra time, and at the earliest possible moment we swerved off to the left and took to the rocky side of the Helmet. This was much pleasanter than the snow, but the slope was very steep and a certain amount of zigzagging was necessary. It was 10 o'clock when we reached the topmost ledge of rock, and halted for another meal; at half past we walked over the dome-shaped top of the Helmet



into the snowy trough which lies between it and the great eastern wall.

This, if I have rightly understood Mr. Kinney's description was the farthest point reached in 1908. His party went as far as the edge of the bergschrund which runs along the base of the wall but did not cross it. I think they intended to ascend entirely by the snow, a short distance to the right (as one faces the wall) of where the rocks cease to appear. This had also been our intention at first, but after a short inspection at closer quarters, a slight change of plan was decided upon. From a distance the rocks look like belts running horizontally along the face of the wall, alternating with bands of snow, but we could now make out a fairly well defined rib, descending to within perhaps two or three hundred feet of the bergschrund with a slight downward trend from right to left, which seemed to provide a route with a decidedly easier gradient, to within a short distance of the sky-line.

I think it was then about 11 o'clock. There was no bridge over the bergschrund, but it was not very broad, and Inderbinen managed to cut himself a precarious foothold on the far side, and there laboriously hewed and hacked away a space sufficient to enable him to clamber out on the snow slope above its upper lip. It was a difficult task, cleverly performed. The rest of us followed comparatively quickly. The snow here was in fairly good order; it was one of those very steep slopes where one's main preoccupation is the question: what will it be like coming down?—and the steps are made very large and treated with tender consideration. When we arrived at the rocks there was a comfortable feeling in the air that things were going well, but it did not survive very long. Progress was slower than had been anticipated. We kept to the rib where we could, but spent most of our time in the gully; for the rib bounded a gully or chimney, inconspicuous from below but continuous and well marked when one got close to it. Inside the gully the rocks were loose and rotten, and a succession of troublesome places occurred, in which one used one's knees a great deal and never got a really good hand-hold. And the melting snow made it slippery, soppy work. Those who frequent the English Lakes at Christmas or a snowy Easter know the kind of thing I am trying to describe, but they do not get it in such large doses.

We gained ground steadily though slowly, and at length found ourselves on a band of snow, or rather ice with a thin covering of snow over it, above which was another belt of rock, the last one, and then another band of snow of which the sky-line was the upper boundary. Looking up and down for a moment while Inderbinen was step-cutting, I was tremendously impressed by the continuous steepness of the climb. The slope on which we were standing was perhaps the steepest, and in Inderbinen's opinion it was the nastiest bit that we had yet encountered, and the rocky belt above appeared literally to overhang, like the eaves of a roof. However, it was not very far off, and a little to our left a narrow neck in the line of rocks seemed to promise access to the final snow slope.

We had pulled up for a minute or two to discuss this matter when a breeze blew down the slope and struck me chill. I was soaking wet, and for some time the sun, though still high, had been completely hidden from us behind Mount Robson. Moreover, the sky was no longer clear, and it suddenly struck me as highly probable that we should get no more sunshine that day—a depressing thought, which prompted me, for the first time since we had started on the ascent of the face, to look at my watch. It was nearly 2 o'clock. An hour more to the crest (Inderbinen had just volunteered this estimate) and then some little halt for food was really imperative. And then—well, yesterday we had reckoned that after reaching the crest we could follow it to the summit in two hours, but somehow our guesses at times had not so far proved very reliable, and even if this one did not turn out to be immoderately sanguine, it would be 5.30 at least before we reached the top.

Once this train of calculation was started, it became alarmingly obvious that there was not the faintest chance of our getting back to the bottom of the wall before dark, and that meant spending the night either on the ridge itself or somewhere on the face of the wall, not far below where we were now standing. I confess I was appalled by the prospect, and lost no time in announcing, apologetically but firmly, that nothing would induce me to face either alternative.

Amery's gentle accents floated tip to me from below:—"You only want a rest, Mumm, we'll be on the ridge in half an hour and we can stop a bit and have something to eat and you'll be all right." This remark was meant to be soothing, and like most remarks made with that amiable object, it produced exactly the opposite effect to the one intended. I replied rather tartly that as far as grind was concerned, I was quite ready to go on for another six hours, but spend the night on the ridge or on the face I would NOT! It was a bitter moment for Amery; "Well, at any rate," he pleaded, "let us go on to the sky line; we must have another try, and it will be useful to know what it's like on the top." But Hastings too had been making calculations, and pointed out that if we abandoned the attempt to reach the summit, it was certainly not worth while spending a night out for any lesser object, and there was no margin of time left to play with if we meant to get back to the main Robson Glacier before dark. So rather gloomily we turned to the right about, and without shifting our places began the descent, Amery leading.

We had scarcely started when a tremendous bang and crash made everyone stop and look round hastily over his right shoulder. A number of blocks of ice, some of them the size of a man's head were just shooting through the narrow neck in the rock belt which had been selected as the best line of ascent, and an instant later came hurtling down the snow into the gully. Before anyone had moved or spoken another crash above heralded a second discharge. This one consisted of a mixture of ice and rocks and followed the same course as the other. They passed within a few feet of us, but nothing came our way. Very little was said, indeed there was little to say. "We should all have been kilt," Inderbinen observed thoughtfully, a few minutes later (he meant, if we had gone on in the direction originally intended), and that practically exhausted the subject. We went down as fast as we could, which was not very fast, only stopping once on a ledge well out on the rib for a short and very welcome rest during which we finished the small store of provisions, that had been brought thus far. I could not help looking back occasionally at an icy tusk which rose, disagreeably conspicuous, against the sky. Its twin must have furnished the materials for the avalanche. But nothing more came down and we were safely over the bergschrund by 5 o'clock. It was the mild night and that abominable warm wind in the morning that caused the mischief; I believe it would have been perfectly safe the day before, but I must admit that we had no business to be in that place on that afternoon.

We had resolved while descending to make the return journey by way of the snowy pass at the head of the Robson Glacier—the route which had been provisionally chosen two days before—instead of repeating the long climb over the Helmet, so we now walked down the snowy trough, past the Helmet and past the end of the eastern wall, which terminates in a tremendous almost vertical precipice several hundred feet in height. Here the floor of the trough took a rapid downward slope and disappeared from view, clearly in the form of a pretty steep glacier, too steep to try without previous examination at that hour of the afternoon. On our right between the great precipice and the col were a succession of towers or teeth forty to fifty feet high, covered with snow on the side nearest us, steep and rocky on the other. Amery and Hastings got over to the far side of the first one, and announced that all was well so far as they could see.

The surrounding scenery here merited more attention than we could well spare, especially



**Camp At Swifts. A.L. Mumm Photo.**



**Camp At Prairie Creek. A.L. Mumm, Photo.**



**Alpine Club Party Camp At Foot Of Robson Glacier. A.L. Mumm, Photo.**

the new world of mountains which suddenly became visible to the west and south-west. I noted one great mass of peaks which looked to me very high indeed, higher than anything in our neighbourhood except Mount Robson itself, and carried extensive snowfields and glaciers on their flanks. They might have been any distance from 40 to 60 miles away, and I have not been able to identify them on any map. But I was less interested in them at the time than in the question whether we should get to the col and down to the lower levels of the Robson Glacier while daylight lasted. We were still a considerable height above the col and as each successive tower was surmounted or turned, there was a moment's anxiety as to whether it would "go" on the other side. Not till the last fifty feet of the descent did we see our way clear before us, and, on the other side of the col, a comfortable slope of névé leading down to the head of the glacier. We raced over the col, without stopping to inspect the descent towards the Grand Forks Valley, and round to the opposite side, and felt that for the first time we were really "out of the wood." We did then pause for a moment to look at the glacier which leads up to, or down from, the lower end of the trough between the eastern wall and the Helmet; its ascent is quite practicable, and it thus provides a third route, and the best and quickest one, to the base of the wall.

Inderbinen took the lead again at this point, and trotting down with admirable decision and rapidity, landed us safely on the lower level of the glacier with a good half hour of daylight on hand; the Extinguisher was reached just as darkness fell. We rested and took things easily here for a time, feeling that we were to all intents and purposes at home, and were rather taken aback when we rose to begin the last stage of the journey, by the discovery that it was absolutely pitch dark. Hastings had hardly got out his compass and started when rain began to fall heavily, and presently there came a vivid lightning flash, followed by a reverberating crash of thunder; it really looked for a time as though the day's adventures were not yet over. However Mount Robson was only having a last bit of fun with us and did not really mean mischief. Only the outer fringe of the thunderstorm reached us, and the rain after coming down in torrents for a spell, gradually abated its violence. For the rest, I was so well satisfied to have got thus far, that I accepted quite cheerfully the prospect of perambulating slowly in Hastings' wake for the remainder of the night and hopping at intervals over small crevasses. But things did not come to that pass; after a couple of hours the clouds lifted a little and we could see where we were. Hastings had steered with wonderful accuracy and in a few minutes the surface of the glacier began to slope gently downwards; we had reached the snout. By 11.30 we were in camp and Captain Amery emerged in pyjamas to join us in a final supper. So ended an eventful and memorable day.

Though we had failed and began the homeward journey with a rankling sense of defeat, we had at least made the most of our one and only opportunity. Rain fell almost continuously on the 8th, 9th and 10th of September and the 11th showed little sign of any lasting improvement; it was clear that the season for high climbing was over, so Captain Amery started with Yates for Tête Jaune Cache, he and his brother having arranged to complete their trip by a journey in a canoe down the Fraser, and so round to Ashcroft. On the 12th the whole camp broke up; Amery went off with Keller, the owner of the canoe, down the Grand Forks Valley to the Fraser, where they joined the rest of their party two or three days later. I believe they were the first people to make the complete circuit of Mount Robson. The rest of us started on the back trail. We reached Entwistle without any incident worthy of record on September 30th and set off by train the same night for Edmonton where we arrived at 10 a.m. on October 1st, being probably the first pleasure party to travel by the Grand Trunk Pacific Railway.

## **To The Top Of Mount Robson.**

*Told by Kinney and Phillips.*

*Narrative by Rev. G. Kinney.*

"Give me your hand, Curlie." "I'll give you my sock," says Curlie. Thrusting into my mittened hand his gloved one, over which he had pulled a woollen sock for better warmth, Donald Phillips and I congratulated each other on at last succeeding in capturing that most difficult peak, Mt. Robson. We stood on the needle point of the highest and finest peak of all the Canadian Rockies, and the day was Friday, August the thirteenth, 1909.

I doubt if ever a peak was fought for more desperately, or captured under greater difficulties, than was that of Mt. Robson. Situated in the heart of the Rockies, some fifty miles or more north of the Yellowhead Pass, and hundreds of miles from civilization, the mountain could only be reached by pack-train after long weeks of strenuous effort, through trackless forest and muskeg, by nameless mountains and raging torrents. And I have the honor of being the first white man ever known to have stood on its ragged sides.

Dr. A. P. Coleman, Geologist of the University of Toronto organized an expedition in 1907 to capture Mt. Robson. The party consisted of the Doctor and his brother, L. Q. Coleman, myself and a helper. The four of us, with our pack-train of ten horses and outfit, left Laggan, August 2nd, 1907. We followed the Pipestone, Siffleur, Saskatchewan and Athabasca Rivers; crossing the Pipestone and Wilcox Passes. For weeks we made our own trails through the wilds, and forced our way, through hundreds of miles of tangled underwood. We rested our weary limbs by many a beautiful lake and babbling brooklet, while our camp-fires lit the dark shadows of ravine and cliff. Rafting our stuff over the mighty Athabaska, across which we had to swim our horses, we hurried over the Yellowhead Pass, and swung down the Fraser. But our trip that year left Mt. Robson still unconquered, though we explored its western side, and I discovered Mt. Turner and "The Valley of a Thousand Falls."

Smarting under our former failure, the three of us renewed our attack in August, 1908. This time Dr. Coleman got John Yates, an experienced packer to take us in charge. Going in by way of Edmonton, we followed very nearly the route the Grand Trunk is now taking, and crossed the Yellowhead and followed down the Fraser as far as the Moose River, a tributary of the latter. This time we attacked Mt. Robson from the east side, by tracing the Moose River to its source and then a branch of the Smoky. But the story of our desperate fight for the peak of Mt. Robson that fall is briefly told in the Alpine journal of 1909. The region for miles around this splendid peak was explored, and many peaks captured all about it. The mountain itself was attempted on several occasions, but the difficulties being too much for us, we had to give it up, after spending twenty days at its foot.

I left the mountain that fall, believing that I had had my last try at it. But by the time the next spring had come, Mt. Robson had such a hold upon me that I could not rest satisfied until I had had another try at it. I again made arrangements with John Yates for the trip, and planned to be at Mt. Robson several weeks earlier than the year before. In May I received word that foreign parties had designs upon the mountain. Telegraphing Yates that I was starting at once and expected to meet him on the trail, I hurriedly borrowed some money and, the second of June, 1909, left Victoria for Edmonton to outfit an expedition of my own. I had counted on one of my brothers making the trip with me, but at the last moment he could not get away. At Calgary, the President being absent, I could not accept the grant of a hundred dollars, that the Alpine Club had so generously made me,

because I was at that time alone and could get no one to make the trip with me. At Edmonton, money that I had expected to be at the bank for me failed to materialize, and a letter of introduction that would have made matters easy had been misplaced. I was in Edmonton about a week before I finally got my outfit together. That week's delay nearly cost me the prize, for by it I got caught in the floods of the Athabaska. Another disappointment, in the shape of a letter from Yates, awaited me in Edmonton, telling me it would be titter folly to think of starting on a trip to Mt. Robson at that time, for a very late spring had left the mountains and passes full of snow. But I had gone too far to back out then, and snow or no snow I would make the attempt. On Friday, June 11th, with only two dollars and eighty-five cents in my pocket, but with three good horses packed with three months provisions, I started off alone for Mt. Robson, hoping to pick up someone on the trail who would share fortune with me. For hundreds of miles across the prairies and through mountain vastnesses I fought alone the fearful difficulties of that trip, threading my way across treacherous bog, or swimming my horses across mountain torrents. On the McLeod River I picked up an old-timer, who wanted to go along with me. Selling him one of my horses and half of my provisions we shared together, for a few days the joys and hardships of the trail. But the dangers of the trip and the floods of the Athabaska were too much for him, so he dropped out and I was alone again with only two horses. I nearly lost my whole outfit in the swollen Rocky River, and my saddle-horse and I had to swim for our lives. Then a mighty cloud-burst flooded the entire valley of the Athabaska, beyond anything ever known in those parts before, leaving me stranded on a little island, and my horses on another, in the midst of those swollen waters. On that occasion I had to shift camp three times, wading waist deep through the raging waters, carrying my provisions and outfit on my back to a place of safety. The floods not only made the rivers impassable, but also the small streams as well, so that I had to make a trail over dangerous mountain sides. When I reached John Moberly's, the half-breed's place where I expected to swim my horses across the Athabaska, I found several parties of Indians and prospectors held up by the floods. That night the Indian dogs stole all my store of bacon. To make matters worse the Indians had no pemmican, and all I could buy to replace my stolen meat was a can of lard.

It was at this place, and on the following day, that Donald Phillips rode into camp, wearing on his Stetson hat the silver badge of the Guides' Association of Ontario. Phillips, a sturdy youth of twenty-five was looking up the country for future guiding purposes and I soon had him interested in Mt. Robson. He was on his way back for provisions and had his camp on a little island, half a day's ride down the Athabaska, where he, too, had been caught in the floods.

*Narrative by Donald Phillips.*

In July of the year 1909 I was out on a prospecting trip in the mountains along the Athabaska River and its tributaries. On the 6th of July I got marooned by the floods that followed a big cloud-burst, and for six days I had to stay on a small sand-dune island about a mile above Jasper Lake. On July 11th the floods had gone down quite a lot but the water was still pretty high in the Athabaska. As I was becoming pretty tired of my little sand-dune I thought I would try to get as far as John Moberly's, a half-breed Cree who lived about six miles further up the river, so I took my saddle horse and started on what to me was an unknown trail, that in places was flooded for half a mile with muddy water. However, my little saddle mare behaved fine and took everything I put her at, and three times she had to swim while crossing creeks.

I arrived at John Moberly's about noon. John told me that there were three white men camped just above his house, so I went up to see if it might be anyone that I knew. In this I was

disappointed as all three were total strangers to me, but acquaintances and friendships are easily made out in this country and I soon learned that two of the party were from Chicago and had been on a prospecting trip down to Tete Jaune Cache on the Fraser and were now returning to Edmonton. The third member of the party turned out to be the Rev. Geo. Kinney, of Victoria, B.C., a member of the Alpine Club of Canada, who was on his way all alone to Mt. Robson, which it was his purpose to climb. He was in rather tough luck just then, for an old chap he had picked up at Medicine Lodge on the McLeod River, and who was going along for company and to see the country, had got "cold feet" when the floods struck them at Rocky River, where they nearly drowned a fine saddle horse and lost part of their outfit, in fact did lose their only tent and the tripod for Kinney's camera; so that when they reached White Fish Creek, about the middle of Jasper Lake, Mr. McBride decided that to go back was his forte, especially as a breed had told them that there were several more creeks that were backed up from the Athabaska and the horses would have to swim. Therefore, making a division of the grub, they had parted. Mr. Kinney then followed some breeds over a rough high-water trail and got to John Moberly's where he decided to lay over a few days and let the water go down before he started again. Here the Nichi dogs ate up all the bacon he had while away from his camp, which consisted of a six by twelve feet strip of balloon silk stretched over a ridge pole, a rather disagreeable shelter during a driving rain or while the mosquitoes were bad.

Mr. Kinney was very anxious that I should go with him to Mt. Robson; and so persistent was he that by the time I was ready to return to camp he had persuaded me to accompany him on the trip. He rode and swam back with me to my camp that night, and the next day we got my outfit across Jack Creek in an old dugout canoe to a place where we could reach the high-water trail. We then swam the horses over, packed up and arrived again at Moberly's by noon in a drizzling rain and about frozen stiff. The two Chicago fellows, with genuine mountain hospitality, invited us to have dinner with them as soon as we had got our horses unpacked and the saddles off. Dinner over, we got our camp up and spread out our pack covers and saddle blankets to dry as the sun had put in an appearance. That night we all attended a "tea dance" at one of the tepees and while we were away one of John's cows ate up two cakes of soap and a couple of gunny sacks at our camp. John's cows have better appetites than an army mule or an ostrich. The following day we got John to ferry our duffle across the river in his big dugout canoe and then swam our horses across. After packing up we went about a mile to Mr. Swift's tony ranch and farm. It is customary to stop over a day at Swift's, as this is the last of civilization. But alas for Swift! his big day is now past; for the coming of the railroad brings a change over all the old ways and good old days of the pack trail.

During the afternoon while I stayed in camp and did some cooking, Mr. Kinney went out and picked enough wild strawberries for supper. The next morning, after getting a few supplies from Swift and a couple of pecks of potatoes, we started westward and camped early at Caledonia Creek, the first tributary of the Miette River. In a little lake at the head of the creek, about a mile from camp, we caught some forty rainbow trout. Here I first learned that Mr. Kinney was a preacher, for at the lake he met two prospectors and one of them asked him if the preacher that was with Dr. Coleman's party had got "cold feet." This was too good for Mr. Kinney to keep and he had to tell me about it when he came back to camp. Of course, after that, I had to lay aside any superfluous language that comes in handy to a fellow driving pack horses or doing other ornery jobs where patience becomes a burden.

The following day we made to Dominion Prairie, some four miles from the Yellowhead Pass, having covered about twelve miles that day over the worst trail that I have ever experienced.

The trail is bad at the best of times but the cloud-burst had flooded the whole river bottom and left a foot or two of mud, so that we had to stay in the saddle all the time; and the mosquitoes were about as thick as the mud. The next day we made a short drive to a nice camping ground midway along Yellowhead Lake. A short drive again on the following day, which was Saturday, and we camped a mile west of Grant Creek, the first large creek running into the Fraser west of Yellowhead River. Here we camped over Sunday. By this time I had got Mr. Kinney's grubstake sized up and could see that we were going to be short of provisions. He had assured me before starting that he had plenty of provisions for the trip. I had but a scant month's grub myself when I met him and had intended to go in for more in a couple of weeks.

And now we were on the trail with a short month's grubstake and the chances looked to me that we might be a good deal longer than a month out. But as we had a rifle along I wasn't a bit alarmed at the shortage and decided that as goats were plentiful I would have a try for one while we laid over Sunday. Luck was against me, however, for it snowed all Saturday night and Sunday morning and the alps where the goats generally stay were covered with snow, and, although I spent the whole day up there in the cold, all I saw was one marmot whistler.

Monday we did not find our horses until noon and got a very late start. We found the water in the Moose River low enough to ford without getting anything wet but our feet. The party we met at Caledonia Creek had lost most of their outfit in this river a few days previous. A mile further west we turned off the Fraser River trail and headed north up the Moose River Valley. The only sign of a trail from then on was an occasional blaze on a tree, but the logs and windfalls were more than occasional; they were continuous. Packs had to be overhauled and ropes tightened before we had nicely got started and in the course of the next mile or so we had to repack Mr. Kinney's pack-horse three times. The horse was failing and the cinches were up to the last notch, so at the top of the hill where the feed was good we camped; as we had lost so much time already that day that we could not hope to make the first camping ground up the Moose. After putting up camp, Mr. Kinney went out to pick wild strawberries for supper while I cooked up the next day's supply of food and refitted his pack saddle.

Getting a good start next morning we dined at the camping place that we had intended to make the day before. That afternoon we passed the forks of the Moose and some beautiful falls and camped at night on a big grassy shingle flat well up the next branch of the Moose River. A tempting valley and a big glacier invited exploration but our time was limited, and the next morning we struck into the woods eastward over to the last branch of the Moose. Up this east branch we travelled all day, stopping for noon where we lost the trail and had to cut through a half mile of brulé. After dinner the trail kept getting worse. There were no signs of anyone ever having travelled on that side of the river and we could not cross as the water was too deep to ford. All the afternoon we pushed through brush, fallen timber and wet muskegs where the mosquitoes nearly devoured us alive. Just before dark we found a place that was above water level and camped for the night. The next forenoon we made nearly to the summit of the Moose Pass by noon and while eating dinner it started to rain. The rain continued most of the afternoon so that we did not again go on but camped there over night without stretching the tent. We were at tree line and could get no tent poles, so just tied the tent up as a "lean-to" between some stunted spruces. The next day was fine and showed up to advantage the beautiful grassy slopes and alps of the pass, and the pretty little parks at both end of it at tree line. Crossing the summit we encountered a lot of rock slides and much avalanche snow. The snow was hard, and good going for the horses, but the rock slides were bad. At the northern slope of the pass we struck the head-waters of the Big Smoky River.



Just as we got below tree line again we came up close to a big bull caribou. Here was our chance to replenish our larder. Mr. Kinney dismounted, got his rifle unfastened from the side of the saddle and shot at the caribou, which was less than fifty yards away, and scored a clean miss. "Here," he says, "you shoot." I took the rifle, dropped on one knee and fired nine shots while that caribou trotted up towards us and stampeded our horses. Then he seemed to lose interest in the show and departed. On examination of the rifle we found the barrel had got bent about a quarter of an inch out of true. I was too disgusted to even swear and wanted to kick myself for not bringing my own rifle along instead of caching it at Moberly's. We saw two more caribou in the next mile but didn't bother them. We didn't think that they would like to be shot at with a crooked gun.

That afternoon we got our first view of Mt. Robson and the same evening camped at the lower end of Lake Adolphus, four miles from its base. Next morning we traversed the shore of Lake Adolphus and the big shingle bar at the foot of Mt. Robson Glacier where both the Smoky River and the Grand Forks find their source. Past Berg Lake, which is ever full of ice-bergs, that day and night, all summer long, continually keep breaking off the glacier that overhang the waters of the lake. Down they go with great splashes and reports like cannon. Close to the river, on a bench at the foot of Mt. Robson, we erected our silk tent, to be our home and shelter until we should scale the heights and stand on the summit of the lofty peak of Mt. Robson. Sunday, July 25th, we stayed around camp and rested for our climb on Monday. From our camp we picked out what looked like a pretty easy route up the first tier of cliffs. During the afternoon we heard a great rumbling and roaring and, looking across the valley of the Grand Forks to a lofty mountain several miles away, we saw a big avalanche descend from near the summit to a glacier below. The sight was grand indeed.

*Narrative by Rev. G. Kinney.*

From where we camped, Mt. Robson rose in one sheer unbroken wall from base to highest summit, and at such a fearful angle that a snow cornice, breaking off the crest, would fall seven thousand feet before it could come to a stop. Yet we spent no time looking for a chance to climb, for I knew of a narrow rugged way up those walls of rock and crumbling ledges that I had found the year before. Monday afternoon, with fifty pound packs on our backs, we worked our way up the cliffs and narrow ledges of that north shoulder of Mt. Robson, till we climbed its summit and reached the big shale slope on the northwest side of the mountain at about 9,500 ft. altitude. There in the shelter of "Island Cliff," an isolated wall of rock on the shale slope, we spread our blankets and watched the setting sun paint a wonder-world with its glorious colors. We called that spot "Camp High Up." At sunrise next morning we started enthusiastically for the peak. The year before I had crossed alone that shale slope to a big shoulder of cliff, nearly a mile to the south, and then in a blizzard had climbed some five hundred feet of cliff, till my aneroid read 10,500 ft. The storm was so thick that I could see no distance; but from photographs that I had taken of the western side, I believed it possible to make the peak, if that shoulder on the west could be climbed. But when Phillips and I stood on the shale slope, and looked at the rugged cliffs above us, we believed, by working our way up its snow-filled couloirs, we could reach the peak quicker than by going around to the south according to the first plan.

This west side of the mountain we found free of snow to about the eleven thousand foot line; but the cliffs above the shale slope were more difficult than we imagined, and it was slow work. The snow in the couloirs, that we had thought would offer good climbing, was so steep and hard that it could only be climbed by means of laborious step cutting. From early morning,

till three o'clock in the afternoon, we struggled up the wall of rock and ice, and in all that time we succeeded in reaching an altitude of only a little over eleven thousand feet. The weather was glorious, and the scenery of this show spot of the alpine world beggars description. The warm sun kept the avalanches busy all about us, and loose rocks would frequently whistle past. Sometimes these came from cliffs so high above that, without any warning and coming seemingly right out of the sky, they would scream past in awful flight to be engulfed in the silence below. We could hear them strike nothing, either coming or going.

In coming down that afternoon we discovered a far easier way up than the one we had tried, so we made up our minds that we would give it a try next time. Returning to our "High Up" camp, we cached blankets and instruments, and then hastened to our permanent camp at the base of Mt. Robson, for more provisions. Wednesday, July 28th, we again climbed the cliffs of the north shoulder, and made our "Higher Up" camp that night, in the cliffs above the shale slope, at ten thousand feet altitude. Here we slept on a little ledge so narrow that there was but room for the two of us to lie close together, and we had to build a little wall of stone, to keep from rolling off the mountain-side. Though the weather was fine, we were very cold, and the wind at that altitude was terrific. All the peaks for hundreds of miles were below our level, excepting Mt. Turner to the north, a fine twelve thousand foot peak on the other side of "The Valley of a Thousand Falls." The grinding avalanches and the distant roar of countless waterfalls, sang our lullaby. We had carried some dry wood with us and were able to warm over a stew of wild meat for breakfast; then, in the crisp early morning, July 29th, we tried for a second time the rugged walls of the northern face of Mt. Robson.

So successful were we, that by half past nine we had reached an altitude of eleven thousand feet. Here we came to an unscalable wall of rock. Our only possible way by it was up a sixty or seventy degree slope of ice, which terminated in a jagged crack in the wall, where we had to climb some twenty-five feet straight up in the air. It took us so long to cut steps up that great slope of ice, and the ravine was so difficult that it was noon before we conquered them. From then on we found every possible lodging place loaded with snow, making our climb not only more difficult but adding danger as well. The sun swinging round to the west brought a new enemy. The snow on the sheltered cliffs began to melt making our footing on them exceedingly treacherous. And not only were little streams forming in every draw and couloir, but loosened masses of rock and ice began falling on every hand. We reached an altitude of over twelve thousand feet, and our worst difficulties seemed nearly over, but the day was too far spent for us to make the peak and ever get back to safety, so reluctantly we turned back.

For more than a thousand feet down those upper cliffs of rock our every step was fraught with fearful danger. Not only did we have to get down gullies dripping and streaming with water, where falling rocks and avalanches were a constant menace, but the now melting masses, that covered every ledge, threatened to slide from under our weight and drag us over the cliffs. We found the steps we had cut in the ice slope of the couloir below had nearly melted away, and that the whole mass looked as if would slip down over the cliff if we so much as touched it. But it was our only possible way down, and we had to hurry, for each moment but added to our dangers. We made a cairn at eleven thousand five hundred feet altitude.

After we got below snow line, we made good time, for Phillips was fast becoming an expert in climbing. Reaching the level of the big west shoulder, up which I had climbed in 1908 in a blizzard, I left Phillips in charge of my camera, and for half a mile followed the narrow ledges, till I stood on the summit of that noble view point. The sun was just setting, Phillips was a mere dot on

a cliff to the north, the lake that Dr. Coleman named after me, and the "Valley of a Thousand Falls" lay eight thousand feet directly below. These and the valley of the Fraser, with its little thread of silver, were being engulfed with darkening blues and indigos as twilight flooded the innumerable peaks and glaciers on every hand. Above me swept a long slope of snow clear to Mt. Robson's highest pinnacle. Though tipped at a fearfully steep angle and bands of black across its white spoke of cliffs to climb, the contrast it presented to the almost perpendicular cliffs we had been climbing during the past four days, filled me for the first time with joy and confidence of ultimate success. I hurried back to Phillips and told him the good news, and we determined to make the top of that west shoulder our "Highest Up" camp the next day.

This little side trip of mine had delayed us considerably. We had planned to enjoy a real supper and to sleep comfortably that night in Camp Robson at the foot of the mountain. In fact we had to cut steps in the ice of the steep couloirs and get down the last five hundred feet of cliffs in the dark of night, before we reached our "Higher Up" camp in the cliffs. There was nothing left for us to do but camp there again, at ten thousand feet altitude, in the wind and cold on that little ledge. I started a little fire and warmed up our stock of stew, while Phillips made our bed. There, partly covered under our blankets, we ate our supper in the dark and watched the gathering storm-clouds blot out the whitecapped peaks at our feet. The storm soon swooped down upon us burying our little world in white, while the tempest of wind threatened to tear the very cliffs to pieces. I do not suppose there is any place where the wind blows so hard as on an exposed mountain top. Phillips and I curled up so closely together that we managed to keep from freezing, but it was a most uncomfortable night.

By daylight it was storming as hard as ever. The rocks that had been warm in the sun of the day before still retained enough heat to melt some of the snow that fell, so by morning the drip from the cliffs had wet our blankets through, and we were driven to seek Camp Robson, at the foot of the mountain, several thousand feet below. Packing up our wet blankets and without any breakfast, for we could not start a fire and we were too cold to eat, we plunged through the storm and glissaded down a long slide of snow. A thousand feet lower we were below the storm, and in a couple of hours had got down the cliffs of the north shoulder, and were once more comfortably feeding at our camp fire at the base of the mountain.

*Narrative by Donald Phillips.*

If I remember correctly, we slept part of that day as we were a little behind on sleep. The weather continuing bad, we spent the next four days down stream around Lake Kinney exploring and fishing, but the fish were a minus quantity and, as we only got one young grouse, we were soon on half rations. We found three different places to get up the long line of cliffs that extend west from the base of Mt. Robson across the valley of the Grand Forks, up which Dr. Coleman's party could not find a way three years ago. One of these with very little work could be made passable for a pack train, for the deer, bear and goat use it now.

Our grub getting pretty scarce I decided to take the damaged rifle and go back to the Smoky River and see if I could get a caribou. I straightened the rifle the best I could, and taking a little grub and one horse started out. I returned three days later with two fool hens that I had shot with my Colt 32 revolver. Our trusty rifle had failed at every shot to hit an old billy goat, although I had shot away all but five of our supply of cartridges. So now things did look blue indeed. We would have to go on slim rations if we hoped to hold out much longer, for our flour was down too near the bottom of the sack to look good; in fact only enough remained for another pan of biscuits and

everything else was about as scarce. If I remember correctly, it was about the second day after I got back from the hunt that we tried our third attempt to scale Mt. Robson, but fate was against us again. We had only got up to about 10,000 feet when it started to snow. A few hundred feet higher up we had to abandon the attempt, for the snow was already four inches deep and snow slides came tearing past us every minute or so. Mr. Kinney lost his cap in one of them. Luckily for him, on the way up, he had found his hat which had blown over a ledge the first time that we had climbed.

We cached our packs of grub and bedding and firewood in a little cave, and hiked for main camp where we arrived after dark, soaked to the skin and all our dry clothes cached up on the mountain.

For a few days it rained and snowed more or less every day, and between showers we made trips after game with our pocket guns and lived almost entirely on "Mulligans" made of blue grouse and whistlers. One afternoon when the clouds lifted a little I went after goats across the river from camp and shot away the remainder of our rifle cartridges. After the last cartridge was gone a big old billy walked up to within twenty feet of me.

At last the weather began to clear up, and Monday, August 9th, we again climbed the rugged north shoulder. Crossing the difficult shale slope, we passed the camp spots of our former trips, and with our heavy fifty-pound packs, struggled up those fearful cliffs till we reached an altitude of nearly ten thousand five hundred feet. We would soon have reached the top of the west shoulder, when the storm caught us. For a couple of hours we had watched the storm-clouds gather, then gradually obliterate the peaks; yet we pushed on, hoping they were only squally. We were climbing in a narrow couloir when it began to snow. We did not mind it at first but in a few minutes it had snowed three inches, and slides began to come down. Realizing at once our danger, we hastily cached our packs under a sheltering rock and hurried down the cliffs. But we had a bad half-hour before we got out of danger and glissaded the draw down the long shale slope. We got to Camp Robson at the foot of the mountain in a discouraged frame of mind, for we were hundreds of miles from civilization, with scarcely any provisions and the mountain was still unscaled.

For three days it stormed, and we lived on birds and marmot (a kind of mountain groundhog). Then Thursday, August 12th, dawned fine and clear. As we had lots of time to make our "Highest Up" Camp that day, we spent most of the morning repairing our boots and clothes and making ready for our final climb. After an early dinner we climbed the several thousand feet of cliff to where we had cached our packs the Monday the storm caught us. Shouldering the packs, we climbed more cliffs, and finally worked our way to the top of the west shoulder, 10,500 feet above the sea. Here, at an altitude equal to that of Mt. Stephen, we chopped away a couple of feet of snow and ice, and feathered our bed with dry slate stones. We shivered over the little fire that warmed our stew and then, amid earth's grandest scenes, we went to bed with the sun and shivered through a wretched night.

Friday, August 13th, dawned cold and clear, but with the clouds gathering in the south. Using our blankets for a wind-brake we made a fire with a handful of sticks, and nearly froze as we ate out of the pot of boiling stew on the little fire. Then we laid rocks on our blankets so they would not blow away, and facing the icy wind from the south, started up the west side of the upper part of the peak. The snow was in the finest climbing condition, and the rock-work though steep offered good going. Rapidly working our way to the south, and crossing several ridges, we had reached, in an hour, the first of two long cliffs that formed horizontal ramparts all around the peak. We lost half an hour getting up this cliff, but finally found an easy way up it.

The clouds that came up with a strong south wind, had gradually obscured the peak, till



**Tumbling Glacier And Berg Lake N.W. Face Of Mt. Robson. A.L. Mumm, Photo.**



**Donald Philips On Mt. Robson At Altitude 12,000 Feet. Rev G.B. Kinney, Photo.**

by the time we reached the cliff, they were swirling by us on our level, and at the top of the cliff it began to snow. For a moment I stood silent, and then turning to my companion said: "Curly! my heart is broken." For a storm on the peak meant avalanches on that fearful slope, and there would be no escaping them, so I thought that we would have to turn back, and our provisions were now so low that we would not have enough to make another two day trip up the mountain. It meant that this was our last chance; but, to my surprise, it did not snow much, the clouds being mostly a dense mist. In a few minutes I said, "Let us make a rush for the little peak," meaning the north edge of the peak which was directly above us. "All right," says Curly, from whom I never heard a word of discouragement, and away we started, keeping to the hard snow slopes. Though these were extremely steep, the snow was in such splendid condition that we could just stick our toes in and climb right up hand over hand.

By the time we had conquered the second of the long ramparts of cliffs, that form black threads across the white of the peak, we concluded that it was not going to snow very hard, as the clouds were mostly mist and sleet. Swinging again toward the south, we headed directly for the highest point of the mountain, which we could see now and then through the clouds. Small transverse cliffs of rock were constantly encountered, but they were so broken that we could easily get up them, by keeping to the snow of the little draws. For hours we steadily climbed those dreadful slopes. So fearfully steep were they that we climbed for hundreds of feet, where standing erect in our foot-holds, the surface of the slopes were not more than a foot and a half from our faces; while the average angle must have been over sixty degrees. There were no places where we could rest. Every few minutes we would make foot-holds in the snow large enough to enable us to stand on our heels as well as our toes, or we would distribute our weight on toe and hand-holds and rest by lying up against the wall of snow. On all that upper climb we did nearly the whole work on our toes and hands only. The clouds were a blessing in a way, for they shut out the view of the fearful depths below. A single slip any time during that day meant a slide to death. At times the storm was so thick that we could see but a few yards, and the sleet would cut our faces and nearly blind us. Our clothes and hair were one frozen mass of snow and ice.

When within five hundred feet of the top, we encountered a number of cliffs, covered with overhanging masses of snow, that were almost impossible to negotiate, and the snow at that altitude was so dry that it would crumble to powder and offer poor footing. We got in several difficult places that were hard to overcome, and we fought our way up the last cliffs, only to find an almost insurmountable difficulty. The prevailing winds being from the west and south, the snow, driven by the fierce gales had built out against the wind in fantastic masses of crystal, forming huge cornices all along the crest of the peak that can easily be distinguished from the mouth of the Grand Forks, some ten miles away. We finally floundered through these treacherous masses and stood, at last, on the very summit of Mt. Robson.

I was astonished to find myself looking into a gulf right before me. Telling Phillips to anchor himself well, for he was still below me, I struck the edge of the snow with the staff of my ice axe and it cut in to my very feet, and through that little gap, that I had made in the cornice, I was looking down a sheer wall of precipice that reached to the glacier at the foot of Berg Lake, thousands of feet below. I was on a needle peak that rose so abruptly that even cornices cannot build out very far on it. Bearing my head I said, "In the name of Almighty God, by whose strength I have climbed here, I capture this peak, Mt. Robson, for my own country, and for the Alpine Club of Canada." Then, just as Phillips and I congratulated each other, the sun came out for a minute or two, and through the rifts in the clouds, the valleys about us showed their fearful depths. The

Fraser lay a thread of silver, over eleven thousand feet below. Before I could take any photos the clouds shut in again thicker than ever. We were nearly frozen, so could not remain at the top till the clouds should break. We could not build a cairn there, in which to cache the Canadian flag, that Mrs. Dr. Geo. Anderson, of Calgary, had donated, and our records; for if we left them in the snow they would have been lost, so we cached them on our return, in a splendid natural cairn, a few hundred feet below the peak.

On three different little cliffs near the summit, we met with great difficulty in descending, but we finally managed. After caching our records and getting down near the twelve thousand foot level, we found a new danger that nearly finished us. The storm had increased, but the temperature had risen. In fact a chinook was melting the lower snows. We found our trail nearly melted away. To make the matter worse, the slopes were so steep that the snow never could lie very deep, even in the couloirs; and we frequently had to make detours around places where the ice or rock beneath the thin snow would allow of no footholds whatever.

It was so cold and stormy at the summit, we did not get anything out of our packs to eat. While I fixed the cairn Phillips ate some Peter's chocolate, and later on I snatched a moment to eat some, paper and all. But during the twelve hours climbing and returning on that slope, there was no time to do anything but get to the summit and then to safety. So very dangerous did the snow get, that our return trip cost us seven hours of distressing work, while the climb to the summit was made from our "Highest Up" Camp, at 10,500 feet, in five hours. We had to use the rope all the way down, and only one of us could move at a time, while the other got as good an anchorage as possible. But finally we reached the lower of the two bands of cliffs where we unroped, and then rapidly got down to camp "Higher Up," where we soon devoured everything edible in sight. The storm was raging fiercely above us, night was gathering, and we had thousands of feet of cliff still to descend before reaching Camp Robson that night, yet we lingered on the west shoulder, eating and resting, and oh, so glad that the peak had, at last, really been won.

It was a long three-hour struggle with our packs down those cliffs. We had half a mile or more of ledges to follow to the north there were several deep gorges with ice steps to cross, then a long glissade and more cliffs. So it was long after dark before we reached Camp Robson and finished the big return trip from base to summit in twenty hours. We were so tired we could hardly eat or rest and our feet were very sore from making toe-holds in the hard snow. But we had stood on the crown of Mt. Robson, and the struggle had been a desperate one. Three times we had made two-day climbs, spending ninety-six hours in all above ten thousand feet altitude, so far north. During the twenty days we were at Camp Robson we captured five virgin peaks, including Mt. Robson, and made twenty-three big climbs.

Others will doubtless some day stand on Mt. Robson's lonely peak, but they who conquer its rugged crags will ever after cherish in their hearts a due respect and veneration for its mighty solitudes.

*Narrative by Donald Phillips.*

The following morning my feet were so bruised and sore that I could scarcely stand, but we determined to break camp and make a start on the return trip. We only had food enough for about four days short rations and it would be at least six or seven before we would arrive at Swift's where we could get more. When we got our duffle all packed ready to load up I went out to shoot Billy, Mr. Kinney's pack horse, as he had been sick with the fever all the time we had been at Mt. Robson. But I was spared an unpleasant task, as I found the poor fellow dead. We then waded

across the river and brought in the rest of the horses, packed our outfit on my two pack horses, and, leading our saddle horses, we started on our return trip. At the foot of Lake Adolphus we camped that night and remained there over the following day, it being Sunday, and Mr. Kinney objected to travelling on Sunday. Considering the state of our food supply, I thought this rather an extreme course of action, but Mr. Kinney claimed to be confident that we would be provided for. And as it turned out I was about as well satisfied for it snowed nearly all day.

Monday morning we got some "fool hens" between the branches of the Smoky River and, after dinner, at the summit of Moose Pass, we shot five rock-slide gophers, as Mr. Kinney called them, and five ptarmigan, so that we had a big old "Mulligan" for supper that night. But the birds with two exceptions were young ones about the size of robins. The next day was a very exasperating one, for Mr. Kinney, in trying to dodge the bad places we had struck coming up that part of the river, only got mixed up worse than before. In one place, trying to find a trail to higher ground from the river bottom, we got into such a fix that it took us an hour to cut our way back to the river. And, when the trail did go up, Mr. Kinney turned back to the river bottom after going half a mile up the mountain side, and we floundered there in muskeg and water for an hour or two before we struck the trail where it again came down to the river flat. Again, between the forks of the Moose, in the heavy timber, he wanted to travel west although we could see the valley of the west branch to the south. I suggested that we strike for it. We were both pretty cranky about that time and, when I said the way he came in was round about and crooked, he said that I had better go ahead and see what I could do. As much by good luck as anything I emerged from the timber scarcely a hundred yards from the camping ground. I was on the lead in the future.

The next day we made the Grant Creek on the Fraser after an all day drive. We had got a few more fool hens during the last two days, but "Mulligan" straight three times a day was getting tiresome and we were ravenously hungry all the time. From Grant Creek we decided to make Swift's in two days, but the next day we overtook Mr. A. Trelle and his son Herman at Poplar Creek and they gladly shared their grub with us. And never before did "bannock," bacon and coffee taste so good. They insisted that we should travel with them for a few days as they were not going to make any stops until they reached Jasper Lake. We camped over Sunday at Caledonia Creek and, Saturday evening, Mr. Kinney, Herman and I caught fifty-two rainbow trout. A party of Indians camped beside us Saturday night and told us that Swift had told them that he thought we must have had a mishap up at Mt. Robson and that they had better have a look for us as they had to pass Mt. Robson on their way to Tête Jaune Cache.

At John Moberly's we met part of the English Alpine party on their way to Mt. Robson. They seemed quite confident of being able to reach the summit of the peak and said that they had records of 20,000 feet. But there are mountains and mountains, and Mt. Robson is about as nearly impossible as they make them. The rest of the English party we met three days later at Cache Boyett Flats. On the first day of September I bid Mr. Kinney good-bye at Medicine Lodge on the McLeod River. He had sold me the remainder of his outfit and was going to walk back to Entwistle at the Pembina and take the train from there to Edmonton and civilization.



## **The Ascent Of Pinnacle Mountain And Second Ascent Of Mount Deltaform.**

*By J. W. A. Hickson.*

Pinnacle Mountain (10,062 ft. above sea-level) is so well known to all readers of this journal through the excellent illustrated article by Mr. P. D. McTavish in the issue of 1908, that it would be a superfluous labor to attempt any re-description either of its appearance or situation. It will suffice to recall the fact that it forms part of the range of peaks on the eastern side of Paradise Valley, that it adjoins Eiffel Peak, and is separated from Mount Temple, the "monarch of the district" by Sentinel Pass. When the present writer returned from one of the upper ledges in August 1907, on what was a third unsuccessful attempt of this peak during that summer—the first having been made by Mr. Forde, of Revelstoke, with the Swiss guide Peter Kaufmann, the second by a party consisting of Mr. P. D. McTavish, the Revs. J. C. Herdman and George B. Kinney (since then the conqueror of Mount Robson) and the Swiss guide E. Feuz, Jr.—he felt that his chances of making the first ascent of this tempting prize had become greatly diminished. My guide Eduard Feuz, Jr., for whom this was the second attempt turned his back on the mountain saying in a temporary mood of annoyance and disappointment: "I won't try the wretched peak again." But I knew well that in the case of one of his enthusiastic and enterprising nature this attitude would not be a lasting one. The latter part of the summer of 1907 was most unfavorable for mountaineering in the Canadian Rockies. After the beginning of August, cold and wet weather, attended by snowfalls at altitudes over 8,000 feet, prevailed till the first week of September. It was a heavy fall of fresh snow which brought about our failure on Pinnacle, for the chimney or "crack" in the precipitous tower near the top, (so well described by Mr. McTavish) not being practicable, the only alternative way of ascending the last few hundred feet seemed to consist in traversing the face of the mountain to the left. But considering the absolute rottenness of the rock, this was deemed too precarious a route to attempt under the physical conditions then prevailing, which included amongst other contrary factors a gale of wind.

As I was preparing to visit the Rockies the following summer, a severe illness overtook me and rendered me an invalid until late in the autumn. All expectation of ever capturing Pinnacle Mountain was put aside; it was even for a time doubtful whether my right arm would ever again be fit for the strain of mountaineering. In the meantime it seemed certain that Pinnacle would be scaled. But nobody tried it during the season of 1908. This appearing almost like a special dispensation of Nature in my favor, and having determined to spend a couple of months in the Rockies last summer, I decided to get into condition as rapidly as possible after reaching Banff, in order to make a more vigorous attack on what was now one of the few virgin peaks in the neighborhood of Lake Louise.

After some good scrambles on the mountains—including Mount Victoria—surrounding this ever enchanting lake, I started from the "Chalet" on the afternoon of July 28th for Paradise Valley, with Eduard Feuz, Jr. and Rudolf Aemmer (a new guide from Interlaken, Switzerland), with whom I had not previously done any climbing. He turned out to be a most capable fellow. On the way to our camping ground, the weather, which had previously looked uncertain, assumed a more glowering aspect, threatening rain every moment, but none fell until after we had gone to bed. We were astir early but the rain continued till 5 a.m., before which hour we had hoped to have started on our climb. At this time the weather looked so unpropitious that I had, with gloomy resignation, practically given up the idea of attempting an ascent. But half an hour later there were signs of an improvement; so having taken breakfast we prepared to set out, and eventually left our camp—on

the site of the A.C.C. Camp of 1907—by 6.30 o'clock, two hours later than we had originally planned. Shortly after we were on the way, a light drizzle began and continued with more or less persistency for the next two hours. So unsettled indeed, did the weather appear that it was not until we had ascended a respectable distance that we were certain of going on.

At first the route lies alongside the stream which issues from Horseshoe Glacier, and then to the left over a grassy slope adorned with brilliant flowers to an ascent over huge boulders and scree. After a slope of fairly soft snow is passed, one reaches a steeper slope on which we roped. The ascent of this was easy enough, and we proceeded rapidly until the steep couloir was reached, that had been climbed on an earlier occasion, and which was now in a more difficult and dangerous condition than it was two years before. It was, as Messrs. Forde and McTavish found it, filled with ice, thinly covered with hard snow, and necessitated the vigorous use of our axes for step-cutting. Loose rocks insecurely held by snow and ice rendered the greatest care desirable, lest some of the débris should be precipitated on the head of the last man on the rope. On reaching the top of the couloir we found ourselves on a narrow ridge which connects a gendarme to the main body of the mountain. From here onwards the hand-holds were mostly unreliable on the friable rock. After some delicate rock-climbing which demanded caution rather than the exercise of gymnastic attainments, and after "negotiating" a somewhat awkward corner, we reached a perpendicular wall a couple of hundred feet in height. Following our previous route we now made a sharp descent into a kind of amphitheatre with a narrow ledge running under the wall and having a precipitous drop on the other side of about 500 feet. Crossing this ledge, we came out on the col which joins Eiffel Peak and Pinnacle Mountain. From here until within about 300 feet of the top the climb consisted in scaling a succession of more or less perpendicular faces, of no particular difficulty, but demanding constant attention and care owing to the rotten character of the rock. A photograph appended is typical of its state of disintegration.

At 11.20 o'clock we reached the ledge under the precipitous black tower, which had been the halting place of our previous attempt. Vertical rock faces stood in the way of our further advance. Thus far our route had been the same as in 1907; but we had determined that from this point it should be varied. Resting for over half an hour we fortified ourselves with sundry refreshments, and discussed the *modus operandi* of attack.

The weather had by this time cleared; and, although there were occasional masses of clouds flitting about, there was, fortunately for us, almost no wind. Leaving to the right the "crack" which pierces the tower for a hundred feet, and through which the three previous parties had successfully attempted to ascend, we skirted the precipitous wall, and proceeding towards the left, tried as we had wished to do two years before, the face of the mountain towards Paradise Valley.

It was immediately realized that only very slow progress could be made in this direction, for the disintegrated tawny-colored limestone rock was of a most treacherous character. It was covered for the most part with a glaze of ice, which when disturbed had a tendency to bring the eroded limestone away with it. It was hard to say whether the rock sustained the ice or vice versa; perhaps the support, such as it was, was mutual. In our attempt to turn a sharp angle I found myself sitting for about ten minutes—but for what seemed more like half an hour—astride a rocky protuberance, which appeared likely to give way at any moment, while Feuz was endeavoring to find a good footing on the other side. For a few minutes I almost regretted that I had come; for there was a sheer drop on either side of probably 2,000 feet. At many places there were no handholds; and we dared not touch the rocks with our ice axes lest we should precipitate downwards the insecure supports we were standing on. We were very much in the position of flies on a nearly vertical wall

covered with sand which from time to time was crumbling off. There was no defined ledge to follow. Advancing gingerly with cat-like tread, and avoiding any spring or jerk which might detach the insecure footholds and leave us hanging precariously, Feuz picked out places here and there which offered the chance of a support, and we were glad when we found a piece of rock an inch or two wide and a few inches long on a part of which a nailed boot-edge could obtain a transitory grip. It is remarkable how very small a projection, if not slippery, will suffice for a temporary hold. Fortunately, not one of the party once slipped; thus avoiding any test as to how far he could have been held by the others. Luckily, also, we had lots of rope; so that we could allow about twenty-five feet between each person, and this enabled us at times to manoeuvre into better positions.

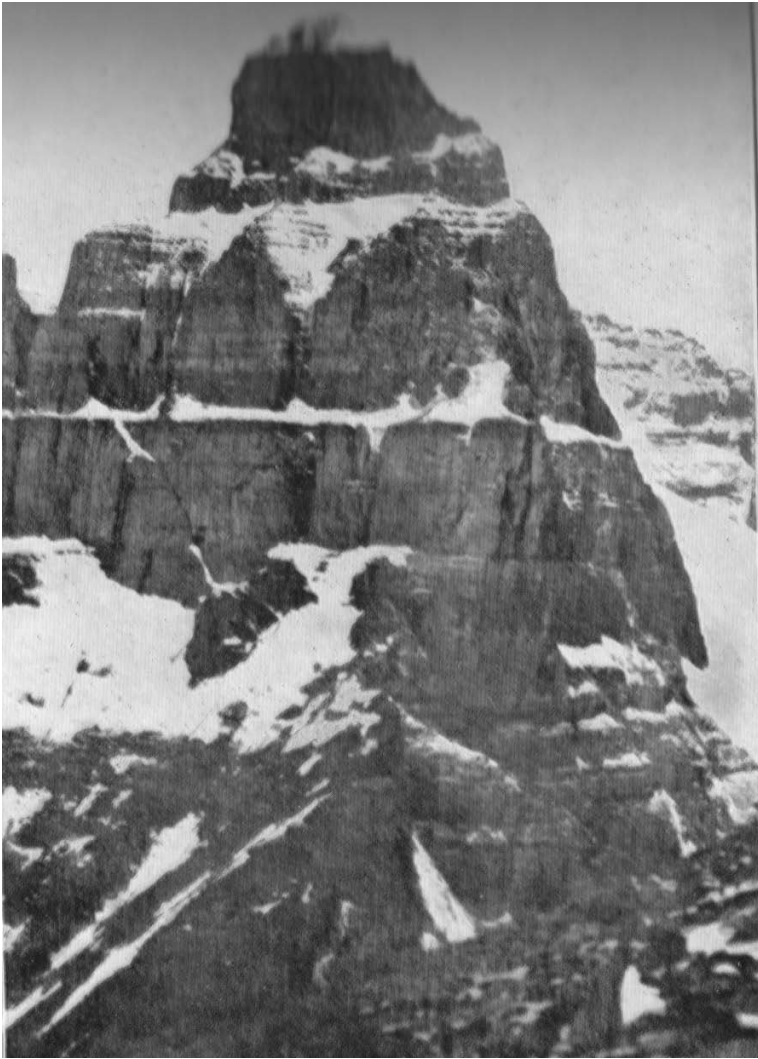
Our nerves throughout this period of two hours, during most of which only one of us moved at a time, were at considerable tension; not a moment of slackness or diminution of watchfulness being allowable. A keen lookout was constantly demanded to meet an emergency which was not at all improbable. Nothing could be taken or was taken for granted, except that everything was unreliable and an accident might be expected. This is perhaps why none occurred. As Tyndall says somewhere in his "Glaciers of the Alps," "the thought of peril keeps the mind awake and spurs the muscles into action; they move with alacrity and freedom, and the time passes swiftly and sometimes pleasantly."

After advancing persistently and almost horizontally along the face of the wall for two hours, we saw an unexpected chance of reaching our goal more speedily than we had latterly hoped. This was offered by a large couloir leading to the "saddle" between the black tower and the summit of the mountain, which is not much higher than the top of the tower. Fairly steep and broad, the gulch contained some ice and snow. As we got down into it Feuz turned to me and said, "I think we've got him," of which I was already convinced. Crossing the couloir we rapidly ascended the rocks on the left side and at its top, to our great surprise, landed on a bed of shale, which by an easy slope led in a few minutes to the summit at 2.35 p.m. The last 250 to 300 feet, vertically measured, had taken us fully two and a half hours to scale.

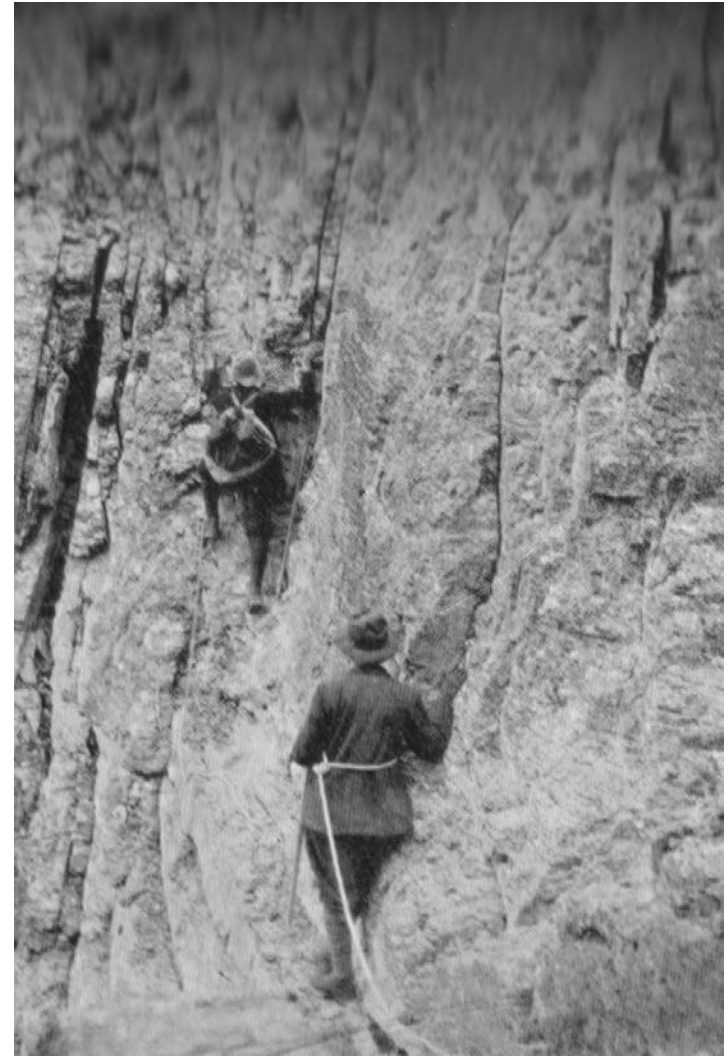
It was with a feeling of great satisfaction that we sat down and basked in the warm sunshine. The atmosphere was very calm; the view of the Ten Peaks with Moraine Lake and quondam Desolation Valley, superb. Mount Deltaform, grim and most forbidding looking, in particular attracted our attention and suggested another climb. Mount Fay, with its huge snow-cap and cornice, which was frequently avalanching, Mounts Hungabee, Ball and Assiniboine, were prominent objects in the landscape. To the west and north the panorama is rather limited by Mounts Ringrose and Victoria, which are higher than the peak we were on. After administering again to the corpus vile, and crowning the vanquished peak with a stone-man, we took a few photographs, and at 3.30 o'clock commenced, rather reluctantly, the descent.

It is well known that in the majority of cases, descents are more trying and precarious, if not necessarily more difficult than are ascents; a statement which though disputed by the late Leslie Stephen, seems well founded on recognized physical principles that need not be here explained. Hence the guides were very unwilling to retrace the rather hazardous route by which we had made the last part of the ascent; if this could possibly be avoided. It was, therefore, decided to proceed from the "saddle" around the back of the black (and southerly) tower, skirt it if possible, and come down through the "crack." This would make a complete "traverse" of the mountain, would vary the climb, and be, as we believed, and as it turned out to be, more expeditious and less risky.

We followed a narrow, but firm, ledge for about fifteen minutes from the saddle around the southerly tower (next Eiffel Peak). It then became necessary to reconnoitre to see if the route



**Pinnacle Mountain From Sentinel Pass. P.D. McTavish,  
Photo.**



**Climbing On Pinnacle Mt. Showing Character Of  
Rock. E. Feuz, Jr., Photo.**

proposed were further feasible. So the second guide Aemmer, assisted by Feuz, went ahead and soon returned to say that we could get down by roping off. This led to one of the most interesting and exciting bits of the whole climb.

At the corner or angle where the ledge we were on terminated there was a peculiar arrangement of rock which had resulted in the formation of a small square hole with nothing but sky to be seen on the further side. Under this hole there was a gap in the ledge of about three feet with a drop of about fifteen feet into a dark pit below. To cross the gap it was necessary to lie down flat on the ledge on the one side with face to the rock, stretch your feet to the rock on the other, your body thus spanning the gap, then draw yourself through the hole and gradually swing yourself into an upright position by the help of the rope and the handholds in the further wall of rock. It looked a more trying operation than it actually was because one had to turn somewhat sharply on emerging from the hole in order to stand up on a rather slender ledge. But there is practically no danger; when one is firmly held on the rope by guides, whose caution and resourcefulness, here as elsewhere, were admirable, and have fully justified the confidence which I have always reposed in their ability.

Having, with mutual assistance, all three surmounted this difficulty and having advanced a little further down the side of the tower, we perceived a way into the chimney already referred to, about sixty feet above its base. Here it was obvious that the only way of getting down was to rope off. Amongst other paraphernalia we had brought with us an extra short piece of rope, which could serve as a loop. It was now slung around a firm piece of rock, which was rendered more adaptable to the purpose by a little hammering, while through the loop was passed a second rope about 120 feet long. This being doubled still gave us the required length. I went down first, being held besides on another rope, so that no serious mishap could have overtaken me. For the first forty feet there were practically no footholds to be found, a fact for which we were prepared; but fortunately the rock was good—indeed, this is the only bit of firm rock on the mountain—and I got safely down and out of the chimney, after swinging once or twice like a bundle of goods, without any worse experience than having my clothing a little torn and with the feeling that there might be a permanent groove around the centre of my body. Feuz descended next and took a photo of Aemmer sitting at the top. As Aemmer was descending he disturbed a small stone which danced down with great force and, to Feuz's chagrin, cut off about twenty feet from the lower end of his fine manilla rope. We then pulled down the rope, but, of course, had to leave behind the loop, which may be serviceable to some later party.

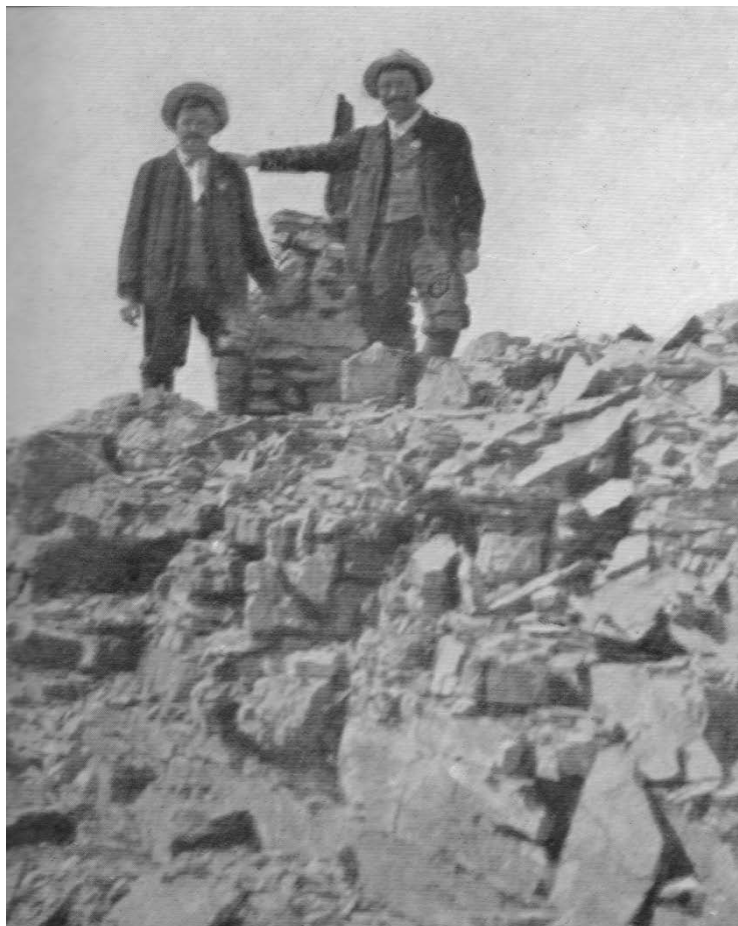
It was a few minutes after 5 p.m. when we thus regained the ledge, whence we had started five hours earlier on our stimulating trip to the summit. After a rest of twenty minutes we started to retrace our route of the morning. The descent occupies almost as much time as the ascent, owing to the character of the rock, and the fact that after reaching the col connecting with Eiffel Peak, one has to again ascend several hundred feet in order to skirt the vertical wall. So it was nine o'clock when, after a short glissade, we again reached the grassy slope connecting with Sentinel Pass; and it was almost dark enough for the lantern as we got back to camp about three quarters of an hour later.

## SECOND ASCENT OF MOUNT DELTAFORM.

When we were on the ridge of Victoria towards the end of July, Mount Deltaform, the second highest of the Ten Peaks, had particularly attracted our notice, and I informed Feuz, who



**Pinnacle Mt. From Paradise Valley Eiffel Pk. On Right. H.G. Wheeler, Photo.**



**The Guides On Summit Of Pinnacle Mt. J.W.A. Hickson, Photo.**

heard the news with pleasure, that I intended trying it before returning home. It is, with Hungabee, undoubtedly one of the two most formidable looking mountains in the neighborhood, and had the reputation of being an exceedingly difficult climb. What Kristian Kaufmann, one of the ablest of the Swiss guides, who have visited the Rockies, told me about it, combined with Professor Parker's rather terrifying account of the first ascent, contained in the Record Book at Lake Louise Hotel, had previously aroused my curiosity and desire to attempt it. My resolve to do so became quite fixed after seeing the huge, sharp triangular-shaped peak again from the summit of Pinnacle. But it was not until the 31st August, that simultaneously with that unmanageable element the weather, after a week of boisterousness, having declared itself on our favor, I was able to procure two guides—fortunately the same two who had accompanied me on Pinnacle—which number was regarded as indispensable to the success of the expedition. Except for the uppermost couloir of ice, I should not, however, hesitate to climb it again with one guide such as Feuz. But whether he would be willing to go with me alone is another question.

Setting out about noon from Lake Louise with a packer and a couple of pack horses to carry our tents and supplies, we followed the trail around the base of Mount Temple, and passing Moraine Lake on the left, proceeded to the head of the Valley of the Ten Peaks where we pitched our camp at the side of Wenkchemna Lake, and opposite to the north-west face of Mount Deltaform, the precipitous escarpments of which, seamed with glaciers and snow falls, rise vertically over 4,000 feet above Wenkchemna Glacier.

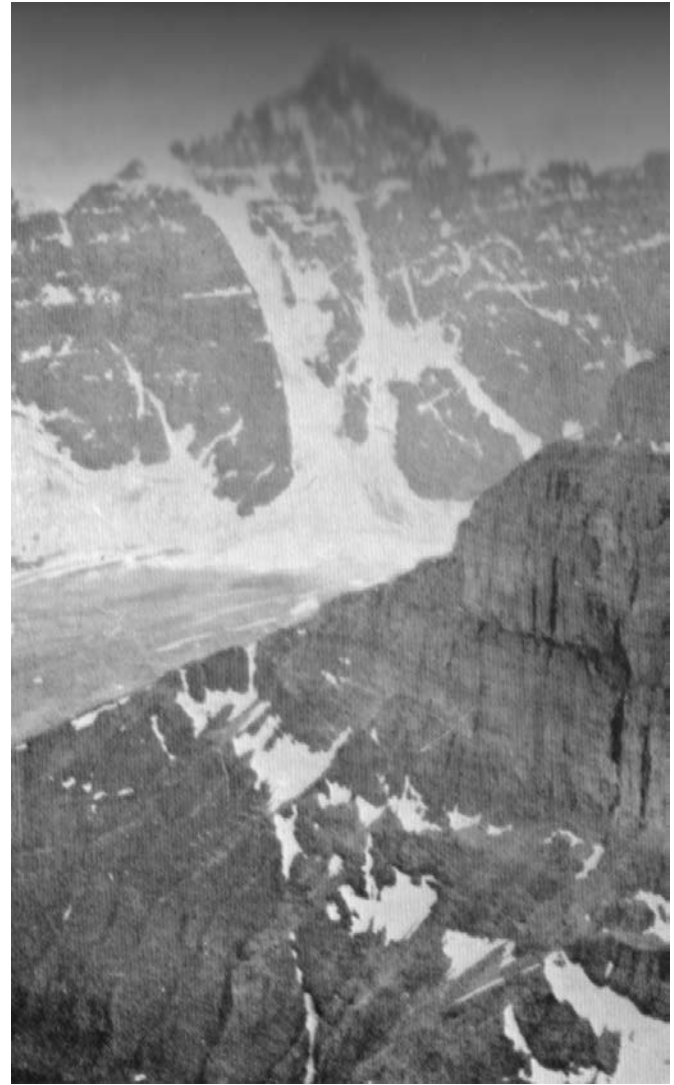
It was a most charming situation among larches, which formed a novel and agreeable feature of the landscape, after the usual small pines and spruces. We were protected in all quarters from the wind. As this was not the side however from which the mountain could be climbed, we intended to push on from here the same night and begin the ascent from Prospectors' Valley on the other side of Deltaform. We were anxious not to lose another day lest a break in the weather should occur, which at this time of year is almost certain to be serious in higher mountain altitudes. An additional reason for not losing any time was my desire to climb the mountain on the sixth anniversary of its first ascent, September 1, 1903.

By the time that we had put up our tent and had supped in luxury, as Canadian mountaineering fare goes, it was necessary to snatch a few hours rest and sleep before rising again at 11.30 p.m. The successful execution of our plans depended on the help of the moon, which was then full, in our preliminary scramble over Wenkchemna Pass. We were not disappointed in our calculations. None of the party could recall more brilliant moonlight than that of August 31st and September 1st, 1909. The cool night air after a very warm day stimulated physical action, and rendered exercise under unusual conditions both agreeable and interesting.

Leaving our camp, about 7,000 feet above sea-level, at 12.45 a.m. we ascended partly by rock and partly by snow to the summit of Wenkchemna Pass (about 8,100 feet), which separates the shoulder of Mount Hungabee from Neptuak, the adjoining peak to Deltaform. Descending sharply for fully 1,000 feet we skirted the base of Neptuak, crossing over huge boulders and a great deal of scree, and pushing on at an easy but steady pace, reached the base of Deltaform about 5 o'clock. We were now, as it seemed to us, in the centre of the mountain's base, and opposite to a long broad snow couloir which, starting from a moraine immediately above us, appeared to offer a way of ascent; the first, and so far as we could see afterwards, the only route which presented itself. As the light was still too dim, however, to warrant us beginning the climb, for we could not see where the couloir ended or led to, and as none of us had ever previously examined the mountain from this side, we awaited the assistance of the sun, and in the meantime took a short nap.



**The Crack. Pinnacle Mt. E. Feuz, Photo.**



**Deltaform From Summit Of Mt. Pinnacle.  
J.W.A. Hickson, Photo.**



About 5.45 we started for the moraine at the head of which we roped and entered the couloir, where the hard snow with under-layers of ice involved some step-cutting. Ascending partly by the couloir but more often by the rocks on its sides, which operation required a few speedy traverses in order to minimize the danger from falling stones, we came upon some very steep but not particularly difficult ledges. The first real difficulty was encountered after three hours of steady climbing, and just as we were beginning to wonder whether the character of the mountain had completely changed in the six years, since it had been first ascended, It consisted of a chimney about forty feet in length, with very few good foot or hand holds, and filled, moreover, with loose stones. The two guides were ahead and I was last on the rope. Aemmer, who entered the chimney first and had cleared away most of the rubbish, was well towards its top and waiting for Feuz to follow when, although exercising great caution, he dislodged a goodsized stone, which, crashing down, inflicted a severe wound on the back of Feuz's head. Fortunately I was standing on a ledge at the side and was out of the line of danger. Blood poured down over Feuz's face and neck, and concluding that the climb was at an end I considered only how we could get down again; for Aemmer could hardly have descended the chimney without assistance. But as soon as the stunning effect of the blow had passed over, Feuz pulled himself together with wonderful grit and pluckily declared that the accident would make no difference; nor did it. We all got through the chimney without further mishap and gaining a ledge with a stream of trickling snow water, washed and bandaged Feuz's wound. About 11.15 o'clock, after surmounting some further rather steep ledges which reduced the rate of our advance, although at many places we were all able to move simultaneously, we reached a bed of shale, which we took to be the northwest arête of Deltaform. Here we stopped half an hour for luncheon.

The arête turned out to be the south-east one, opposite number Seven of the Ten Peaks. And now disappeared our vision of a quick dash for the summit, as we discovered that we were further from it than we had estimated. Dr. Eggers relates that his party fell into a similar error with regard to the remaining distance.

At first we were able to proceed fairly rapidly until a regular buttress of rock obliged us to make a long and slow traverse of its base. Altogether two hours more of hard and persistent climbing were required to cover the remaining distance from the arête, which vertically measured was certainly less than 1,000 feet. Frequently, almost vertical ledges were encountered, formed of sharp-pointed rocks, which made the use of gloves quite desirable. On some of these ledges streams of water spouted down over our arms and legs from the melting snow above. But the main difficulties consisted in having to make a short traverse of a steep couloir of flint-like ice to some spiky and disintegrated rocks, and in working through a short chimney higher up, which had an overhanging base and was devoid of footholds at the bottom. Standing on Feuz's shoulders, Aemmer managed to seize one or two slender handholds further up in the chimney and draw himself into it, after which he assisted Feuz who in turn helped me. On the way down I found this couloir and the last mentioned chimney the most disagreeable and trying features of the climb. On emerging from the chimney we soon reached the final arête which leads to the sheer pinnacle of the summit. The latter looked almost inaccessible, but Aemmer quickly perceived a way up, and in a few minutes we were on the very disintegrated top, which culminates in two pinnacles covered with smooth, white, weather-worn limestone rocks. It was now 1.40 p.m.: so that the ascent from Prospector's Valley including an unexpected delay of half an hour had taken eight hours. The view is not nearly so magnificent as from Victoria, or even so fine, in my opinion, as from Pinnacle.

I had been eager to vary our return route by proceeding along the ridge to Neptuak and

thence over this peak back to Wenkchemna Pass. This would have made an ideal finish to an otherwise most satisfactory climb. But a careful scrutiny of the arête showed it to be in many places tremendously sharp and deeply serrated, while elsewhere it presented smooth perpendicular slabs of rock, especially between the arête and the summit of Neptuak; all of which features would have caused us the most strenuous exertion, and, what was more important, rendered it quite probable that if attempted we might have to spend the night at a higher altitude than we desired. Consequently we decided to curb our ambitions.

Realizing that we had no time to lose, if we wished to get off the mountain before nightfall, we immediately set about erecting a new cairn and after a brief rest began the descent at 2.30 p.m. While proceeding cautiously, as was necessitated by the nature of the rocks, we also pushed on without delay, and our party, being in good condition, was able to make fair time. On arriving at the lower of the two more difficult chimneys, we decided to rope off, and in this safer and time-saving method were assisted by Nature, which had made provision for the purpose in the shape of a large and secure rock, right at the top of the chimney, around which a loop can be easily and securely fastened. Both this chimney and the upper one are undoubtedly easier to descend than the one described on Pinnacle. Having all got down quite comfortably by the assistance of the rope, I suggested to the guides that we should not stop for refreshment until we had passed the moraine and reached the tree-line. To this proposal they cheerfully consented. After more than another hour of steady descent we came to the long couloir of snow by which we had commenced the ascent. It was now in fairly good condition, the snow having been softened by the sun; so that we could leave the rocks and descend much more rapidly by it. Shortly after 8 o'clock we left the snow and could dispense with the rope, which had bound us together during more than thirteen hours of adventurous companionship. Speedily descending the moraine and hurrying down some rough grassy slopes, we found ourselves, half an hour later near the stream in Prospector's Valley where, after lighting a fire and finishing the remainder of our provisions, we awaited the moon. The complete descent had occupied about six and a quarter hours. About 11 p.m. we commenced the return trip around the base of Neptuak and across Wenkchemna Pass. We reached our camp again, all extremely sleepy, shortly after 3 a.m., after an absence of over twenty-six hours. We had been favored by fine weather conditions throughout.

Without having ever reconnoitered or having even been in Prospector's Valley previously, from which the only approachable side of Deltaform can be thoroughly examined, the guides showed practically unerring judgment in choosing the route of ascent which, as far as the south east arête, is, doubtless, that followed by Professor Parker and Dr. Eggers. From here it is possible that our route diverged slightly from their's, although after reading Professor Parker's account in "Appalachia," on my return home, I am not wholly convinced that it did. Either this, however, or the condition in which they found the mountain was not so favorable as on the occasion of our ascent. The latter supposition appears from Professor Parker's account the more probable. And it is further supported by the fact that his party, who were all splendid rock climbers, took over six hours longer than we did for the complete ascent and descent, although they set out from a camp in Prospector's Valley about 4,000 feet below the summit.<sup>1</sup> Starting at 6 a.m. they did not reach the summit till 4 p.m. and coming down in the dark were overtaken by bad weather, so that the descent

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<sup>1</sup> Additional confirmation of this conjecture is contained in the independent description of the climb by Dr. Eggers, in Mr. W. D. Wilcox's "The Rockies of Canada," 3rd ed., 1909. pp. 251-257, which I only recently read. The "Solemn and unenthusiastic party" that reached the summit evidently encountered more ice work than we did. This may be partly accounted for by supposing that they proceeded up the higher couloir of ice, the crossing of which we found a trying bit of work.

required nearly eleven hours. Of course, it is to be remembered that their party consisted of four persons, whereas we had only three, an ideal number on such a climb as Deltaform, which under any conditions will always remain a first class test of alpine work. While a more strenuous climb than Pinnacle, because of its greater height, and relatively greater inaccessibility, it is neither more difficult nor more dangerous. Indeed, I felt our position to be more precarious on the upper faces of Pinnacle than anywhere on Deltaform; and this, I believe, was also the feeling of the guides.

### **First Ascent Of The North Tower Of Mount Goodsir.**

*By J. P. Forde.*

The two main towers of Mt. Goodsir had long been gazed at with envious eyes by the few real mountaineers who had visited the Canadian Rockies in the early days of climbing in these mountains, but, so far as is known, no attempt to ascend either of them had ever been made before 1901, when Fay, Outram and Scattergood, with Guide Christian Hasler, made an attempt to climb the South Tower. Owing to the very unfavorable conditions which existed on the mountain at the time this attempt was unsuccessful. In 1903 Fay and Parker, with Guides Christian and Hans Kaufmann, were successful in reaching the summit, and those who have not already done so are advised to read Fay's very interesting account of these climbs, published in the 1907 volume of the Canadian Alpine Journal.

In 1903 the ascent of the North Tower was attempted by Dr. August Eggers, of Grand Forks, N.D., accompanied by the same guides, but a severe snowstorm stopped their progress when they had reached a point estimated to have been within 1,000 or 1,200 feet of the summit. This party had considerable difficulty in regaining their camp that night, but finally succeeded in doing so long after darkness had fallen.

The North Tower remained a virgin peak until the summer of 1909, although a number of climbers have had designs upon it. Why it should have been neglected for so long is a mystery. It is a peak to tempt the most ambitious climber, and its altitude, 11,555 feet, places it among the highest of the peaks south of the railway line. As seen from the railway looking up Ottertail Creek, it is most forbidding looking, with its bare, precipitous side actually overhanging Goodsir Creek Valley, but this would prove an attraction, rather than a deterrent, to the class of Alpinists who climb in these mountains now, and besides, all mountaineers know that if a mountain cannot be climbed from the known side it is always possible to make the ascent from some other (unseen and unknown) side, so that the uninviting easterly face certainly cannot have been the reason for the peak having remained unscaled for so long. Whatever the reason was, however, the fact remains, as mentioned above, that until August, 1909, no ascent had been made.

After the 1909 camp of the Alpine Club of Canada had broken up, much to the regret of all who were so lucky as to have been present at it, and the Club's English visitors had been well started on their trip through the Yoho valley region, P. D. McTavish and myself were fortunate enough to receive an invitation to join a party which was about to make a trip into the Ice River Valley, an unknown country to us, and one which we had been anxious to visit for years. Most of the members of this party were going into the valley on a pleasure trip, pure and simple, but Dr. Eggers, who, as already mentioned, had made an attempt on the North Tower in 1903, and who had made a number of other big climbs in the region, notably the first ascents of Mts. Deltaform and Biddle, intended again trying the peak, and for this reason was taking Guide Ed. Feuz, Sr., with him. He was so kind as to invite McTavish and myself to join him on the climb, an invitation we

were slow to accept, as we considered that the first climb should belong solely to the gentleman who had already tried it and who had only failed on account of the opposition of the elements.

In addition to this I had another and private reason which I would not have cared to admit at the time, but which was that I had already spent the two previous weeks in a decidedly strenuous manner and the thought of a week to be spent in pure idling was most attractive to me. We, therefore, did not make any decision at the time, nor until we had reached our main camping ground at the foot of the mountain. As Dr. Eggers was good enough to renew his invitation then we gladly accepted, and it was arranged to make the attempt on the following day. The same afternoon Dr. Eggers and Feuz did some reconnoitering with a view to choosing the route for the climb, whilst I recuperated by wading through muskegs and fording streams in a vain attempt to get some trout for the evening meal.

The following morning, August 16th, was fine, with cloudy skies, a condition which lasted all day, and the weather generally was all that we could desire, as the clouds promised a cool day for climbing, and the slight mists on the summit would, we promised ourselves, clear away before our arrival. We were camped on the Ice River, immediately at the base of the mountain, at an elevation of about 5,100 feet, according to Wheeler's map of the valley, and had, therefore, a very short walk before beginning the ascent. We left camp at 5.08 a.m., crossed the meadow on which our camp lay, and took our way up the bed of the stream coming down from the northwest face of the peak. A tramp up the creek bed, crossing and re-crossing the stream as the walking seemed most desirable on one side or the other, brought us to the foot of the rocks at 7 o'clock. The only incident on the way up was a meeting with a fine, black bear, which was coming down the stream on the lookout for an early breakfast. Unfortunately he refused to come close enough to allow us to get a photograph of him in the dull light.

As soon as we reached the rocks, at an elevation of 6,800 feet, we began a southerly traverse across the westerly face of the peak, gradually ascending on some of the rottenest rock I have ever been on. Whilst making this traverse we had the pleasure of watching an old goat and her kid keeping out of our way, and I am much mistaken if I was the only member of the party who felt jealous of the ease with which they did so. At 10 o'clock we had reached the long southwesterly ridge which runs down to the Ice River and saw, to our disgust, that we would have saved ourselves a long, arduous climb if we had taken to this ridge as soon as possible after leaving camp. However, we comforted ourselves with the thought that if we failed that day we would know better next time. During our second breakfast which we had on reaching the ridge, our spirits were considerably dampened by finding that Dr. Eggers was in anything but good condition for climbing, he being unable to eat anything and being out of condition generally. But, with the real mountaineering spirit, he would not think of giving up, though he expressed himself as being very doubtful of reaching the summit, and kept on after breakfast with the intention of succeeding if such a thing was possible. We held to the ridge already mentioned until forced to leave it by perpendicular bluffs, and then traversed a long rock slide on the south side of the peak, at the top of which we reached another ridge immediately overhanging the valley between the North and South Towers. Whilst ascending the slide to the ridge a large rock was started by one of the party and slid rapidly down, passing over our rope. Nothing was thought of this until some time afterwards, when it was noticed that the rope had been cut, and a close examination showed that it was hanging by one strand only. Very fortunately, no strain had been put on it in the meantime. The ascent of this ridge, sometimes on the arête and sometimes across one or other of the faces, brought us, at 2 p.m., to the base of the Tower, at an elevation of about 10,300 feet. At this point, Dr. Eggers, who had



**North Tower Of Goodsir From Ice River Valley. A.O. Wheeler, Photo.**



**The Towers Of Goodsir From Ottertail Valley. M.P. Bridgland, Photo.**

several times hinted that he was not in a fit condition to continue the ascent, decided that he would not be wise in going any further. A consultation was held, the other members of the party wishing to postpone the ascent until such time as our companion, who was also the leader of the expedition, would be in proper condition to make another attempt, but he absolutely refused to consider this and insisted on our proceeding with his guide and allowing him to await our return where he then was. A eulogy of Dr. Eggers is entirely unnecessary here, but those who read this account can form some opinion of what his disappointment must have been under the circumstances, and will appreciate the generosity of his action in thus handing over to others a first ascent which would, under ordinary circumstances, have been his alone. However he certainly acted wisely in giving up the attempt when he did, as some of the hardest work was still ahead of us. To make a success of a severe climb nourishment of some kind is very necessary, and unfortunately he was unable to take any.

Leaving him in a good place, from which he would be able to watch us for some time, and leaving our rucksacks and all impedimenta but ice axes and spare ropes, we left the ridge and traversed the base of the Tower along the upper leg of the V of snow which can be so distinctly seen from the Ice River Valley during the summer months. This traverse was very steep sidehill work, chiefly along narrow ledges covered with scree or soft snow, and required very careful work. The end of this leg brought us to the foot of a snow-filled couloir, where we got our first water since 7 o'clock. The snow in the couloir was very hard and an ascent of it would have necessitated the cutting of steps so, as we found the rock on the right hand side of it to be ideal for climbing, we took our way up it. We made very good progress for about 350 feet, when it became evident that it would be necessary to leave the good rock and cross the couloir in order to reach the summit, as the course we were then on would have taken us to the foot of an inaccessible bluff. This we did with much regret, as it was the only part of the climb where we had firm hand or foot holds or where the climbing was comparatively safe. After reaching the left-hand side of the couloir on steps cut in the snow the traveling was very steep and, as the dip of the rock was downwards at the surface and the rock was very loose, the greatest care was required. By taking a zigzag course up the slope, and taking advantage of every possible hold, sometimes on rock, sometimes on ledges covered with scree and often on patches of snow-covered ice in which steps had to be cut, we made the ascent of the last difficult piece and arrived on a small snow-field. By a tramp of about 100 yards up this we reached the summit.

Unfortunately, forest fires had been burning for some time, somewhat obscuring the view of the more distant peaks and making it impossible to obtain any photographs, but the panorama of the nearer peaks in the main range was enough to have repaid us many times over for our exertions.

As it was now after 4 p.m. and we had a long descent to make to camp only enough time was spent on the summit to build a small cairn and enjoy the view for a few minutes, and the return was begun at 4.15 o'clock. The upward route was followed until Dr. Eggers was rejoined, and, while the great disappointment of our day was that he was not with us at the summit, his great pleasure on the climb appeared to be that he should have been the first to have a chance to congratulate us on our success. It was now 6.30 p.m., we were at an elevation of considerably over 10,000 feet and, as darkness was already beginning to show, no time was spent in talking, but a start made at once for the valley. We decided to follow the southwesterly ridge as far as possible, and hoped to be able to reach far enough down it to get to timber line and then take down one of the numerous avalanche tracks into the Ice River Valley, from any part of which we could reach

camp by lantern light.

With this in view we continued the descent until about 10 p.m., having been moving for about two hours in almost complete darkness. Several times we had gone over "jumping off" places on the ridge, not knowing whether we were going down four feet or forty, but, as we were still roped, the danger was not so great as might be imagined. Yet, when we came to a place where we could see no means of proceeding farther down the ridge we decided, after trying two or three different routes, to spend the remaining hours of darkness where we then were. We found a small ledge under an overhanging rock, which served somewhat to keep the wind off us. On this ledge, which was too small to permit of our lying down comfortably, and on which we did not dare to sleep, we stayed, huddled together for warmth, until 3.30 a.m., at an elevation of about 8,500 feet. Below us, in the valley we could see the camp fire burning, and only the risk of a nasty accident kept us from trying to make our way to it. If we had had water we would have been fairly comfortable, for the night was not extremely cold, but, as we had neither fire nor water and did not care to eat anything without a drink of some kind to accompany it, we spent the night in trying to find soft places in the rock and in slapping our hands and kicking our feet together in an attempt to keep warm. Seldom, if ever, has dawn been watched for more closely, in the Ice River Valley, and at the first appearance of greyness in the sky we were on our way down again. Daylight showed us that we had done well to stay where we did, for we still had some interesting rock work to do before reaching the valley. As soon as we were on the move our troubles began to fade away, and by the time water was reached and our thirst quenched they were entirely forgotten.

After a long drink McTavish and I took a short and steep way to camp which we reached at 6.30 a.m., after having been over twenty-five hours on the mountain. Our desire to reach camp was not on our own account at all, but to relieve the anxiety of our friends, whom we had pictured as sitting up around the fire all night, talking, with bated breath and white, drawn faces, of what terrible sufferings we must be enduring, and our disgust may be imagined when we found them sleeping, and to add insult to injury, snoring most heartily. However, they were all very glad to see us back, and to know that another of the now very few unclimbed peaks of note in the better known portion of the Rockies had been struck off the list. As soon as we reached camp one of the guides started off with horses for Dr. Eggers and Feuz, who rode in, ready for breakfast, about 8.30 a.m.

It might not be out of place to mention here that if we had not made the first ascent just when we did we would not have had another chance, as Messrs. Goddard, of Berkeley, Cal., and Richardson, of New York, both old, experienced climbers, with Guide Rudolph Aemmer, arrived at our camp about two hours after our return from the climb, with the intention of climbing the peak, and found, much to their disappointment, that through the generosity and unselfishness of Dr. Eggers, we had been enabled to get there before them. Mr. Goddard and I had been together a few days previously on the second climb of Mt. Biddle, and still later he was one of a party I had taken up Mt. Victoria by the hitherto unclimbed south route, and I, therefore, knew enough of his ability as a mountaineer to feel sure that the only reason that he did not make the first ascent was because he was a day or so late. In proof of this I may say that his party made the second ascent of the peak two days after we had first set foot on its summit.

The climb was not a particularly exciting one, the long time taken to reach the summit being more on account of the extreme caution with which it was necessary to move than because of any difficulties encountered. The time could be very much shortened by spending the night previous to the climb at timber line in the valley between the two Towers, from where a climb of five or six hours should suffice to reach the summit. The main camp in Ice River Valley could then

be reached the same evening without difficulty. Of course this time could only be made if the party was favored with the same ideal conditions both as to the weather and the state of the mountain, as we found on the day of our climb.

### **Further Beyond The Asulkan Pass.**

*By E. W. D. Holway.*

The three who made the journeys described in this Journal (Vol. II, No. 1, 1909) met again at the Glacier House in July, 1909, full of enthusiasm and ready to carry heavy packs. As we expected to spend several weeks in the region we thought it would save time and labor to obtain the aid of a packer, so we wired to one that had been well recommended and he arrived on the first train. We showed him our pile of provisions and he selected about ninety pounds for his load and we divided the balance of the outfit, which on weighing we found to be fifty pounds each. The next morning we had the packs taken on ponies up the Asulkan Valley to the glacier, where we got under them and began climbing the steep moraine. Our man only went a few rods when he put down his pack and divided it, carrying half to the summit of the pass and then returning for the other half which he managed to get down to our first camp across the Geikie Glacier. He was so tired that supper did not interest him at all and he soon sought the tent and rolled up in his blankets. In the morning we asked him to go back after what he had left and he promised to do so. We then packed about all there was and took it up to the summit of Donkin Pass. We returned at six in the evening and found no packer in sight. Looking in the tent we saw that his blankets were gone and knew that he had deserted us. This left us with very little to eat as all our flour and sugar was at the summit of the two passes. In the morning there was nothing for us to do but climb up to the Asulkan and bring down the forsaken load. We were not making very flattering remarks about the packer but upon reaching the place we found a message scratched on a stone at which we laughed so heartily that we forgave him. It was:

“Gone back  
The clim is to  
Much for me.”

We eventually got everything over the Donkin Pass and down to our old camping place on the south side of Mitre Creek opposite the falls. There is no more delightful place for a camp in the mountains. A fine spring, dry wood enough for many years and magnificent views. The valley drops rapidly to the west and the sunsets and cloud effects over the snow-covered peaks were glorious. All around us were unclimbed peaks and beyond the Purity Range was an unknown country. All of it was “our country,” with not a tourist within miles nor even a climber to get ahead of us. What more could be asked? As soon as we were rested we made

### **THE FIRST ASCENT OF MT. KILPATRICK (10,624 FEET.)**

Crossing the Bishops Range we ascended the Black Glacier to where it comes tumbling down the side of Kilpatrick, where we put on the rope. We selected a route leading to the left of the rocky peak projecting through the ice near the col. The snow was in good condition and we arrived at the bergschrund without difficulty and soon found a way over and on to the arête, which we



followed to the summit. The views of Mt. Purity and Mt. Wheeler were particularly noteworthy. The wind blew hard and in a temperature of 36° it was difficult to keep warm, so we soon left our records and returned by the same route. Our next expedition was the climbing of Mt. Dawson from the south.

We had in climbing Mt. Selwyn last year followed the regular route up Dawson nearly to the summit, so we preferred to find a new way. We therefore followed up the Bishops Glacier to where a broad debris-covered slope comes down. Upon reaching the large comparatively level top of this we turned to the left over steep snow slopes and rocks to the east end of the arête, which was then followed to the summit. Here we built a new stone man near the old one. Returning we went down the longest and steepest snow slopes with our faces to the mountain, a slow but safe method. We now felt we were ready for the finest climb of all.

#### FIRST ASCENT OF AUGUSTINE PEAK (10,762 FEET)

We went over to the Black Glacier and followed this up, keeping to our left, until under the first ice-fall, where we went up a steep clay bank and reached the rocks above this fall. From here we followed along the ledges, going up at every opportunity, mostly over rocks but occasionally crossing some ice or snow in the gullies until we reached the final arête at the eastern end. This we found to be extremely narrow, dropping for a great distance on both sides, and quite sensational in places, great gaps occurring, down which we had to climb and then up on the other side. In one of these we had to leave our spare rope to get back by. Finally the last gap was gotten over and we stood upon the summit looking across at our last year's stone man on Cyprian Peak and much elated at our success. First ascents are naturally reported as difficult. We do not make this claim, but having climbed Sir Donald, Dawson and Tupper we do say that Augustine is the best of all. The ascent of the rocks to the arête is interesting, and the long narrow arête is far more impressive than anything that we have seen. The summit can also be reached by the way of the Bishops Glacier, a longer route over steep glaciers and snow, but which will certainly be interesting. We returned by the same route except that we went on the glacier above the ice-fall.

We now began to think of the Battle Range and returned to the Glacier House to add a few things to our food supply. After a little rest we took up our packs and found ourselves again in the Mitre Creek camp. One morning we loaded up with camp outfit and six days' provisions and left to make a new pass, which might be called Battle Creek Pass,<sup>2</sup> at the head of the second glacier to the east of Mt. Purity. It is the lowest pass in the Purity Range, 8,700 feet, and as we had, previously ascertained, the only one available for taking packs over.

#### BATTLE CREEK

We crossed the Bishops Range as usual, then went directly across the Black Glacier and up the glacier coming down from our pass. Arriving at the col we looked down upon a finer valley than the Yoho, a scene savage grandeur unequalled in all the region. No one had ever crossed the range and we knew not what difficulties we should meet with in descending the great ice-fall, two thousand feet high, which dropped beneath us so rapidly that only a little of it could be seen. On the

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<sup>2</sup> It is suggested, as an amendment, that this pass across the Purity Range might be named "Purity Pass," and that at the westerly bend of Battle Creek, leading to Duncan River Valley, "Battle Pass."—Editor.



**Mt. Purity Showing Battle Pass On Extreme Left. A.O. Wheeler, Photo.**



**Kilpatrick And Wheeler From Summit Of Mt. Purity. E.W.D. Holway, Photo.**



**Looking Down Battle Creek From Above Our Camp. R.W.D. Holway, Photo.**



**Foot Of Battle Glaciers. F.K. Butters, Photo.**

right, beginning with Mt. Purity, great glaciers covered the mountain sides as far as we could see; on the left were the fine snow-clad peaks, Grand Mt. and Sugar Loaf; below the ice-fall the Battle glaciers with a great medial moraine filled the valley, and where it turned to the west there towered for more than 7,000 feet above the creek a splendid unnamed mountain terminating in a sharp rock peak; glaciers were everywhere and many streams tumbled and rushed down the steep slopes.

Descending a snow slope and keeping well to the left we reached a lateral moraine and followed this to the comparatively level glacier below the ice-fall. The medial moraine, some distance further on, is remarkably large, fifty feet or more high and wide and level on top. We reached the tongue of the glacier just about dark and were resting on the rocks when up came a yearling silver-tip, the most beautiful bear that we had ever seen. He stopped short, and after we had gazed at each other a few minutes we stood up and the bear rushed down the valley. We followed and ten minutes later, looking up the side of the valley, a little distance above us, we saw an enormous grizzly with a cute little cub. The "boys" affirmed that she was as large as a cow! The cub was getting lessons in snow work for the old bear jumped up a snow bank several feet high and the little fellow after trying in vain to follow her had to seek a lower place. Just then the mother seemed to smell us for she kept looking around and lifting her nose in the air. A shout finally caused her to turn, walk towards us and inspect us. She soon concluded that we were harmless and went on her way, which happened to be down the valley, in the direction that we had to go, although above us. It was nearly dark, and we were almost starved so we struck out at a lively gait. In fact no such pace had ever been set by the party before. Of course the bears had nothing to do with it! Getting down the tongue of the glacier was bad enough going but from there on it was the bottom of a Selkirk Valley and only those who have been there can appreciate that. Drewry, who was some miles below in the lower part of Battle Creek says "I had travelled through some rough country but that into which we then entered exceeded anything I had ever imagined to exist in Canada."

We keep to the left of the Creek, forcing our way through alders and tangled jungles filled with boulders over which we continually stumbled. It was quite dark when we crossed a tributary stream and saw some dry wood scattered about on the stones. It was a poor camp but we finally cut out a place in the alders for the tent and soon had pea soup, bacon and tea. The next morning we moved the tent to an open place on the bank of Battle Creek, which we found to be at an elevation of 4,200 feet, 700 feet below the tongue of the glacier. Above us to the east was a fine Matterhorn-like peak and a glacier from Sugar Loaf Mt. The stream that we had crossed came roaring down for hundreds of feet from a fine hanging valley leading up to a glacier on Grand Mt. The Sugar Loaf Glacier proved to be very interesting. It is fed from a hanging glacier enormously thick where it breaks through a narrow opening in the cliffs. The névé back of it is large, so that there is remarkable activity. During the day that we were climbing near it loud reports from the cracking and the thunder of the falling ice were almost constant.

Unfortunately there were daily storms and we found it impossible to climb the high peaks. After waiting several days we were obliged to leave, and as the rain and hail continued we kept for a time under the shelter of big stones on the glacier. This made us late and we crossed the Bishops Range after dark in mist and rain. It looked like home when we found the tent at half past nine. When the weather cleared we climbed Mt. Purity, partly by the route of the first ascent, finding the old camp on the western slopes of the mountain. We followed up the glacier to the debris-covered slopes between the two peaks, then crossed the snow to the right until the rocky arête was reached and thence to the summit. High clouds were in every direction adding greatly to the splendor of the views and to the beauty of a fine series of photographs obtained.

When we returned to the Glacier House we made the ascent of Eagle Peak, Terminal Peak and Mt. Tupper, the last the first ascent without guides, and Mr. Palmer left for the East. After some days Mr. Butters and the writer went to the coast and made the ascent of Mt. Rainier by the usual Gibraltar route. The trip from Paradise Valley was made in ten hours and the return in four and a half hours. We found no ice and the climb although long was very easy. Returning to the Glacier House we made the ascent of both peaks of Avalanche Mt. for photographic work, and our season was over.

Members of the Alpine Club should certainly arrange to see the country beyond the Asulkan, the finest by far that the writer has found in many years of tramping in the Rockies and Selkirks. Those who have seen the Dawson Range from the Asulkan Pass have gained a slight idea of what there is. It is still more wonderful beyond. The Battle Creek Valley has only been glanced at. It is very low, our aneroids showing 3,500 feet where the creek turns to the west and the highest peak further down must rise directly 7,800 feet from the stream. From a camp beyond Donkin Pass all the mountains in the Dawson, Bishops, and Purity Ranges can be readily reached, and they offer a greater variety of rock and glacier work than can be found together elsewhere. It is of course necessary to pack everything, but with a proper outfit and preferably three in the party it is not difficult. Glacier experience is necessary, as much of the route is over badly crevassed ice, covered with snow for most of the distance. It is worth doing. Try it.

### **Ascents In The Canadian Rockies.**

*By Val. A. Fynn.*

Some of the finest peaks in the Canadian Rockies can be reached from Lake O'Hara, where the official camp of the Alpine Club of Canada was pitched in the summer of 1909. Lake O'Hara can be reached in about three hours from Hector, a flag station on the C.P.R. between Laggan and Field. An easy trail leads up the Cataract Creek, south of Hector, to the shores of the lake. East of this lake is a long ridge, the general direction of which is from N. to S. Its northernmost peak is the well-known Mt. Lefroy, then follow Glacier Peak, Ringrose, Hungabee and Peak No. 10,<sup>3</sup> after which the ridge sinks to the Wenkchemna Pass. Lake Oesa lies at the very foot of Glacier Peak and can be reached from Lake O'Hara in about one and a half hours by a faintly marked trail. The Opabin Pass separates Hungabee from Mt. Biddle, which lies due west of the former. A well marked W. arête descends from Hungabee to the Opabin Pass and rises to the insignificant Opabin Peak just before reaching the said pass. This pass can be easily reached from Lake O'Hara in about two hours by way of the harmless Opabin Glacier. Ringrose sends out a N.W. spur culminating in Mt. Yukness which stands between Lake O'Hara and Lake Oesa. The Opabin Pass leads into Prospectors' Valley, which opens into Vermilion River, whence the Bow River Valley and the C.P.R. are reached some six miles south of Eldon.

On the East, Glacier Peak, Ringrose and Hungabee over, look the Paradise Valley with Horseshoe Glacier at its head. Glacier Peak is probably accessible from that direction, but Ringrose and Hungabee look quite hope, less from that valley. Hungabee is the most imposing of the whole group; it had been climbed once, previous to this summer by Prof. H. C. Parker with the assistance of the two Kaufmanns; the other two were virgin peaks, Mt. Lefroy has been often climbed but the writer knows nothing about Peak No. 10.

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3 The "Peak No. 10" here referred to is a shoulder of Hungabee (the Chieftain). It is inferred that the Chieftain would be one of the ten. If so the tenth would be Hungabee.—Editor.

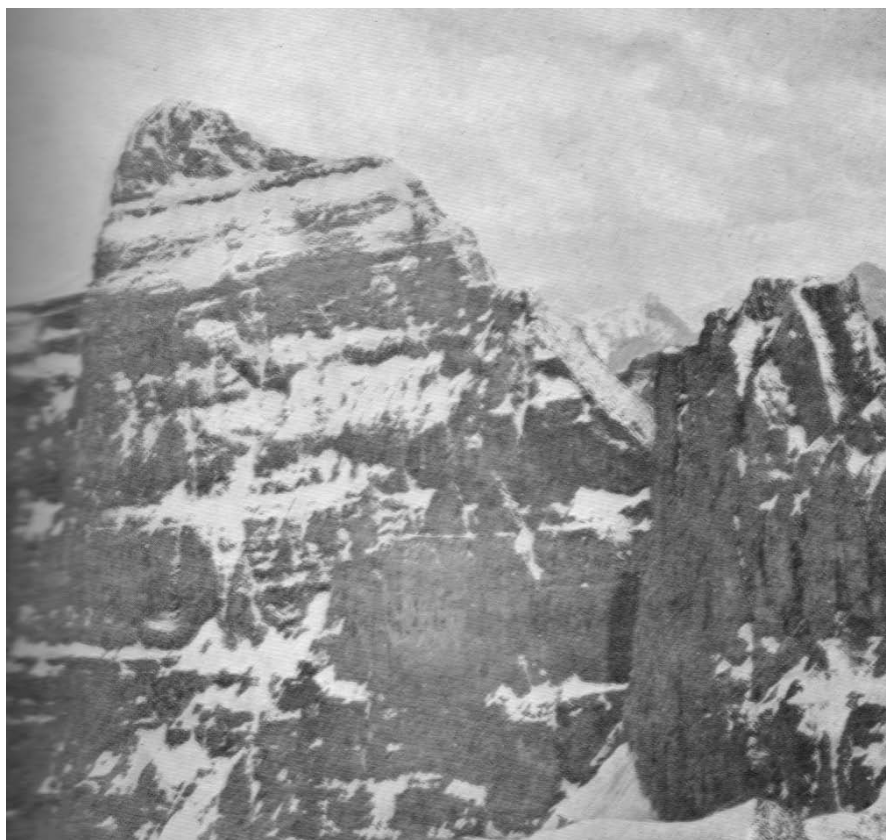
MT. HUNGABEE  
(THE CHIEFTAIN-11,447 FEET.)

The S.W. face, which overlooks Prospectors Valley and extends south from the W. arête reaching down to Opabin Pass, is well seen from Opabin Peak; its average inclination is a little less than  $50^{\circ}$ . This face is broken throughout its width by three very steep pitches or walls running horizontally. The first of these pitches, at about 8,900 feet, is the highest, but also the easiest to overcome, presenting many convenient ledges and sound ribs. The second pitch at about 9,500 ft., is not so high, but it is nearly vertical and even overhangs in places; its continuity is, however, broken by a chimney usually filled with ice and snow. This chimney apparently affords the only, and not altogether safe, means of progress. The third pitch, at about 10,900 ft., is also very steep, but presents fine and reasonably safe climbing. That part of the S.W. face which lies between the first and second pitches, is furrowed by five couloirs. The first of these loses itself in the W. arête, at or near the second pitch; the second is the widest and runs clear up to the main or N. arête of the peak, ending near the summit on the well marked and highest shoulder of the mountain. This couloir breaks through the second pitch at the ice chimney previously referred to and also cuts a broad, but obviously dangerous couloir through the third pitch. The remaining three couloirs do not break through the second pitch at all, but are continued above it and lose themselves more or less quickly in the topmost part of the face, after scarring the third pitch with corresponding wide and nearly vertical chimneys. All five couloirs also run down through the first pitch. The W. arête itself cannot be followed throughout and traverses in its immediate neighborhood look very dangerous indeed particularly so in the lower half. This mountain, like all the others in the district, is more dangerous than difficult, requiring very careful selection of a route on account of the very rotten rock.

The second ascent of Hungabee was made on August 7, 1909, by E. O. Wheeler (A.C.C.) and the writer by way of the S.W. face. Leaving the official camp of the A.C.C., near Lake O'Hara, at 2.45 a.m., the foot of the W. arête was reached by way of Opabin Pass and Opabin Peak at 6 a.m., including 30 minute rest. Bearing south over easy and gradually narrowing horizontal ledges until near the middle of the first couloir quick upward progress was made over steep but firm rocks until quite easy going was reached, when the couloir was rapidly traversed in order to reach a well marked ledge on its southern side just above a prominent notch in that ridge. The ridge leads directly to the foot of the ice chimney in the second pitch (6.45 a.m.) and can be followed closely affording fine climbing, or quicker progress can be made on its southern slope. North of the ice chimney appears a safe crack, but if this is followed it soon becomes necessary to leave it, to climb into the ice chimney and to traverse the latter high up. The rocks leading from the crack down into the chimney are very difficult. The chimney was found full of ice and required much step cutting; it was safely negotiated at 7.20 a.m. Much snow will make this chimney very easy, no snow will turn it into a very hard rock climb, particularly as the rocks are sure to be always glazed in the early morning. The chimney is left as soon as a traverse south becomes possible, for the main couloir discharges all its missiles in this direction. A broad horizontal ledge now leads round a corner into a steep but quite easy couloir which is exposed to falling stones, but can be negotiated in 15 minutes when the ridge on its north side affords a safe and easy route. This ridge is somewhat broken just above the couloir, but can be picked up again somewhat higher and slightly to the right, and followed to the foot of the third pitch (8 to 8.15 a.m.). From this point, the main couloir and the gap it cuts through the third pitch are well seen directly on the left. In the direct line of ascent



**Hungabee And Ringrose From Schaffer. M.P. Bridgland, Photo.**



**North Arete Of Hungabee From Glacier Peak. V.A. Flynn, Photo.**

are difficult rocks, they can be turned by traversing the forked head of the couloir on the right (step cutting) and working up the rocks on the far side (black rock) to an inclined scree covered ledge some eight feet wide running along the foot of the main wall (yellow and greenish rock) of the third pitch. Working back, north, along the ledge, the foot of a deeply cut couloir in the main wall of this pitch was reached at 8.50 a.m. On the north side of the couloir and near the centre, are two very steep chimneys separated by very steep slabs and narrow ledges leading to the last steep slopes of the S.W. face (black and brittle rock) affording new holds (10.05 a.m.). In the direct line of ascent is seen, high up near the ridge, a crack in the black rock. This can be reached with care over some patches of snow and leads on to the main ridge some thirty feet north and a few feet below the summit, which was reached at 10.45 a.m.

The same route was taken on the return journey; the ice chimney was reached in three hours and negotiated in twenty-five minutes; a regular waterfall was now racing down the ice and some stones came down, one of them striking Wheeler's foot and knocking him out of his steps. Opabin Pass was reached in one hour and five minutes after forty-five minutes rest, and one and a half hours later we were back in camp at 6.30 p.m.

A close examination of the main or N. arête showed that the latter will afford a splendid and much safer climb. It should be struck at its lowest point, between Ringrose and Hungabee. This point can be reached without serious difficulty from the foot of the Opabin Glacier. This first part of the climb is, however, again exposed to falling stones.

Prof. Parker climbed the mountain from a camp in Prospectors Valley, but attacked the S.W. face near Opabin Pass, the first part of his route probably coinciding with that described above, and reached the main ridge by way of the main couloir.

A first attempt made by E. O. Wheeler and the writer on July 25th, 1909, was frustrated by bad weather. On that occasion the route followed was the same, except that the third pitch was negotiated further south—just above the third couloir (connecting the main couloir as number one). The main ridge was reached some sixty feet below the summit, but this only became known to the party on the day of the successful ascent. The more direct route followed on the second attempt is the better.

#### RINGROSE (10,741 FEET.)

On August 9th, 1909, E. F. Pilkington (A.C.C.) and the writer made the first ascent of this peak. The S.W. face is well seen from Opabin Glacier. The mountain shows two summits, of which the southern one is the higher and the broader. To the south of the higher Summit is seen a formidable looking gendarme on the main arête which soon drops very suddenly to the lowest point of the arête between Ringrose and Hungabee. The S.W. face is reached by way of a broad snow covered ledge which sweeps up from the Opabin Glacier and runs north, rising in the direction of the col between Ringrose and the eastern peak of Mt. Yukness. The characteristic features of the S.W. face are a first couloir descending from a point on the main ridge just south of the north summit and a second couloir descending from a point just north of the gendarme. These two couloirs converge on a point at the foot of the face. A large patch of snow covers a fairly level platform in the line of the first couloir. A little above this and about half way up the face is seen a horizontal but steep ledge; it is particularly well marked just under the lowest depression of the main arête. Another such ledge appears about the height of said lowest depression.



Leaving the camp near Lake O'Hara at 4.45 a.m. a little lake at the foot of Opabin Glacier was reached at 5.55. Continuing at 6.10 the foot of the S.W. face was reached at 7.25. The face was attacked at 7.48 a.m. at a point immediately below the highest summit. The rocks present no difficulty and many variations are, therefore, possible but a sharp lookout must be kept for falling stones.

The ribs between the two couloirs mentioned above is followed, leaving the snow patch on the left, the first ledge being easily reached just where it crosses the second couloir. At this point, and on the south side of the second couloir, is seen a steep and curved gully partly filled with snow. It runs up in the direction of the lowest depression in the main arête then turns back in the direction of the main summit. The rib which separates this curved gully from the second couloir seems to descend from the gendarme on the main arête. The second couloir looks very smooth and is certainly very dangerous. Crossing it very rapidly the rocks on its north side are reached and afford fine, safe, climbing. The curved gully runs into a couloir filled with ice which descends from the south side of the gendarme. Crossing the curved gully at its junction with the ice couloir the rocks on the north side of the latter are followed, keeping high up and well out of harm's way until direct progress in the direction of the main arête becomes impossible without crossing the ice couloir. At this point an irregular vertical crack in a partly overhanging rock wall affords a chance to reach the crest of the rib which seems to descend from the gendarme. This is the hardest part of the climb for the rock is quite brittle. Once astride on the sharp rib it is seen that the second couloir which is now immediately on the left divides a few feet higher into two branches, the one running to the very foot of the main peak, the other away from it. Either branch is practicable but both are dangerous. Descending from the rib, the near branch of the second couloir is rapidly crossed when the main ridge can be reached by way of the buttress between the two branches. It is not until this buttress is reached that it becomes evident that the gendarme has been left on the right and that it will not stand in the way. The main arête is struck at the foot of what appears to be a vertical wall guarding the approach to the main peak from the south. This wall is, however, easily climbed (10.50 a.m.). Striding along the almost level arête in the direction of the highest point one is suddenly brought up by the most perfect "Gabel" some eight feet wide and about twenty-five feet deep with perpendicular sides. The ridge here is flat topped, from two to three feet wide. Both sides are perpendicular for some thirty or forty feet, and the ridge looks exactly like a thick wall. Loose rocks enforce great care in negotiating the "Gabel" but it is the last difficulty, and the actual summit is reached immediately after (11.45 a.m.).

The same route was followed on the way down.

Leaving the main summit at 12.5 p.m. the "Gabel", where a rope had been left, was passed at 12.15. After building a second cairn, south of the Gabel, the difficult crack was passed at 10.15 reaching the snow at the foot of the face at 2.45 p.m. Resting near the lake from 3.5 to 3.40 camp was reached at 4.45 p.m.

It is quite possible to traverse from the south to the north peak and the north peak also seems accessible from the col between Ringrose and Yukness. We could not investigate further for we were due at Sherbrooke Lake that night but only managed to reach Hector. The lowest depression in the main ridge between Ringrose and Hungabee, from where the latter can probably be climbed, may be reached from the lower of the two horizontal ledges of the S.W. face by a horizontal traverse to the south and a scramble up some easy rocks.

GLACIER PEAK  
(10,831 FEET.)

On August 4th, 1909, C. A. Richardson, A. R. Hart, L. C. Wilson, all of the A.C.C., and the writer made the first ascent of this mountain. Leaving the camp at Lake O'Hara at 8.20 a.m., Lake Oesa was reached at 9.30 and 10 minutes taken for a final survey of the peak. A direct attack is out of the question owing to two hanging glaciers which threaten the whole of N.W. face. It is probably possible to scale the rocks immediately north of the hanging glacier nearest to Mt. Lefroy and thus reach the less steep upper slopes of this glacier; said rocks appear to be frequently swept by falling stones and afford practically no cover. The only other possible line of attack lies up a deeply cut but not very steep snow filled couloir leading to a gap in the main ridge between Ringrose and Glacier Peak. This couloir is not threatened by either hanging glacier and affords an easy and tolerably safe point of attack. It is best to keep close to the very steep rock walls on its north side; they afford good protection. Going up some screes and a small glacier the bergschrund was soon reached and easily passed. From 11 to 11:20 was devoted to lunch in a protected spot well up in the couloir. At 12.15 came the first easy opportunity to take to the rocks on the north side; at this point, which is quite close to the gap, a broad ledge covered with loose stones runs horizontally into the couloir. A traverse north looks tempting but is not advisable. Near the main ridge and running nearly parallel to it is seen the mouth of a steep narrow and ice-filled couloir; keeping on its north side and as high as practicable fair progress is made over extremely rotten rocks requiring the greatest care. It soon becomes possible to reach the crest of the rib on the north side of said couloir; this affords much greater safety. The general line of ascent from this point is a rapidly rising one bearing but slightly north. The main ridge was reached at 1.15 p.m. without special difficulty and very soon afterwards the party stood at the foot of the peak itself after having turned the last rocks of the main arête on the north over an ice slope covered with about one-half inch of hard snow closely adhering to the ice. Traversing to the faintly marked S.W. ridge of the last peak, which looks like a pyramid of rock rising out of the snow and ice, the cornice crowned summit was easily reached 2 p.m. It is just possible that this peak can be reached from Paradise Valley. The upper parts of the east face appeared easy; it was, however, not possible to see lower portions. Hungabee and Ringrose look very imposing from the summit but still more so from the lower portions where the main ridge was struck. Leaving the summit at 3 p.m. and following the same route at a leisurely pace, the top of the couloir was reached at 4.30, bergschrund at 5.10, Oesa Lake at 5.35 and camp at 6.55 p.m.

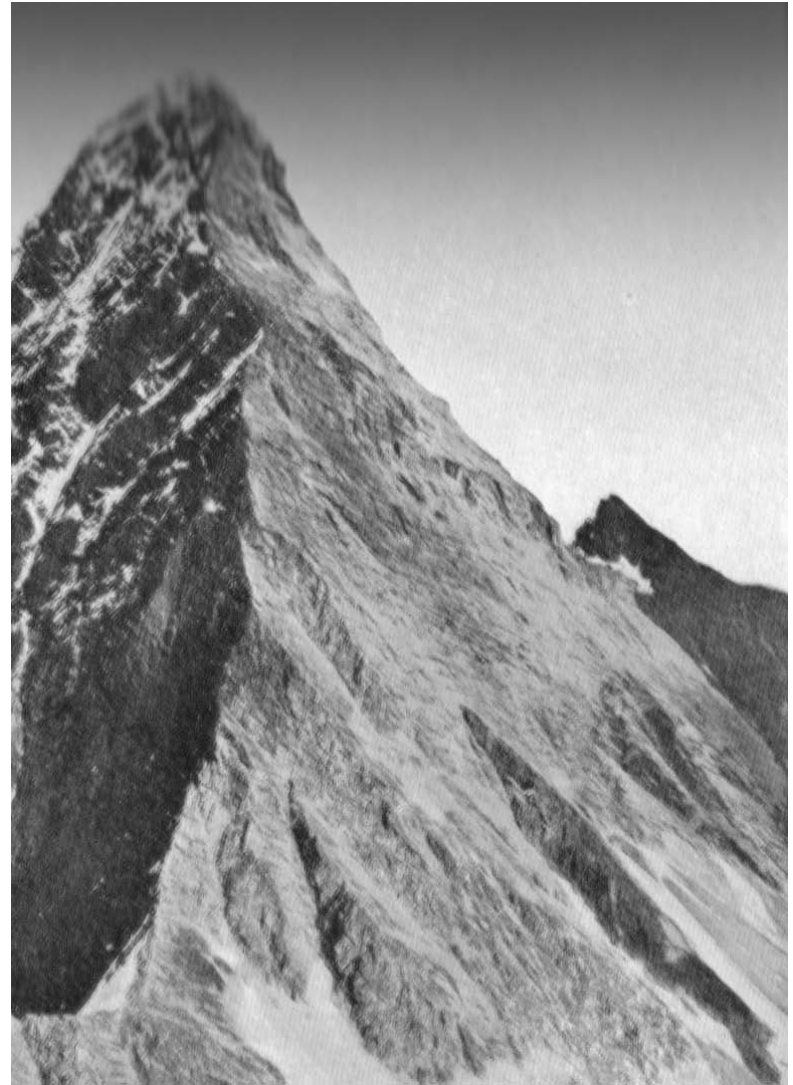
PARK MOUNTAIN  
(9,671 FEET)

From Lake O'Hara Camp to McArthur Lake one hour fifteen minutes. The simplest way to reach Park Mountain from here is to make for the lowest depression in the ridge between Park Mountain and Mt. Biddle, and then follow the scree arête to summit. The lowest depression in this ridge is reached by a steep rock and snow couloir in its N.E. face. It is easily seen from north end of lake.

On July 22nd, 1909, the writer went up the N.E. face itself. The first rock buttress is overcome by means of a couloir close to the north end of lake—then up steep snow slopes to foot of rock rib descending from the apparent summit. Follow this rib gradually bearing west and reach the north ridge near summit—complete ascent by west side of north ridge—rocks rotten and fairly



**Glacier Peak. F.W. Freeborn, Photo.**



**N.W. Arete Of Mt. Sir Donald From Eagle Peak.  
Howard Palmer, Photo.**

difficult. The real summit is a long, nearly horizontal, ridge east of the apparent summit. Three hours from lake shore. Descending follow the south arête and then strike west down to McArthur Creek traversing north wherever possible, so as not to lose too much in height. No difficulty on this side but very rotten rocks. The stream at foot of McArthur Pass is reached in two hours twenty minutes.

MT. SIR DONALD-SELKIRK RANGE, B.C.  
BY THE N.W.W. ARÊTE  
(10,808 FEET)

This arête referred to as the north arête in the "Selkirk Range, B.C." and is the one joining Sir Donald to Uto Peak. It was first climbed in 1902 by Mr. E. Tewes with the guides E. Feuz senior and Chas. Bohren. On August 18th, 1909, A. M. Bartleet (A.C., A.C.C.) and V. A. Fynn (S.A.C.U to, A.A.C.Z., A.C.C.) climbed the mountain by this arête, descending by the ordinary route. The weather was perfect, the rocks dry. Left Glacier House at 3.15 a.m. reaching south of Vaux Glacier at 5.05. Followed ordinary route to the top of right hand (north) moraine, then took to grass slopes at foot of S.W. face of peak, traversing to col between Sir Donald and Uto Peak. Reached col at 6.40 a.m. and summit at 11.25 a.m. The arête was followed as closely as possible, difficulties being mostly avoided by taking to the N.E. face until near the summit, when an easy traverse on the left hand face is clearly indicated. The rocks are steep but afford plenty of holds. Some care is required as a number of boulders are loose; apart from this the climb is absolutely safe and cannot be considered difficult in favorable conditions. Left summit at 1 p.m., reached the breakfast place at 2.50 by way of the Feuz chimney, left rocks at 3.30, reached top of north moraine at 3.50 and Glacier House at 5.20 p.m.

**On Mount Hood**  
*By Frank W. Freeborn.*

Mt. Hood is the scenic pride of Oregon. With its 11,225 feet of altitude it is plainly visible, in ordinarily clear weather, from Portland, fifty miles away. Even at that distance its bulk and height and whiteness and symmetrical shape are most impressive. It is one of the line of volcanic peaks that dominate the Cascade Range from Baker in Washington to Shasta in California. Though it has had no violent eruption in historic times it is still sending out steam and sulphurous fumes. Its lower slopes, to the height of 6000 feet, are overspread with forests; above that nearly all its surface is covered with glaciers.

The most convenient point from which to climb the mountain is Cloud Cap Inn on its northern side. The Inn is a long, low, log structure, built near timber line on a rocky buttress directly in front of the foot of the Eliot Glacier. The house is exceedingly well managed and comfortable; but as its attractions are well appreciated and its accommodations are limited any party larger than one should write or wire ahead for room. The address is Mt. Hood P.O., Oregon.

A railway ride of 55 miles from Portland along the south bank of the Columbia River brings one to Hood River, a bustling town with good hotels. From there it is twenty-eight miles south to Cloud Cap Inn. An automobile provided by the management of the Inn took us the first twenty-four miles. Our route lay straight up the Hood River Valley, famous for its apple orchards.

Ahead of us loomed the big white mountain, its head wrapped in clouds. No rain had fallen for over six weeks and the road and all vegetation for rods on either side were buried in dust. The last four miles of the journey was made in a mountain wagon and took just two hours. It was a steep road all the way through a noble forest of spruce and fir and pine. But the powdered volcanic dust that filled the narrow road was ankle deep, and as the horses slowly wallowed through it, that part of the trip was far from comfortable. From the time we left the lower valley the woods about us and the nearer hills through which we mounted had shut out all views of Hood. But when we reached the Inn, we came face to face with the majestic, glacier-covered cone, close at hand and towering as far above us as Lefroy stands above Lake Louise or Temple above Paradise Valley. From the platform on the roof of the Inn we looked off over the country we had just traversed. Fortunately the air was clear of smoke, and in the north and northwest rose the mighty, volcanic brothers of Hood, Adams and Rainer and St. Helens.

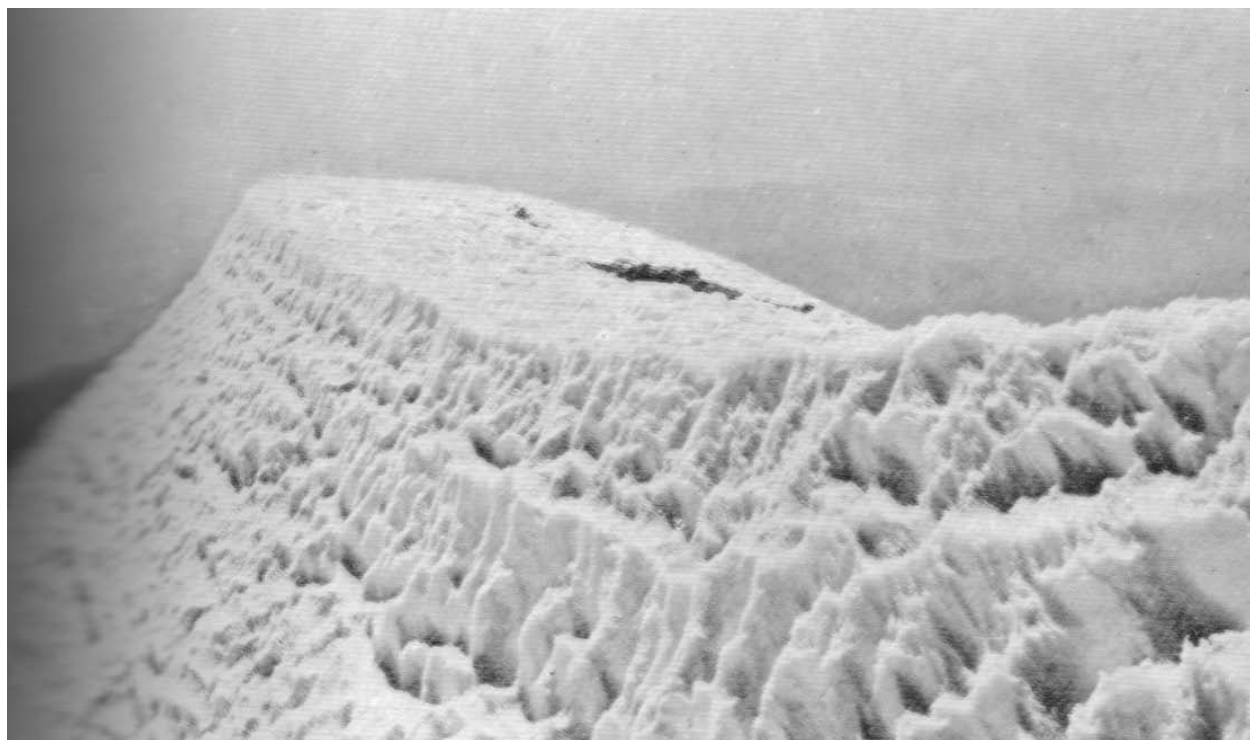
My purpose was to climb Hood the next day with the local guide, but as the weather seemed doubtful I could make no definite arrangement. The next morning was perfect, but the guide (there is only one) would not budge. He offered sundry trumped-up excuses, but later developments showed that he was already booked for an ascent the following day and did not care to climb two days in succession. But I really lost no time, for I had a most interesting solitary tramp over the Eliot Glacier. The next day was also fine and we started at 7 o'clock. A young man named Sharp, from a near-by town, was my chance comrade and shared the attentions of the guide with me. Our route lay for a few minutes through a forested depression, and then we gradually mounted along the bare, curving ridge of Cooper's Spur that bounds the Eliot Glacier on the east. In two hours we reached the base of the cone of Hood at an elevation of probably 8400 feet. There we roped. The method was new to me. Each man was provided with a belt of very thick heavy leather about six inches wide. To the side of this belt was attached a line of the usual size of about fifteen feet long. The end of this was made fast to a ring in the next man's belt. The contrivance was stiff and heavy and at times inconvenient; its advantage lay in the ease with which any member of the party could be detached.

Our route now lay over the glacier nearly to the summit. The snow on the glacier was in good condition but so deeply furrowed and pitted that foot-holds were treacherous and rapid progress difficult. The slope grew steeper, and after climbing an hour upon it we came to a crevasse like a bergschrund running quite across that face. At that point we found the end of a stout rope 1250 feet long hanging on the snow curtain over a convenient ice bridge. The other end of the rope was fast to a rock not far below the mountain top. But for this rope, put there by the management of the Inn, we should have had to cut many steps in the next stage of an ascent. As it was we made good use of it, and after an hour slipping and kicking in uncertain foot-holds and steadying and pulling ourselves up with our arms we reached the ledge to which the rope was anchored. Then, with ten or twelve minutes of easy climbing, we stood upon Mazama Rock, the northeast corner of the summit of Hood just four and a half hours from Cloud Cap Inn. The climb had been needlessly rapid and I was too exhausted to share a breakfast with the others. I hope to climb Hood again some day, and I shall then take at least five hours and a half and do it comfortably.

At the summit we met two men who had climbed up the other side from Government Camp. The ascent on that side is not so steep as ours had been, but it is twice as long; and Government Camp is not nearly so accessible from Portland as Cloud Cap Inn. If I had climbed the mountain for distant views alone I should have been disappointed. The smoke of forest fires so filled the air that no good views were to be had beyond the base of the mountain. Only in the north, fifty miles



**Mt. Hood From Cloudcap Inn. F.W. Freeborn, Photo.**



**The Summit Of Mt. Hood. F.W. Freeborn, Photo.**

away, the ponderous glacier crown of Adams floated high in mid air, a thousand feet above the top of Hood, without any apparent support. It was a grand weird sight. But Hood itself was most interesting. Spurs of brown and black rock ran down all sides like the ribs of an umbrella; the wide spaces between them were filled with glaciers down to the tree line. A wide gash in the southwest side of the mountain ended a thousand feet below in a ragged pit from which issued clouds of steam. We judged this pit was probably the source of the sulphurous fumes that came to us on the wind as we were climbing.

After an hour spent at the summit we began our descent, picking our way carefully down to the cliffs where the safety rope was anchored. But from the time we grasped that rope until we reached the fairly level glacier at the base of the cone, our progress was a senseless, reckless plunge down the mountain side. We covered in 45 minutes, including a stop to photograph the crescent crevasse, what we had taken 135 minutes to climb. There we unroped; and as Mr. Sharp and the guide were eager to get back to the hotel as soon as possible I gave them my blessing and bade them goodbye. They disappeared over the cliff to find a short cut, and a little later I saw them hustling along over the Eliot Glacier far below. I made my way leisurely back by the morning's route, stopping to eat my now welcome lunch, and loitering to study the mountain and enjoy the scenery. In two and a half hours after we left the summit of Hood I was at Cloud Cap Inn.

### **The First Traverse Of Mount Victoria**

*By G. W. Culver.*

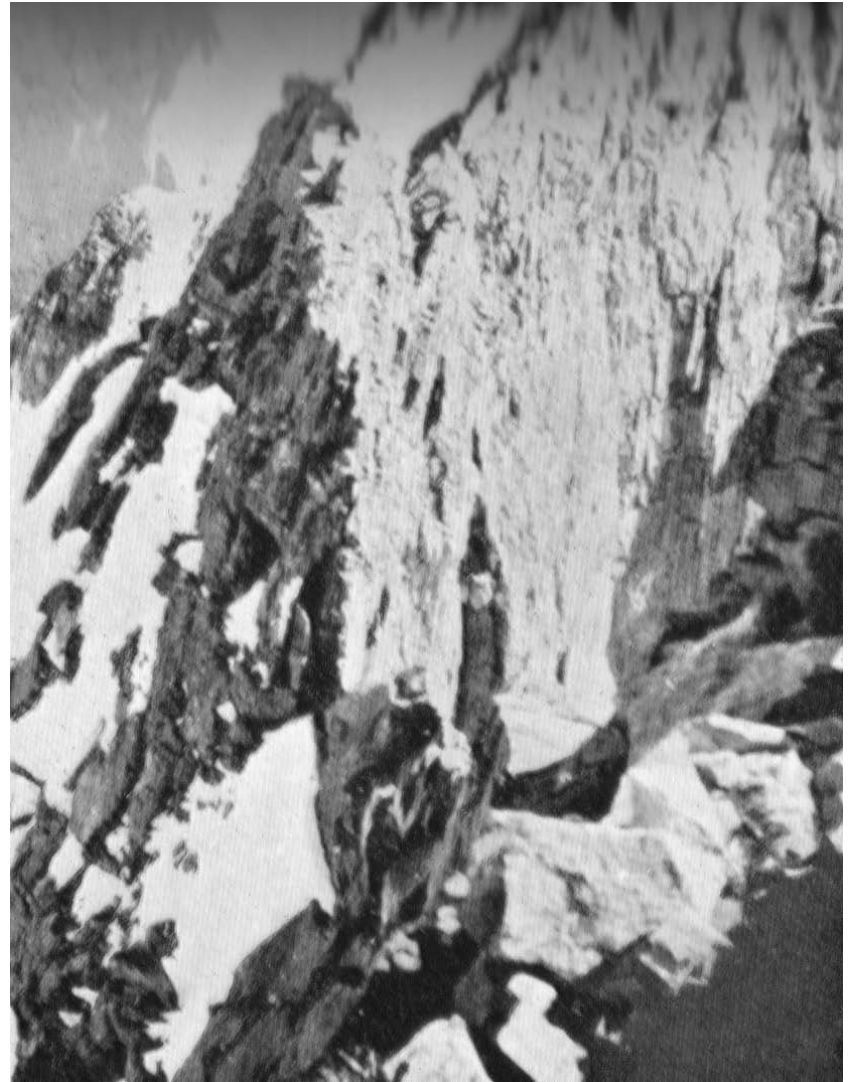
The climb that I am about to describe was made early in last September. I was then at Lake Louise for only a few days, but was fortunate enough to find both of the guides stationed there, Edward Feuz, junior, and Rudolf Aemmer, free from engagements. As a result I determined to make an attempt to traverse the Victoria Ridge, and with this intention left the Chalet, with Feuz and Aemmer, about 1 a.m. on Saturday, September 4th. The weather had caused us some anxiety on the previous evening, but at midnight it was bright and clear with every promise of so remaining.

For three hours or more we followed the customary route, first skirting the lake shore and then traversing the moraine. We kept well to the right, however, and to about 4.30 a.m. began to ascend the bluff, grass-covered shoulder which we had been paralleling for sometime. Before long we reached the tongue of quite an extensive ice sheet which sloped upwards rather sharply. We now roped with Aemmer in the lead and Feuz bringing up the rear, an order which we preserved throughout the climb. Thanks to our crampons the glacier caused us little delay, and at 7.30 a.m. we were standing upon a shoulder of the arête itself. Here we disposed of a light meal, and then, pushing on rapidly, we reached the north peak of Mount Victoria at 10 o'clock. This peak is only slightly lower than the actual summit of Mount Victoria, and, as it was a bright day, we obtained a splendid view in all directions. From the north peak the summit itself appeared to be very close, and one of the guides estimated—how wrongly it later devolved—that it would not take more than four or five hours to reach it.

We soon began, however, to realize that our difficulties were still before us. For two hours after leaving the north peak our progress became increasingly slower, but by 12 o'clock we had arrived at the furthest point previously reached by any party, and here we decided to stop for a second meal. We were now apparently about midway between the north peak and the summit. Where we stood the arête was broken by a deep depression, and, when, after a short rest, we again started forward, we found it necessary to lower ourselves by a sling to the level of that part



**The Victoria Ridge. G.W. Culver, Photo.**



**The Victoria Ridge. W. Culver, Photo.**



of the ridge which was immediately below us. This cleft in the arête marked what was really our first difficulty, but a succession of others followed fast. It seemed almost incredible that any such saw-toothed formation could exist as the remaining part of the Victoria arête proved to be. Jagged pinnacles, or gendarmes, jutted sharply upward from the ridge in countless numbers. Some of these we surmounted; others we were forced to circle around, but always upon the left side of the face for the wall upon the right was absolutely sheer. Almost everywhere the rock was terribly treacherous. So rotten was it indeed, that time and again a projecting portion which appeared to offer a firm hold would break off at the slightest touch.

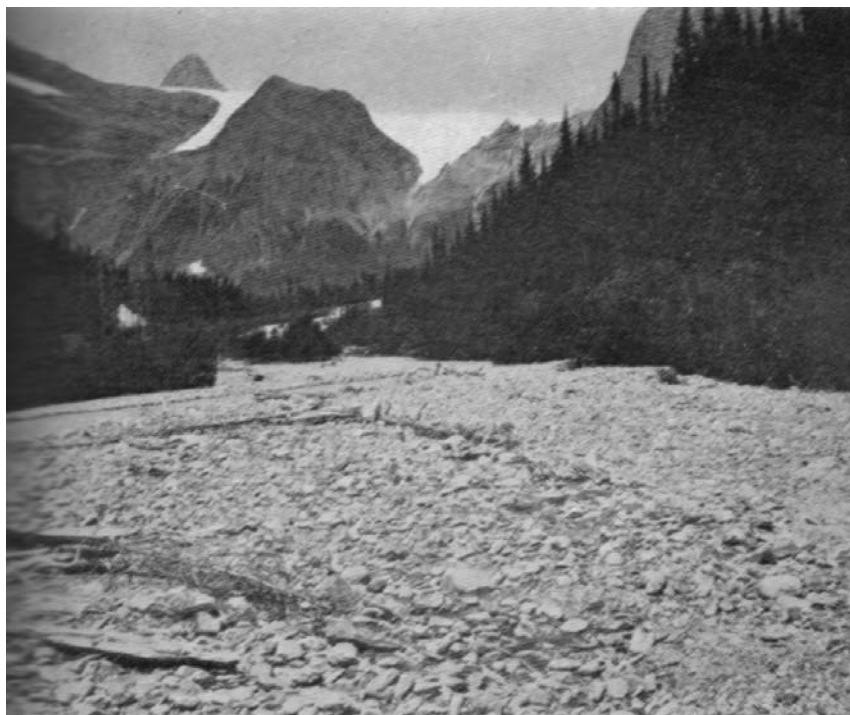
Needless to say our rate of progress was not very rapid, and between 3 o'clock and 6 o'clock it was particularly slow. I distinctly recall one hour, spent in skirting the base of a rock tower, in which each of us moved the distance of half the length of the rope only four times. By 6 o'clock, however, we had reached a part of the ridge where the rock was a great deal firmer. We were then able to advance much more quickly, and at 7 p.m. we arrived at the summit. Naturally enough it was a very brief halt that we made upon the summit, for already it was beginning to grow dark. An hour later it became pitch black, and we were forced to stop and wait for the moon. Meanwhile, a strong wind had sprung up, and the two and a half hours that we were compelled to spend upon an exposed part of the arête were far from pleasant ones. At 10.30 p.m. the moon, then its last quarter, had begun to show over the crest of Mount Lefroy, and once more we started forward. Even now there were some slight difficulties to be encountered. The moon gave but a very dim light, and at times was entirely obscured by clouds; the wind, too, was so strong that it was not easy to keep the lanterns burning; and we were further delayed by the necessity of cutting steps whenever we descended snow slopes, for the surface of the snow was hard and icy. Consequently, it was not until 2.30 a.m. that we reached the head of Abbot Pass. Three hours later we unroped upon the moraine. There we rested for a short time, and then pushed on rapidly toward the Chalet, which we reached at 8 a.m.

There are, I think, two outstanding difficulties in the traverse which I have just described. The one consists in the great length of time which this particular climb requires. It almost inevitably entails spending a night, or at least a considerable portion of one, in some exposed position. The second difficulty and of course much the more serious one, results from the untrustworthy nature of the rock. Much of the greater portion of the Victoria Ridge which lies between the north peak and the summit is formed of rock which has so suffered through process of decay that it is absolutely crumbling away. Certain harder portions of the ridge have naturally withstood the process better than the softer ones, and hence the many towers and pinnacles already referred to. Were it not, however, for the intense rottenness of its formation, and as well, perhaps, its unusually great length, I could not conceive of a more interesting bit of mountaineering than that to be found in a traverse of the arête of Mount Victoria.

### **Over The Wilson And Duchesnay Passes.**

*Mrs. A. H. MacCarthy.*

After the Alpine Club camp of 1909 had passed into history, a party of six members of the Club made a trip into the beautiful Ice River Valley, going in by way of the Beaverfoot River trail with horses. We had been in camp at the head of the valley for some days, and the men of the party had made a successful attempt on the long-coveted North Tower of Mt. Goodsir, on which I had longed to accompany them, even while realizing that it was beyond me.



**The Head Of Ice River. Mrs. A.H. MacCarthy, Photo.**



**The Goodsir Ridge, Wilson Pass. Mrs. A.H. MacCarthy, Photo.**

A suggestion that we should make the return journey to Field on foot, over the intervening passes, sounded very attractive as a wind-up to my first visit to the Canadian Rockies; so, on the following morning, no others being enthusiastic enough to join us, Mr. J. P. Forde, Mr. P. D. McTavish and I, set out on our air-line trip. None of us had ever been in the region which we proposed to traverse, but we knew the general direction and started with the intention of travelling until we reached some place. We did not know how long the trip would take and, therefore, took a supply of provisions and a quilt for my use at night.

After leaving camp we followed the Ice River almost to its source, and then kept along the side of the valley leading to the ridge which Mr. Whymper had named the Wilson Pass. After a hard struggle through dense underbrush, relieved by patches of wild strawberries, raspberries and blueberries, we were forced to take to the bed of the stream, which appeared to come from near the Pass. From then until we reached the summit of the Pass, at an elevation of about 8400 feet, the travelling was easy, though steep, as for a great part of the way we were able to follow goat trails, and in one instance followed the goats themselves, which kept just ahead of us until they apparently vanished into thin air on reaching the top of the ridge. The easterly side of the ridge overhangs a small glacier which we reached through a little chimney, and we then made our way down the glacier by steps cut in the ice. After a long descent over loose rock, and then through dense timber, we reached Goodsir Creek. It was now evident that we would not reach Field that night; so, after following the creek for some distance, we halted for the night in time to allow for gathering a good supply of firewood before dark. After a hearty supper, the cooking of which was almost as enjoyable as the supper itself, I wrapped myself warmly in the quilt and spent a most comfortable night beside the roaring fire kept on by the men, though towards morning I took my turn at tending the fire and helped to prepare breakfast.

We were off again at daylight, leaving the quilt to decorate a tree and mayhap gladden the eye of some belated traveller. The rising sun, tingeing with pink the four peaks of Mt. Goodsir, was a sight worth lingering to enjoy, but we had a long trip ahead of us and set out at a good pace to the confluence of the Ottertail River and Goodsir Creek. Here, in a few minutes, we caught some trout, and from there on saw fish in all the streams. A short trip across some lovely park-like stretches brought us to McArthur Creek about a mile above its junction with the Ottertail River, and then came the most strenuous part of the whole expedition. For hours we struggled through dense brush on the bank of the creek and across innumerable slides overgrown with alder, taking turns at breaking the trail, which in this case meant tearing the tangled limbs and brush apart so that we could force our way through them. Close to the Forks of McArthur Creek we took short rest and drank the last of our tea, and much refreshed, set out along the West Fork of the creek for the Duchesnay Pass. Shortly after lunch I was so unfortunate as to fall into a deep pool, out of which I was most unceremoniously pulled by my companions, but not before I was thoroughly soaked, making travelling very heavy for me for the rest of the day.

Late in the afternoon we reached a large amphitheatre lying between Mts. Owen, Oday, and Duchesnay, at the head of which was a high ridge, which we fondly hoped would prove to be the Duchesnay Pass. Imagine our disgust therefore, when, after a long uproar, pull, the latter part of which was a hard scramble over fine slippery scree, we reached the ridge at an elevation of about 8000 ft. to see below us a drop into the valley of Boulder Creek, which lay at the foot of an utterly impassible wall of rotten rock, almost 2000 ft. high.

It was now beginning to get dark, we had still to cross the Duchesnay and Dennis Passes, the exact location of which we were ignorant of, and all my clothes were as wet as possible. As

it was imperative that should leave for the East on the following day we decided to attempt to reach Field by another route before making a retreat to timber line to spend the night, which was apparently what was before us. We therefore retraced our steps a short distance, traversed the side of the long ridge connecting Mts. Duchesnay and Odaray, and after some prospecting found a passable slope down which we managed to crawl on to the Duchesnay Glacier. We crossed the glacier and climbed to the summit of the Duchesnay Pass, from which we saw one of the fine, sunsets it has ever been my good fortune to witness. We then made our way down on the west side of the Pass and traversed the steep side of a shoulder of Mt. Stephen until we reached the summit of the Dennis Pass at about 7.30. Here we caught sight of the lights in the village of Field, lying about 3000 feet below us, and only taking time to untie and coil our rope, we scrambled down the scree and rolled and slid through the burnt timber as quickly as the darkness would permit. We soon reached the creek which flows from the Mt. Stephen amphitheatre, during the crossing of which I managed to pull Mr. Forde into it, escaping myself this time, and quickly gained the trail leading to the village.

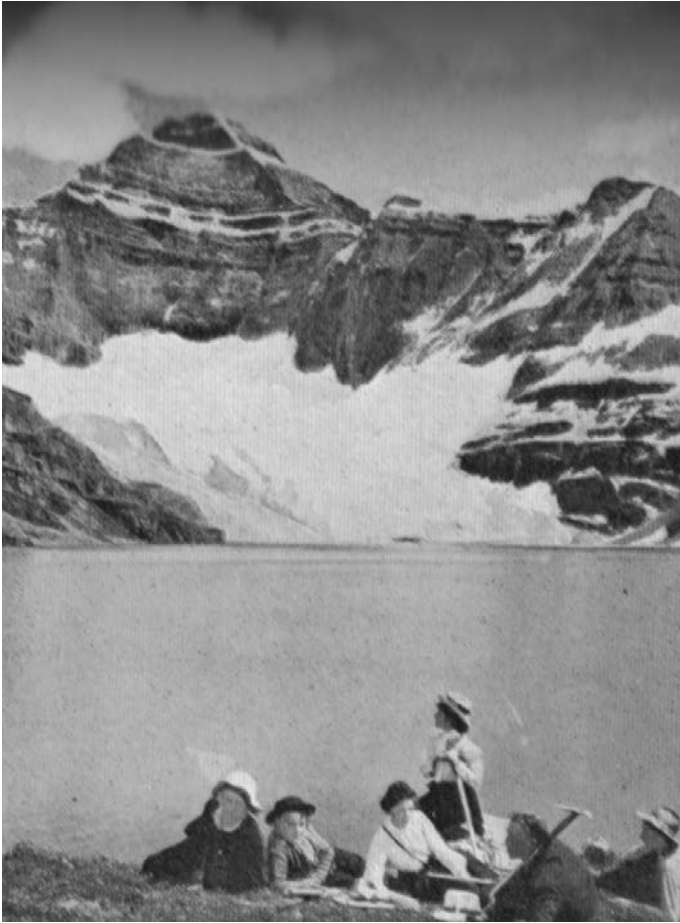
We now felt that our troubles were over, and hurried down the trail by lantern light to the hotel, which we reached at 9.30 p.m., and sat down to a much-needed and highly appreciated supper, even the remarks of the tourists in the hotel upon my costume having no effect on my appetite, which had been growing keener every minute since noon. So ended one of the most exciting and strenuous, and at the same time one of the most enjoyable experiences of our lives.

### **Second Ascent Of Mt. Biddle, First Ascent Mt. Victoria By South Route.**

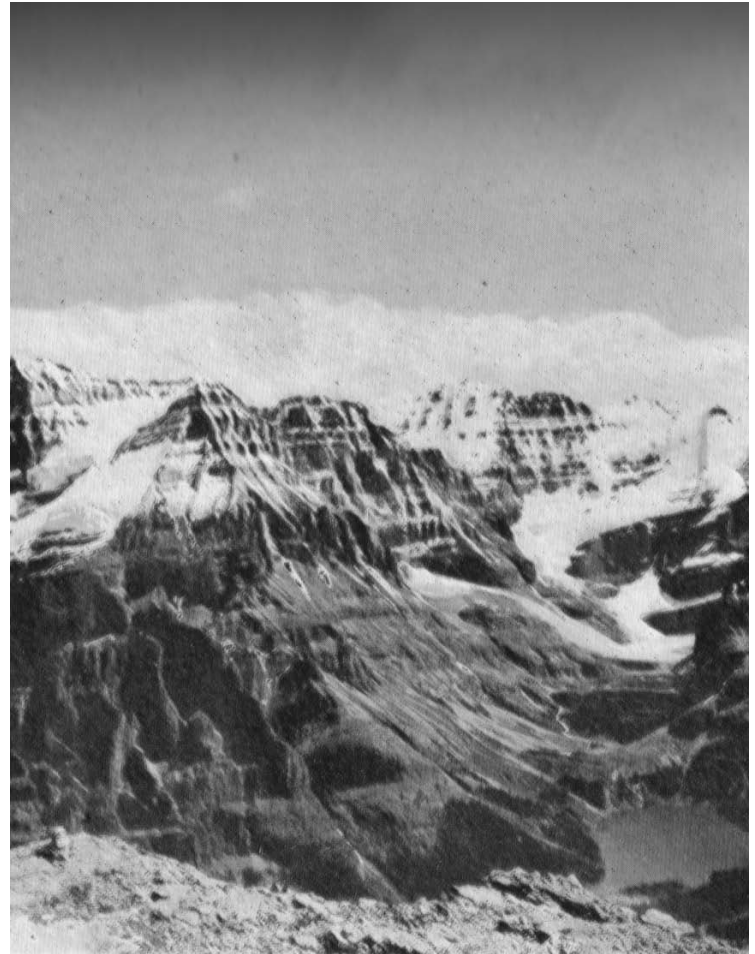
*By J. P. Forde.*

The first ascent of Mt. Biddle, 10,876 feet, was made from a camp in Prospector's Valley, near the Eagle's Eyrie, in 1903. The second party to make the ascent was camped at Lake O'Hara, with the Alpine Club of Canada, in August, 1909. The party consisted of Messrs. J. Watt, J. J. Trorey, M. Goddard and J. P. Forde, with Guide Gottfried Feuz.

The start from the camp was made at 6 o'clock and the trail followed to the west end of Lake McArthur. The south bank of the lake was taken, to avoid the necessity of crossing the Biddle Glacier. Whilst going along the lake a gradual ascent was made and when the head of it was reached about half the ascent up the southerly ridge, lying between Lake McArthur and Misko Creek, had been made. The summit of the ridge was gained by a direct ascent, partly on fairly good rock and partly up a snow couloir. The ridge was then followed towards the mountain until it was seen that it would be very difficult, if at all possible, to make the entire ascent from the south side. A descent of a few hundred feet was then made into an intervening valley, and the southeasterly ridge gained, where a light lunch was taken at 10 o'clock. After this ridge was crossed and the next valley had been traversed the easterly ridge, overlooking Prospector's Valley, was climbed, and a second lunch eaten. Here the rope was put on and the real ascent begun at 12.30. For several hundred feet the arête was followed, the climbing being very steep, the rock poor, and at places the arête assuming a knife edge overhanging the valley to the north and with an almost perpendicular descent into the valley to the south. As the main peak had to be reached from the south a traverse of the easterly face became necessary after a time, and two attempts were made to cross it before a suitable place was found. The mountain was not in good condition for climbing, on account of the steep slopes being icy, with a light covering of loose snow, which threatened to avalanche at any moment, and the greatest care was necessary on the traverse.



**Mt. Biddle. Howard Capman, Photo.**



**Victoria Via Huber Route. M.P. Bridgland, Photo.**

When the base of the main peak was reached, after scramble up a scree-covered ridge, the foot of the wall was followed until a chimney immediately above the south ridge was reached. After a fairly easy climb up his chimney a walk of a couple of hundred feet to the summit ended the ascent, at 2.30 p.m. Here the bottle left by Dr. Eggers and Professor Parker, at the time of the first ascent, was found in their cairn.

The descent was begun after a few minutes and the same route was taken to camp, except that the south ridge was avoided. A blinding snowstorm was passed through in the afternoon and as soon as Lake McArthur was reached rain was encountered, which accompanied the party into camp at 9.30 p.m., the second ascent of the mountain having taken fifteen and a half hours.

#### SOUTH ROUTE TO SUMMIT OF MT. VICTORIA.

During the Alpine Club camp of 1909 at Lake O'Hara, a party consisting of Mrs. A. H. MacCarthy, K. M. Gordon and M. Goddard, under the leadership of P. Forde, made the first ascent of Mt. Victoria, 11,355 feet, from the south side.

The party, after passing around the east end of Lake O'Hara, ascended to the saddle between Mt. Huber and the Wiwaxy Peaks. From there the usual route up Mt. Huber was followed to the north side of the mountain into the valley between Mts. Huber and Victoria. The course then led to the left, around the head of the valley until the end of the bergschrund on the south side of Mt. Victoria was reached. Rounding the end of the schrund a short traverse led to the foot of the rock wall facing Mt. Huber. From where the snow on Mt. Huber was first reached to this point the climbing was very good, though the ice in the steps previously made on Mt. Huber and the hard snow on the south side of Mt. Victoria necessitated the cutting of a large amount of steps. The ascent of the wall was made on the rock beside a snow chimney about 400 feet high, to the long arête of Mt. Victoria, and the usual route along the arête followed the summit, which was reached at noon, after a six hours' climb. The day was beautifully clear and the views be had, particularly of the Lake Louise Valley, were magnificent. A leisurely descent by the same route except that on return the westerly end of Lake O'Hara was taken, brought the party to camp at 5 o'clock.

This route provides a much shorter and easier climb of the mountain than the one from Lake Louise to the head of Abbot's Pass, and the long and tedious walk, along the ridge from Abbot's Pass to the summit avoided. On the portion of the ridge traversed on the above climb the snow was dangerously corniced in number of places, and great care was necessary in avoiding these cornices. Some step cutting was required along the ridge, though the generously large footsteps of a party who had made the ascent from Lake Louise a few days previously were of immense assistance to the Alpine Club party. Where no cornice existed the arête was followed, the party walking for some time with one foot, on the Atlantic and the other foot on the Pacific water-sheds.

Had it not been that all the members of this party had been across Abbot's Pass on the previous day they would have returned by that route, and for parties who have never been over the Pass this would form an interesting variation of the climb.

#### **A Short Trip In The Selkirks.**

*By R.R. Copeland*

Most of the high peaks visible from Revelstoke had in previous years been ascended jointly by Harry. Siegfried and the writer, but there remained one, that towered over all the rest, which had

not yet been scaled, Albert Peak, 9998 ft.

Taking the train on August 30th, 1909, to Twin Butte, we walked, east along the track, and had lunch at Twin Creek. A fair start was made at 1 p.m., walking along the track for another half mile to a point where a shoulder from Albert Peak comes close to the track. Just to the left of where we ascended there was an outcrop of rock.

The going was found very good, as going goes in this part of the country, but the day was exceptionally warm, and there was no standing timber to afford comforting shelter from the hot rays of the sun. We had realized before starting that there was little chance of any water before reaching the top of this shoulder, so a steady gait was kept up and the plateau reached after a climb of over 4000 feet. As by this time it was getting dusk, it was decided to camp, although there was little chance for water. Dropping our packs I left Harry to prepare camp, making towards a small gully, in the hopes of finding a little of the precious liquid.

This proved to us to be almost the most interesting part of our trip, for I had not proceeded far through the tangle of fallen and burnt trees, before I saw a bear running into a small clump of alders. Not being equipped for a bear hunt, having only my light ice-axe, I made a detour round the clump, intent on investigating the gully for water. But the bear, a huge, lanky, old silver-tip, was evidently of a suspicious nature, for he left his shelter and walked slowly in the direction I had left my companion. Calling out that he might expect a visitor shortly, I stumbled on through the gathering dusk, when once more our visitor changed his mind and decided to become more closely acquainted with me. Climbing on top of a large fallen log, I brandished my ice-axe using the full power of my vocabulary and lungs in the vain effort to inspire Bruin with fear. Hearing my eloquent language, Harry was by this time hurrying towards me, although out of sight behind a low rise of ground. Even though our visitor did not appear to have hostile intentions towards me, I rather resented his familiarity, and when within half a dozen paces, I made a flying leap towards him. These sudden tactics on my part, changed his mind, and he started on the run as hard as he could in the direction of Harry, while I followed in hot pursuit to aid the latter, if necessary. Mr. Bruin quickly disappeared over the top of the rise, and a wild yell of defiance from my companion notified me that he had introduced himself to our visitor. A moment later the latter once more appeared on the top of the rise and again seeing me, ran off at a tangent into some adjoining big timber, leaving me undisturbed to rejoin my peaceful quest for water; which, however, proved fruitless. By the time I returned to camp it was quite dark, and I found that the bear had once more shown himself, but only for a moment, distrusting my companion, who, by the way, can give a yell like the proverbial Comanche,

Putting up our small shelter tent we were soon eating a well-earned repast, which was, however, rather of a dry nature. We then rolled in and were soon asleep. I would here like to point out that it is comparatively easy to do without water for a considerable period, if you make up your mind from the start that it is very probable you will have to do without it. Experience has taught both of us that to allow the mind to dwell upon the cravings of thirst and continually to be expecting to relieve it aggravates the symptoms a hundred-fold. In time one certainly gets genuinely weak—no doubt to a great extent owing to the accompanying difficulty of partaking of a sufficient quantity of solid food—but with a calm mind the actual craving need be little more than a slightly unpleasant experience for the time being.

At 4.30 next morning a good start was made after partaking of a light breakfast. Ahead and a little to the left of us we could see a long green slide covered with grass and flowers, and up this we ascended till once more we reached the edge of the "hogsback". Down on the other side we

could see a small stream flowing, but as this seemed at the time out of our general route, we kept on up the "hogsback" till we reached Wheeler's survey station—North Twin, 8033 feet—at 10 a.m., where we found snow. A fire was soon made with a little dry heath and the help of some dry wood which Harry fetched from a distance below; and by 10.30 we were enjoying our first drink since leaving the railway, in the shape of some steaming hot soup. After a good rest it was decided that our best route lay across the basin where we had seen the stream, and, accordingly, we clambered down once more, finding an old camping ground, used I believe by M. P. Bridgland, while on a survey. Here a comfortable camp was made, an early supper enjoyed and then a quiet evening walk taken to reconnoitre for the morrow's climb.

The next morning broke clear and beautiful. A hearty breakfast was enjoyed, some lunch packed up, and a start made from camp at 5.30. Crossing some Meadows, aglow with flowers, we reached the foot of the beautiful little glacier lying between Albert Peak and North Albert Peak. The foot of it was perched above us on the edge of what might be termed one of the upper steps of a huge staircase. We kept to the next lower step, which was in one place littered with the remains of séracs, fallen from the glacier above. Below us, down the valley constituting the main source of East Twin Creek, could be seen the lower worn steps of this giant winding staircase, vacated by the glacier in past ages.

Here we halted for a few minutes to decide on the best means of reaching the main arête extending from far down the valley, right up to the summit. To go down in the valley and climb from the base of the arête looked by far the most simple route, but this would entail a very long, tedious climb, so it was decided to climb right up the face of the arête, immediately on the far side of the foot of the glacier. Between us and the cliff lay a long lateral moraine, up which we trudged, and then up the rocks. These were found to be in very rotten condition in most places. The cliff was composed, more or less, of alternate layers of white marble and dark coloured, rotten limestone; and observation soon showed us that, where possible, it was advisable to keep to the ledges where the marble predominated. The height from the moraine to the edge of the arête above was possibly only 800 feet, yet this portion occupied us for several hours, and from a mountaineering point of view was quite interesting. After finally overcoming this portion, we found the edge of the arête quite firm and a long, exhilarating scramble of about 2000 feet brought us at 1.30 finally to the summit. This consists seemingly of a horizontal ridge about a hundred feet in length lying at right angles to the arête up which we had climbed. After lunch a small stone-man was built against a large boulder, and possession taken of the peak in the name of the Alpine Club of Canada and of the Revelstoke Mountaineering Club.

The air was rather hazy on account of bush fires; still, we could easily distinguish our old friend and neighbor, Mt. Begbie, towards the west; while in the other direction, we could make out Sir Donald and the group of mountains in its vicinity. Far below us, between our peak and North Albert Peak lay the beautiful little glacier before mentioned, which was very badly broken up at its lower extremity, evidently where it precipitated itself over the huge "steps," forming enormous séracs and an incredibly wide crevasse reaching clear across the glacier. Near the base of the arête nestled a beautiful emerald-green alpine lake, while beyond was the range lying between the two Twin Creeks, the whole forming a glorious picture. The climb down, and the ensuing tramp across the long meadows in the gorgeous lingering sunset brought us to camp with ravenous appetites. After a refreshing night's rest, an early start was made for the railway, which was reached in time to catch No. 5 for Revelstoke, well pleased with our annual mountain climb.



## SCIENTIFIC SECTION.

### **Geology And Glacial Features Of Mt. Robson.**

*By A. P. Coleman.*

Though Mt. Robson has been seen and admired by travellers ever since 1865, when Milton and Cheadle described its splendor, it had apparently never been actually visited by white men before 1907, when a party consisting of Mr. L. Q. Coleman, Mr. George Kinney and the writer reached its southern face. In the following summer the same party had an opportunity to study it from the opposite side, and it is intended here to give a general account of its geology and glacial features as then worked out.

The region along the Yellowhead Pass was briefly described and mapped by Mr. J. McEvoy in 1900, and his outline of the geology will be followed here. In his map a band of the Castle mountain series (Upper Cambrian) is represented as covering the area of Mt Robson, and he describes this series as made up principally of quartzite and limestone. My own observations agree with this; and as no undoubted fossils were found by us, we have no reason to change his classification.

On the south side of the mountain along the small eastern branch of Grand Forks River grayish and purplish quartzite is found up to about 1,000 feet from the base. Above this along the canyon we found gray limestone, sometimes containing chert, and the same rock occurs north of Lake Kinney in the valley of the main Grand Forks River, and as far up as Berg Lake. Since the boulders brought down from Mt Robson by glaciers seem all to be of similar bluish gray limestone weathering yellow or brown, it appears that the mountain as a whole is built of nearly flat lying limestone resting on quartzite, the latter rock showing only on the south side where the Grand Forks and its tributaries have cut most deeply.

Though the rocks as a whole lie nearly horizontal, they have an upward bend to the south and also to the north. This is especially marked where the quartzite comes up from beneath the limestone on the southern buttresses of the mountain, the strata curving rapidly upwards with inclinations of from 30 degrees to 70 degrees to the north. On mountains farther south the dip becomes vertical or even somewhat overturned.

On the northwest side of Mt. Robson, at the falls near Berg Lake, on the other hand, the limestone dips southeast with an inclination of about 10 degrees; and near the main glacier thinly bedded limestone dips south at about 25 degrees. In the range of mountains to the northwest of the Berg Lake Valley the dip is about the same. To the east of the main glacier the Ptarmigan and Lynx Mountains show a gentle dip westwards.

From the structural point of view Mt. Robson represents the bottom of a syncline or basin with gentle inclinations from all sides. The more expanded and shattered forms around it, once probably parts of anticlines, have suffered far more from the destructive forces than the slightly compressed and, therefore, strengthened parts of the syncline.

In both rocks and structural features Mt. Robson is of a very simple type. It is surrounded on three sides, northwest, southwest, and south, by deep valleys, from which it rises in splendid unscalable cliffs. On these sides erosion is going on rapidly by the action of frost and weather, while the rivers are cutting back their canyons to the northwest and northeast.

The Grand Forks River may be said to rise in the main glacier of Mt. Robson, flowing over



a flat cone of debris derived from the glacier and spreading into a tangled skein of distributaries before entering Berg Lake. From this it flows southwest over cliffs with a succession of water-falls having a total height of 1,500 feet. The valley then turns for a mile to the south and is encumbered with immense blocks of limestone which have rolled from the cliffs of Mt. Robson. Another drop of about 500 feet brings the river to the delta flat which it has formed on entering Lake Kinney, which appears to have been dammed by an ancient moraine. A little below the outlet the much smaller east branch of the river comes in from a wild and desolate canyon.

The west and south sides of Mt. Robson are almost free from glaciers or important snow fields because of their excessive steepness, which is evident when one remembers that within a mile or two there is a rise from Lake Kinney of nearly or quite 10,000 feet. On the opposite side, toward the northeast, the slope is less rapid, and snowfields and hanging glaciers are formed, which discharge by ice avalanches upon the main glacier beneath. This makes a broad sheet of ice with moderate slopes between Mt. Robson and the Lynx Mountains to the northeast; and then bends off as a well defined glacier toward the northwest, partly enclosing the Rear Guard Mountain. It ends at about 5,700 feet on the pass between Smoky and Grand Forks Rivers. Its front is parted by a small hill of solid rock, and each side feeds a torrent, the smaller one to the west, flowing into Berg Lake, and the larger toward the northeast, splitting into two streams, one entering Berg Lake and the other Lake Adolphus. The latter body of water forms the head of smoky River, a tributary of Peace River; so that the main glacier sends its drainage partly into Fraser River and the Pacific; and partly into Peace River which join; the Mackenzie and reaches the Arctic Ocean. This is probably a unique instance of a glacier and its effluent river dividing their waters between two oceans 1,300 miles apart.

The two small lakes at the ends of the Smoky-Grand Forks Pass appear to be dammed by old moraines, formed probably toward the close of the last Ice Age, when the glaciers of Mt. Robson, probably joined by ice from the lower range to the northwest, still filled the valley. Two other glaciers reach the level of this valley. The Blue Glacier comes steeply down from the Helmet to Berg Lake, where it sets free small icebergs and another glacier, not yet named, comes down from the same quarter just to the southwest of Berg Lake, and shows a broad stratified front of ice a little above the valley. All of these glaciers seem now to be in retreat though not at a very rapid rate, and old moraines occur at several stages beyond the present ice front.

The hill of rock dividing the end of the main glacier protects a grove of ancient spruce and balsam, some of the trees being more than a foot in diameter. Their growth is very slow at the elevation (about 5,700 ft.), and one tree seven inches thick cut several feet above the ground, showed 240 annual rings. It must have been 250 years old, and its larger neighbors are probably 400 Years old. Ice cannot have invaded this sheltered spot for at least that length of time.

In order to determine the retreat or advance of the ice in the future some measurements were made from the present ice front on the 1st September 1908. The directions given below are magnetic, the variation being 28 degrees to the east.

Line run west from the centre of the present ice front south of the grove.

	yards
Muddy morainic material recently freed from ice	12
Last moraine (without plant growth) begins ....	68
Last moraine (without plant growth) ends	80
Crest of next moraine (a few small willow bushes)	127
End of next moraine	170
Crest third moraine (willow with 13 annual rings)	187
Crest of fourth moraine (spruce 250 years old)	296
End of fourth moraine	311

From the end of the line, at 311 yards, the largest boulder on the inner edge of the oldest moraine is distant 61 yards in the direction N 20° E (magnetic). This boulder is of brownish cherty limestone and rises eight feet above the general level of this part of the moraine. It should be easily recognized by later parties.

Beyond the oldest moraine there is a gravel flat to the west more or less covered with spruces, some having a diameter of one foot, and a probable age of 400 years. More than 400 years ago, after a long period of retreat from the outlets of the two lakes in the valley, a distance of a mile and a half to the northeast and of two miles to the southwest, respectively, the ice halted for some time at the oldest (4th) moraine. Within quite recent years it has again retreated setting free the three later moraines.

Another line was run from the mouth of the largest glacial stream, on the north side of the end of the glacier. The river pours from an ice cave as a water-fall tumbling for 37 yards over a steep slope of limestone. At 229 yards from the mouth of the cave on the left side of the river in the direction 290° (or 20° north of west) there is a prominent block of limestone about 14 feet square and 5 feet thick resting upon an old moraine.

The main glacier with its tributary hanging glacier covers most of the northeast side of Mt. Robson, presenting a very striking contrast with the bare cliffs the opposite side, due mainly to the gentler slope north eastwards, permitting snowfields to accumulate. The large size of the glacier, when compared with its relatively small gathering ground, is due to the very heavy precipitation on Mt. Robson, which rises suddenly for 10,000 feet near the southwestern edge of the Rockies facing a region with much lower mountains. The western air currents coming from the Pacific are forced upward for several thousand feet. This causes the rapid precipitation of the moisture, giving rise to almost daily falls of snow on the summit, especially on the side towards the main glacier. In summer the snowfall at higher levels is represented by showers of rain in the valley, and there is a very rank growth in the Grand Forks Valley south of the mountain. To the north the valley is nearly 3,000 feet higher and has a much cooler climate, so that vegetation is much less luxuriant.



**Glacial Stream From N. Side Of Main Glacier.**

Mt. Robson Divides Its Waters Between The Pacific And Atlantic Oceans. A.P. Coleman, Photo.



**Shows Forefoot Of Robson Glacier Sending Its Waters Northward To Lake Adolphus And Southward To Berg Lake.**

The Great Divide Lies Between. Rev. G.B. Kinney, Photo.



**Hanging Glaciers With Blocks Breaking Off N.E. Side Of Mt. Robson. A.P. Coleman, Photo.**



**Ice Avalanches On Upper Edge Of Main Glacier N.E. Side Of Mt. Robson. A.P. Coleman, Photo.**

## **An Adventure With An Eruption Of Mont Pelée.**

Being the Substance of a Talk Over the Camp Fire at Lake O'Hara, August, 1909.

*By Tempest Anderson.*

It will be in the remembrance of every one present that in May, 1902, severe volcanic eruptions took place in St. Vincent and Martinique, both of which islands form part of the chain of the lesser Antilles in the West Indies. The Royal Society appointed a committee to investigate the eruptions, by whom I had the honour of being nominated along with Dr. J. S. Flett, Petrologist to the Geological Survey, to proceed to the scene of the eruptions and report to them.<sup>4</sup>

After visiting St. Vincent, which was the main object of our investigations, we proceeded to Martinique. On arrival at Fort de France we found that the devastated area to the north of the island was still almost entirely unoccupied. The greater part of the inhabitants of St. Pierre and the neighborhood had been killed by the eruption, and the few survivors were only returning by slow degrees. It was, therefore, impracticable to make our base of operations on land near the scene of the eruption. Fort de France was too far away to be available, except at a ruinous expenditure of time and money in going to and fro. It was, therefore, determined to engage a sloop, provision it, and live on board, moving by day to any point where landing was desirable, and returning at night to some safe anchorage within reasonable distance. We devoted our first day to an examination of the ruins of St. Pierre, and in the evening we moved about two miles south along the coast and spent the night at anchor off Carbet, just at the limit of the area of devastation, at a spot commanding a full view of the mountain. Next morning we returned to St. Pierre, and moored the sloop to one of the buoys at the north end of the town. Dr. Flett landed and further examined the ruins, while I remained on board and took photographs of the magnificent cauliflower masses of dust and steam which were frequently ejected from the great triangular fissure which opens from the crater. Later in the afternoon we sailed further north along the coast, still taking photographs of Mont Pelée, which was clearer that day than we ever saw it before or after, and showed to great perfection the deeply eroded valleys with which its slopes are scored. They much resemble those in corresponding position on the slopes of the Soufrière in St. Vincent and appear to be formed in the same way in strata of similar composition, viz., fragmentary ejecta from the volcano which had consolidated to form soft tuffs, and had subsequently been eroded into their present forms by ordinary atmospheric agencies.

We returned and sailed slowly south past the base of the volcano, witnessing and photographing many small explosions and their cauliflower clouds of dust, and thus twice crossing the track of the eruption which took place later. We anchored as before off Carbet, and watched the sun set behind the clouds of ashes ejected by the volcano. When approaching the horizon and thus viewed, the sun appeared a sickly yellowish green, and so pale that it could be looked at with the naked eye without discomfort. Later on, after sunset, the gorgeous after-glow appeared, and the thin clouds in the western sky were lit up with most brilliant red, beginning perhaps 30° or 40° from the horizon, while the part below still remained yellowish-green. Later still, as the sun sank further below the horizon, the yellowish-green area sank also, and only the reds remained, till they too sank out of sight, and gave place to the light of a brilliant three-day's-old moon. We had sat on deck absorbed in watching this superb spectacle, and were just going to begin supper, when one of

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4 Anderson, Tempest, and Flett, John S.-Report on the Eruptions of the Soufrière in St. Vincent, in 1902, and on a visit to Montague Pelée in Martinique-Part I. Phil. Trans. A Vol. 200, 1903, pp. 353-553. Part II. Phil. Trans. A Vol. 208,-1908, pp. 275.-332. See also Geographical Journal. March, 1903.

us, looking towards Pelée, said, "That cloud is different to the others. It's quite black, and I'm sure it's coming this way." A few moments' examination confirmed this, and, the captain's attention being called to it, we all, passengers and crew, heaved up the anchor as quickly as possible, and set all sail. The black cloud had meanwhile rolled down the side of the mountain on to the sea, and came quickly towards us. We had not moved a moment too soon. The upper slopes of the mountain cleared somewhat and some big red-hot stones were thrown out; then I saw the triangular crack become red, and out of it poured a surging mass of incandescent material, reminding me of nothing so much as a big snow-avalanche in the Alps, but at a vastly different temperature. It was perfectly well defined, did not at all tend to rise like the previous cauliflowers, but flowed rapidly down the valley in the side of the mountain which had clearly been the track of previous eruptions, till in certainly less than two minutes it reached the sea, and was there lost to view behind the remains of the first black cloud, with which it appeared to coalesce. There on the slopes of the mountain were doubtlessly deposited the greater part of the incandescent ash, while the steam and gases, with a certain portion of still entangled stones and ash, came forward in our direction as a black cloud, but with much greater rapidity than before. The sailors were now alarmed, nay, panic-stricken, got out the oars and pulled for their lives. Meanwhile the cloud came nearer and nearer; it was well defined, black, and opaque, formed of surging masses of the cauliflower type, each lobe rolling forward, but not all with one uniform rotation; bright scintillations appeared, some in the cloud itself, and some like little flashes of light vertically between the cloud and the sea on which it rested. These were clearly the phenomena described by the survivors in the St. Vincent eruption as "fire on the sea," occurring in the black cloud which overwhelmed the windward side of that island. We examined them carefully, and are quite clear that they were electric discharges. The scintillations in the body of the cloud became less numerous and more defined, and gradually took the form of vivid flashes of forked lightning darting from one part of the cloud to another. The cloud rapidly gained on us. When it had got within perhaps half a mile or a mile—for it is difficult to estimate distances at sea and in a bad light—we could see small material falling out of it in sheets and festoons into the sea, while the onward motion seemed to be chiefly confined to the upper part, which then came over our heads and spread out in advance and around us, but left a layer of clear air in our immediate neighborhood. It was ablaze all the time with electric discharges.

As soon as it got overhead stones began to fall on deck, some as big as a walnut, and we were relieved to find that they had parted with their heat and were quite cold. Then came small ashes and some little rain. Eventually we gained the harbor of Fort de France unhurt, and anchored for the night. We slept on deck, and in the morning I heard a boat. I put my head over the bulwark. A voice exclaimed, "Anderson! is that you?"

I said, "Yes," and it continued, "I guess we have come out to seek your bodies." It was Jagger, now of Boston "Tech," and who is now organizing the new observatory on Kilawaii. We went on shore and told our adventures to a number of scientific men and pressmen whom we had left three days previously. One of the latter kept aloof and said nothing. We found afterwards he had immediately gone to the telegraph office and wired an account to his paper in New York which appeared with many embellishments as having happened to "Our Own Representative."

The proposed ascent of Mont Pelée next day, for which men had already been engaged, was abandoned. The cloud was also noticed at Fort de France. It was described as like those in the previous eruptions, but two unbiassed observers, who had seen it and that of May, declared this was the larger of the two.

Returning now to the mechanism of the hot blast and the source of the power which propelled





**St. Pierre, July 8th, 1902. Tempest Anderson, Photo.**



**The Bank, St. Pierre, July 8th, 1902. Tempest Anderson, Photo.**

it, both my colleague and I are convinced of the inadequacy of previous explanations, such as electricity, vortices, or explosions in passages pointing laterally and downwards, or explosions confined and directed down by the weight of the air above. Such passages into the mountain, which, to be effective, would require to be caverns closed above, and not mere open ravines, do not exist in the case of the Soufrière, and we are not aware that they have been observed in Mont Pelée; and as to the weight of the air, this did not prevent the explosions in the pipe of the Soufrière from projecting sand and ashes right through the whole thickness of the trade-winds till they were caught by the anti-trade current above and carried to Barbados, 100 miles to windward. Moreover, the black cloud, as we saw it emerge from Mont Pelée, seemed to balance itself at the top of the mountain, start slowly to descend, and gather speed in its course, and the second incandescent discharge followed the same rule.

We believe that the motive power for the descent was gravity, as in the case of an ordinary avalanche.

The accepted mechanism of a volcanic eruption is that a molten magma rises in the volcanic chimney. It consists of fusible silicates and other more or less refractory minerals, sometimes already partly crystallized, and the whole highly charged with water and gases, which are kept absorbed in the liquid, partly by the immense pressure to which they are subjected. When the mass rises nearer the surface and the pressure is diminished, the water and gases expand into vapour and blow a certain portion of the more or less solidified materials to powder, or, short of this, form pumice stone, which is really solidified froth, and they are violently discharged from the crater. When the greater part of the steam and gases has been discharged, the lava, still rising, finds a vent either over the lip of the crater, or often through a lateral fissure, and flows quietly down the side of the mountain.

It is quite recognized that these phenomena may occur in various relative proportions. The explosive phase may predominate, in which case only sand, pumice, and fragmentary material are discharged, with perhaps ejected blocks torn from the sides of the chimney, and in this case an ordinary ash or cinder cone is built up. On the other hand, the magma may contain little vapour, and the lava may be discharged quietly and spread out widely as a sheet over the surrounding country. The Snake river basalts in Western North America are of this class, and they cover an area larger than England and France combined. It is supposed that the lava welled out quietly through fissures. Such fissures I have seen in Iceland, studded with a row of quite small craters only. We believe that in these Peléan eruptions an inter-immediate phase occurs. The lava which rises in the chimney is charged with steam and gases, which explode as usual, but some of the explosions happen to have only just sufficient force to blow the mass to atoms and lift the greater part of it over the lip of the crater without distributing the whole widely in the air. The mixture of solid particles and incandescent gas behaves like a heavy liquid, and before these particles have time to subside the whole rolls down the side of the mountain under the influence of gravity, and consequently gathers speed and momentum as it goes. The heavy solid particles are gradually deposited, and the remaining steam and gases, thus relieved of their burden, are free to ascend, as was the case with the black cloud which rose over our heads on July 9.

We had concluded, from our examination of the Soufrière, that something of this sort must occur, but the explanation was obvious when we saw the eruption of Mont Pelée.



**Mt. Pelee In Eruption, July 9th, 1902. Tempest Anderson, Photo.**



**Mt. Pelee In Eruption, July 9th, 1902. Tempest Anderson, Photo.**

## **Motion Of The Yoho Glacier.**

*By Arthur O. Wheeler.*

In July and August of 1909 it was the good fortune of the Alpine Club of Canada to entertain as its guests a number of members of the Alpine Club, London, and of the Scottish Mountaineering Club. They came out in advance of the British Association Meeting, held at Winnipeg during the latter part of August, in order to be present at the Canadian Club's fourth annual camp at Lake O'Hara.

On August 9th, at the close of the camp, those of the party whose engagements permitted were taken on a special six-day expedition around the Yoho Valley. The route lay high up along the sides of the mountains enclosing it, by way of Sherbrooke Lake, Niles Pass and the Daly Icefield to the Yoho Glacier; thence by the customary pony trails to the Upper Yoho Valley and home by the Yoho Pass and Emerald Lake.

The third day out camp was pitched beside the pony trail, about a quarter of a mile west of the Yoho Glacier. The three preceding days had been very strenuous ones, so on the fourth, a short move was made to the little lake in Waterfall Valley, not far below the Twin Falls. Advantage was taken of this short move to make, the annual observations for motion of the Yoho Glacier.

On August 12th, a glorious summer day, a party equipped with the necessary instruments cut its way up the foot of the icefall and without difficulty found all of the six plates set in line across the forefoot on the 1st of July of the previous year.

### **To Obtain Rates of Flow.**

The base line A - B<sup>5</sup> on the east side of the valley was visited and angular readings taken from each end on the plates in the position in which they had been found. The following table gives the results for the several years since observations were inaugurated by the Club.

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5 See map of ice forefoot in 1908 issue of the Canadian Alpine Journal (Vol. 1, No. 2, opp. page 274.)



**From Viewpoint 79.3 Feet South Of Rock No. 1 1909. A.O. Wheeler, Photo.**



**From Rock No. 2 1909. A.O. Wheeler, Photo.**

**Table Showing the Motion of Plates set on the Yoho Glacier.**

Plate	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Movement between July 15th, 1906, and July 17th, 1907						
Total Motion	29 ft.	74 ft.	89 ft.	124 ft.	134 ft.	124 ft.
Yearly Motion	29 ft.	74 ft.	89 ft.	124 ft.	134 ft.	124 ft.
Daily Motion	0.95 in.	2.43 in.	2.93 in.	4.08 in.	4.41 in.	4.08 in.
Movement between July 17th, 1907, and July 1st, 1908						
Total Motion	20 ft.	43 ft.	112 ft.	115 ft.	127 ft.	127 ft.
Yearly Motion	21 ft.	45 ft.	117 ft.	120 ft.	133 ft.	133 ft.
Daily Motion	0.69 in.	1.48 in.	3.85 in.	3.95 in.	4.37 in.	4.37 in.
Movement between July 1st, 1908, and August 12th, 1909.						
Total Motion	25 ft.	67 ft.	100 ft.	147 ft.	161 ft.	157 ft.
Yearly Motion	22 ft.	60 ft.	90 ft.	131 ft.	144 ft.	141 ft.
Daily Motion	0.72 in.	1.97 in.	2.96 in.	4.31 in.	4.74 in.	4.62 in.

1906-1907, Average daily motion-3.15 inches .

1907-1908, Average daily motion-3.12 inches.

1908-1909, Average daily motion-3.23 inches.

Comparing the three sets of observations for surface movement of the ice, each for a period of 365 days, we have a greater motion in 1909 for every plate except No. 3. In 1907 this plate was found in a shallow crevasse, but in 1909 the motion almost exactly agrees with that then observed; while in 1908 it was considerably greater. This portion of the ice has always been found much broken and crevassed, and on that account the flow may be erratic.

For plates Nos. 1 and 2 the movement observed in 1909 is greater than that in 1908 and less than that in 1907.

For plates 4, 5 and 6 the observed movement in 1909 exceeds that of the previous observations.

Speaking for the whole series there seems to have been a general increase of surface motion over previous years. It is worthy of note as there can be little doubt that the entire volume of the ice has very considerably decreased. This may be readily seen by comparing the illustrations here given with those obtained from the same view-points in the years 1907 and 1908. (See Canadian Alpine Journal Vol. I, Nos. 1 and 2, also Vol. II., No. 1.)

#### **For Advance or Retreat.**

The usual measurements were made from Rocks Nos. 1 and 2, and from Sherzer Rock to the nearest ice. The results are here tabulated, together with those for preceding years.

**Table Showing Measurements to Nearest Ice.**

Year	From Rock No. 1 Left side of Stream	From Rock No. 2 Left side of Stream	From Sherzer Rock Right side of Stream
1904	————	————	79.4 ft.
1906	27.5 ft.	36.6 ft.	79.6 ft.
1907	35.8 ft.	43.8 ft.	123.0 ft.
1908	72.3 ft.	104.4 ft.	138.5 ft.
1909	104.2 ft.	139.0 ft.	189.3 ft.
Distance from Rock No. 1 to Rock No. 2=53 ft.			

1906-1907, Average retreat of ice forefoot-19.6 ft.

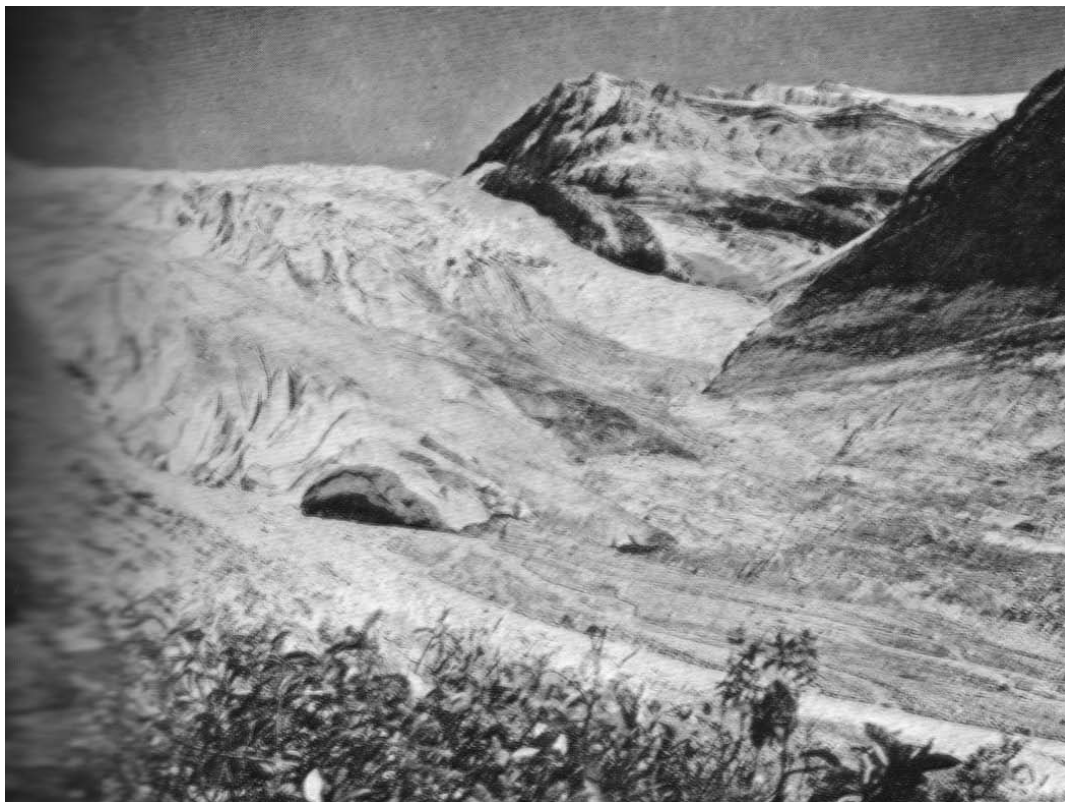
1907-1908, Average retreat of ice forefoot-37.5 ft.

1908-1909, Average retreat of ice forefoot-39.0 ft.

Taking a mean of the measurements on both sides of the stream issuing from the ice forefoot the recession for the past two years has been about the same, although the relative measurements vary considerably owing to irregular changes in the formation, due to the breaking off of great blocks at the extreme points.



**From Viewpoint 6 1/2 Feet Nearer Ice Than Vaux Marks Of 1902. 1909. A.O. Wheeler, Photo.**



**From Station D**

For Position See Map Of Ice Forefoot, Volume I., No. 2, Page 274. A.O. Wheeler, Photo.



### **Annual Change In Formation of Ice Forefoot.**

A study of the photographs taken from view-point 79.3 ft. south of Rock No. 1, from Rock No. 2 and from view-point 6 1/2 ft. nearer the ice than the Vaux marks of 1902, show clearly the change in forefoot and the general shrinkage of the ice.

The greatest change in form seems to have been on the right side of the stream, where a large chunk has broken off and melted away. This is clearly seen by comparison of illustration No. 3.

The most remarkable feature of the shrinkage is seen in Illustration No. 2. By comparing this with the corresponding views presented in previous issues of the journal the greater height of cliffs created by the decrease of thickness in the ice is very marked; also the uncovering of the rock on the right side of the stream. The latter is still more apparent in Illustration No. 1.

The best idea of the general shrinkage can be obtained by comparing Illustration No. 4 with that shown opposite page 153 in the first issue of the journal, Vol. I, No. 1.

A special feature of the forefoot last summer was seen in the magnificent ice-arch, spanning the full bed of the stream from side to side. It is well shown in Illustration No. 4.

The observations will be continued during the summer of 1910, and it is intended to establish a station on the side of the Rocky spur of Mt. Gordon, seen in Illustration No. 4, for the purpose of gathering information with regard to the position and changes of the névé line.

### **Observations On Glaciers In 1909.**

*By George Vaux, Jr.*

The glacial observations and measurements which we have conducted for so many years, were carried on jointly by my brother, the late William S. Vaux, Jr., and myself. It was his enthusiasm and love of nature which caused us first to enter upon them; he it was who had given most of the thought and study to the subject, who had done the larger part of the instrumental work, and all of the final reductions of the observations, in order to secure results.

Hence it is that the writer finds himself at considerable disadvantage in continuing the observations and the reports upon them.

In the summer of 1908 none of us visited the region so that we have nothing original to report for that season.

#### *Illecillewaet Glacier.*

The winters of 1907-1908 and 1908-1909 do not appear to have differed materially from the average. The aggregate snow-fall at Glacier Station, according to the records kept there, was 37 feet 11 inches during the former winter, and 35 feet 1 1/2 inches during the latter. It was not surprising, therefore, to note that the conditions of shrinking and recession heretofore noted on the Illecillewaet Glacier have not materially changed. The snout of the glacier has altered visibly, the ice arch being almost entirely absent in the summer of 1909, and the extreme tongue possibly somewhat closer to the left bank.

According to our measurements on August 12th, 1907, the distance from our marked rock "C" to the ice was 315 feet 10 inches. This distance had increased to 366 feet upon August 21st, 1909, being almost exactly 50 feet for the elapsed two years.

Upon September 26th, 1908, Mr. A. O. Wheeler, A.C.C., found this interval to be 355 feet, which indicates that the recession was about the same each year, when we take into consideration

the lateness in the season of Mr. Wheeler's measurement.

A number of the iron plates set out in former years to measure the rate of flow were found deposited on the bed moraine near the edges of the ice. Some of them had undoubtedly been disturbed by tourists. But one plate was found on the ice, No. 4 of the 1906 series.

In conjunction with Mr. A. O. Wheeler, A.C.C., upon September 11th, 1909, a new set of plates, eight in all, was laid out. Their character was somewhat different from the ones heretofore employed. They were of 1/8 inch iron, 8 inches square and with opposite corners turned over so as to make triangular points to catch in the ice. They were not painted and were roughly marked with a cold chisel 'VAVX IX' meaning "Vaux, 1909," and in addition the number of the particular plates. I was indebted for them to Mr. Thomas Kilpatrick, A.C.C., of Revelstoke, who kindly had them made in the C.P.R. shops there.

The surface of the Glacier opposite the base line was exceedingly rough at some points. The ice was worked up into great gullies and furrows, which made it impossible to see to the far side of the glacier from the base. Accordingly these plates were laid out on a new line, somewhat further up the tongue, where the physical conditions were more favourable. The western end of this line was a conical fir bush growing high up on the left moraine and which any one on the spot can easily identify. Mr. Wheeler's generous co-operation alone made this work possible, and his measurements, as found elsewhere in the journal, should be consulted.

#### *Asulkan Glacier.*

This glacier was visited August 20th, 1909. It showed very great activity. Whilst recession and shrinkage appeared evident, yet there were marked indications of a decided advance since August 15th, 1907, much more than is usually to be expected by the change from summer to winter. The marked rock which in 1907 was 54 feet 6 inches from the snout could not be found at all, whilst a large rock in the left moraine, used since 1899 as a fixed point from which to locate other less stable rocks used in calculating the recession, seemed to have been undermined and to have slipped down into a small stream. The bed moraine in the vicinity had but recently been evacuated by the ice.

As a point from which to measure future recession, a large boulder of gray quartzite was selected. It measures about 6 feet by 4 feet and has peculiar fine parallel dark bandings. It was marked with red paint with a circle, and the words "Vaux 1909 8/20." The distance to the extreme tongue was 62 feet.

#### *Victoria Glacier.*

The conditions at the Victoria Glacier seem to be very similar to those heretofore noted. The main stream now flows from what would appear upon superficial examination to be the left side of the glacier. It is the true tongue, however, as shown by Prof. Sherzer. The ice cliffs in this vicinity are wasting away with considerable rapidity.

Upon August 8th, 1907, the distance from the marked double rock to the nearest ice was 126 feet. The recession as measured August 2nd, 1909 was 25 feet 6 inches.

#### *Wenkchemna Glacier.*

We have established no definite points for measurements at this glacier. Comparing its face upon August 30th, 1909, with photographs taken on several different former occasions, the changes appear insignificant. Large boulders are still pushed forward and occasionally roll into the

growing forest, knocking down trees in their course.

LINE OF PLATES SET ON ILLECILLEWAET GLACIER NEAR FOREFOOT ON  
SEPTEMBER 11th, 1909.

Length of base 231 ft. 3 in., measured on right lateral moraine. Rocks at each end of the base marked with red paint.

Plates were set in line between southeast end of the base and a conical fir bush growing high up above the left lateral moraine. Plates were numbered from 1 to 8, commencing with plate nearest the base.

Angles Read at S.E. End of Base.

Object Sighted on	Transit Readings		Interior Angle
N. W. end of Base	360° 00'	180° 00'	Angle between Base and line of Plates. =81° 08'
Top of Conical Bush	278° 5.2'	98° 52'	
Angles Read at N. W. End of Base			
S. E. End of Base	360° 00'	180° 00'	Angles between Base and Plates
Plate No. 1	65° 59'	245° 59'	No. 1=65° 59'
Plate No. 2	75° 25'	255° 25'	No. 2=75° 25'
Plate No. 3	82° 17'	262° 17'	No. 3=82° 17'
Plate No. 4	85° 19'	265° 19'	No. 4=85° 19'
Plate No. 5	87° 04'	267° 04'	No. 5=87° 04'
Plate No. 6	87° 58'	267° 58'	No. 6=87° 58'
Plate No. 7	89° 27'	269° 27'	No. 7=89° 27'
Plate No. 8	90° 38'	270° 38'	No. 8=90° 38'
Top of Conical Bush	93° 09'	273° 09'	Top of Bush=93 09'



**The Arbutus (Arbutus Menziesii) Julia W. Henshaw, Photo.**

## BOTANICAL NOTES

### **The Arbutus. (*Arbutus Menziesii*.)**

*By Julia W. Henshaw.*

This beautiful tree, which belongs to the Heath Family, (Ericaceae) and forms one of the chief ornaments of the hillsides close to the Pacific Ocean is commonly called the Arbutus by British Columbians though occasionally one hears the romantic Spanish name Madroño (pronounced Ma-dron-yo) applied to it in Canada, as is generally done in California.

The Arbutus is found along the Western Coast, and also on Vancouver Island, sometimes growing straight and tall where the conifers shelter it from unfriendly storms; and sometimes bent and twisted, clinging to life in some cranny among the rocks, finding foothold on the edge of a precipice, or bordering a trail slashed through the sumptuous forest. Often I have found it growing only a few feet high, massed together in shrubby form; and again I have seen it towering a sixty-five feet up into the air, with a trunk five feet in circumference, spreading forth stalwart branches that in June bear great big panicles of white waxen bells, to be replaced when autumn comes with clusters of reddish-orange drupaceous berries.

The Arbutus is an evergreen, its bark is close and smooth by exfoliation, becoming rough near the base, and in midsummer thin layers of a rich Sienna hue begin to peel off stem and branch disclosing a greenish-yellow surface, like satin to the touch. The leaves are thick, oblong, alternate, petioled, entire or serrulate, and are from four to five inches long; they are a glorious polished green and are sometimes delicately veined with red above, being pale and finely reticulated below. The wood of the Arbutus is very hard, shading from brownish to reddish-yellow; it is used to inlay furniture, and is much prized in the preparation of charcoal to be employed in the making of gunpowder. Those who have seen the Arbutus in British Columbia have no doubt been struck by the resemblance to its diminutive replica the Bearberry (*Arctostaphylos Uva-ursi*) which carpets the ground in many western localities and is its next of kin in the Heath family.

It is a most remarkable fact that neither in Britton and Brown's "Flora of the Northern States and Canada," in Coulter's "Rocky Mountain Botany," nor in Hough's "Trees of the Northern States and Canada" is there any mention of the *Arbutus Menziesii*.

Truly the British Columbian Arbutus is a patrician among trees, and inevitably calls to mind Bret Harte's exquisite lines, penned to the Madroño of California:

"Captain of the western wood,  
Thou thatapest Robin Hood!  
Green above thy scarlet hose,  
How thy velvet mantle shows;  
Never tree like thee arrayed,  
O thou gallant of the glade!

"When the yellow autumn sun Saddens all it looks upon,  
Spreads its sackcloth on the hills, Strews its ashes in the rills,  
Thou thy scarlet hose dost doff,  
And in limbs of purest buff

Challengest the sombre glade  
For a sylvan masquerade.

“Where, oh where, shall he begin  
Who would paint thee, Harlequin? With thy waxen burnished leaf,  
With thy branches’ red relief,  
With thy poly-tinted fruit,  
In thy spring or autumn suit,  
Where begin, and oh, where end,  
Thou whose charms all art transcend?”

## MISCELLANEOUS SECTION

### **A Fortnight With The Canadian Alpine Club.**

*By Godfrey A. Solly.*

The annual camp of 1909 will perhaps be remembered in the future for two main reasons. First, because of the glorious weather, and secondly, that it was the first occasion on which a party of climbers from the British Isles had been able to come out in response to an invitation sent to the Alpine Club of England. Writing as one of the British party, and on behalf of all, I wish to say at the outset of this paper that we feel that no words of ours can adequately express our gratitude for the unbounded kindness and generosity of our reception.

It was not only that Mr. and Mrs. Wheeler and the Vice-Presidents and Officers of the Club did so much for us, but we were made to feel that in every member of the Club we had a friend who was doing his or her best to give us a good time. Staying for a few days amongst so many strange faces, it was impossible to become acquainted with all, and one cannot even put the right names to all the faces that remain with us in our memories or on photographic prints, but to one and all we tender our most hearty thanks.

We have been present in the early school days of the Club—a child of great vigour and rapidly increasing stature, and there need be no doubt that it will do honour to its parentage. May it carry on faithfully the great traditions that surround the Alpine Clubs of Europe, in its turn perhaps developing new features and expanding our knowledge of mountain craft; but, above all, may its members maintain the traditions of good fellowship—may it always be remembered that mountaineering is a recreation—that we learn our mountain craft and go to the hills for health and strength and pleasure that it is wrong to court danger, but that if danger comes, no effort can be too great, no hardship too severe, if only disaster can be warded off.

No more enduring friendships than those of the mountains can be made. Twice I have spent a night out, in danger high up on the cliffs of a great mountain. Each time I knew that my companions were true men, who would be loyal while life lasted, and I count them amongst the most valued friends of my life. But I am now a member of the Alpine Club of Canada. Anyone who has been in camp with our President knows what that means: his orders are absolute. My orders lie open before me in a letter demanding a paper in connection with our visit to the Canadian Rockies. I would rather make my mark with an ice axe than a pen, but I have no option.

We were received at the delightful Club House at Banff on July 29th. We all took training

walks on the hills around and hoped we were getting inoculated against future assaults by mosquitoes. The town authorities thoughtfully offered us a free sulphur bath, and the plunge into the hot water, though startling to those who did not know the temperature, alleviated the irritation temporarily. From the climbing point of view, the great feature of the place is the short cut to Banff along the pipe track. That walk for a quarter of a mile along a single plank about ten feet from the ground, was one of the most serious difficulties that I met with in the district.

On the 1st August we all moved to the camp near Lake O'Hara and remained there until the 9th August. Others will describe the varied incidents of the camp life, so I will only give a short account of a climb on Mount Odaray, which has not hitherto been described in the journal. On August 2nd, two parties, comprising five of the British visitors and V. A. Fynn, had made the ascent, and on the strength of their description, I started next morning with O. Rohde and A. C. Hargreaves. We followed at first the track towards Lake McArthur, seeing on the way a large porcupine, as it laboriously climbed a tree. Near the first little pool we turned to the right, i.e., westwards, and ascended the lower slopes of the mountain until we came to the edge of the glacier where we roped. From this point we circled round the lower peak of the ridge, avoiding some wide crevasses and ice cliffs and ascending gradually until we were under the lowest point of the ridge between the low east peak and the highest point. From here we climbed without difficulty by steep ice and rocks to the ridge, which is followed to the summit.

Presently we came to a depression in the ridge and opposite to us was a steep rock face with a very pronounced chimney holding a jammed stone. Hastings had told me the night before of a chimney with a jammed stone, as being the most difficult bit on the mountain, so we at once concluded that this must be the place and did not look for any way of avoiding it. We climbed it, the principal difficulty being to avoid sending down loose stones on those below, and thought our difficulties were over. Continuing along the ridge, to our surprise we came before long to another chimney, also with a jammed stone in it. We did look for a way of avoiding this chimney, but finding none had to climb it. It was perhaps less difficult than the lower one, but the stones were even more loose. From that point we soon reached the summit—Hargreaves had ascended Mt. Huber on the previous day, but for Rohde and myself it was the first Canadian peak. I had often heard, but never before realized, the special feature of the view from a peak in the centre of the Canadian Rockies—that is, the enormous number of peaks in sight. In every direction, North and South, East and West, we saw glacier-clothed peaks in countless numbers, shining in the sun. Nothing that I know in the Alps resembles it; peaks may be more lofty there, and perhaps grander in outline, but there is not the same suggestion of boundless space. After staying for about an hour on the summit, eating luncheon and enjoying the view, we began the descent. The two chimneys were troublesome, particularly the lower one where the holds are not very good for the last man to depend on, but there was no other difficulty, and we soon reached camp. We then asked Hastings and the others about the two chimneys and were told that the lower one could be avoided by going a very short distance to the left, and that on the previous day one of the parties had descended by this easier route, and that both parties had ascended by it. However, we were not sorry that we had misunderstood their description, as it gave us the best bit of climbing on the mountain, and the descent in particular was very interesting. If the mountain is often climbed, the probability is that many of the loose stones will be cleared away, and it will become easy and safe, but the decision not to use it as a qualifying climb in 1909 was undoubtedly wise. It is no place for a number of parties to be on at the same time, and an inexperienced climber would hardly be able to avoid sending down loose stones, to the danger of those below.

I must pass over the glorious two days' trip to Paradise Valley and back, which was made by many of the British party, including three of the ladies. As taken in the reverse direction, it has been well described in the Journal for 1908.

I will only refer to the Eagle's Eyrie. Whilst a Vice-President and some of our party were sleeping in the sun, I had a look at it. There is a crack on the southerly side that looks as if it would go, but when one gets up a little, the holds seem all in the wrong places, and the rock pushes one out. Then perhaps the thought will come to a climber that he is not in very good training just now, and that it would be better to try some other day. Finally he will get down, which is the only sensible thing to do. The game is not worth the candle.

*The Yoho Trip.*

But the most attractive feature of the entertainment provided for the British party was the trip in the Yoho Valley. Amery, Hastings and Mumm had left the annual camp on the Friday to go to Mt. Robson, but the rest of the climbing members of the party, reinforced by A. M. Bartleet, were invited to spend the next six days in the Yoho Valley, changing camp each day. A party of thirty-two was formed headed by our President, and including most of the British visitors and three of the guides. The United States were represented by Miss Vaux, whose cheerfulness in putting up with the little inconveniences of camp life and readiness to give a hand whenever needed, charmed all, and contributed much to the pleasure of the trip.

On the first day after descending from Lake O'Hara, and lunching at the depot camp near Hector Station, we rounded Paget Peak and, having passed Sherbrooke Lake, camped in the woods at the furthest point that the ponies with their heavy loads could reach. Next day everything had to be carried over the pass west of Mount Niles, and across the Daly Glacier to a high camp on the rocky slopes nearly due north of the snout of the glacier—a photograph by Mr. Harmon shows twenty-seven of the party on the ice with their loads. The remaining five were the photographer himself, the Rev. J. R. Robertson, Bartleet, Hargreaves and myself. We four left the others at the pass and traversing on the snow slopes under Mt. Niles reached the rocks on the south-westerly side of Mt. Daly. Here we were caught in a violent thunderstorm. The lightning seemed very near and our axes were all hissing, so we left them for a time in the snow and waited on the rocks until the fury of the storm had passed. Then picking them up, we mounted the rocks, which are easy, and, walking over the summit plateau of snow and shattered rocks, soon reached the highest point. We had no very distant view, but the cloud effects as the storm was passing away were very grand. On the descent we varied our route down the rocks which can be climbed almost, but not quite, everywhere, and then picking up our loads, which had been left below, made the best of our way to the camping place. The mountain is a very easy one, but on the snow slopes under Mt. Niles there are some crevasses and the rope should always be used. At camp, we had a mixed reception. Robertson had been complaining of the weight of his load, which he thought contained only bacon, but some friend had also put in it all the tea, so the rest of the party had had nothing to drink except water—hot or cold—until our return. Some actually complained of our thoughtlessness in going away with the tea, when we would have given them not only the tea, but the bacon and all our loads if they would have taken them. Others more practical at once made tea, which was acceptable to all, for it was cold and wet and the camping place exposed.

On the next day a party of about fourteen, including the three British ladies, made a successful ascent of Mt. Balfour, but again we had no distant view from the summit. There was a high wind and drifting snow. In the meantime the rest of the party had moved camp to a beautiful





**Mt Odaray From Camp. B.S. Darling, Photo.**



**The President And Vice President From Upper Yoho Valley.**

spot near the foot of the Wapta Glacier, Here the ponies met us again. On the next day the President took some measurements of the ice movement of the Wapta Glacier while the camp was moved a short march to a point in the Waterfall Valley. On the next day sixteen of the party, including only three of the visitors, Bartleet, Rohde and E. F. Pilkington, had a very long day over Mounts Habel and McArthur while most of the others walked to the top of Kiwetinock Pass, and had a view westward over mountains, which few except the President have visited. On the following day a large party of four ropes, including three ladies, had a long day on Mts. President and Vice-President, to the next camp which was at Yoho (Summit) Lake. Most of the climbing was easy but there is some good scrambling on the northern ridge of President, access to which is gained by one of several steep chimneys. The final descent from the foot of the glacier through the forest to the lake was hot and tiring. There may be a path but our leaders did not hit it off. The next day all went down to Field. Oliver Wheeler and one or two energetic young men took Mt. Burgess on the way, but most strolled down the path to Emerald Lake, where after a civilized luncheon at the hotel, carriages came and we were driven down to Field. The whole party reunited at the hotel and enjoyed a farewell supper together, rather to the astonishment of the other guests. Toasts were drunk and speeches made and episodes of the trail recalled, till we were told that it was 10.30 p.m. and that our places were wanted for travellers just arriving off No. 96, due twelve hours earlier.

So ended a glorious week, and we separated, some going off that night, others next day or the day after, but we hope to meet again in other years. Whether that may be possible or not we know that we are richer by the memory of a week where all went right and nothing went wrong. East knows West and West knows East a little better than before, and we trust that the friendships begun among the mountains in search of recreation only may be a tiny link in the chain that binds together one great Empire.

I was asked to write a paper on the mountaineering done by the British visitors, but I cannot write of what I do not know. Others must tell how Amery, Hastings and Mumm travelled to Mt. Robson and were only beaten on it by the bad weather; and of how Fynn led Pilkington up Mt. Ringrose and Bartleet up the N. W. arête of Mt. Sir Donald. On the morning after the supper, I started at about 4.30 a.m. with the Rev. A. M. Gordon and Bartleet and Pilkington to try Mt. Cathedral. We did not then know of the two climbs described in Outram's book, and the only advice we could get was to walk along the line eastwards until we had gone through the tunnel and then turn up towards the mountain. This we did and found ourselves on fatiguing scree slopes which continued almost without intermission over the small glacier to the pass between Mts. Cathedral and Stephen. Long before we reached the pass we knew that we were wrong, but there was no time to go back and begin elsewhere, so we went to the other pass and looked over to see if we could find any way of turning the southerly end of the hopeless wall of rock that had flanked us on the left for so long. We climbed a short way up the ridge, but saw that to go on was useless. We then decided to go down the other side of the pass knowing that we should strike the O'Hara track and so make a tour of Mt. Cathedral. The south side of the pass is perfectly easy. The scenery is superb and the precipices on the north-westerly face of Mt. Odaray are most imposing. There is, of course, no path down the valley, and we had the usual struggle through the forest until we reached the track, but this did not spoil the pleasure of an interesting day. When we got back to the hotel, we heard that we ought to have gone further along the track before turning off it, for the beginning of the ascent, and that by so doing we should have reached the glacier coming down from the N. W. of the mountain.

After this, I was obliged to go to the Chalet on Lake Louise where I stayed for five days.

Unfortunately I had no male companion, the guides were all engaged and I could find no climber amongst the visitors, so the only climb that I had there was the ascent of Mt. Niblock with Mrs. Solly and Miss Maclay. Then I had to travel east for England, home, and duty. My holiday was at an end, but a dream of many years had been realized. In 1893, I had hesitated whether to go east to the Caucasus or west to the Rockies—but in those days the journey east was the quicker and more certain of the two and I chose the Caucasus. Now much is changed, and on the tenth day from London one can be on a Canadian glacier, whilst the journey into the Caucasus is no more easy than it was, and the uncertainty as to getting out of the country is so great, that it is reported to be not worth while for a traveller to take a return ticket. My dream now must be of a second visit to Canada. May it be far less than sixteen years before I see again the mountains and meet the friends of 1909.

### **Two Englishmen In The Yoho Valley.**

*By E. F. M. MacCarthy And A. M. Bartleet.*

“Great things are done when Men and Mountains meet;  
These are not done by jostling in the street.”

—William Blake.

The domesticated dog still takes two or three turns round to flatten the prairie grass before he curls himself up upon your carpet; and the domesticated man still has lurking in his being a remnant of the barbarism which makes him revolt occasionally against the life of the city and the crowded struggle of the streets, and which sends him out to the waste places of the world where God's air is at all events untainted, and where he may return to the primitive way of living. The inherited impulse is valueless to the dog, but it has made of man that noble specimen of his race, the Climber.

It was this evolutionary instinct shared by two otherwise dissimilar Englishmen—MacCarthy, a septuagenarian, and Bartleet, young enough to pass for his son, the one a schoolmaster, the other a barrister, which made them jump at the invitation of Mr. Wheeler, the President of the Alpine Club of Canada, to join his party for a week's camping out in the Rockies. So it was that, singing to ourselves

Fare ye well, stiff-laundered shirt-fronts,  
Cuffs of starched and courtly whiteness,  
Black dress-coats and silken stockings!

We found ourselves, on an early day in August, 1909, being whirled away by iron-horses westward from Winnipeg (whither the British Association Meeting had drawn us), across eight hundred miles of almost level prairie to the foot-hills of the Rockies, and then up and up, for two hundred miles more, between sombre sentinel pines and gleaming silvery waterways, through mountain gorges and under steep cliffs epauletted with lumberroofed snow-tunnels, till we crawled up to the Great Divide, and, a few miles further on, reached the water-tank (glorified under the name of Hector Station) where our puffing and panting horses stopped to quench their thirst. Here we stepped out of the Hotel-upon-wheels in which we had lived for the last 36 hours, and at noon, Monday, August 9th, bade good-bye for a week to the ordinary routine of civilized life as we made our way through the trees, under the guidance of one of “the Boys” (as the younger members of

the A.C.C. are called) who had been told off to meet us, and found ourselves at the Club's base Camp hard by.

It had been arranged that we should there await the arrival of Mr. Wheeler and his party who had been camping out the previous week at Lake O'Hara. They soon arrived in two's and three's, and we were greeted by a few old English friends (who had received a similar invitation to ourselves) and a larger number of those who were soon to become new ones. We shared in an excellent and cheery meal and then returned to the station to change into mountaineering kit. Here the Vice-President, Mr. Patterson's description of the climbs planned for the first two days decided the "Old Man" (as he was irreverently styled by the Boys) not to attempt the Sherbrooke Valley part of the trip, but to go down to Field, wait for the return of the pack-horses and come up the Yoho Valley with them on Wednesday, so as to join the rest of the party at the Glacier at the head of the Valley.

*Here follows Bartleet's narrative of his experiences : —*

About 3.30 p.m. we started, a party of some thirtysix persons, up to the Sherbrooke Valley—a comparatively little known way of approach to the Eastern slopes of the Yoho Valley—and Mr. Wheeler told me to run on and catch up to the pack-horses (that had already started while I was changing at the station house), and relieve myself of my rucksack. I may say at once that I did not "run" very far, and was doubtful for a time if I should ever catch the horses, this being my first experience of a forest trail which often seemed as conspicuous by its absence as the underbrush did by its presence. However, after half-an-hour or so I did overtake them and then began thoroughly to enjoy myself.

Otto, the Club's Master of the Horse, was some way ahead in front of the string of horses, but his Equerry, Jimmy Simpson, riding last, proved a most entertaining and instructive companion. His control over the animals struck me as wonderful. When one of them went wrong he rated it, either by its individual name or by names (also used in England) of more general and forcible application; and the offender always returned promptly to the trail. At one point, a horse got stuck near the top of a steep and slippery pitch, and after many unsuccessful efforts to pull him up Jimmy said there was nothing for it but push him down. The poor brute fell a considerable distance and landed with his pack beneath him and legs in the air. He was soon righted, however, and then got up the pitch safely; but we both agreed that it had been odds he would break a leg in that fall.

About 7.30 we reached our first camping ground, a mile or so above the beautiful Sherbrooke Lake; and after an excellent supper the English guests passed a most comfortable night in a well brushed-down tent. Next morning, Tuesday the 10th August, we breakfasted about 7 a.m. By 10 o'clock camp was struck and everything packed, and we started in detachments on the walk up the Sherbrooke Valley to the pass at its head, immediately west of Mt. Niles. It was now that I realized for the first time the full extent of the generosity of our Canadian hosts. This day and the following we were to traverse a trailless country impossible for the packhorses, which were already making their way back to the base camp at Hector and so on to Field; and our hosts themselves carried on their back the whole camp and accessories—tents, cooking apparatus, axes, and food for nearly forty people—in fact, the whole outfit, besides their own personal requisites and those of some of the guests. The loads were simply staggering; not indeed to the bodies of those who bore them, but to the feelings and imaginations of the others; and the thought, not only that this tremendous work was undertaken during their short holiday, but that it caused our unselfish friends to miss making

the ascent of the mountains they would have loved to climb, indeed touched the hearts of all us English. Perhaps by way of expressing my own gratitude to the President, Vice-Presidents and the Boys, I cannot say better than that I value the memory of the week I spent with them more highly than any other of my mountaineering experiences, albeit these reach back to a time more than twenty years ago; and I may add that, had I missed those first two days, I should ever after have felt much regret, save only for the fact that in that case the loads would have been a little lighter.

Between mid-day and 1 p.m. the whole party were sitting on top of the pass; and to my joy Mr. Solly kindly asked if I would come with him and try Mt. Daly. Of course I jumped at the suggestion, and under his leadership, Mr. Robertson, Mr. Hargreaves and I, left the pass behind us, skirted the rocks of the ridge running up from it in an easterly direction, and crossed the snowfield at the head of the Daly Glacier towards the rocks of the final peak. On the most exposed part of the plateau, a magnificent thunderstorm broke upon us, and we hurried on to the rocks ahead where we should be less conspicuous objects and less likely to be struck by the lightning.

Here we sat for some time, our minds divided between admiration of the storm and fear that it would cheat us of our peak. Never have I seen anything grander nor felt more deeply the awfulness of Nature. We were fairly high up and the view was extensive. Sometimes we seemed to be in the very heart of the storm, to be part of it, so to speak; then the lightning would flash far away in the East, and then again would glorify the southern or Western horizon. Perhaps there were several storms taking place at the same time. Apart from the lightning, the effects of light and shade were more beautiful than any I have seen; and there was a rainbow towards the East that Turner himself would hardly have dared to paint.

Well—the storm passed; the rocks were easy and the final snow slope short; and we stood on the summit of Mt. Daly at 4 p.m. The view gave us all intense pleasure, and, for me, recalled my feelings when in August, 1888, I stood on the top of my first snow mountain—Piz Morteratsch in the Engadine. In each case I was taking a bird's-eye view of an entirely new country of which I had thought much beforehand—in perfect contentment, satisfying what had become almost a craving; and if in the former year my excitement was greater, I think that now a more mature experience allowed the pleasure to be deeper. If asked to compare the Swiss and the Canadian scene, I might perhaps say that from Mt. Daly, (and three days later from Mt. Habel) the range of the Rockies seemed to stretch endlessly and without a break in all directions, whereas from a Swiss summit one nearly always sees or suspects a plain or a fertile valley and so gets the suggestion of humanity and civilization. Perhaps Mr. Whymper had this effect of endlessness in his mind when he wrote that the Rocky Mountains are like “fifty Switzerlands rolled into one.”

We made the descent without adventure or misadventure in some three hours, reaching camp No. 2 about 7.20 p.m. The expedition was delightful; and though the mountain presented no special difficulty, the facts that none of us had seen it before and that the succession of thunderstorms rendered success very doubtful added to the pleasure of achieving the summit. We found the new camp pitched on an ideal spot—a grass plateau at timber-line, near the right side of the ice-fall of the Daly Glacier, commanding glorious views of the “Vice-President” and other mountains across the Yoho Valley—that beautiful valley of which I had read so much and which I was now to visit under such good auspices. We had been wet through and dried again by the sun several times during the day, so it was not unpleasant to get inside a tent just in time to escape a final downpour.

On Wednesday, the 11th, a party of twelve, including the three English ladies, left camp at 9 a.m., intending to climb Mt. Balfour. We traversed in a Northerly direction, well above timber-line, the higher slopes of the Yoho Valley, and ascended a moraine at the top of which we roped

up in three parties of four. We then crossed a snowfield, surmounted the bergschrund without much difficulty, walked up the snow slope of the final peak, and reached the summit at 1 p.m. As a contrast to yesterday, clouds now robbed us of our view. We left the summit at 1.30, and reached the top of the moraine, where the sacks had been deposited, at 3 p.m. From here we continued the traverse in a Northerly direction of the upper slopes of the Yoho Valley to a point very near its head, whence we started an extremely steep descent to the glacier-stream below, forging our way through very dense undergrowth. We soon saw the smoke of Camp No. 3, rising through the trees across the valley, and apparently within a stone's throw; but as the river seemed too deep to ford, we made a detour over the snout of the glacier, which we crossed with the help of some well-cut steps, hit the trail on the other side and reached the Camp at 7.15. This Camp again was most beautifully situated, lying in a little clearing in the forest; and as I lay on the grass watching the scene round the fire and my eyes half closed, I either fancied or dreamed that I was about to witness the performance of some ancient Druid rites. But the Arch Druid suddenly changed into MacCarthy, who had just come up from Field with the pack-horses; and the only rites performed were shakings of the hand, and almost immediately, the consumption of a first rate supper.

On Thursday, the 12th, being glad of an easy day, a few of us followed Mr. Wheeler and his son, and watched them making their annual measurements and observations of the Yoho Glacier. Its snout was found to have receded at the rate of about 30 feet a year during the last three years; and Mr. Wheeler pointed out a line of logs lying at a considerable distance from the present position of the ice and indicating its limits years ago, when an avalanche from the heights above must have carried down the trees, which were only brought to rest by impact against the Easterly side of the then more extensive Glacier. In the afternoon we walked through the forest to Camp No. 4 which had been pitched near a beautiful lake a little below the Twin Falls. Although my expectations had been pretty high they were more than realized when I gazed with admiration on these wonderful falls. Were they in Switzerland they would make the fortune of half-a-dozen hotel companies. Pray Heaven that this neighbourhood may never be so profaned.

On Friday, the 13th, at about 6 a.m., a party of sixteen set out to climb Mts. Habel and McArthur. A way was found up the impregnable-looking cliff over which the falls hurled themselves on our left. The pace was tremendous, and one was glad of a short breather after an hour or so of extremely steep and rapid walking. We now looked down upon the falls and the view above began to open out. The Glacier was soon reached, and about 8.45 a halt was called on the snowfield above photographs were taken, and we roped up in four parties of four. The snowfield was a long one and eventually increased in steepness, and as I had anticipated, we fairly raced over it. Indeed one felt grateful to the bergschrund that caused a little delay after over an hour and a half of going at high pressure. Skilfully led, we crossed it without much difficulty, Mr. Harmon from the lower lip taking photographs of us in transit. Another steep though short pull, and we reached the little snow col at the foot of Habel's final peak, where we unroped and left the sacks; and then a walk of twenty minutes up the snow (each at his own favourite pace) brought us to the summit at 11.20 a.m. This was the view I had looked forward to most eagerly since deciding to come out to the Rockies and reading the books of the pioneers. My expectations were again surpassed. Mt. Mummery was close at hand; the Selkirks, amongst which I should soon be, lay to the West, the peaks we had recently climbed to the East, and to the North Mt. Forbes and that boundless ocean of mountains which appeals so strongly to the imagination. The weather was perfectly fine, and that half-hour will never fade from memory.

Plenty of work was still before us, so we tore ourselves away, lunched on the little snow col



**Camp III, Yoho Expedition. Val A. Flynn, Photo.**



**Getting A Meal Ready. Val A. Flynn, Photo.**



**Camp IV, Yoho Expedition. Val A. Flynn, Photo.**

and about 12.30, started off in the direction of Mt. McArthur. Those on the three first ropes took to the snow on the west side of the southerly ridge of Mt. Habel; but Konrad Kain, the enterprising guide in charge of our rope, seeing a chance of an interesting rock climb, took Messrs. Harmon, Pilkington and me along the ridge itself, which terminates in a minor peak that provided some enjoyable rock work. We reached the top about 1.30 and at first looked in vain for the others. Before long, however, we distinguished them far below us on the snowfield that lay between our minor peak and McArthur. We descended to their level by a glorious glissade, long, steep and safe, followed in their tracks across an interminable stretch of snow, and joined them at last waiting for us at the foot of Mt. McArthur.

It was now about 3.20. On this side the mountain presented a fine rock arête, and the first parties, after prospecting some time for a route, decided to take to the screes on the right or Western side. Konrad, however, thought he detected a sporting rock climb to the left, which if feasible would lead more directly to the summit. He was let out to the full length of the rope, which was just long enough to enable him to cross a smooth slab of rock with almost imperceptible holds, and reach a place of secure anchorage. Pilkington and I followed in our turn, and were glad to know there was one above in whom we could put our trust. There was a remarkable similarity between this slab and the "Nose" on the North climb of the Pillar Rock in Cumberland, in each case faith being the virtue most needed by the leader. After this the arête itself gave good, interesting climbing, but had finally to be left for fear of sending down stones on the parties below. Traversing to the left, a nasty piece of loose earthy scree on the top of smooth rock was encountered, the hand holds being few and rotten. Fortunately on this side the ridge it did not matter how many stones were dislodged, and in time sounder rock was reached and the summit attained about 4.50 p.m. The other parties arrived only a few minutes later; so they must have climbed with great rapidity by their less direct route.

The half hour spent on this summit was again very delightful. Owing to the lateness of the hour the colouring was beautifully soft, and the mountains around the site of the O'Hara camp towards the south, for some reason or other, seemed surprisingly near. The descent was quick and easy. We unroped at the foot of the Glacier at 6 p.m. and reached Camp No. 5 half an hour later. The expedition had been an exceedingly fine one, of a very high order of interest and variety; and it will hold a position all by itself in my memory.

The Camp, situated at the head of the little Yoho Valley exactly below Mt. President, was a very welcome sight, and not less welcome was the splendid supper that had been prepared for us. In particular the soup was a veritable masterpiece, and for all the world reminded me of the Bouillabaisse that one enjoys so much on the French Riviera. Over my second or third helping Thackeray's appropriate lines suggested themselves:

"Indeed a rich and savoury stew 'tis ;  
And true philosophers, methinks,  
Who love all kinds of natural beauties,  
Should love good victuals and good drinks."

Kind thanks to the cook, and to the perfect organization whereby, with never the least sign of a hitch, a comfortable camp, excellent meal and hearty welcome invariably greeted those descending from a mountain.

On Saturday, the 14th, the self-sacrificing President and Vice-Presidents for the first time during the week allowed themselves the pleasure of an ascent, and they took a party of some eighteen persons, including the three English ladies, for what must have been a most interesting



(and certainly a very fitting) expedition, namely, the traverse of Mts. President and Vice-President. For myself I was glad of a less strenuous day, and greatly enjoyed walking with MacCarthy to Camp No. 6; after watching the old camp being broken up and the horses loaded.

Rounding the lower slopes of the "Vice-President" the route lay well above timber-line, and beautiful views were obtained down the Yoho Valley, on the opposite side of which the celebrated Takakkaw Falls were seen to the best advantage, with their remarkable rainbow caused by the sun shining on the spray. After two or three hours of rather rough walking a steep grass slope brought us down to an excellent trail, which was followed to the last camp, alongside of Summit Lake. The torrents crossing this trail were swollen through the mid-day sun, and into one of them MacCarthy, slipping on a boulder, fell. With great ability he scrambled out of the water; and having the heart of a boy for all his seventy years, he treated the episode as the best joke in the world. Nor did he fail to amuse the rest of the party when he issued from his tent later on, his lower man encased in a sleeping bag, as if the programme of the evening festivities was likely to include a sack-race. What it did include was a concert round a roaring camp fire, when songs were sung, speeches made, good stories told and interesting adventures related. One perhaps specially remembers Mr. Fynn's account of the heroic behaviour of Miss Gertrude Bell, when caught by terrible weather, she and her two guides (the brothers Fuhrer) spent two nights high up on the Finsteraarhorn; and the modest speech of our good cook, Mr. Alldritt, in which he told his experiences in the South African war, when he went with the Canadian contingent to the help of the Old Country in the time of her strain and stress.

*Here Bartleet's narrative ends. It needs supplementing by a few more words from his companion.*

As the Summit Lake was the last of our grounds, and the party had only to work its way down to Emerald Lake and on to Field on the morrow, the fun was kept up till a late hour; but at last we groped our way to our tents. We had just fitted ourselves into our allotted spaces, like sardines in a box, when the President, followed by the Vice-President, came to our tent, the President carrying his private flask of "medicine" (we were a strictly temperance Camp) and the Vice-President with a rug, the one to offer the "Old Man" a warming cordial, and the other, to tuck him up in an extra blanket; in case his cold bath had given him a chill. Their kindly urbanity deserves, and here receives, warm and cordial recognition.

Next morning our tents were folded for the last time, and, in single file, we dropped down by a zigzag trail through stunted brushwood on to a muddy, stony floor at the extreme western edge of which, glistening in the sunlight, lay the shrunken waters of Emerald Lake which once must have covered the whole of the plain. Rounding the northern shore of the lake we came upon the Chalet Hotel—a tourist resort of the normal type. In our haste to make sure that we had really returned to civilization, the Englishmen gave a large order for beer and cigars—quite forgetting that we were still the guests of the Canadians. However, our hospitable hosts would insist upon paying for what we had ordered, and all we could do was to apologise humbly for the lapse into bad manners into which our eagerness had hurried us. By the way, talking of manners, the only bad manners we came across in Canada were imported by ourselves. On one occasion in a Railway Dining Car, MacCarthy shouted to the attendant at the other end of the Car, "Waiter, another plate," whereupon the waiter came up to his side and whispered in the gentlest tones, "Say Please." The missing word was promptly forthcoming, and the Englishman received with humility, not unmixed

with amusement, the plate he had asked for and the reproof he had deserved.

But to return to our story. After a sumptuous lunch, eaten with as keen an appetite as Shackleton and his men must have had when they returned from the South Pole to New Zealand, waggonettes came round and carried us off along a well-made road, canopied for several miles by an avenue of pine-trees, to the Mt. Stephen Hotel at Field, where we arrived at 5. So ended our visit to the Alpine Club of Canada but the English guests were naturally bursting with desire to show their appreciation of the kindness and consideration they had received, and to relieve themselves, as far as they could, of the burden of obligation which lay heavily upon them. So the tables were turned for a few hours that evening, and we became the hosts and the Canadian Alpine Club our guests at a dinner which Mr. Flindt, the courteous manager of the Mt. Stephen Hotel, exhausted his resources to supply.

After dinner, a flood of oratory poured itself forth with the rapidity of the Kicking Horse River; but, as no reporters were present, there are several deplorable gaps in the record of the speeches delivered. Prof. Dixon, of Manchester, occupied the Chair, and proposed the toast of the evening, "Our Canadian Hosts" which was gracefully responded to by that prince of hosts, the genial President of the A.C.C. Other toasts followed—that of "the Boys," proposed by Mr. Solly and responded to by Messrs. Bridgland, Alldritt and Ballentine; that of "the English Guests" proposed by the Vice-President and responded to by Messrs. Dixon and MacCarthy. Dr. Benson, of Dublin, when called upon to speak in response to the toast of the "English Alpine Club," with genuine Irish humour admitted the appropriateness of his selection to respond, seeing that he was not an Englishman, and not a member of the English Alpine Club. Mr. George Smith, one of "the Boys," a Rhodes Scholar, shortly to enter as an undergraduate at Balliol College, Oxford, naturally felt qualified to propose "the Ladies" as he was so soon to be a devotee at the shrine of Minerva.

The "Old Man" has completely forgotten what he said in response to the toast of the "English Visitors," but he knows what he would have like to have said then, and what he would not like to leave unsaid now. "We English visitors have had a most delightful time, and are overwhelmed with feelings of pleasure at the grand mountain scenery to which we have been introduced through the kind invitation of your President, and of gratitude for the unbounded hospitality which has made our visit so agreeable. Believe me, I am not gasing. On this Continent you are familiar with natural gas; and, if gas at all, mine is natural gas—naturally arising out of the emotions which you have evoked. We have had perfect weather, (barring the one thunderstorm), have revelled in perfect health and spirits, and have been companioned, waited on, and catered for by the most cheery and good tempered fellows it has ever been our lot to meet.

"The scenery through which we have passed has been quite a revelation. Artemus Ward, humorously patronizing Dame Nature for the clever way she had done her crumpling to produce the Rocky Mountains of the American Continent, gives her the testimonial—"The Rockies are a great success"; and so they are. While the earth's molten crust was slowly cooling, She must have dexterously puckered here, pleated there, crimped in one place and craped in another with a far-seeing eye to the general effect when it should have solidified—hollows not too deep, and heights not too steep to depress with their inaccessibility the enthusiasm of all but the most stalwart climbers. And Artemus Ward's verdict is just that which the English climbers familiar with Switzerland's deeper valleys and steeper heights, conspicuously endorse—"The Rockies are a great success." And our visit to them has also been a great success, thanks to the kindly skies we have lived under, the kindlier rocks we have met with, and the kindest hearts which have greeted us during the past week.

“Emerson says of the mountains—  
“Hither bring  
Our insect miseries to the rocks;  
And the whole flight with pestering wing  
Vanish, and cease their murmuring.  
Vanish beside these dedicated blocks.”

These ‘miseries’ of our working life—how true it is that they are mere ‘insects’ compared with the mammoth delights of our week in the Canadian Rockies.

“Members of the Alpine Club of Canada, from the bottom of our hearts we thank you, and our parting words to you are “Vivite et Valeté.”

### **A Graduating Climb.**

*By Ethel Johns.*

It was the Alpine journal that did it. Journeying peacefully along the sunny Portage Plains in the train day a copy lay beside me belonging to a fellow traveller.

It fell open at a page showing “The McTavish” scaling a giddy precipice on Crows’ Nest. Further along was an article describing some climb which ended with the magic sentence—“We had been out fourteen hours.” I drew a long breath, suddenly I was wearied of “the great spaces washed with sun” and remembered the Rockies as I had once glimpsed them, eighty miles away, fairyland of rose and grey and silver. The one desirable thing in life seemed to be to climb Crows’ Nest and to be out fourteen hours.

So it came to pass that one glorious August morning a very scornful porter deposited me and my possessions on the platform at Hector among a crowd of people all talking at once and engaged in dragging their own particular dunnage out of a pile almost high enough to constitute a qualifying climb. This mountain was regarded with extreme disfavor by the pack train officials, who evidently considered my modest addition to the heap as the proverbial last straw, and were openly dubious of my sworn statement that it weighed only forty pounds. I must confess that at this particular moment I never felt more lonely in my life. The air was full of shouted greetings and reminiscences in which I had no part, but presently two of the lady members came over to me and told me that a party was going to walk out to camp in a short time and were so good to me that I took heart of grace again. While we were waiting one of my long cherished dreams came true. I saw a Swiss guide in the flesh. So many of one’s dreams are spoiled in the realization; but that Guide was, as the Virginian puts it: “better than I dreamed.” He wore the official badge on his coat lapel. He even sported the Tyrolean feather. His boots were as thick and full of nails as I had hoped. He carried an iceaxe, a rucksack and a coiled rope. I walked round him at a respectful distance and regarded him from every angle. He was a most satisfying person.

Presently there was a gathering of the clans and a start was made. Such a morning! All blue and silver and deep green, and not a sound but the rush of the torrent over the broken boulders. Far ahead strode the guide of my admiration followed by a select party who were going to make a “quick trip.” I wished I had gone with them and not stayed with these people who trusted themselves to an irresponsible individual who didn’t look like a mountaineer at all and whose slogan seemed to be “Hop along, Sister Mary, hop along.” The ascent began to grow steeper. I began to feel



**Crossing The Daly Icefield On The Yoho Expedition. Byron Harmon, Photo.**

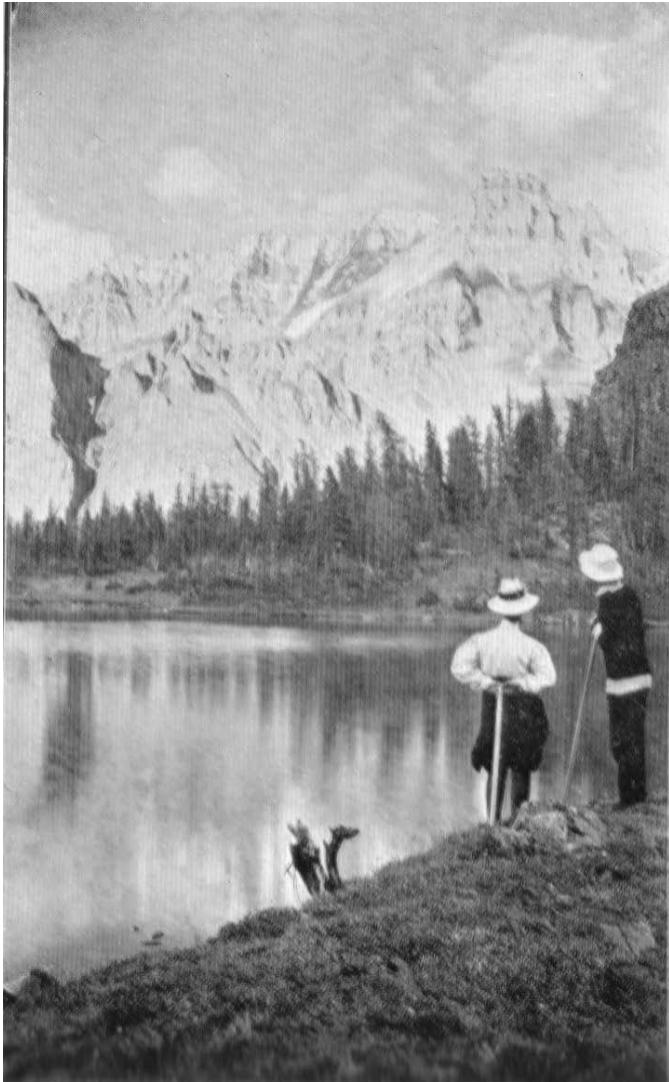
awfully queer, as though some one were sitting on my chest. I decided this must be the result of transporting myself from seven hundred feet above sea level to six thousand and then indulging in physical exercise. It was a very disagreeable sensation. A kindly individual with a handkerchief gracefully draped over the back of his neck noticed my distress and suggested that the party halt as he was tired. I sank down on a log and made noises like a dog who has been chasing a rabbit. This was my first experience of Alpine chivalry. For some strange reason it is always the strongest member of the party who gets tired first. Just as the weaker ones are praying for death as a relief from their sufferings one of the strong ones who could go all day without stopping, suddenly discovers that he is quite exhausted, in fact, cannot go another step. This condition of affairs terminates abruptly when the weaker vessels have got their breath and are beginning to take some interest in life once more. This power of getting suddenly and unaccountably tired increases in direct proportion to the number of difficult climbs made by the individual concerned—or, in other words, the better the climber the more sympathy he has for those weaker than himself. Which after all is what one would have expected. It was at this juncture that I discovered that the irresponsible one whom everybody addressed as “P.D.” was really half of the McTavish entity. It was rather a disillusion. He was not dressed as I imagined a mountaineer should be. But apparently clothes are no criterion of mountaineering. The real celebrities don’t bother with frills. They often scorn artistically adjusted puttees and tie their trousers round their boot tops with a bit of string instead. They wear fearsome sweaters and shocking bad hats. So much for the modesty of true greatness.

The trail was not to be without adventure for me. After my rest I started out like a giant refreshed and presently came to a torrent bridged by a log of somewhat slender proportions. Over they all went like a flock of mountain goats. That is to say—all except me. I stopped half way. In fact I wallowed in that torrent. It was not deep but I made the most of it, and emerged therefrom looking more like a muskrat than a human being. It was not very comfortable walking in wet clothes and when at last we did reach camp I found that my outfit was left behind at Hector. There was nothing for it but to drape myself about in blankets and seek the chaste seclusion of tent number five while my clothes were sent to the cook tent to be dried.

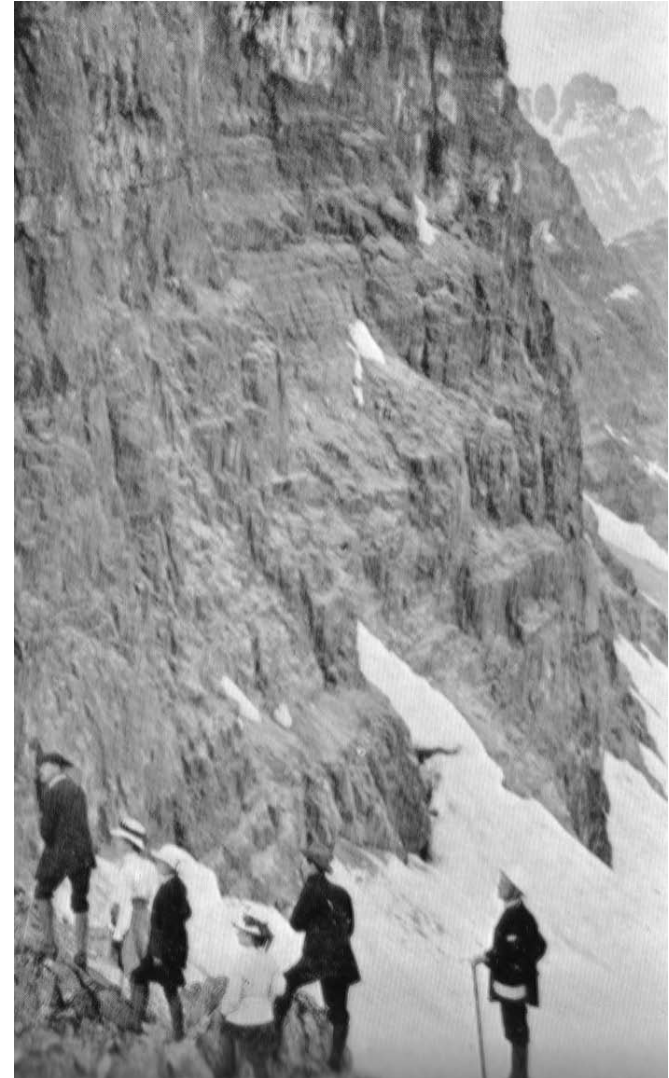
It is useless to attempt a description of the camp at Lake O’Hara. Those who were there need no description. They have but to close their eyes to see again that mountain meadow, starred with ling, flaming with painter’s brush—its rows of white tents, the shining Adonis pool and all about it the snowy hills of God.

After all my most vivid abiding memory is of the day on Huber. The side trips had helped my wind considerably and had given me some experience of scrambling, so on Thursday evening my name figured among a large number of others who were to attempt Huber on the following day. Sleep did not come easily that night and it seemed a long time before I heard the President’s voice repeating the well-known formula—”It is now five o’clock, if you are not ready in an hour’s time the party starts without you.” On this particular morning he added a corollary that still further dashed my wavering spirits—”the rocks are slippery to-day, those going do so at their own risk.” Soon we were assembled round the smouldering embers of the camp fire, and the various “ropes” answered the roll call. Ours was the last rope to start, it was the last rope to reach the summit, strange to say it was the last rope to get in at night. In fact, it was a very bad rope. Edouard Feuz said we were “the limit”—and he ought to know for we were his rope.

Mindful of good advice I planted myself next the guide as we skirted the shores of the lake. It was a glorious morning—Cathedral was reflected in the mirror of O’Hara, its summit already touched with flame. Little wisps of mist still clung about Odaray but Huber towered above us,



**Mts. Huber And Victoria. Howard Chapman, Photo.**



**Cliffs Of Mt. Huber. Howard Chapman, Photo.**

its castellated summit dark against the morning sky. Before long we were out of the timber on to the scree, the incline grew steeper and my troubles began; I was soon gasping like a dying fish. About half way up we paused to rest. Edouard looked us over with a cynical eye and much to my disgust put me back to the middle of the rope and put another member of the party, a most plucky climber, next to him. I made a feeble protest but it was no use. "You'll get your second wind pretty soon—You can make it alright" said heartless Edouard and off we started again.

People who have never done any climbing have since asked me how I enjoyed the glorious view which unfolded before us as we went up. I have been forced to draw on my imagination for a reply to this question. As a matter of fact all I saw on the way up Huber was Edouard's boots. They prevailed the whole landscape and rose and fell with the regularity of clock work. Occasionally, very occasionally, these boots were near enough to be studied in detail, but more often I had to content myself with mere impressionistic glimpses of them disappearing upwards, ever upwards.

After we left the col we roped up and here we overtook the party ahead of us who had had to wait at "the rope ladder" familiar to all who graduated on Huber. Somehow or other that rock work was traversed. We had perforce to go slowly and here Edouard's prophecy came true—I got my second wind. Looking back on the climb as a whole the worst part of it was struggling through the timber and up the scree to the col. In Mr. Mantalini's immortal words, that was "one dem'd horrid grind." Finally we arrived at the snow slope immediately below the summit. Photographs of this interesting spot are most misleading. They represent it as a mild and innocuous slope, whereas it was really, according to my recollection of it and also from tales told previously by newly graduated ones, almost perpendicular. Even our accomplished end man acknowledged it was "an awkward little place." Slowly we crept out—one man moving at a time—and at last it was done. We had climbed Huber and stood on the very Peak of Things.

We spent about half an hour on the summit and then started the descent. By this time the steps on the snow slope were pretty well worn and the going was decidedly slippery. Edouard's adjurations to the "lady in the middle" became more and more peremptory. "Stick your feet in" said he, don't walk like a chicken." The words were hardly out of his mouth before the aforesaid chicken was accidentally pulled off her feet by the gentleman ahead who took an unusually long stride and pulled the rope taut. Something had to go, so I did. At least I started, but as they say in describing big climbs: "The rope held." I should say it did. It nearly cut me in half. Fortunately my knee caught in one of the steps and I managed to hold on to my alpenstock, so before long the chastened chicken and the rest of the party were safely down on the snow-field leading to the rock work. Here Edouard decided we might try to glissade. For some reason it was not a success. Either we started too soon or we did not all start together. Something went wrong evidently, for all I can remember is trying to dodge the gentleman behind me, who being heavier naturally came down faster and insisted on using me as a toboggan. From the distance we must have resembled a baby avalanche. However, we covered considerable ground and, as it was getting late and the rock work had still to be negotiated, perhaps it was just as well we did hurry involuntarily.

Oh! that rock work—Coming up was nothing to getting down. To Edouard's disgust I made the attempt with my back to the rock instead of in the conventional manner. I knew I didn't look a bit like the picture of The McTavish on Crows' Nest, but I also knew that if I turned I should get dizzy. But turn I did in answer to Edouard's pleadings, and dizzy I got, and when finally I half slid half tumbled to the bottom of that rope ladder (ladder indeed!) I asked to be let alone to die in peace. Edouard's treatment of my sad collapse was to force upon me a little piece of hard cake and some water which he found in a crevice. These had a marvellous effect and before very long



**Gentlemens' Quarters O'Hara Camp. P.W. Freeborn, Photo.**



**Photographing A Colony Of Young Marmots. W.P. Freeborn, Photo.**



we reached camp where the evening fire was blazing gloriously and the President as usual was prowling around the outskirts on the lookout for late parties. They gave us three cheers—I never heard a sweeter sound in my life—and we gave three croaky ones for Edouard who certainly deserved them—for had he not shepherded us to the top of Huber “by the power of man”? Then some one gave me tea and more and more tea, and presently, sinful pride having rule inside I went out to the camp fire to tell fearsome tales of the day’s adventures. Now for the first time I felt as though I belonged in that circle. Never, never should I be a mountaineer, the precipices of Crows’ Nest were not for me, but nevertheless the climb had been made, badly, falteringly, but to the top and accordingly I was made free of the great and noble company of mountaineers.

That night as I vainly twisted and twined to ease my aching bones I lived the whole day over again. The vision from the summit of Huber unfolded itself again before me—that sea of peaks, height calling unto height and depth to depth—the Kingdoms of the Earth and the glory thereof spread out before us.

In conclusion let me not forget to record—”We had been out fifteen hours.”

### **An Afternoon Stroll In The Selkirks.**

*By H. B. Dixon.*

It was a sad moment when the English party had to say good-bye to the Canadian Alpine Club at Field. We had been the guests of the Club for nearly three weeks—guests of honour, so to speak, at Banff, of friendship at Lake O’Hara, and—we feel we might almost say—of affection in the Yoho. And here were all the “boys” on the platform to see us off. How fond we had grown of these fine fellows with their broad shoulders and ringing voices. How much we appreciated being looked after so assiduously. How much we should miss that strident call to meals—”Roll up!” Why they should have become attached to us—beggared our understanding. But the fact remains, they really seemed to enjoy fetching and carrying, cooking and washing up, tent-pitching and bedmaking—all for our comfort.

We parted with many vows that we would all meet again in the Rockies, and the words as spoken did sound hollow. But the President’s sentiment was more wisely put: “Well, some of us will meet again, and we’ll remember the rest.”

“All aboard!” and we disengaged our hands to swing on to the moving steps, and waved hats and scarves as our west-bound train began the long descent of Kicking Horse Pass. It was the end of a rare good time, which I have tried to tell of (I know how inadequately) in another Alpine Journal.

That afternoon, as our train breasted Rogers Pass, we looked across the valley at the tops of our friends of the Rampart Range, “Afton, and “Rampart” and the “Dome,” and in a short time we were quartered at Glacier House where other members of the party were awaiting us. Glacier House is enlarged and improved, but is not yet improved out of all recognition—like the “Chalet” at Lake Louise. Our kind hostess of 1897, Miss Annie Mollison, has gone to Calgary, where indeed she met our train and pressed on us baskets of fruit to beguile our journey. But nevertheless we received a warm welcome and were made very comfortable at Glacier.

I must confess our mountaineering here was of the idlest. Perhaps it was the return to the flesh-pots that was responsible for this slackness. Beef-steaks and omelettes for breakfast—though they give an admirable sense of completeness to the morning—do not induce any abnormal desire to make early starts. And so it came about that we wandered round Marion Lake, visited the Caves,

and hacked steps on the Illecillewaet with no particular object—but always to the intense interest of the Yankee crowd of trippers. When my Oxonian daughter in her climbing costume took a stroll with me on the glacier we evoked quaint remarks: “Snakes, there’s a plucky little girl takin’ the Swiss guide right up the ice.” And so our last day came—a really fine day and we hadn’t even attempted a peak. A picnic and tea on the Asulkan Glacier was the *pièce de resistance* for the afternoon—”Why not climb Afton and join the others for tea?”

So Mrs. Spence, with her graduating honours fresh upon her, took me up the Abbott trail in a blazing sun. The trail loses itself—or we lost it—on the Abbott Alp. But we found a broken place in the cliff that faced us, and after an easy scramble reached the ridge. The view is wonderfully fine from the Alp, but the ridge opens up new ranges and the magnificent snow fields of Mt. Bonney to the West. It would have been a sin to hurry over this. We ate our luncheon, and lay in the sun—could we have slept?—for a delicious hour. Then we traversed the ridge and climbed the rocks of Afton. We ought—as we had decided to descend to the Asulkan glacier—to have gone straight down the snow couloir from the col between the two peaks, but my companion has a feeling that snow should only be tackled if no other way is open, and beneath the lower peak an enticing rock chimney led down and would certainly “go” for two or three hundred feet by the aid of a few traverses.

A large party on the Asulkan glacier below watched us through Swiss glasses as we reconnoitered the face. They were already where we had promised to join them for tea. Well, we had a jolly climb down—keeping as near as possible to the edge of the buttress that falls from this point—picking our chimney to the right and left of it, and traversing round on sound ledges until we found another opening. The rock was firm and the holds good, but it took time—and I was not surprised when we reached the foot of the great cliff that we had been an hour and a half on the rocks.

From our position it looked quite an easy run down either to the snout of the glacier or to the river running from it—and it was only 4.30 p.m. But I had been in a Selkirk bush before and warned Mrs. Spence that the little belt of forest and bush between us and the river would take some crossing. What I did not expect was that the apparently easy grass slopes leading from the rock-face of Afton down to the wood would take nearly two hours; but they did. The grass was so steep and slippery that even with good nails I slathered down it in jerky glissades, and Mrs. Spence who had lost nearly all her nails had almost to crawl. We found a few patches of old snow which made easy going, and we lingered a moment in a hollow of the hill ablaze with yellow and white lilies. At 6.20 p.m. we reached the tree line. Should we select the pine-wood or the scrub?

I knew the wood was bad, so—probably unwisely—chose the scrub. A few minutes made it plain that it would be a fearful fight to get through on the level; when it dipped down it would be hopeless. So we selected a small stream and followed right down its bed. At first we stepped gingerly from stone to stone as we parted and pushed through the boughs overhead. By keeping to the stream—and we soon forgot to bother whether we stepped in the water or not—we could just see what we were going to step into; but after an hour’s struggle we could hear that we were near a waterfall, and presently we saw our stream slide over a smooth slab and disappear. The bush was too thick to let us see what fall there was. We turned out of the bed of the stream and forced a way through the bush to the left. After traversing some thirty or forty yards I thought we might venture forwards—testing the ground (which it was quite impossible to see, for we were walking on bent-down boughs) with the ice-axe at every step. Then without the slightest warning—for my axe struck something hard in front of me—I took a step on to what appeared solid ground and, whatever it

was, "it failed beneath my feet." I went straight down, tearing away the twigs I was grasping in my left hand, down through a region of total darkness, scraping along what I took to be a stem (but it turned out to be a hanging root) and coming into the light—and also stopping—in a sitting position with one leg round the root, which made a convenient loop before running back to the ground above. Long rootlets hung in a festoon round my head, but beneath me it was light enough, for I looked down on tree tops forty feet below me. My perch seemed secure, so I had time to look round. Away to my right was the water-fall—descending quite clear of the cliff which I could just touch with my axe. A great slice of cliff had flaked off leaving the earth and roots, which it had supported, overhanging like a cornice. The rock was hopelessly smooth and leant over towards me; there was no getting up or down it. Below was space and waving tree-tops, above me the smooth straight root gave the only path; I had to swarm it. The first eight feet were simple climbing, but the rope and axe were awkward impedimenta. Then the roots got complicated and I could not push my shoulders through. There was nothing to get one's feet on, and as the seconds passed I thought of a descent and a tumble into the tree tops would be the "way out." Then I managed to get one shoulder jammed between the roots, and kicking out "behind and before" in a final effort caught a toe on some unseen projection. This gave enough leverage to force my shoulders through, and in another moment I had a foot-hold and it was easy work to push a way through the dark hole above. I was surprised to find I had gone down a drop of sixteen feet. These acrobatics over—and a brief breathing space allowed—we took a fresh traverse to the left and then cautiously turned down the slope again. It was still steep, and until we had forced a way down some two hundred feet we could not be sure we were not stepping into the blue at every step. That little belt of scrub took us two mortal hours, and the light was just disappearing as we emerged into the comparatively level "meadow" by the river.

I spotted and followed a track where grass and weeds had been trampled down and bushes bent and broken for a height of two feet six or so. "Why a party has been along here," cried Mrs. Spence. Yes, a grizzly or a large brown "party" had been along pretty recently, but there was no time to discuss details if we meant to cross the Asulkan river and get home that night. I kept a fairly bright look-out for the "party," and on reaching a spot that plainly showed his claw marks judged it expedient to make a slight detour. Mr. Bear might turn nasty if he thought we were pursuing him on his way to his evening drink. We reached the river and found it deep and rapid. We forced a way for some hundred yards down the left bank and then Mrs. Spence spotted below us a natural bridge. It was a large fallen tree and made an excellent bridge even in the gloom. Having crossed the water we scaled and tumbled over fallen timber till we hit the path. Hurrah! we were through!

The light was now gone, but the path could hardly be mistaken—even in the dark—and we sang in pure light-heartedness. But we were to have one more sensation. Though the rocks and trees to our right were lost in gloom, the white foam of the torrent on our left gave a half-light that let us see a few yards ahead. I don't know whether we had bear on the brain—but there right in the path as we turned a corner of rock stood Mr. Bruin. I cannot exactly say—as the poet says of another sudden vision—

"His loveliness with shame and with surprise  
Froze my swift speech."

for it was too dark to discern the beauties of his form. But I caught the glint of a small eye as he turned, and distinctly saw the grey fur round his neck bristle as he waited for us. Our song ended with a jerk, and we and he stood still and silent.

Now according to all poetic canons a gaunt wolf, or (presumably) a grizzly, when he meets

an unarmed person (of blameless habits) singing a song in a wood, should immediately turn tail when he hears the name of the heroine of the song—be she

“Lalage, Neaera, Haidee, or Elaine or Mary Ann.”

A fortiori when a lady is actually present, he should not stand upon the order of his going, but go at once. Stay: was I judging Mr. Bruin fairly? My companion is tall and slim, and was correctly attired as an active member of the Canadian A.C. Should I have been sure, if I could have put myself in his place, that it was a lady? Anyway he stood his ground stubbornly; but he did not come at us. I looked to right and left, feeling we might, without loss of dignity, yield him the path if we could find a way round. It was not easy. Then came a happy inspiration. I felt for my matches, picked out two and advanced between him and the torrent—striking a light within two yards of his nose. And lo! the mystery was revealed. It was a fretful porcupine standing on a black rock, and shaking indignant quills at our intrusion.

An hour later we crept into Glacier House dishevelled, stained and hungry. And Mrs. Young, the hostess, shook her head at us and said we were incorrigible, but gave us an excellent supper all the same.

### **With The Scottish Mountaineering Club At Easter.**

*By G. M. Smith.*

When the Scottish Mountaineering Club assembled in a distant, northwest corner of rugged Ross-shire for their annual Easter meet, it was discovered that a quorum of the Alpine Club of Canada had also gathered together. The presence of that quorum may justify some account of the proceedings in the Canadian Alpine Journal.

Travelling north as the guest of Mr. Solly, I awoke on the Thursday morning before Easter to find myself among the brown Highland hills, whose summits were still covered with snow—a startling surprise, with the previous night’s picture of a crowded English city still impressed upon my mind. At Kingussie, where we issued forth to claim breakfast baskets, ordered for members of the Club a month before, came the first deep breath of Highland air. The holiday had begun.

On the station platform at Inverness rucksacks and ice-axes betrayed the motives of a jolly band of mountaineers who seemed to have suddenly assembled. Time, it was explained, was invented for slaves and is no object in the Highlands, and before the train for Achnasheen had proved the fact, the Alpine experiences of the year had been recounted and the tale of the O’Hara camps ten times told.

Then a plunge into the heart of the Highlands under the crags, through the glens and beside the lochs. Here and there a cairn marked, not the triumph of the intrepid climber, but the site of some ancient struggle of the clans in memorable cattle raids; and from the corner of the carriage a modern representative of the clans, who had turned his spears into ice-axes and has abandoned cattle raiding for “Alpinism” pointed with pride to the monuments of ancestral vigour. But the fighting tradition remains. A sturdy Gael seeing “battleaxes” in the carriage, furtively inquired the nature of the row.

From Achnasheen, the Scotch cousin of the Canadian Hector, a ten mile drive to Kinlochewe at the head of Loch Maree, opened before us the wild, rugged and desolate, yet wonderfully beautiful scenery of Ross-shire. The snow-clad peaks above, a surprise to eyes which imagined that Canada and Switzerland had a monopoly of snow, and the deep brown lochs below, the rushing

mountain torrents, the peat moors, the fragmentary clumps of bright green pines, sole survivors of great forests, and the heather with its faded flowers-the whole fused into a mellow mass of colour by the mystic Highland lights-gave promise of one of those other Edens which are the Paradise of mountaineers. On the hillside two stately stags gazing curiously at the intruders before plunging madly up the hillside, warned us that we trod by permission on forbidden ground.

The inn at Kinlochewe was the headquarters of the main section of the meet, for limited accommodation forces the club to divide. To simply say that it is a Highland inn is eminent recommendation. No tin plates, no canopy of canvas, no brushed tents, no camp fire, yet marvelously fascinating and comfortable.

There is a temptation to wander from the technicalities of climbing to a contemplation of the beauties of Ross-shire. For the scenic aspect often is pre-eminent. The Scotch mountains have their difficulties; but for the slack man and the photographer, there is an easy way to the summit or rather to the various summits, for in a day one climbs a range and not a single peak. To satisfy the "Steigenlust," the strenuous climber finds the rock faces of Coire MacFhearchair on Ben Eighe or the northern pinnacles of Liathach. Readers should perhaps be warned against attempts to pronounce these names. Mr. Roosevelt and phonetic spelling have not yet invaded the Highlands. With the silent lapse of time and the mutations of language many of the surnames of these "Bens" are impenetrable mysteries.

But what of climbing? Perhaps I may narrate briefly my own experiences, which are also those of Mr. Solly. Good Friday, three peaks of Ben Eighe were climbed, and on this day Mr. G. E. Howard was one of the party. The altitude of these Scotch mountains is but slightly over 3,000 feet but starting from sea-level one gets the full benefit of the stated height. Over the moors and up the stalking path, across a high plateau, up a steep snow slope and over a small cornice and nothing remained but a windy walk in the Scotch mist to the first peak. One could not see far in the mist but it seemed as if huge Alpine ranges loomed up before us. Distances and heights are magnified. Traversing the ridge to the next peak we encountered a row of "Black men," pinnacles of Torridon sandstone which obstruct the way. From the second to the third peak it is a matter of scrambling over rocks. A glissade, another stalking path and a five mile walk completed an easy first day.

Saturday opened with a ten mile drive to the sea-loch Torridon, followed by a long walk around the base of Liathach to an inland valley, from which the northern pinnacles were accessible. But the roundabout way along an old lateral moraine was long, if delightful, and it was one o'clock before the main ridge was reached. The north side of Liathach has two horseshoe corries and the famous northern pinnacles, a deeply serrated ridge of Torridon sandstone, rising in steps to the central peak, makes the wall between them. The lateness of the hour and a gale from the sea made it impossible to get down into the corrie and up the wet rock of the pinnacles. We therefore traversed the serrated main ridge, over pyramid-like peaks looking down into the two unparalleled corries. Huge white valleys, they seemed, walled by the steep, black rock of Liathach, with its long perpendicular gullies outlined in snow. In the distance the eye travels along the deep valleys on either side or out across Loch Torridon and the sea to the Isle of Skye. On the last peak a snowstorm led to a hurried, glissading retreat. Tea and the trap we found at the keeper's lodge.

On Sunday, a long walk on the moors with a return by Lochs Conlin and Clair revealed one of the beauty spots of Scotland. The afternoon was clear. To the right in the distance the snows of Liathach were bright in the sunshine; to the left the sun went down behind a sombre, wooded hill. Across the loch rises another wooded hill, with a hunting lodge in the trees. As we traversed the opposite shore, the whole scene is mirrored in the dark lochs in an ever-changing panorama

of extraordinary detail and colour, the white chimneys of the lodge, appearing as stalactites in a gloomy cave, lightened by the snows of Liathach through an aperture concealed by the pines and birches of the foreground.

Monday's climb up the sides of Corrie MacFhearchair, returning over all the peaks of Ben Eighe was likewise full of interest—the picturesque ice-bound loch with the corrie in the background, suggestive of McArthur without the Biddle Glacier, the climb up steep, crusted slopes, the views of Liathach, the distant outlook to Loch Ewe, to the peaks of Skye and to the outer Hebrides. Similarly Tuesday's walk up Slioch gave incomparable glimpses of a score of picturesque lochs and valleys.

Wednesday, we left Kinlochewe for Dundonnell on Little Loch Broom, a twenty-four mile walk through the glens, now untrodden save by deer and their hunters, over two 1,000 foot passes and around the charming Loch Fada. A long walk in a third valley along a stream, of which the deep pools everywhere invited a plunge, brought us to a gamekeeper's cottage, where with true Highland hospitality we were given tea. Still eight more miles over unknown moors and the unfamiliar mountainside of the Teallach Range, with darkness coming on. Then followed a most exciting walk over the upland moors and through the darkest and gloomiest of glens to another Highland inn and another Highland dinner. The pleasure of reaching Dundonnell was not incomparable to an arrival in Paradise Valley after a journey over the Abbot and Mitre Passes.

On Thursday, a late start did not permit us to traverse the whole of the Teallach Range—perhaps the most difficult of all in the neighborhood—but reaching the highest point in the long broken ridge, we returned as we had come. To gain the final peak, by a traverse of a soft snow slope over a precipice falling sheer in the loch in the valley, the rope was necessary. This was the only occasion on which it was used.

Friday, a motor carried us thirty-six miles to the nearest station, Garve—another surprise to any who imagine that one can't get off the trodden paths in the British Isles. The night was spent in Inverness and Saturday, the Highlands abandoned.

Climbing in the Highlands, it is obvious, finds its charm in the picturesque. But it is also extremely stimulating, if not thrilling. With the background of inns, it may be called comfortable. It is none the less delightful. The Ross-shire Ranges, moreover, are sufficiently far from civilization. A few crofters, shepherds and gamekeepers are the sole inhabitants at Easter time of this distant corner of Great Britain where the cry "back to the land" is meaningless. Here are the haunts of grouse and hare, of eagle, the ptarmigan and the raven; the deer are monarchs of the glen. Easter is the climbing season; then the deer forests are open and the snow is on the mountains.

Into Kinlochewe, came the merry mountaineering invasion, filling the inn, the manse, the cottage. There the camp-fire spirit of the Rockies found a counterpart. One heard much of the hospitality of the Alpine Club of Canada, but there too, Canadian hospitality found a serious rival. Great interest was evinced in the Canadian Rockies and nothing but the routine duties of life, or perhaps the possibilities of a general election, seems to prevent many from visiting the camp of 1910 in the Valley of the Ten Peaks.

There were no ladies at the meet. A separate sister organization is the pride of Scotland.

"And from Caithness down to Arran, on the mountains  
big and barren,

You can trace their little footprints in the snow."

Scotland, it may be said in conclusion, is not necessarily as advertised. It tried to rain but twice during the meet.

## Mathew Arnold's Alpine Poetry.

Of truly Alpine verse in English poetry there is not very much, and the reason is too obvious to mention. Without greatly caring for the philosophical theories concerning Nature held by Wordsworth or Coleridge or Browning or any of the Master Poets, the ordinary mountain climber who reads poetry is attracted to descriptions of mountain landscape. What he wants is truth of description, pictures that please him because he has seen the sights and heard the sounds and felt the thrill of the upper world. Without the poet, these pictures continually flash upon his inward eye, but his rapture of memory has no voice. Take, for instance, Coleridge's great apostrophe to Mont Blanc, surely the sublimest Alpine utterance in the language: it is now our poetic expression who, without it, were dumb. We might climb high mountains till the crack of doom, and still be dumb; and it is well, since our silent memories and feelings are uttered forth by singers so inspired.

We could essay no more delightful task between climbing seasons in the long winter evenings when the next summer's campaign is being affectionately planned, than to make for ourselves an Alpine anthology. Here is an idea gratis for that fruitful anthologist, Mr. C. V. Lucas, who might call it "The Alpine Pageant." It would be an "unspeakably slight" though indubitably choice volume. In it we should find some beautiful fragments and more than one whole poem of Mathew Arnold's. R. H. Hutton, than whom Arnold has had no more sympathetic and discerning critic, found a languor of death even in his poems of Nature. The phrase was Hazlitt's applied to Wordsworth's "Loadamia"; and Mr. Hutton quotes the whole terse sentence as true of the body of Arnold's verse: having "the sweetness, the gravity, the strength, the beauty, and the languor of death; calm contemplation and majestic pains." He finds that this languor drives Arnold to Nature and haunts him there, albeit his pulse beats stronger under her spell. But I think there is genuine passion in Arnold's Alpine passages; and one poem, at least, is strong with a strength born of the poet's love, deep and vital, of wild alpine beauty. True, all these poems of Switzerland are marked with a hopeless human love, real or imaginary, for a lady whom he names Marguerite. But it is to the high Alps with their purple hills, eternal snows, and exulting winds that he turns for healing and refreshment. And most of these fragments are steeped in profoundest melancholy, but that is not owing to anything in the scenes he describes. Take first, some passages from the groups of poems whose theme is his unrequited love of Marguerite. As far as possible I shall leave out the lines referring to her.

"Some day I shall be cold, I know,  
As is the eternal moon-lit snow  
Of the high Alps, to which I go.

\* \* \* \* \*

And as this brimmed unwrinkled Rhine  
And that far purple mountain line  
Lie sweetly in the look divine  
Of the slow-sinking sun;

\* \* \* \* \*

So let me lie, and calm as they  
Let beam upon my inward view  
Those eyes of deep, soft, lucent hue  
Eyes too expressive to be blue,  
Too lovely to be grey."

And this poem in which the elements are the voice of his longing heart

“Ye storm-winds of Autumn  
Who rush by, who shake  
The window, and ruffle  
The gleam-lighted lake;  
Who cross to the hill-side  
Thin-sprinkled with farms,  
Where the high woods strip sadly Their  
yellowing arms; —  
Ye are bound for the mountains—Ah,  
with you let me go  
Where your cold distant barrier, The vast  
range of snow,  
Through the loose clouds lift dimly  
Its white peaks in air  
How deep is their stillness!  
Ah ! would I were there!”

Then he hears her voice on the stairway as music from some “wet, bird-haunted English lawn” or from some clear mountain brook. But

“Hark! fast by the window  
The rushing winds go,  
To the ice-cumbered gorges,  
The vast seas of snow,  
There the torrents drive upward Their  
rock-strangled hum,  
There the avalanche thunders  
The hoarse torrent dumb.  
—I come, O ye mountains  
Ye torrents, I come!”

The interlude brings her figure casting its shadow, then her face, eyes, hair, cheeks and lips described in exquisitely delicate phrasing. And again the tumultuous winds

“Hark! the wind rushes past us  
Ah! with that let me go  
To the clear waning hill-side  
Unspotted with snow,  
There to watch, o’er the sunk vale,  
The frore mountain wall,  
Where the nich’d snow-bed sprays down  
Its powdery fall.  
“There its dusky blue clusters  
The aconite spreads;  
There the pines slope, the cloud-strips  
Hung soft in their heads.



No life but, at moments,  
The mountain-bee's hum.  
I come, O ye mountains!  
Ye pine woods, I come!"

The stanzas following are poignant with the pain of separation, and he turns to Nature in whose heart is balm for all who love her.

"Blow, ye winds! lift me with you  
I come to the wild. Fold closely,  
O Nature! Thine arms round thy child.

To thee only God granted  
A heart ever new  
To all always open;  
To all always true.

Ah, calm me! restore me!  
And dry up my tears  
On they high mountain platforms,  
Where morn first appears.

Where the white mists, forever,  
Are spread and unfurl'd;  
In the stir of the forces  
Whence issued the world."

Were there space, I might quote some lovely Alpine verses from "Obermann" and from "The Grande Chartreuse," but enough has been quoted to prove Mathew Arnold worthy a place in any Alpine anthology.

—E.P.

## IN MEMORIAM.

### Hector G. Wheeler.

The death occurred on July 6th, 1909, at Hawthorne, Ontario, of Hector George Wheeler, Assistant Chief Mountaineer of the Alpine Club and an official of the Dominion Topographical Survey. It was owing to exposure in the field that Mr. Wheeler was smitten by a severe illness which kept him for four months in the hospital at Revelstoke and which developed into an incurable malady. Until the end almost, he was hopeful of recovery and eager to get back to the mountains. Shortly before his death he said to the writer, "I shall see you at Camp at Lake O'Hara, but I shall not be climbing any this year." I had taken him a box of anemones, the first spring blossoms on the prairie, and he said, "they will just be blooming on the mountains, when we get to camp." But the signs of death were even, then in his face. Throughout his long and painful illness, his patience never wearied and his sweet temper never failed.

Mr. Wheeler was a son of Captain E. O. Wheeler of "The Rocks," Kilkenny, Ireland. He was born in London in 1873 and came with his parents to Canada in 1876. He served an apprenticeship of five years as an engraver with the British American Bank Note Company, at its close accepting the position of topographical draughtsman in the office of his brother, Mr. A. O. Wheeler, Topographer in the Department of the Interior. One of the most skilful draughtsmen in Canada, he was an invaluable member of the staff. Several of the published, and many of the unpublished, maps of the Selkirk and Main Ranges of the Rockies are the work of his pen.

These maps are made from photographs obtained from the summits of mountains, a process involving difficult and dangerous climbing, often of unknown peaks. While attaining to great skill both on ice and rock, Mr. Wheeler had several times escaped death by a hair's breadth. Once he fell through a snow-bridge into a crevasse and was saved by his ice axe catching on the edges; and twice he shot over precipitous ice-slopes, his descent being arrested as if by miracle. An original member of the Alpine Club, he was closely connected with all its operations. He was one of the most trusted guides, and under his leadership many have graduated to active membership. The qualities which won him confidence as guide were the qualities which brought him respect and affection as man—great strength, and a skill, born of study and experience and love of climbing: infinite patience and gentleness of temper; and an altogether sweet and unconscious selflessness. Members of this Club did not wait for his death to express their admiration and affection for Hector Wheeler. These things were said of him while yet he was alive and active. The writer of this too feeble tribute holds his memory dear for the influence of his strong, gentle spirit. It was the gentleness which makes a man great. His true home was in the mountains; he loved them and left them with regret, hoping and expecting to return.

"From depth to height, from height to loftier height,  
The climber sets his foot and sets his face,  
Tracks lingering sunbeams to their halting-place,  
And counts the last pulsations of the light.  
Strenuous through day and unsurprised by night  
He runs a race with Time and wins the race,

Emptied and stript of all save only Grace,



**Hector G. Wheeler**

Will, Love, a threefold panoply of might.  
Darkness descends for light he toiled to seek  
He stumbles on the darkened mountain-head,  
Left breathless in the unbreathable thin air,  
Made freeman of the living and the dead:  
He wots not he has topped the top-most peak,  
But the returning sun will find him there.”

—Christina Rossetti.

### **The Reverend J. C. Herdman, D.D.**

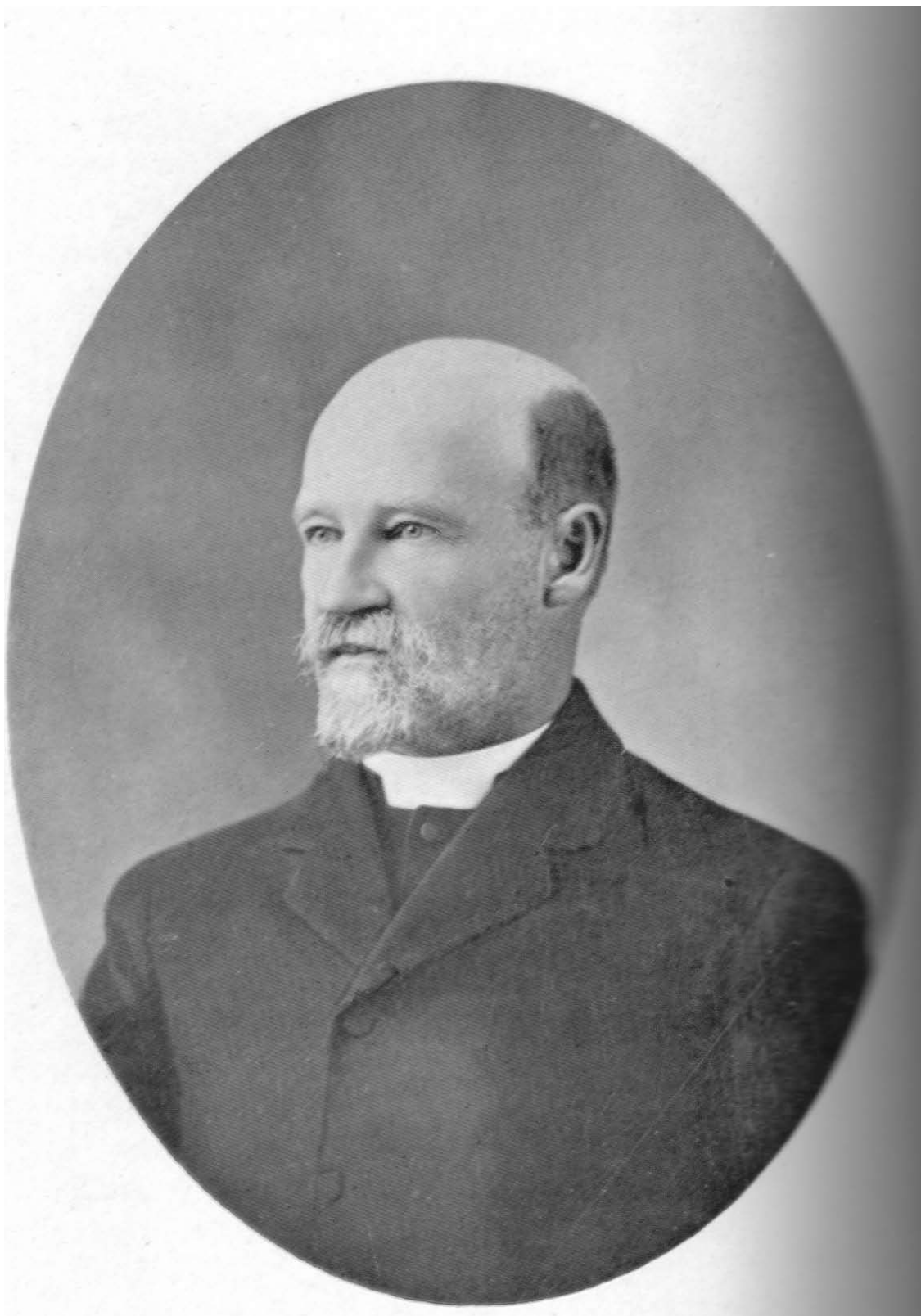
The late Dr. Herdman was a native of Pictou County, N.S. He came to Alberta in 1885, when twenty-nine years of age and for nearly twenty years was pastor of Knox Church, Calgary. He resigned the incumbency in 1903 to assume the position of Superintendent of Presbyterian Missions for the Province of Alberta and Eastern British Columbia. He died on 7th June, 1910, at the early age of fifty-four years, and was buried at Banff in the Rocky Mountains Park amidst the snow-clad peaks and pine forests he loved so well.

In March, 1906, he travelled as a delegate to Winnipeg to attend the organization meeting of the Alpine Club of Canada, and was elected as its first Western Vice-President. Always an enthusiastic and able mountaineer, he was a keen supporter of the Club and a regular attendant at its Annual Camps. To his untiring zeal in this direction the Club owes much during its infancy and the subsequent success it has attained. Apart from the Annual Camps the Doctor was a strenuous mountaineer and did good independent work. He was one of the few men who had taken part in the noble sport in the Canadian Rockies prior to the organization of the Club. Amongst his achievements may be mentioned an early climb of Mt. Hector, the monarch of the Bow Valley, when the Doctor used an ice-axe made from a pattern furnished by him to a Calgary blacksmith. It was truly a wonderfully made article compared with the light and symmetrical modern weapon of attack, but served to carry the Doctor to victory.

Like all enthusiastic mountaineers, he was keen to accomplish first ascents. Standing to his credit are those of Mts. Hermit and Macoun of the Selkirk range. Mt. Macdonald, one of the portals of Rogers Pass, was ascended by him with the same object in view. Having reached the summit in company with the Swiss guide, Edouard Feuz, Senior, they built a cairn and claimed a first ascent. The Doctor was standing beside a huge block of rock in which was a hole filled with rain water. Curiosity impelled him to plunge his arm into the hole and at the bottom he found a rusty nail, material evidence of a previous climb. At a mission meeting at Chilliwack some time later, the Doctor told the story, when one of the audience arose and stated that he could inform him who had placed that nail on the summit of Mt. Macdonald, as he and one other had made the ascent during the construction of the railway through the Rogers Pass.

Dr. Herdman last attended the Paradise Valley Camp in 1907. His subsequent illness caused his withdrawal from the activities of the Alpine Club. He was a strenuous mountaineer, an intense lover of Nature in her primeval fastnesses and a cheery and sympathetic comrade around the camp fire. We loved him well, and feel sure that his noble character and faithful performance of his life's work have received their due reward and that his last and great ascent has placed him on the summit of man's greatest hope and aspiration, where he will realize true peace and happiness.

—A.O.W.



**Rev. J.C. Herdman, D.D**

## ALPINE CLUB NOTES.

### On Equipment.

A mountaineer's equipment is of paramount importance, and many sad accidents are directly traceable to an inadequate outfit. It is on record that men wearing patent leather shoes, silk socks and light cutaway coats have successfully accomplished the ascent of Mont Blanc, yet nothing but the most extraordinary luck has saved them, and it would be just as foolish to base conclusions on such cases as it would be to maintain that falling off a roof is a harmless form of sport just because some lucky individual did, some time or other, perform such a feat without breaking his neck. No mountaineer worthy of the name will venture into the mountains without a suitable equipment. In selecting this equipment, the climber must bear in mind that it is often very difficult to predict, on any given day, just what the conditions on a high peak will be. He must always remember that even a slight accident may force a bivouac and that the possibility of a quick climatic change is ever present. It is, therefore, necessary to go prepared for the worst, while reducing bulk and weight to a minimum. In that which follows, the writer has endeavored to give such hints as a long experience suggests, and he trusts that they may prove of use to beginners.

Well-nailed boots are probably the most important part of a climber's outfit. The sole should reach from toe to heel without a break and should be about  $\frac{5}{8}$  " thick, projecting slightly beyond the uppers, so as to protect the latter against sharp stones. There should be hardly any "waist" under the instep and the heel should project slightly all around. A broad sole throughout materially stiffens the boot and gives a welcome sense of security when standing in ice steps. The broad "waist" is of vital importance, since it protects a sensitive part of the foot from injury by sharp stones. The boot should fit closely at the heel and around the instep, but entire freedom in all directions must be provided for the toes. If the toes are at all cramped, they will freeze very easily. Pointed boots are, of course, quite out of the question. The uppers should be specially stiff and strong round the heel and should reach at least two inches above the ankle. Porpoise leather shoe laces threaded through eyes (and not caught in hooks) give the best wear. Hooks are a source of constant trouble. The best possible well seasoned leather should be used throughout. Swiss or Austrian nails are the only ones worth considering. It is not an easy matter to nail mountain boots properly but, while there is no one pattern which has any very marked advantages, it is very necessary not to place the nails too close together. A closely nailed boot has little grip and is quite unnecessarily heavy. It is a great importance to have a few nails under the instep. It is a good plan to keep boots for six or nine months in a dry, well ventilated place before using them. Much grease is as bad as not enough; it rots the seams. Climbing irons or "crampons" are very useful for hard snow or ice work, but should never be used on rocks unless the latter are coated with ice. The articulated Austrian patterns with 8 or 10 spikes are the best. Crampons should fit the boots closely; otherwise they will become a source of danger instead of a help. Hemp straps should be used in fastening crampons to the foot and it must be borne in mind that such straps contract very appreciably as soon as they become wet. It is not necessary to be always provided with crampons.

Thick woollen stockings are necessary; two pairs of such stockings, or one pair of stockings and one pair of socks, should always be worn. Those who, as a rule, do little walking during the year will find horse-hair insoles a very pleasant and useful addition. On long and difficult glacier tramps, two pairs of stockings and an insole are almost indispensable, for it is often necessary

to move very slowly and to stand in ice steps for hours at a time. The boots should, of course, be ordered to accommodate the thick stockings and the insole, if one is worn. Elastic garters are dangerous, use plain leather straps lined with flannel; thus securing friction between stocking and garter.

In the way of underclothing, light woollen knee drawers and a woollen shirt of ample size are all that is necessary. All these articles should, however, be of the best wool. An abdominal belt, say of the Jaeger button pattern should always be carried in the ruck-sack. It is extremely light, takes little space and is of incalculable advantage in case of severe weather or a forced bivouac.

The climbing suit must be made of very strong and closely woven material. Rough tweeds are unsatisfactory; they cannot keep out a keen wind and tear easily. The material often used for riding breeches and known as whipcord cloth gives very good satisfaction. Whatever the material chosen, it is necessary that it should be at least of medium weight and that both warp (called "chain" in America) and woof ("filling" in America) be composed of two or three distinct strands twisted together like the strands of a rope. Inspection will show that in most materials, the warp alone is composed of several twisted strands, while the woof is composed of one strand only. Such materials do not wear well. A very light coloured suit shows dirt and stains too rapidly; a very dark one is very hot in sunny weather; a darkish grey or brown is best. Knickerbockers are immeasurably superior to trousers and have now been universally adopted. The riding breeches pattern is quite unsuitable, although smart. The oldfashioned, baggy knickerbockers is the proper garment, it should have plenty of overhang at the knee to allow perfect freedom of movement. A somewhat long knickerbocker is also very useful in that it can be undone at the knee, where it must be fastened with strap and buckle and not with elastic, and stuffed into the gaiters when tramping through deep snow. It is essential for the knickerbockers to reach well up above the waist, thus giving good protection to the abdomen. Belts are not to be recommended, suspenders should be worn instead. The knickerbockers should be lined with Jaeger wherever linings are usually used. An ample double seat (not of the small bicycle pattern) is necessary. Hip pockets should be avoided, a deep ticket pocket with flap on each side is very useful.

The opening for each side pocket should be horizontal and must have a flap. A waistcoat of the usual pattern is useful in travelling, but can be safely discarded on an expedition, a light woollen sweater advantageously taking its place.

A Norfolk coat overlapping by two or three inches on the chest and lined throughout with light Jaeger material is most serviceable. The collar should be deep, so as to give good protection when turned up and must button in front when so used. Straps on the sleeves near the wrist are very useful in cold, windy weather. The coat must fit loosely and allow the arms to be moved quite freely in all directions. It is a good plan to provide slits at the side of the coat (say about the middle of the watch pockets in the vest) through which the belt can be passed and then buttoned underneath the coat, thus keeping same in place, when the latter is not buttoned in front. The belt must be securely sewn to the coat; otherwise, it will surely be lost. Two deep, outside side-pockets, two large inside breast-pockets (for maps) and a deep and wide inside "game" pocket extending over the whole width of the back are necessary. All pockets should be lined with Jaeger and all outside pockets should have flaps. A deep inside watch pocket is very useful. The coat should be of medium length only.

A useful sort of hat is a broad brimmed soft felt. It gives good protection against the sun, is light and can easily be tied down with a handkerchief, or the like, when necessary. A stout and reliable hat guard should always be carried. The inconvenience of losing a hat is a small item

compared to the risk run by anyone who attempts to save his hat when in a difficult position. The necessary movement must be sudden and may, therefore, cause the person to over-balance; yet the natural tendency is to make such a movement, unless entire confidence can be placed in the guard. A light woollen muffler should be carried on high peaks. A woollen cap or hood in the shape of a helmet with a small opening for the face and reaching down to the shoulders should always be carried. Such caps are known in Switzerland as "passe-montagne"; they can take the place of a lost hat and are invaluable in a snow storm, when they should be worn under the hat. They also give first-rate protection at night. Choose a large one, one that fits tight will give little protection.

A good ice axe is, of course, a necessity and most amateurs will be well suited with an ordinary Joerg (Zweiluetschinen) axe. Anyone wishing to do all the step cutting himself will select his axe a little more carefully. The proper over-all length for a six foot man is 40 to 42 inches. The shorter the shaft, the less help it will be in descending. The longer the shaft, the more it will be in the way when cutting steps. An expert relies little on his axe in descending and can afford to use a shorter one. The weight of the man determines the thickness of the shaft. The weight of the shaft being thus settled, the head must be of such a weight, as to insure a proper balance. The centre of gravity, when the axe is held horizontally, should be at a point located about  $\frac{3}{8}$  of the total length from the head. Use as light an axe as your weight will allow and see that the pick end is very long, some 8 to 9 inches. This is very important and is of great help when cutting down steep ice slopes.

Slings of the ordinary pattern are most unsatisfactory. They are easily lost and must be either removed or hacked to pieces when cutting steps; furthermore, they do not secure the axe when cutting. The accompanying illustration shows a form of sling, which the writer has used for many years and which has proved satisfactory in every respect. A brass ring is adapted to slide freely up and down the shaft. To this ring is attached a strong leather thong or the like and a leather or metal stop fastened to the shaft of the ice axe, near the bottom, prevents the brass ring from sliding off. The noose of the thong is slipped over the wrist when the axe can be held in any position without removing the thong from the wrist. Step cutting with one hand becomes quite safe and even if the axe is wrenched out of the hand it cannot get away. The climber need not make frantic, dangerous and useless movements in an attempt to recover it. The axe can be safely let go at any moment in order to attend to the rope or to secure a hurried hold. The axe shown in the illustration is a well proportioned Joerg ice axe with a lot of "drive." An old suspender is attached to the sliding ring, instead of the leather thong above referred to. While such a broad band is less of a strain on the wrist yet no material but good leather seems able to give sufficient wear.

Goggles are indispensable. Smoked glass goggles are unsatisfactory, they either obscure the vision too much or they do not sufficiently protect the eye from the actinic rays. Authorities have lately declared that chrome coloured glass or the grey-green Fienzahl glass is much superior for this purpose. The goggles should be large, the glass itself measuring at least  $1\frac{3}{8}$  by  $1\frac{3}{4}$ ".

Gloves are indispensable and should always be carried. They should be of very thick and strong wool with a separate partition for the thumb but without fingers. Such gloves must reach well up the arm at least 4" beyond the wrist. Ordinary rough cotton gloves are most useful about camp and when climbing rough rocks. Several pairs will be required for each season as these cotton gloves give very little wear.

Spiral puttees are smart and convenient but they are not satisfactory for long snow tramps. They answer the purpose sufficiently well for Canadian conditions. A good plan is to have them hemmed with some suitable and strong material after wearing them once or twice. The disagreeable



fraying will thus be entirely stopped. If wound on very tight such puttees impede the blood circulation, if put on loose they quickly come undone particularly if the calf is at all pronounced. For long snow tramps or for winter wear gaiters are best. A combination of the Chamonix gaiter and the puttee is very satisfactory for it combines the advantages of both while avoiding most of their disadvantages. It is important to carry two extra pairs of stockings on long expeditions. If a bivouac becomes necessary the dry pairs should be put on before settling down for the night.

Provisions and personal belongings are best carried in a "Rucksack." A number of light linen bags are most useful for separating and preserving provisions. People with a sensitive skin will do well to rub the face and neck with zinc ointment before venturing on snow or glacier. Sunburn is sometimes very painful and often causes fever.

A fifteen or twenty-yard, ten-millimeter rope is sufficient in most cases for two climbers, provided the rope is of first class make. Three climbers would use a thirty-yard twelve millimeter rope. Dry your rope as soon as possible, but dry it slowly, stretch it well and put it away in a dry, well ventilated place. Do not leave a rope to dry for long on rocks and in a very hot sun.

It is thought that the principal articles of a mountaineer's equipment have now been briefly discussed. It is, of course, impossible to give directions which will apply to all possible expeditions but it is thought that a climber provided with the outfit here described will be suitably equipped for any ordinary expedition in the Canadian or European Alps. For short climbs, the outfit can be considerably reduced with absolute safety.

—VAL. A. FYNN.

### **Hints On The Use Of The Rope In Mountain Climbing.**

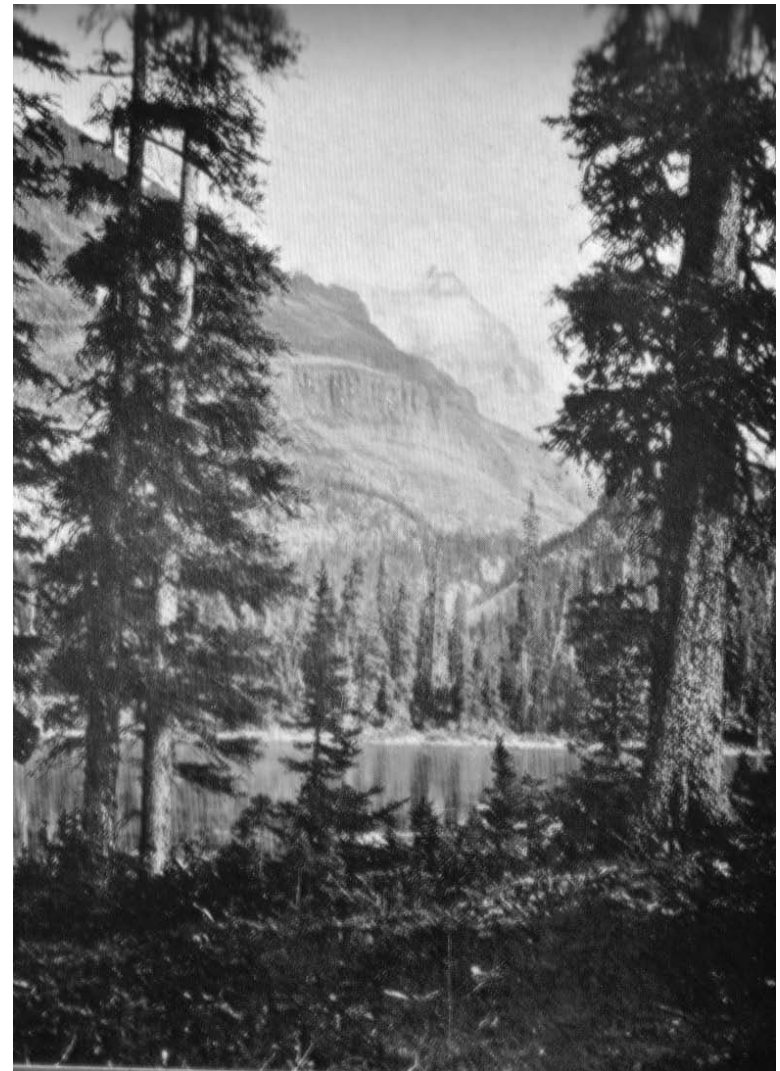
In the sport of mountain climbing the rope is one of the most important articles of equipment and, if properly used, is an absolute necessity to the safety of the climbing party, while it is a distinct source of danger to all if improperly handled, either through ignorance or carelessness. The following hints are given to inexperienced climbers therefore, and while, like any other sport, mountain climbing cannot be learned out of books, I hope that they may be of a little service to some of the newer additions to the quickly increasing ranks of climbers in Canada.

It is presumed that the party is equipped with a proper rope, of a length suitable to the size of the party and the nature of the work to be done, it being a Beale's Alpine rope of three strands of manilla hemp, with the thread of red worsted running through it, which is the only proper climbing rope made. The first item to be attended to on reaching the point where it is necessary to put the rope on is to see that this is done properly. There are three principal things to be looked after in connection with this, as follows:—

First.—To place the party in the proper order. A discussion of what this order should be is unnecessary here, but it might not be out of place to say that on guideless climbs, which I hope will soon become fairly common among the members of the Alpine Club of Canada as our experience and knowledge of climbing increases, the best man should be chosen as leader, to go first on the ascent and last on the descent, and once he is settled on for the position his word should be law until the descent is finished. As he is presumably the best and most experienced climber of the party he should issue his orders firmly and the others must obey him promptly and cheerfully, even though they may not be in perfect accord with him at all times. A disorganized party is always in danger, and when once the leader has decided on a certain course of action his leadership must not be questioned. Of course, it is not intended that the other members of the party should be debarred



**Illustrating Sling On Ice Axe. Val A. Flynn, Photo.**



**A Peep At Hungabee. Olive Dixon, Photo.**

from offering a suggestion or that the leader should be above accepting one, but when one is offered the matter of whether it is or is not to be acted upon must be left to the leader to decide. The position of the rest of the party is of minor importance, except that one who has had experience and who has a good bump of locality should be placed last, as he will be on the lead on the descent.

Second—To place the party at proper intervals on the rope. These intervals should be equi-distant, except in the case of that between the leader and the second man, which should be a few feet greater than the rest. This will often afford him a better opportunity of selecting safe anchorages from which to assist the ascent of the others in the party. What the exact length of the intervals should be varies according to the nature of the climbing to be encountered, and no definite distance can be laid down for it.

Third—To see that the rope is properly tied.—The bowline is preferable for the end men, and for the intermediate ones the “noose” is excellent, as once learnt it is easily and quickly tied, is easy to slip to the proper tightness around the waist and is perfectly secure. It is also easily untied, even when the rope is wet and stiff. However, the principal thing is to make sure that the knots are safe and that they cannot slip.

We will now suppose that the party is roped and ready for the climb. It must always be remembered that if one climber slips nothing serious is likely to happen if every member of the party is doing his duty, while neglect of duty may have serious results. The closest attention to the business in hand is therefore necessary and vigilance must never be relaxed. Admire the scenery while resting in a safe place, but not at any other time. As the late A. F. Mummery so impressively puts it “Among the mountains, as elsewhere, ‘the unexpected always happens.’ It is the momentary carelessness in easy (?) places, the lapsed attention, or the wandering look that is the usual parent of disaster. The first lesson the novice has to learn is to be always on his guard, and it is one the oldest climber rarely fully masters.”

However, I shall now leave generalities and deal with the use of the rope, first on rocks and then on ice and snow.

Everyone should look after and be responsible for the portion of the rope between himself and the man ahead. This will place a definite duty on each one and will leave the leader free to select the best course and pick out good hand and foot holds.

On face work and difficult traverses only one should move at a time, and the others should be prepared to hold him in the event of a slip. After having attained a safe anchorage the leader will belay the rope, if possible, and then assist the others by pointing out the holds, keeping up the slack of the rope, and even, if necessary using it to assist them, they to move under his directions and only one move at a time.

Great care should be taken, when assisting a man with the rope, to put only the actually necessary strain on it. Otherwise harm may be done by pulling the climber from his holds, and there is the certainty of making him sore in at least one, and in perhaps two senses of the word.

When it is necessary to assist a climber by pulling upwards on the rope get as directly over him as possible. A sidewise pull will hamper the pulled one to a greater or less extent and may even be dangerous, by pulling him from his holds.

When paying out the rope to the man ahead keep it clear of cracks where it would be possible for it to jam. If allowed to jam it may result in the climber getting a distinct jerk which might cause him to lose his balance. If it does get jammed, in spite of your care or because of want of it, give him sufficient notice to prevent him from being jerked.

Keep the portion of the rope under your care away from loose rocks. These loose rocks are

one of the greatest sources of danger on a mountain, and if one is disturbed it may cause injury to one of your own party or of a following one.

Always make use of projecting rocks for belaying pins. When paying out the rope to the man ahead it should, when possible, be kept behind a knot or projection of rock which would take the strain of a jerk off the following men in the event of the man ahead slipping. A rounded rock is preferable for this, but always make use of one of some kind when within reach, after having made sure that it is secure. This practice should also be followed when making a difficult traverse and all members of a party should be on the lookout for suitable points for the purpose.

Do not put all your faith on the rope, nor look on it as a sure preventative of accidents. It will not prevent a climber from slipping nor a loose rock from breaking away if you put your weight on it. It is only intended to lessen the chance of serious damage if anything does go wrong. Climb independently of the rope as much as possible; on a perfect climb the rope would, while worn, never be called into use.

Test the rope at frequent intervals, particularly before trusting your weight to it. I have known a rope to be injured by a falling rock, so that only a portion of one strand was left whole, and yet, though the cut was within six feet of me, there was no sign of any damage having been done until fully ten minutes afterwards.

When a party is moving steadily carry a small loop of rope in one hand. This will prevent the pulls which will otherwise be felt on account of different members of the party moving at different speeds. It will also take up some of the slack and lessen the chance of the rope being cut by sharp rocks or of becoming entangled among your feet.

When making a traverse where a slip might prove serious do not allow any slack to hang in the rope. If this rule is neglected and a slip occurs the inevitable jerk may result very seriously.

When ascending or descending a steep couloir where loose rock is lying keep as close together as possible. If this is done rocks which may be dislodged can be arrested in their downward course before gaining a dangerous momentum.

On snow or ice the same care is necessary as on rocks, but somewhat different rules apply at times, and we shall now deal with some of them.

Use the rope on a dry glacier, if crevassed. A slip on the edge of a crevasse is always possible, and if the rope is not in use may prove serious.

Always use the rope when on a *névé*. There is no exception to this rule. Snow may mask dangerous crevasses and yet not be strong enough to carry a person. Crevasses are generally indicated by a slight concavity in the surface of the snow, which is of a somewhat darker shade than on the ice, but it is possible to overlook one, in which case one of the party may break through.

Before jumping an open crevasse make sure that there is enough slack rope behind you to allow you to reach the opposite side. This may seem too obvious a rule to be given, but I have seen it overlooked.

Never travel over a glacier with a party of less than three. If one falls into a crevasse another can hold him up, but it is very difficult, if not impossible, for one man to pull another out. The same friction on the edge of the crevasse which makes it easy to prevent a man from slipping further down prevents the pulling of him up. If two or more are on top it is a comparatively easy matter, especially if the handle of an ice axe is laid close to the edge for the rope to slip on.

If one of a party falls into a crevasse raise him by pulling on the rope from one side of the crevasse only. If the rope is pulled on from both sides there is a certain amount of effort wasted in an incipient tug-of-war.

When ascending or descending a steep snow slope pass a loop of the rope around the handle of your ice axe (and stick the point of the handle hard into the snow at every step. The friction of the rope around the handle will greatly assist in arresting the progress of anyone who slips.

When crossing a *névé* keep all slack out of the rope. You should always be prepared to take a strain on the rope and if this is properly watched a person who breaks through a snow bridge will be checked before they go down further than their waist and will be able to assist in getting themselves out.

When it is necessary to cross a steep snow or ice couloir where steps are necessary let the leader go to the full length of the rope by himself to cut the steps. As many of the party as are necessary to secure his safety can hold the rope while on good footing.

Do not lean towards the bank when crossing such a slope. If you do so you are liable to overbalance and fall against the slope and are also certain to lose your footing. Stand perfectly straight; it is not only safer but is easier.

After coming off the rocky portion of a mountain, where it has been necessary to unrope to cross the *bergschund*, re-rope before crossing the *névé*. This is following the rule already given to never cross a *névé* without using the rope.

The above rules are almost entirely confined to the use of the rope, as a full list of rules to be observed while climbing would fill a book, but in addition to the above a few short additional rules are given which should always be remembered by climbers. They are as follows:—

Pay close attention to your equipment. See that it is of the best quality and in perfect order. This includes your boots and the nails in them. Never climb with darned stockings if you can avoid it. A climber, like a soldier, is only as good as his feet.

When on an ascent always be on the lookout for the means of descent. To quote Mummery again, "If a place cannot be descended it should not be ascended. If it is, the result may be that the party may be forced into difficulties from which they have neither the time nor the ability to extricate themselves."

Do not attempt a difficult place where at least one good anchorage cannot be obtained within the length of the rope. A slip on such a place will mean disaster for the whole party and if such a place is met with a party is not justified in attempting it.

Never attempt a difficult climb except when the mountain is in good condition. It is always bad during a storm and for at least two days after.

Never attempt a climb in bad weather. And if a storm should come on, even threaten, during a climb turn back at once and get to safe ground as quickly as possible.

Never allow more than one of a party on a doubtful snow bridge at the same time. If this rule is observed there is only a chance of one breaking through, and this chance is much less than if more than one are on it.

Never jump on a snow bridge. Cross it as carefully as possible, so as not to jar it. There may be others to follow you and you may need it on your return.

If you should happen to partially break through on a snow bridge distribute your weight as much as possible on top of the snow. Throw yourself forward so as to assume a lying position, with your arms spread out and your ice axe flat on the snow.

Remember that snow bridges are likely to be much weaker in the afternoon than in the morning. The cold during the night will have tightened them up by morning, but the morning sun will have weakened them by noon. Therefore, it is not safe to assume that because a bridge carried you in the morning it will carry you in the afternoon.

Approach and cross crevasses as nearly at a right angle as possible. This will keep all of the party except the one actually crossing as far from them as possible.

Eat and drink as much as possible when climbing. This is necessary to prevent your vitality from becoming low and should be done even if you have to force yourself to do it. The drink should not be ice water.

Retain a reserve of strength and do not overtax yourself. A night spent on a mountain because one of the party has given out is not a pleasant experience.

Have sufficient clothing with you to protect you in emergencies. You are liable to meet with cold and stormy weather at any time on a mountain.

Take an extra supply of food with you. You may be detained beyond the expected time and hunger does not add to the delights of a night spent on a mountain.

Make sure of your hand and foot holds before putting your weight on them. A slip may mean disaster to a whole party, and, as it is not excusable, is always a thing to be ashamed of, even if without serious results.

Avoid places that are liable to be swept by avalanches of rock, ice or snow, especially in the afternoon. An avalanche of any of the above travels with incredible speed and seldom gives any warning.

Do not glissade down, an unknown slope. You do not know a snow slope in the sense meant in this rule unless you have travelled over it within a few hours previously.

Do not drink the melted water found flowing over the surface of a glacier. It contains a large amount of fine, sharp rock in suspension, which is liable to cause trouble later on.

Avoid the use of stimulants while climbing, except in cases of emergency. The stimulation is bound to be followed by corresponding relaxation.

KEEP YOUR ICE AXE WITH YOU. You may need it before you get home. In conclusion, remember that, in the words of a famous climber,

“He who climbs and comes away, “Will live to climb another day, “While he who is in climbing slain “Will never live to climb again.”

It is not probable that St. Paul was familiar with the sport of mountain climbing, but his words should be remembered by all climbers when he says “Look, therefore, carefully how you walk. Prove all things; hold fast to that which is good.”

—J. P. Forde.

### **The First Ascent And Traverse Of The True Mt. Schäffer.**

I spent a week early in August, 1909, at the annual camp of the Canadian Alpine Club at Lake O'Hara enjoying that incomparable spot and having some good climbs. Even the charm of Lake Louise was not sufficient to prevent a return thither after the camp was broken, and so, with hopes of finding something eatable left Mr. W. Symmes Richardson, of New York, and I again sought that spot, which is so centrally located for many good climbs.

The Fates were propitious and we were made very comfortable by Mr. Mitchell, the secretary of the Club, who was superintending the clearing up of the camp. Of course, we had our eyes on a good climb, one always does when knocking about in the Canadian Rockies, but the intervening days must be filled with smaller excursions.

It was on one of these latter that we set out for Mt. Schäffer. During the camp week I had scrambled up to where a cairn is perched on the northwestern and lower end of a spur of the

mountain, named, quite erroneously on the sketch map, Mt. Schäffer, and could see no reason for calling this point the mountain as there is a tower at least a thousand feet higher towards Mt. Biddle. From the valley the true summit is not noticeable and, until one has been well up on the face of either Ringrose or Hungabee, the mass appears as a sloping spur of Mt. Biddle.

Three years previously Mr. Richardson had photographed this peak from high on Mt. Ringrose and was aware of a considerable tower cut off sharply on both sides from the main arête and it was for this that we bent our energies. We soon came to a second cairn further up on the arête marking a spot reached by a party from the club a few days before. Here we were completely cut off by a deep notch rendering further progress impossible without descending well toward Lake McArthur. Having done this we began the ascent of the main peak.

An interesting bit of rock work, quite comparable to the Mitre, led us to the apparently untrodden summit, from which we had the wonderful views here obtainable on a clear day. The three towers of Goodsir loomed up above all else to the southwest offering a challenge, which we later accepted. It seemed as if we could almost touch the black cirque of Biddle, while Hungabee and Ringrose were superb.

After building a stone-man we descended the face towards Mt. Biddle until a vertical wall blocked our way. Apparently the only way down was by a seventy foot chimney which, on account of the rottenness of the rock, was taken rather slowly but without difficulty. A glorious glissade down a couloir soon brought us to the Biddle Glacier and the rest was easy.

—MALCOLM GODDARD.

### **The Altitude Of Mount Huascarán.**

In 1908 Miss A. Peek of U. S. A. claimed to have ascended the north, lower summit of Mt. Huascarán in Peru. She made no instrumental observations above what she considered to be an altitude of 5,975 metres, 19,600 feet, but, from eye-estimates only. asserted that this peak had a height of at least 7,317 metres, 24,000 feet, and was thus the highest mountain of South America.

Believing Aconcagua to be the highest Andean peak, and futhermore to test the truth of these assertions, I decided to have a careful detailed triangulation made of the two summits of Mt. Huascarán. Through the assistance of Messrs. Fr. Schrader and Henri Vallot acting for the Société Générale d'Études et de Travaux Topographiques of Paris, an expedition was sent to Peru for me under the direction of M. de Larminat to effect this purpose.

Assisted by the Peruvian Government and favourable weather M. de Larminat and his assistants were able to carry out this work successfully between August and November 1909.

A base 1,600 metres, 5,248 feet, long was measured in the Rio Santa Valley in the Black Cordillera at an altitude of 3,800 metres, 12,464 feet. This base was measured by means of a 50 metre, 164 feet tape of Invar metal. From two stations, one at either end of this base, and from two others, the positions and altitudes of which were determined by trigonometrical measurements from them, that is from four stations in all, the positions and relative altitudes of the two summits of Huascarán were fixed by azimuthal and zenithal angles taken by theodolite.

In order to ascertain the true height of these stations above average sea-level a progressive levelling was conducted from the highest station, called the Garganta Signal, down along the mulepath leading from Yungay by way of Quillo to the sea at the port of Casma.

The Garganta Signal is higher than the col where the path between Yungay and Casma reaches its highest point. The difference in height between these two was ascertained by triangulation

from the Garganta Signal to be 159 metres, 521.5 feet. From the col down to sea-level at the port of Casma the levelling was performed by means of the tacheometer. The altitude of the Garganta Signal being thus established, it was an easy matter to fix the altitude of the other three stations, from which the triangulation of the summits was made.

From two of these stations from which it was visible, the altitude of the church tower at Yungay was also established at 2,568 metres, 8,432 feet.

The average sea-level was determined by four double observations of two water-marks made at intervals of six hours ten minutes between each. The agreement of these was satisfactory owing to the small amplitude of the tide at Casma, and also to the fortunate circumstances that the observations were made at time of neap tide.

The results of these measurements show the height of the north peak of Huascaran to be 6,650 meters, 21,812 feet, and the height of the south peak 6,763 metres, 22,182 feet.

Fanny Bullock Workman.

17th Feb. 1910.

### **Winter Mountaineering At The Coast.**

In the past winter, although, naturally, little high mountaineering was done in the Rockies or Selkirks, a good deal of climbing in the Coast Range was accomplished from Vancouver by members of the A. C. C. and the Vancouver Mountaineering Club.

The mountains immediately to the north of the City, though not alpine in character, rise from the sea level to altitudes varying from 4500 to 7000 feet and in winter the snowfall above 4000 feet equals that in the Selkirks. The beauty of these hills with their rich forests and magnificent outlook over the lowlands, the sea and the everlasting snows about Mt. Garibaldi is even more varied if not so sublime as that of the higher ranges.

In winter especially they afford to the climber a splendid playground in which to become proficient in the use of the rope and iceaxe and to obtain an invaluable knowledge of snow conditions. The cornices, which often become very large on the exposed ridges and the avalanches which fall constantly in mild weather, form the chief dangers to the unwary.

During the winter of 1909-10 nearly all the peaks within a day and a half's march from Vancouver were ascended, the chief expedition being to the twin peaks known as the "Lions" (6500 feet). This is believed to have been the first attempt to climb them in winter and although they are sixteen miles from the city, six of which were disposed of on the preceding afternoon, the firm condition of the snow and a moonlit night enabled the party to complete the expedition in eighteen hours of steady going. Without ice-axes the hardness of the snow and the steepness of the final 1500 feet would have rendered the ascent impossible. An attempt by a second party failed through lack of them.

In the afternoon these slopes were descended by a series of splendid glissades which in ten minutes brought the party down what had taken two hours to ascend in the morning.

The outlook from the top was superb and although a fleecy blanket of fog covered the city and the flat country, Howe Sound lay far below quite clear of mist and sparkling in the sun.

On other climbs snow-shoes played an important part as the constant falls of snow seldom allowed a crust to remain long uncovered. Skis were also employed but did not prove so useful.

Much more climbing would be done if there were a few huts built at convenient places among the hills, for at present, it is only those capable of travelling far and fast who can reach the





**The Western Lion A.C.C. Climbing In Mid Winter At  
Vancouver. B.S. Darling, Photo.**



**The Eastern Lion A.C.C. Climbing In Mid Winter Att  
Vancouver. B.S. Darling, Photo.**

highest and most beautiful summits. But much activity is being shown and the next few years will, it is hoped, see the construction of these shelters.

B. S. Darling

### **Revelstoke Mountaineering Club.**

A copy of the annual report of the Revelstoke Mountaineering Club has been received from the Secretary, Mr. J. P. Forde. It shows considerable activity by that body.

During the summer months the Club, assisted by the City, built a substantial log chalet on Mt. Revelstoke and furnished it with a stove, cooking utensils, etc. The accommodation thus afforded is much appreciated by members spending holidays in camp on the mountain.

While no actual mountaineering was done by the Club as a body, individual members did a very creditable amount of high-class work as the following partial list shows:—

R. R. Copeland—First ascent of South Albert Peak; attempt on Mt. Sandford.

Rev. J. R. Robertson—Mts. Huber, Habel, Daly, Balfour and President.

W. A. Alldritt—Mts. Huber, Habel, Balfour, South Albert Peak, and first ascent of North Albert Peak.

G. L. Haggen—First ascent of North Albert Peak, South Albert Peak.

J. P. Forde—First Ascent North Tower Goodsir, first ascent Mt.

Victoria from south, second ascent Mt. Biddle, Mt. Mackenzie.

The membership of the Club is forty-eight, a number that will doubtless be largely augmented during the coming summer. A grant of one thousand dollars to be spent on building trails and shelters to assist the programme of the Club has been promised by the Minister of Public Works for the Province.

The report vigorously calls attention to the necessity of a reserve being placed upon the land and timber on Mt. Revelstoke and that steps be taken to prevent the unnecessary destruction of timber by camping parties.

### **Crowsnest Pass.**

We have had our attention called to the fact that the origin of the name “Crowsnest Pass” is wrongly given on page 103 Vol. 1, No 1, Canadian Alpine Journal. There it is attributed to Mr. M. Phillips, of Elko, B. C. Mr. Godsall, of Cowley, writes to us that the name is anterior to Mr. Phillips, and appears on Palliser’s map, published in the fifties. Mr. Godsall says that he was informed by Lee, an old-timer married to an Indian wife, and therefore in touch with their traditions, that the Blackfoot Indians, who do not as a rule go near the mountains, made a slaughter of the Crow Indians near where the town of Frank now is, getting them into a “nest,” or corralling them. The Rev. John McDougall, whose knowledge of the country is profound, says, however, “The Indians have always spoken of the ‘Crowsnest Pass,’ because on this trail through the mountains there was a nest which was occupied annually by crows.” So the matter stands.

[The Canadian Alpine Journal does not hold itself responsible for the opinions of its contributors, but is always eager to verify their statements. The varying accounts of the origin of the name given above are interesting and also indicate the difficulties often experienced in arriving at the ultimate facts.—Editor.]

## REVIEWS.

### TWO NOTABLE ALPINE BOOKS.

No more important contribution has been made to Himalayan literature, perhaps to the whole body of Alpine literature, than Mr. A. L. Mumm's interesting volume, "Five Months in the Himalaya." Though avowedly written for mountaineers, Mr. Mumm has succeeded in producing a book that will appeal to other classes of readers: such as those who are curious about distant places but who refuse to travel, or who, for various hard-and-fast reasons, are unable to go beyond their own province or country. As for mountaineers, they will read it with avidity. Though a mountain climber may not be a bookman in Lowell's sense or be known as a reading person at all, yet he reads alpine books, and gathers a shelf of them as he is able. Out of one such volume, there may be mountaineering issues beyond computation. The "five-foot-shelf," recommended by Harvard's Ex-President, is not complete without at least one volume representing this branch of modern English Literature, which is indeed a debtor to mountaineering.

#### **"Five Months In The Himalaya"**

Is a record of three months and more spent in the unknown Districts of Garhwal and Kumaon in the very heart of the Himalaya; and of six weeks in Kashmir. The party, an eminent one in alpine circles, consisted of Dr. T. G. Longstaff, Major the Hon. C. G. Bruce, Mr. A. L. Mumm and three notable guides, one being Moritz Inderbinen who accompanied Mr. Mumm to the A. C. C. Camp and later to Mt. Robson, last summer. Indeed, in the Himalayan expedition Inderbinen was "a personal luxury." He is a type of the craft to be perpetuated, if that be possible, in these growing democratic times; his devotion to his master is of the strong, deep feudal sort, a devotion fast disappearing among the serving class. In this book he appears and reappears, both in the text and in the beautiful photographs. "Before I had finished photographing, Inderbinen appeared, following me like a careful hen after a missing chicken." And the master too, is always mindful of his guide. But you may look in vain through the whole seventy-five illustrations for a sign of the author other than the sign that lie composed the picture and squeezed the bulb. His talent for self-effacement is only exceeded by his fine faculty of descriptive prose narrative and of simple though luminous Nature description. Mr. Mumm has undoubtedly a sense of the morality of the Nature passage. No descriptive writing is quite so difficult or so fraught with the temptation of the "purple patch" as that of alpine description. "O, the little more, and how much it is," of the ridiculous. A horror of this, I feel sure, is as a stimulus to that fine and beautiful restraint which marks the descriptions of many great English alpine writers. Nothing so palls upon the genuine lover of mountains as fulsome writing about them; and he uses his vocabulary with a nice discretion, aiming to make a good, accurate, concrete representation of the picture as he has seen it with his own eyes. This is true of Mr. Mumm, and he has succeeded in bringing before the reader his view of the panorama of the upper Himalayan world. Here is a little bit of description in the narrative that shows a scene with striking accuracy as the accompanying illustration bears witness. Before seeing the photogravure, the whole scene was as plain to my inward eye as our own Ten Peaks above Moraine Lake: "I was particularly interested in a beautiful semi-circular bay which I nicknamed the Aiguille Cirque, and which positively bristled with dark spires and pinnacles; a glacier descended at an extremely steep angle down the middle of them, and, spreading over the

floor of the bay, joined the main ice-stream. We could here see some way further up the glacier which curved to the west, but it disappeared again round a corner to the right." He avoids the very appearance of "gush" resisting many opportunities and, we may be sure, temptations also, to do a passage of "fine writing." His first sudden vast view of Himalayan Peaks, from the high Kauri Pass is described: "Then a single stride, and I was gazing at a panorama that made one catch one's breath. The day was clear and cloudless, and a brilliant sun illumined every detail of a bewildering multitude of mountains of every variety of shape and outline, but all alike bold, steep and formidable, an army of Dents Blanches, Aiguilles Vertes, and Shreckhorns. This was the first overwhelming impression ; after trying to absorb the general effect of the scene, one turned to the map for particulars; but then came a confused and confusing crowd of peaks, extending eastward in what seemed to be a solid mass, till they were brought to an end by the great trench of the Dhaulī sweeping round to the north. The valley of the Vishnu showed as a mere dark cleft, running up in the direction of Kamet, which stood commanding and dominant far away in the background." Nor does he forget to record Inderbinen's impression. "He too was intoxicated with the scene which he talked of for days afterwards. He was busily engaged, partly in sizing up the peaks in front of him, professionally, and coming to the conclusion that they were, one and all, uncommonly difficult, and partly in reconstructing his idea of the Himalaya." I wish I could have heard Inderbinen's slow remark of amazement: "I did not know there were so many mountains in the world."

"Five Months in the Himalaya" will, for many years to come, be invaluable as a guide for climbers in the remote fastnesses of Garhwal and Kumaon. For the book is, first and last, a book of practical information. Its central point of interest is the conquest of the Trisul, a mountain about 23,406 ft. above sea, and the highest peak then attained by man. Of the three who had set their affections on that summit, only Dr. Longstaff attained, both Major Bruce and Mr. Mumm being unfit by reason of illness. One chapter is devoted to an "Attempt" in which Mr. Mumm reached a height of 20,000 feet when camp was made on a field of snow in a hurricane. It is a vivid piece of narrative. Bruce, who was incapacitated by an abscess on the knee, had of necessity halted earlier in the journey. The final and successful attempt was made by Dr. Longstaff with the two alpine guides and one native. His story fills a chapter in his own words. Concerning any disputes about the highest ascents on record, Mr. Mumm has one sentence which too ambitious climbers would do well to ponder: "Longstaff lays no claim to any record, and goes out of his way, like a good sportsman, to establish the record of a predecessor." Indeed that noble spirit is the spirit of the book throughout, which is one for climbers of the A.C.C. to own. It is to be hoped that Mr. Mumm will write another on the less known mountains and icefields of the Canadian Alps. His second visit will provide him with ample data.

### **"My Climbs in the Alps and Caucasus"**

By A. F. Mummery is also a book for all such as handle the ice-axe or hope to handle it. And for those who knew the author or even knew about him in the years of his splendid alpine achievements and enthusiasm, it surely is a volume to be handled with a certain tender affection. His name is not unknown to us in Canada who may not know his fame as a climber, Mt. Mummery being one of the giants first seen by Dr. Collie from the summit of Mt. Gordon in 1897 and so named by him. Ten years later it was conquered by a party of American students led by two Swiss guides. One, I think, was Edouard, Sr. Mr. Mummery with two Ghurkas, met his death somewhere on the upper part of Nanga Parbat, that sacred, magnificent and terrible mountain in the Himalaya, still defiant, but nevertheless doomed to defeat by some British climber, no doubt. Reading his

inspiring pages, one feels that the conquest was his by right; and hopes, somehow, it may yet be discovered that the three reached the summit ere the mountain had slain them. Mrs. Mummery, who writes the Introduction to the last edition, quotes from the diary-letter which her husband wrote during the fatal expedition. The last words written to his wife were: "Tomorrow I cross a high pass with the Ghurkas to the Baldara Kiote Nullah. Hastings and Collie go round with the coolies and stores. If the N. W. side of Nanga is easy we may yet pull it off, but you will have a wire before this reaches you." And the comment, dignified, austere, and meagre, is great with grief: "This letter bears no date; it must, however, have been written on August 23rd. On August 24th, my husband and the Ghurkas were seen for the last time." It is a word worthy of the widow of the mountaineer whose noble book closes with an utterance all too prophetic. He has been emphasizing the importance of long and patient and fearless practice, if a man would attain to great skill in climbing, and he points out some of the rewards: "He gains a knowledge of himself, a love of all that is most beautiful in Nature, and an outlet such as no other sport affords for the energies of youth; gains for which no price is, perhaps, too high. It is true the great ridges sometimes demand their sacrifice, but the mountaineer would hardly forego his worship though he knew himself to be the destined victim." Old John Muir, another of the alpine brotherhood, looking back over such dangers passed during exploration on rock and glacier, wrote not long ago: "I have sometimes felt that to meet one's fate on a noble mountain or in the heart of a glacier, would be blessed as compared with death from disease or from some shabby lowland accident."

This sacrifice on Nanga Parbat would add a melancholy note to Mr. Mummery's book, did the text make it possible. But it is so robust, so courageous, so happy, so full of the wild joy of battle with the mighty forces of high mountains, with such vigorous love of life in it, that the morbid thought is far from you as you read. It is time that we cleared our minds of cant concerning mountaineering. "The love of living," cries Stevenson, "is stronger in an Alpine climber roping over a peril." With perfect appropriation Mr. Mummery, himself, declares a true mountaineer to be "the noblest work of God." And the shade of Sir Walter would approve.

Mr. Mummery devotes eleven chapters to the Alps, two to the Caucasus and one, the last in the book, to a brilliant though in some respects, debatable essay on "the Pleasures and Penalties of Mountaineering." The beautiful photogravure plates and illustrations in the text are from various sources, including sketches and photographs of Signor Vittorio Sella, Mr. Hermann Woolley, Mr. Joseph Pennell and Miss Bristow. A very serious drawback to the book is the lack of an index, and if I am ever fortunate enough to own it I shall proceed to make one. Important as the illustrations are, so also is the index, whether the reader be student or reviewer. For such books as these become text-books for climbers and for lovers of the mountains who, by reason of age or poverty or frail health or other limitations, must be content to do their climbing in the pages of a book. Young stalwarts who have mastered the technique of this noblest of all the sports, spare your disdain. Heaven itself may reckon these as genuine mountaineers, as Rabbi Ben Ezra would have reckoned them.

On the first page Mr. Mummery recalls that sight of the Matterhorn shining in the stillness of a moonlit autumn night when the passion for great mountains first stirred within him, a boy of fifteen. And the reader knows at once he is in choice company. For one thing, here is a climber who seeks the same summit again and again, knowing well that one ascent is but an introduction to a high mountain. "In my heart of hearts I long for the slopes of which I know every wrinkle, and on which each crag awakens memories of mirth and laughter and of the friends of long ago. As a consequence of this terrible weakness, I have been no less than seven times on the top of

the Matterhorn. I have sat on the summit with my wife when a lighted match would not flicker in the windless air, and I have been chased from its shattered crest and down the Italian ridge by the mad fury of thunder, lightning and whirling snow. Yet each memory has its own peculiar charm, and the wild music of the hurricane is hardly a less delight than the glories of a perfect day." The chapter is mainly devoted to the narrative of an ascent of the Matterhorn in 1879 by a new and difficult route, the Zmutt Ridge. Only one other known ascent was made by this ridge until 1894 when Mr. Mummery, with a young Swiss guide, accompanied the Duke of the Abruzzi and Dr. Norman Collie over the same route. Several days later, Miss Bristow who supplied the sketches and photographs mentioned, made the first descent by this route, led by the same young guide, Pollinger. Miss Bristow is manifestly a nimble and courageous climber. In another chapter she figures honourably in a troublesome ascent of the Grepon when it was in very bad condition, owing to a week of evil weather. She was the first lady to reach its summit, and the climb was one of the most difficult then made by Mr. Mummery. But he foresaw the day when the Grepon would go in the catalogue as a lady's mountain.

Space would fail me for even a reference to these separate chapters dealing with expeditions in the Alps and Caucasus. The last one, which is somewhat polemical, ought to be read by mountaineers everywhere. Only the knowing ones are capable of discussing some of its points. Mr. Mummery propounds the theory and defends it skilfully that the rope is oftener a hindrance than a help. In fact it is dangerous, and he would deprecate the roping together of more than two. As the argument is necessarily empirical, and being of the unknown company which scales the rock and cuts the ice-stairway in imagination only, I am incompetent to form an opinion. I do not forget, however, that Mr. Mummery's capacity for mountaineering was the capacity of genius-and genius is a law unto itself. But I am getting into waters beyond my depth. A symposium on this subject would be of fruitful interest, and I hope the Editor of the Journal will take the suggestion. There are mountaineers in plenty, experienced and distinguished, who, for climbing's sake, would willingly contribute.

As I said, this climber was a genius; he gloried in the exercise, and in a very real sense was "adequate to himself," not with Goethe's stupendous calm but with the mountaineer's tumultuous joy. Yet his advice and testimony are against the habit of climbing alone. He knows whereof he speaks: solitary wanderings ought to be confined within narrow limits on any dangerous mountain. Ten chances to one, the solitary climber "will break his neck." For the duffer who would be carried to the mountain-top "nursed and coddled" by guides, he has a scorn that is all but invective: "... a thing that is pushed and hustled up peaks by Swiss peasants, and which is so wholly unable to take care of itself that it cannot be trusted to sit on a crag unroped." On the other hand, to the worthy aspirant, he gives the sober word of caution. Falling into a crevasse he regards as pure carelessness, and he indulges in some fine irony over this form of accident. I am afraid Mr. Mummery found no place for patience and sympathy with the timid novice or with the mere plodder. He was a brilliant climber who wrote his record brilliantly, yet with that rare charm which holds both novice and plodder in thrall.

—E. P.

## OFFICIAL SECTION.

### Report Of The Hon. Secretary.

Since the Annual Report of a year ago there is much to record concerning the transactions and operations of the Alpine Club.

Executive meetings were held at the camp in August; also, on November 3. November 10, (1909) January 31 and February 10 (1910). Owing to the great distances separating members of the Executive Committee, attendance was possible only for President, 2nd Vice-President, Hon. Treasurer, Secretary-Treasurer and one Adviser, all residing in Calgary. And to these gentlemen, together with chairmen of special committees, who conducted the affairs of the Club, the remaining officers are deeply indebted. In addition to much routine business by which the machinery of the Club is kept in running order, the following proceedings are recorded: Resolutions to secure a lease of more land than the present holdings on which the Club House stands may be enlarged; to amend the constitution, which amendments were since carried by vote of the Club, and printed in the new hand book; that interest on Club House debentures should be paid by placing it to the credit of annual fees; that in view of the national and international value of the work of the Club and of its potential activities in geographical and geological science, the Federal Government be petitioned for an annual grant of \$3,000; that in future no Journals be sent to members in arrear for fees; that as soon as funds are available there should be added to the Club House such necessary equipments as eavetroughs, mosquito screens, stoop for kitchen door and floor on cellar; that \$100 be contributed to the heavy expenses incurred by the Rev. George B. Kinney in his exploration and conquest of Mt. Robson.

Most important in the revision of the constitution is the new section providing for an office involving the actual labour of managing the Club's steadily increasing business, an office subject to the Executive Board and whose tenure is unlimited. By the appointment to this office of the retiring President who is so eminently qualified both in head and heart for the position, there is every good prospect for a more rapid though still healthy expansion of the Club and of its operations in exploration and discovery in the Canadian Rocky Mountains system. Indeed, with a permanent director and a worthy annual grant from the Federal Government, exploration might soon be pushed as far west and north as Mt. Logan in the Yukon, the highest mountain in British North America and the ambition of some eminent mountaineers. Your secretary ventures to hope that the Federal authorities will make it possible for this great mountain and its range to be explored under the auspices of the nation: Alpine Club, that they will not permit its conquest to be counted as a fresh "bag" by some climber from foreign lands.

At this writing, the total membership is 523, but when the members gather in annual meeting, it will probably be considerably more. The grades now stand as follows: Honorary, 10; Associate 18; Life Active, 22; Ordinary Active, 276; Graduating, 172; Subscribing, 25. During our four years' existence, over 600 names have been enrolled; but owing to failure in qualifying, in paying annual fees and to other sufficient causes the list has been very considerably reduced. This process is necessary to the standing and growth of the Club. On the other hand, the list of applications is greater every year. It will be noted in the handbook that out of the 22 life members, nine are members of the English Alpine Club, besides five in the honorary, and two in the ordinary active list. And that members of the oldest and most conservative Alpine Club in the world should seek membership in the youngest and very rigidly democratic Club, is gratifying. For it shows a genuine and practical interest not only in the mountaineering regions of Canada, but in the important

work this Club is seeking to do. Also, we have warmly welcomed to our membership those good climbers of the newer American Alpine Club which stands for a strict prestige in mountaineering achievement.

With a constituency extending throughout the Dominion, below the Boundary and beyond the Seas, a method has been devised to secure the solidarity of so scattered a membership: namely, to appoint committees in centres where the local membership is large enough to warrant establishing a section of the Club. Vancouver took the initiative, and Calgary, Winnipeg, Toronto, New York and London (England) followed. The first-fruit of these committees was the simultaneous anniversary functions in the various centres,—dinner or reception as suited the circumstances of each section. It is proposed, where feasible, to conduct the business of the Club through the chairmen and secretaries of these committees. And the benefit of this method is obvious: a sustained active individual interest in the Club's affairs will ensue.

Your secretary would earnestly ask leave to halt a moment for a word concerning our financial obligations. There is still a small debt on the Club House, whose value as an asset is great. Many members purchased debentures by which the fund was raised and some of these debentures have been generously returned, thus providing the not inconsiderable nucleus of a sinking fund. But fully 320 members have done nothing whatever towards building or furnishing the Club House. That all might have the opportunity, the shares were fixed at \$10 each, and the debentures bear interest at six per cent. It is not right that the majority of Canadian members should suffer English and American members to pay while they pay nothing, especially when we remember that a constitution forbids a place on the Executive Board to both English and American. Nevertheless, some Canadian members have most liberally assumed the heavier financial responsibilities. But it is not well for any institution that these should be borne by a minority. Only where all, or all who can, take a financial part is there perfectly healthy growth. There is no need to labour this point. It is as true of clubs as of Churches. It has been privately pointed out, over and over again, by members of this Club who are members of other sporting and social clubs that the annual fee is remarkably low, that it is not half as high as the fees in many clubs of less importance.

The aim in fixing it at five dollars was that the Alpine Club of Canada should be in no sense a rich man's club.

The meet of 1909, beginning on the 2nd and ending on the 9th of August, was the most successful of the whole series of successful meets which have been conducted by the President, nearly 200 persons being under canvas during the week. That it proved so was owing to three causes. First, the number of our early members becoming expert on ice and rock has increased; second, the camp was set up on a spacious meadow under the shadow of fully eight eligible mountains, according to the mountaineer's interpretation of the word, and contiguous to many interesting passes and lakes—the meadow itself having every advantage both of convenience and of beauty in stream and forest and glacier and mountain peak; third, and not least, was the presence of a group of British climbers—among them eminent mountaineers—who were a very great help in every day's climbing and in every evening's entertainment about the camp-fire. We cannot overrate the importance of the attendance of our British guests. Both in the day's work and in the evening's play, they gave our young mountaineers a fresh impetus and a new outlook. Their informing, inspiring and humorous speech, when night brought tired climbers around the blazing logs, will not be forgotten. "Twenty and thirty and forty years on," the youngest of us shall hark back to nights under the stars or in fitful storm on O'Hara meadow all around the camp-fire, so finely termed by a lady member, "the altar and hearthstone of the Club." One of the guests was so



impressed with the mirth and fellowship of these nights that he has adapted for the camp-fire, an old Harrow song, "Forty Years On."

The expedition led by the President to the Yoho Valley, and the traverse of the Waputik Ice-field when seven mountains were climbed, has also added an interesting bit of data to the history of this Club; and the two expeditions to Mt. Robson, notably the successful capture of that long-defiant peak by the Rev. Geo. B. Kinney, his own third attempt. These enterprises which here call for references only, are adequately recorded elsewhere in the Journal.

In mountaineering it has been a prosperous year. Besides Mt. Robson, first ascents were made of Mts. Pinnacle, Ringrose, Glacier Peak, the North Tower of Goodsir, and Victoria by the Huber route. Second ascents were made of Mts. Deltaform, Biddle, and the North Tower of Goodsir; second and third ascents of Hungabee; and more independent climbing of distinctly difficult mountains was accomplished in the season of 1909 than in any season since the Club was organized. Another advance to be noted is the employment of an Austrian guide by the Club. And for the present season a second one has been brought over for the use of our own members. The Club has also its official outfitters and guides of the valleys—the Otto Brothers of Field, B. C., who are among the few outfitters left in the mountains, of the whole splendid corps of half a dozen years ago. Much might be said concerning the passing of the early type of Canadian guides of the lower altitudes. It is the intention of the Alpine Club to keep, if possible, these competent and trusty guides Otto, who are adapted by nature and by training to the business of outfitting and guiding. To them it has responsibilities other than commercial.

During the winter, the President made a tour in the interests of the Club, lecturing and showing his pictures of mountain landscape in Ottawa, Montreal, Kingston, Toronto, St. Thomas, Winnipeg and Regina. Mr. Wheeler was greeted everywhere with large audiences, indicating how an interest in mountaineering is growing in Canada.

Since the last Journal was issued the death has occurred of Mr. Hector G. Wheeler, brother of the President and Assistant to the Chief Mountaineer, an office held by him from the Club's inception. His death is a very great loss to the Club. As guide and man, Mr. Wheeler had the respect and affection of every one who came in touch with him. Strong and safe and ready, patient and kind and gentle, he left the memory of a good man, a rare and lovable spirit. On mountain or by camp-fire, none who knew him will forget. The Alpine Club owes thanks to many, and especially to the retiring President for his zealous labour and supervision of its manifold affairs. Everyone knows it is to him a labour of love. And both in camp and Club House, the President's wife has been his true helpmeet as hostess, chaperon and altogether the "right arm and spoon and necessary of life." Space would fail to acknowledge all gifts and all kindness from many generous hands.

To the Legislature of Alberta and the Legislature of British Columbia, our gratitude is deep for grants amounting to \$1,000 each. To the Department of the Interior for permission for the President and Vice-President Bridgland to attend the 1909 camp of Lake O'Hara. To the C. P. R. Company for special rates on the railway and at hotels; and for the liberal loan of their Swiss guides, our old and trusted friends, Edouard and Gottfried Feuz.

And finally, your secretary, in concluding the last annual report which it will be her pleasant duty to write, would add a personal note. Much delicate consideration has been shown her by her colleagues; her joy in association with the executive work of the Club has been genuine; and her interest in the Alpine Club of Canada will be abiding.

Respectfully submitted,  
Elizabeth Parker.

### Report Of Librarian.

Since the erection of the handsome Club House at Banff, the Club's library has a permanent and roomy home. There are but eighty-five volumes on the shelves-and we have many shelves. There are also some dozens of Journals and publications, including the exchanges of the Sierra Club, Alpine Club, Appalachian Club, Mazama Club, Scottish Mountaineering Club, French Alpine Club, Swiss Alpine Club, Austrian Alpine Club, Japanese Alpine Club, etc.

We have to thank Mr. A. L. Mumm for the gift of his valuable book "Five Months in the Himalaya." This book is packed with information and interesting photographs. Mr. A. M. Bartleet has presented us with a copy of "Scrambles Amongst the Alps," by Edward Whymper, without which no Alpine library is complete.

Mr. Godfrey Solly has kindly sent us two interesting books "Alpine Ascents and Adventures" by Shultz Wilson, and "Above the Snow Line" by Clinton Dent, and Dr. Bonar has sent us "Port Tarascon" and "Tartarin sur les Alpes," by A. Daudet.

Through the courtesy of the Survey of India, we have received a copy of "A Sketch of the Geography and Geology of the Himalaya Mountains."

We have Mr. Wilcox's "New Guide to the Lake Louise Region." Mrs. Wheeler has given us Parry's Journal and "Reminiscences Among the Rocks" by T. C. Weston. Prof. Macoun has sent his "Catalogue of Canadian Birds," and from the Department of Agriculture (Ottawa) we have "Farm Weeds of Canada." We are indebted to the Department of Mines for a complete set of "Reports of Geological Survey of Canada."

A book of excellent photographs of the O'Hara Camp was sent us by Mr. Freeborn, and there is a set of Mr. Harmon's camp photographs. There are also enlargements of photographs sent by Mr. Hermann Woolley, Mr. Howard Chapman and Prof. Walcott.

The Appalachian Club has most generously added the early rare volume of their "Appalachia" to the library. This completes the set—Vol. I to Vol. XII, inclusive, of which Vols. VI to XI formed part of the nucleus of our library and were also the gift of the Appalachian Club.

Mr. Godfrey Darling has kindly placed in the library a number of standard novels.

Only two books have been purchased this year—Mummery's great book "My Climbs in the Alps and the Caucasus" and the Champlain Society's publication "The Logs of the Conquest of Canada," by Wood.

The Fell and Rock Climbing Club has been added to our list of exchanges.

Mr. Godfrey A. Solly has most generously presented the Club with a complete set of the Scottish Mountaineering Club Journal, which is becoming increasingly rare.

Mr. Fritz Beck has kindly presented us with 1908 and 1909 volumes of the "Jahrbuch Swiss Alpine Club."

Mr. Stanley L. Jones has given a most valuable book to the Club "Clarkson's Standard American Dictionary," and Mrs. Stanley L. Jones has given "With the World's Great Travellers," a work of exceeding interest.

The following is the list of additions to the library since the 1909 report:

<b>Title</b>	<b>Author</b>	<b>Presented by</b>
Alpine Ascents and Adventures	H. Shultz Wilson	Mr. Godfrey Solly
Above the Snow Line	Clinton Dent	Mr. Godfrey Solly
Scrambles Amongst the Alps	Edward Whymper	Mr. A. M. Bartlett
Guide to the Lake Louise Region	Walter D. Wilcox.	Mr. Wilcox

## The Canadian Alpine Journal - 1910

Parry's Journal		Mrs. Wheeler
Reminiscences Among the Rocks	T. C. Weston	Mrs. Wheeler
Five Months in the Himalaya	A. L. Mumm	Mr. Mumm
Port Tarascon	A. Daudet	Dr. Bonar
Tartarin sur les Alpes	A. Daudet	Dr. Bonar
A Sketch of the Geography and Geology of the Himalaya Mountains	Col. S. G. Burrard, F.R.S., H. H. Hayden, F. G. S.	
Farm Weeds of Canada	G. H. Clark	Dept of Agriculture
	James Fletcher	
Appalachia Vol. I to VI (inclusive)		Appalachian Club
Catalogue of Canadian Birds	John Macoun	John Macoun
	James Macoun	James Macoun
Spirit Lake	Heming	F. Yeigh
My Climbs in the Alps and Caucasus		
	Mummery	By Purchase
The Logs of the Conquest of Canada		
	Wood	By Purchase
	(Champlain Society)	
Novels:	8 Volumes	Balzac
	6 Volumes	Marion Crawford
	4 Volumes	Sir Walter Scott
Album of O'Hara Camp Photographs		Mr. Darling
Scottish Mountaineering Club Journal Complete..		Mr. Darling
Annual Magazine Subject—Index 1909		Mr. Darling
Jahrbuch Swiss Alpine Club 1908 and 1909		Mr. Freeborn
Clarkson's Standard American Dictionary		Mr. Godfrey A. Solly
With the World's Great Travellers		Exchange
		Fritz, Beck
		Stanley L. Jones
		Mrs. S. L. Jones

Respectfully submitted,  
Jean Parker, Librarian.

## Report Of 1909 Camp.

### SITE OF THE CAMP.

The fourth Annual Camp of the Alpine Club was held in one of the most beautiful, if not the most beautiful spot in the Canadian Rockies, in a little alpine meadow close by the glacier Lake O'Hara. It was an almost perfect location: a grassy open, a quarter of a mile long, hemmed in by forests of dark spruce, balsam, pine and fir with that very noticeable aromatic smell found in the woods near tree line. Above, all around, showed clear against the sky, the towering snow-clad heights of Victoria, Huber, Lefroy, Hungabee, Biddle, Odaray, and, at a greater distance, Stephen and Cathedral.

The meadow was intersected by a number of small streams which made the arrangement of the camp very easy. At the upper end lay a tiny pond, around which, in a wide crescent, were pitched, with military precision, the bell tents of the gentlemen's quarters. The pond was used for performing necessary ablutions and was nicknamed by the lady members «Adonis Pool.»

To the south across a belt of trees lay an open glade, carpeted with heather and nicely sheltered. Here, in a symmetrical line, were pitched the tents of the ladies' quarters, with those for the lady guests in a little nook at the end of the row.

Still further south rose the large canopy under which were grouped the cook's quarters, the dining tables, the tea tent, the post office and order board, and furnished the place of general assembly. In the open in front of the canopy were the office and store tents and the magic fire circle where nightly gathered these worshippers of the hills.

Separated by another belt of trees were the tents of the gentlemen guests and across the meadow, opposite the assembly canopy, the camp of the «Men in Buckskin,» the outfitters and packers of «The Trail.» In odd nooks and corners along the edge of the forest might be seen the scattered white tents of those who preferred being under their own canvas.

During the day, the meadow, from end to end was a scene of vitality and exuberance of spirits. On every side magnificent spectacular views of steeply rising peaks, topped or faced with snow, met the eye. Hanging valleys, whose floors broke off in precipitous walls, rising one above the other, invited conjecture and subsequent exploration; an air of mystery was added by the scattered growth of trees that clung to every spur, projection and crack presenting a space not absolutely perpendicular. Delightful little lakes of which O'Hara was the chief, sparkled like jewels in their settings of forest and rock. Below the great peaks rose towers, minarets and aiguilles lending a fine idea of immensity to the masses behind them. It was a wonderfully impressive and attractive panorama and one that would remain imprinted on the pages of memory's scrap book for a life time.

This year the Club camp was under its own canvas, with the exception of one large tent at the railway base, which was loaned by J. P. Forde, Resident Engineer of the C.P.R. at Revelstoke, and was used for storing surplus baggage. In all, some sixty tents were in use.

Hector, a flag station on the Canadian Pacific was the railway base. The camp, seven and a half miles distant by pony trail, was reached by a delightful path up the valley of Cataract Creek flowing from Lake O'Hara. It wound beside a rushing, rock-walled torrent; then through an old brulé, brilliant with summer flowers; across the debris of a huge rockfall; up and down through the cool green forest of spruce, balsam and fir, with glimpses of the swiftly flowing glacial stream now and again; along an old moraine and beside the blue-green Lake O'Hara, its surface broken by sparkling ripples, scintillating in the sunlight; and finally over a timbered hog's back to an open meadow and the city of white tents, looking as first seen like a glimpse of fairyland-all green and yellow, white and blue. The depot camp at Hector accommodated temporarily those arriving by train too late to reach camp the same day. It was well patronized and furnished a general base of supplies.

The following Alpine Clubs were represented: The Alpine Club, England, The Scottish Mountaineering Club, The Fell and Rock Mountaineering Club, The American Alpine Club, The Appalachian Mountain Club, The Alpine Club of the Netherlands.

Members of the following Learned Societies were present. The Royal Society, The Royal Geographical Society, American Geographical Society, Geological Society, Entomological Society, Entomological Society of America, Linnaean Society.

### **BRITISH GUESTS.**

The Annual Meeting of the British Association for the Advancement of Science had been arranged to open at Winnipeg on the 25th of August. It was desired by the Alpine Club of Canada to extend such courtesies as might be in its power to visiting members who were interested in

mountain regions from an alpine standpoint. An invitation was, therefore, conveyed through the Executive of the Association and the Executive of the Alpine Club, London. Twenty acceptances were received and the entertainment of these guests extended over a period of three weeks, during which time all attended at one time or another. First, they were received at the Club's headquarters at Banff, where the new Club House had just been opened. They arrived there on the 27th of July and remained until the 1st August when a move was made to the O'Hara Camp. The Camp closed on August 9th and on that day we started our guests upon a six-day expedition around the upper reaches of the Yoho Valley, a valley comprising in the minimum of space the maximum of alpine scenery. This expedition is referred to further on.

The guests who attended the Club House, the Camp at Lake O'Hara, or the subsequent six-day trip were, including a party of fourteen under the leadership of H. B. Dixon, of Manchester University, an old-time explorer and climber in the Canadian Rockies:—

H. B. Dixon, F.R.S., Manchester  
Mrs. Dixon, Manchester  
Miss Phyllis Dixon, Manchester  
Mrs. C. J. Spence, Cheadle  
Godfrey Solly, Birkenhead  
Mrs. Solly, Birkenhead  
Miss Maclay, Hamilton  
A. L. Mumm, London  
Oscar Rohde, Birkenhead  
L. S. Amery, London  
G. Hastings, F.R.G.S., Bradford  
E. F. Pilkington, Prestwich  
Arthur H. Benson, F.R.C.S.I., Dublin  
Mrs. Benson, Dublin  
Edward Whympers, F.R.G.S., Teddington  
E. F. M. MacCarthy, Birmingham  
A. M. Bartlett, Birmingham  
Tempest Anderson, F.R.G.S., F.G.S., York.  
A. G. Priestly, London.  
Miss M. Vaux, Philadelphia

### THE CAMP FIRE.

One of the chief attractions of the camp—the altar of worship in fact—is the camp fire. It is lighted on the evening of the opening day and is not allowed to go out while the Camp lasts. During the day it smoulders, but when the graduating and other climbs are over, when the various expeditions have returned, when the evening meal has given full satisfaction and the sun is sinking behind the snowclad giants in the west, then the camp-fire flares up and is soon a glowing centre of genial warmth and good fellowship. Seated around it in a wide circle may be found the entire population: guests, members, officials, helpers, not even excepting “the mascot” of the camp—Baby Leggatt—the six months old daughter of Mrs. Leggatt, who was cook for the “Men in Buckskin,” the guides and other members of the system.

An entertainment committee provided a good programme for each evening and our guests kindly provided a chairman to act for each night; and well they did it. Under their skilful guidance, history of travel in distant lands, full of thrilling adventure and good stories—particularly lion stories,—exciting accounts of first ascents, songs, anecdotes, speeches and excellent recitations

made the time fly all too swiftly. Each such evening seemed a fitting climax to a day of thrilling excitement, and the aches and pains and weariness of first climbs were forgotten under the influence of the magic circle, while the aromatic smoke rose into the thin frosty air and the stars twinkled aggressively above the uncertain of the grey and white peaks showing mystically in the bright moonlight.

One evening was made memorable by the address of the veteran, world-famed mountaineer, Edward Whymper; an address he had travelled more than ten thousand miles by land and sea to deliver. It is here quoted in full:—

“Friends, Canadians, Countrymen, lend me your ears, as Shakespeare said. They shall not be taken away from you, I only want to get hold of them for a few minutes.

“We meet here on the common ground of love of nature and love of freedom. Curiosity and interest have been expressed in the Old Country in respect to your proceedings and the progress of the club, and many in Europe, I am sure, would gladly have come here if their engagements would have permitted.

Let me read to you a few passages from letters which have come in. The first is from the Rev. W. A. B. Coolidge, who is American by birth and English from association. In regard to Alpine literature, he is considered to be the most learned and best informed “Man of the Time.” He says, writing from Switzerland:

“You flatter me in imagining that anything I can write would be of any value as to the Canadian Rockies. I have never seen them. I am a ‘statesman,’ but did not climb any hills therein, though I was at school amid the White Mountains of New Hampshire. However, so far as I can judge, it is about time now that some one gathered together the threads of previous explorations in the Canadian Rockies, so as to show what still remains to be done, and to make known the claims of the fine mountain scenery which exists in the whole area.’

“There, Indies and gentlemen, is a nice little job for one of the youngest members of the Alpine Club of Canada. It will keep him well occupied all his lifetime.

“The next is from a man of science, from Professor Dr. Thomas George Bonney, who is to be brought forward shortly at Winnipeg as president of the British Association for next year. He has been a member of the A. C. for a clear fifty years, and was president from 1881 to 1884. This is what he says:

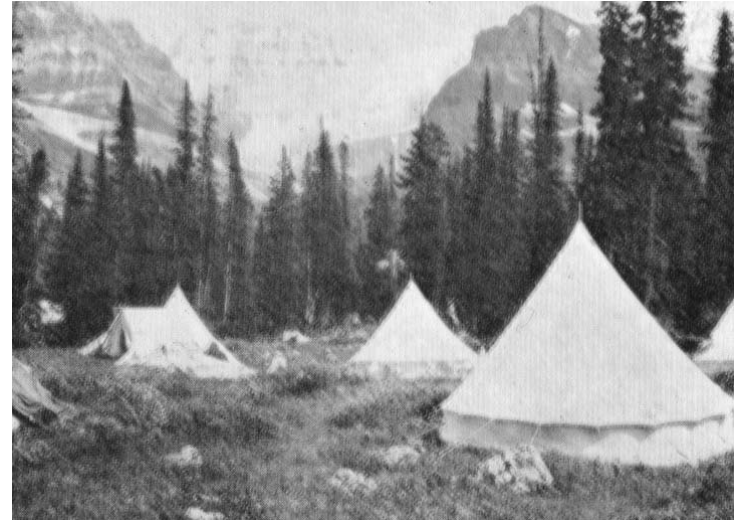
“‘For fully half a century my summer holidays have been spent among the mountains. To them I believe myself indebted for the health and strength which has enabled me to get through a considerable amount of hard work and to be still as vigorous as most men who have lived three-quarters of a century. (That is his age.) I have not been a lover of the Alps only from their invigoration or for the grandeur and beauty of their scenery. They have drawn me back and back again because they lead the dweller in the lowlands into fresh fields of scientific interest. From the snowclad peaks and glaciers we can learn lessons which enable us to understand the action of ice and the effects of denudation in past ages of the earth’s history very different from the present. From the record of the rocks mountains possess inexhaustible interest. The great hills speak in impressive tones. They are something like splendid and costly books, which lead us to admire the beauty of the illustrations while reading the story.’

“This is what the Bishop of Bristol, president of the Alpine Club from 1905 to 1908, says:—

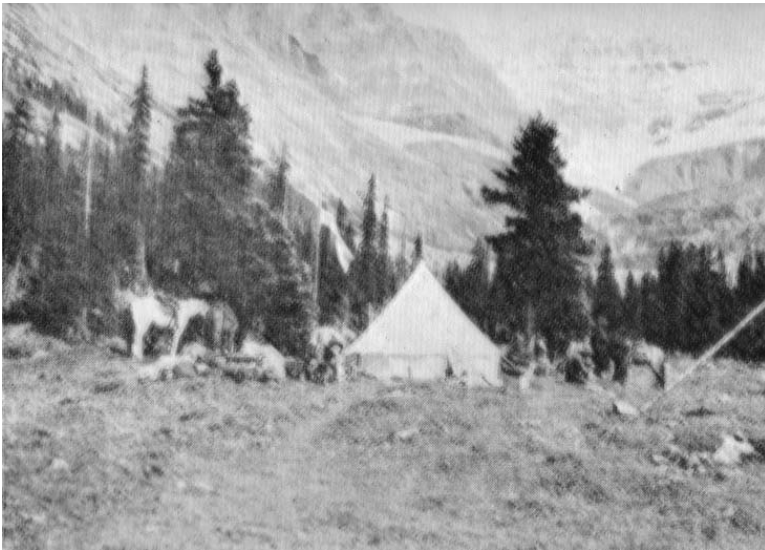
“‘I wish I could go with you to those dear Canadian Alpinists. There are many marks of this present age, but we name two: (1) A rebellion against conventionalities and (2) an appreciation



**The British Party**



**The Ladies Quarters**



**The Store Tent**



**The Camp Fire. Olive Dixon, Photos.**

of the recuperative power of Nature. A chief charm of a mountain expedition is—we have done for the time with conventionalities, we are free children of Nature, let us go and seek our mother, and drink in from her pure white breasts all that is highest and best; and when we come back to the life of the world, and its calls upon our mental and physical powers, we find ourselves fit as no doctor's stuff put in our poor, ill-treated stomachs ever made us; all morbid thoughts and fancies cleared away, able to see that we and those around us have only to be as a good God intended us to be. With sincere regards for now forty-five years,

—G. F. Bristol.

“That is what a bishop says. Now for a politician, who has been my friend for forty-eight years. He was president of the Alpine Club from 1899 to 1902. This is what the Right Hon. James Bryce, His Majesty's ambassador at Washington, says :—’I am very glad to hear that you are going to join the summer camp of the Canadian Alpine Club at the Continental Divide. They were good enough to write me as an honorary member to come to the camp, and I would most gladly have been there and joined in welcoming you had it been possible for me to leave my duties at this embassy for so long.

“Will you please give my warm regards to my fellow members of the club when you meet them, and say from me what you are doubtless saying for yourself, how much we British Alpinists rejoice in the growth and prosperity of the Canadian Club, and congratulate, our Canadian fellow subjects on possessing such a magnificent region of peaks, passes and glaciers, which will occupy their energy, and give scope for their skill and courage for many a year to come. Sincerely yours,

—James Bryce.

“Other marks of interest have been shown in you and your proceedings. My bootmaker has sent a dozen of his cards and has expressed a desire to make the acquaintance of the whole of you. Specimens of his work are on my feet, and in camp. The Alpine Club rope maker of London sends samples, etc., and although he does not wish to encourage suicide, he states that a person weighing twelve stone may drop ten feet, and that the rope will not part company. Messrs. Burroughs, Wellcome & Co., of New York and Montreal, send an Alpine medical outfit, and a tabloid photographic outfit, as presents, and these and other things will be put up to auction presently for the benefit of the clubhouse. I agree with all that was said by my four friends, but much more can be said about the marvels of the Rocky Mountains of Canada, where, amongst other things, raspberries grow upon gooseberry bushes. This was, I believe, first pointed out by the Rev. W. Spotswood Green in the paper which was published by the Royal Geographical Society that I will pass around.

“The ascent of a great mountain is inspiring. Below there is gloom, while above there is glory. This stimulates the faculties and makes one aspire. Most or all of us are familiar with these words of Longfellow:—

“The shades of night were falling fast  
When through an Alpine village passed  
A youth, who bore through snow and ice  
A banner, with this strange device;  
‘Excelsior.’

“A critic might say that this youth was foolish for starting out at such a late hour, and that





**The President's Address Annual Meeting, At O'Hara Camp. F.W. Freeborn, Photo.**



**Annual Meeting At O'Hara Camp. F.W. Freeborn, Photo.**



**The Hon. Secretary Report. F.W. Freeborn, Photo.**

it would be more in accordance with Truth and Nature if the poem commenced:

“The orb of day was rising fast.”

“Don’t let us be captious. Longfellow’s meaning appears to be, let our motto be: ‘Onwards and Upwards,’ and that would be a good one for an Alpine Club.

“Ladies and gentlemen, live, live while you can. We’re born to live, but born to die. Unite prudence with courage. Take heed to your steps lest you fall. Whatever you set your hands to do, do it with all your might. Act well your part, there all the honour lies.

“This, ladies and gentlemen, is the first, and it will be the last occasion on which I shall have the honour to speak to you. I came out from Europe expressly for this meeting, and tomorrow I start back. But, if unable to be with you in body, I shall, so long as I live, be with you in spirit, and wish you success and prosperity.”

The camp-fire inspired L. S. Amery, of the London Times, author of “The Times History of the Boer War,” to an adaptation of an old Harrow song, entitled “Forty Years On,” to the bivouac of the Alpine Club of Canada.

### **ALPINE CLUB CAMP SONG.**

*By L. S. Amery.*

Forty years on when afar and asunder,  
Parted are those who are singing to-day,  
When you look back, and, forgetfully wonder  
What you were like in your work and your play;  
Then, it may be, there will often come o’er you  
Glimpses of days when your pulses beat strong,  
Dreams of the mountains shall float them before you,  
Echoes of notes from our camp-fire song.

Chorus

Follow up! Follow up! Follow up! Follow up!  
Hear it ringing again and again;  
‘Tis the call of the heights to the plain, Follow up! Follow up!

Oh the great days in the distance enchanted,  
Days of fresh air in the snow and the sun;  
How we rejoiced as we toiled and we panted  
Hardly believable forty years on.  
Then, you will say, not a feverish minute  
Strained the weak heart or the wavering knee;  
Was the day hard? We were bound to be in it,  
And neither the last nor the faintest were we.  
Follow up!

Forty years on, growing older and older,

Shorter in wind as in memory long,  
Feeble of foot and rheumatic of shoulder,  
What will it help you that once you were strong?  
God give us summits to stir our endeavour,  
Peaks to be conquered in earnest or fun,  
Grant we mount eagerly, fearlessly ever,  
Twenty and thirty and forty years on.  
Follow up!

Now the great peaks watching silently o'er us,  
Sentinel guards of our camp and our land,  
Bid you remember the morrow before us,  
Bid us take thought for the task we've in hand;  
So from the camp-fire we must be going;  
Wishing every comrade a pleasant good-night;  
Soon on the summits the dawn will be glowing  
We must be there to salute her aright.  
Follow up!

It was truly pleasant to see in that brilliant circle many well known faces from other lands, who had been present at previous camps, or were old visitors to the Canadian Rockies, noticeably: Prof. H. C. Parker, of Columbia University; George Vaux, Jr., and Miss M. Vaux, of Philadelphia; F. W. Freeborn, of New York; Howard Palmer, of Harvard, and Dr. Goddard, of California.

With a few passing rain showers and one snow storm of some hours' duration the weather was perfect and under no other conditions could the exceptionally spectacular scenery have looked more entrancing.

Assistance was given by the Dominion Government through allowing the President and Mr. Bridgland leave of absence from their surveys to superintend the camp and mountaineering, by the Alberta and British Columbia Governments, and by the Canadian Pacific Railway Company, who again loaned us two old reliable Swiss Guides, Edouard and Gottfried Feuz.

The Camp proved in every way the most successful and active yet held, and by far the best work was done. It broke up on August 9th and was immediately followed by the six-day trip around the Yoho Valley, of which a short description is given further on.

### REPORT ON MOUNTAINEERING.

The climbing was under an able staff. M. P. Bridgland was in charge assisted by E. O. Wheeler. Many volunteer active members did splendid service in assisting the graduating members to qualify and in taking charge of expeditions. Among these may be mentioned: Val. A. Fynn, J. P. Forde, D. N. McTavish, Rev. J. Robertson, Rev. A. M. Gordon, and P. D. McTavish. Several of our English guests good naturedly entered into the spirit of the Camp and its objects and lent us their experience and skill at climbing for the same purpose. Of these H. B. Dixon, Godfrey Solly, A. L. Mumm and E. F. Pilkington were prominent.

As professional guides we had our old standbys, Edouard and Gottfried Feuz, loaned to us through the courtesy and friendship Mr. Hayter Reed, of the Canadian Pacific Railway Company. In addition we hired from the Company Ernest Feuz, brother to Edouard, who was now out for his first year in the Rockies. We had also our own guide, brought out from Austria shortly before the camp. Konrad Kain had had a large experience in the Dolomites, in the Tyrol and generally

through the Swiss, French and Italian Alps as well as in Corsica and other places. Before the season was over proved himself to be a first class man and became a great favorite. A. L. Mumm very kindly loaned his own guide, Moritz Inderbinen, on a number of occasions. Moritz has been with him on many expeditions in many parts of the world and particularly is known in connection with Mr. Mumm's expedition with Dr. Longstaff and Capt. Bruce in the Himalaya. He had now been brought out to assist in an intended attack on Mt. Robson to be made later by Mumm, Hastings and Amery. So it will be seen that the camp was well supplied with guides both professional and amateur. It needed them, however, and could scarcely supply the demand for strenuous work that was such a marked feature of the gathering.

It was originally intended to have Mts. Odaray (10,165 ft.) and Huber (11,041 ft.) the official graduating climbs, but on making investigation of routes up Mt. Odaray two chimneys were discovered that would furnish serious difficulties for novices. It was, therefore decided to make Huber the official climb. This did not prevent a graduating climb being made on any other peak of sufficient altitude and of the required character.

Towards the camp Huber presented a bold rock face much broken by cliffs and far too steep to attempt an ascent. To reach the summit it was necessary to traverse along the west face and attack the mountain from the north and east. Here, the entire character changed and snow and ice predominated. At one point in the cliffs, at a lower altitude, it was considered advisable, though not absolutely necessary, to place a rope, which helped much those making their first climb.

Fifty-eight members graduated, as follows:

**MT. HUBER.**

August 1st.

K. Campbell, M.D.  
J. H. Boyce  
G. M. Smith

August 2nd.

Miss R. Paterson  
Miss D. Oldham  
Miss M. Thomas  
Miss R. Dow  
F. M. Nicholson  
E. N. Higinbotham  
A. R. Hargreaves  
Rev. Chas. Peck

August 3rd.

A. C. Graham  
Miss L. DeBeck  
Miss L. Hanafin  
F. W. Godsal  
Miss Ings  
H. L. Pim

C. G. Arthur  
Miss E. G. Crawford  
B. S. Darling  
J. B. Kay  
Miss M. Baxter

August 5th

Miss A. Baxter  
Miss D. Chevrier  
Miss MacNab

August 6th.

Miss J. A. Gibson  
A. F. Armistead  
Miss McClinton  
C. A. Lett, Jr.  
W. B. McKechnie, M.D.  
A. L. Kendall, M.D.  
Mrs. Kendall  
Miss Carter  
B. McClelland  
G. C. Battell  
J. B. McLaren  
Mrs. McLaren  
W. H. Gunn  
Miss McLean  
Eric Ings  
Rev. A. McA. Dallas  
Rev. J. G. McKechnie  
Miss E. Sinclair  
Miss E. Johns  
Rev. G. Howcroft

August 7th.

Miss Elizabeth Moore  
H. A. Dowler  
Miss Beth Halstead  
Miss E. Mumford  
W. A. Alldritt  
Miss Holditch

August 9th

Henry H. Lyman  
Miss M. Mumford  
F. Creedy

**MT. STEPHEN**

Miss M. N. McKenzie  
C. H. Gillis  
W. H. Harrison

**MT. ODARAY**

Mrs. Spence

**OTHER CLIMBS**

A number of important climbs were made of the surrounding peaks while the camp was in session, viz:

Second Ascent

MT. BIDDLE (10,876 ft)

J. P. Forde, M. Goddard, J. J. Trorey, J. Watt

Guide: Gottfried Feuz

MT. ODARAY (10,165 ft.)

G. A. Solly, A. G. Priestly, A. R. Hargreaves, H. B. Dixon, Mrs. C. J.

Spence, C. Hastings, E. F. Pilkington, V. A. Flynn,

E. O. Wheeler.

HUNGABEE (11,447 ft.)

Second Ascent

V. A. Fynn, F. O. Wheeler

VICTORIA (11,355 ft.), Via Huber route

J. P. Forde, M. Goddard, A. Gordon, Mrs. A. H. MacCarthy.

MT. RINGROSE (10,741 ft.)

First Ascent

V. A. Fynn, E. F. Pilkington

GLACIER PEAK

First Ascent

V. A. Fynn, A. R. Hart, L. C. Wilson, C. A. Richardson.

All the foregoing climbs are described elsewhere in the Journal.

**MINOR CLIMBS**

Mt. Schäffer, Wiwaxy Peaks, South Peak of Mt. Odaray, Park Mt.

**EXPEDITIONS**

During the Paradise Valley Camp of 1907, a two day trip was organized by way of the Mitre Pass and Glacier, Lefroy Glacier, Victoria Glacier, Abbot Pass; stopping the night at Lake O'Hara;

then via Opabin Glacier and Pass, Prospectors Valley, Wenkchemna Pass and Glacier, Wastash or Sentinel Passes and Horseshoe Glacier back to the camp-a round of nearly twenty miles of arduous work, but always of live interest, and exhibiting most beautiful and varied alpine scenery.

The same trip was on the daily programme for the O'Hara Camp, except that the half-way stop for the night was placed in Paradise Valley. It was made in different directions, some parties going via Abbot Pass and some via Opabin Pass. In all five parties made the circuit comprising thirty-seven gentlemen and seventeen ladies. In 1907 only three ladies attempted it.

### **MINOR EXPEDITIONS**

There were a number of minor expeditions every day to Lake McArthur, Lake Oesa, Opabin Pass and the Crystal Caves, all of which were well attended.

The Camp broke up on Monday 9th August. It was a record camp as to attendance and the amount of good work done. There were fully 150 people under canvas from the start to finish, while the maximum was 190. The steady attendance throughout, which was a new feature, made the camp a very lively one and kept the staff very fully employed.

### **THE SIX-DAY YOHO EXPEDITION.**

A special expedition had been organized to enable our British guests to see a little more of the alpine features of the region. So, on August 9th, the party moved from Lake O'Hara to Hector Camp and got ready for a start.

There were thirty-three altogether, ten of whom were guests and the remainder officials, volunteers and guides. Of the guests E. F. M. MacCarthy and A. M. Bartleet joined us at Hector. Prof. Dixon and Mrs. Spence, Godfrey Solly, Mrs. Solly and Miss Maclay, Miss M. Vaux, Oscar Rohde and E. F. Pilkington came from the camp. Hastings, Mumm, and Amery had some days previously started for Mt. Robson with the intention of attempting an ascent.

A move was made from Hector camp about 2.30 on the afternoon of the 9th, over a blazed track through the woods, to the shores of Sherbrooke Lake. Now following the east shore around the lake and ascending by the torrent from the upper hanging valley, that valley was traversed and the first night's camp made near timber line in the valley leading to the Niles Pass. Ponies took the baggage and supplies thus far and then returned to meet us two days later near the icefall of the Yoho Glacier.

For the next two days, all food, bedding and outfit had to be carried on the backs of the Club's members who had volunteered for the purpose. The second day's route lay over the Niles Pass, the southern approach consisting of open grassy alps and rock debris, the northern a descent of steep snow slopes, which were negotiated by starting the heavier bundles and letting them go, then following ourselves by a series of swift glissades. Next ensued a tramp in single file across the Daly Glacier and camp was pitched for the second night just above the timber-line at the edge of the most northerly icefall of the Daly Glacier.

The route for the third day lay along the western slopes of Mt. Balfour and its outlying spur, Trolltinder. A descent was ultimately made to the icefall of the Yoho Glacier, which was crossed by all except a few of the party who preferred to wade the torrent, and the third night spent in a delightful camp in the forest beside the regular pony trail, about half a mile from the icefall.

It had been pretty heavy work carrying supplies and outfit for thirty-three persons for two days and necessarily some discomfort was experienced by our visitors, but they were excellent

sports and met all difficulties and mishaps with the most cheery good humour, lending assistance at every point as the occasion arose, and even carrying heavy loads, though quite unaccustomed to it. Indeed, they helped us more than they knew. During these two days some of our guests accompanied by members of the Club made ascents of Mts. Daly and Balfour, both peaks of the Great Divide.

At the third camp ponies met us and for the remaining three days transport was an easy matter. The fourth night was spent at a charming camping ground in Waterfall Valley, beside the little lake near the trail. The fifth camp was in the Upper Yoho Valley and was probably the most attractive of all. During the day the move was made a number of members and a few of the visitors crossed the Wapta Icefield and made the ascent of Mts. Habel and McArthur, rejoining the camp in the Upper Yoho. The rest of the party tramped to Kiwetinok Lake and Pass, and had a look at the Van Horne range across the Amiskwi and Otterhead Valleys.

The fifth day, camp was moved across the alps above the upper trail to Summit (Yoho) Lake, near the crest of the Yoho Pass. About half the party reached this camping ground by a traverse of the President Range, crossing over the summits of the President and Vice-President.

At Summit Lake the party was joined by Dr. and Mrs. Benson, who had not accompanied the six-day expedition. One more jolly and lingering camp-fire together, one more night under the stars and then, on the sixth day, travelling easily, we crossed the Yoho Pass, and moraine delta of Emerald Lake, following the shore of the lake to the C.P.R. Chalet, where a civilized luncheon was thoroughly enjoyed. A drive through woods of lodge-pole pine over a good road landed us at Mt. Stephen House at the village of Field, and the expedition was over-no, not quite over, for our guests had planned a pleasant surprise and now become our hosts at a noble banquet, to our great delight and satisfaction. A more pleasing and kindly thought for a happy termination of a memorable expedition could not have been conceived.

The space at my disposal admits of but the merest sketch of what was really something of a feat, most happily carried out, thanks to the good temper, willingness for hard work and readiness to be pleased with everything, by everyone concerned. We found our guests right jolly good fellows, ladies included, and we could not have asked for better mountaineers or sportsmen. They have taught us much and we thank them most heartily for it.

In the pages of this number will be found a delightful sketch of the expedition entitled "Two Englishmen in the Yoho Valley," by MacCarthy and Bartleet, which does better justice in the way of a description than the writer has been able to do. In the February (1910) number of the Alpine Journal will also be found a capital description by Harold B. Dixon. This number may be obtained from Longmans Green and Co., 39 Paternoster Row, London, England; price 2/6

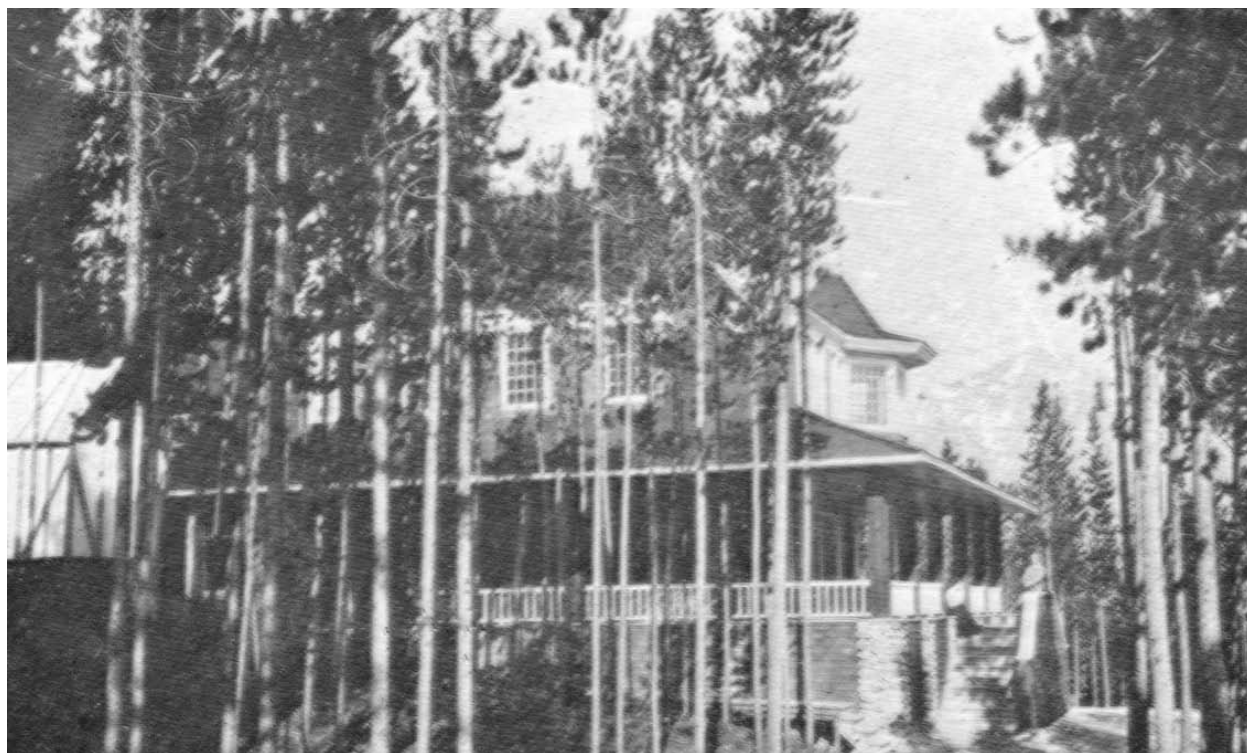
ARTHUR O. WHEELER  
Chairman of Camp Committee.

### THE CLUBHOUSE

The Club House rises, a speck of colour, amid the pines of Sulphur Mountain, "Beautiful for situation." From the spacious front verandah one looks across towards Tunnel Mountain; to the north are the village of Banff and Cascade Mountain; the C.P.R. hotel hides the falls of the Bow, but over it, through the gap, Peechee and Inglismaldie stand bold against the sky, lovely in the after-glow of the sunset; the barren slopes of Rundle and the valley of the Spray fill the view to the South.

The main attraction of the interior of the house is the large assembly room, thirty feet





**The Club House, Banff. C.H. Mitchell, Photo.**



**The Assembly Room and Vaux Fireplace. C.H. Mitchell, Photo.**

square, finished in dark brown and furnished in mission style. In the centre of the western wall the great stone fireplace, erected in memory of the late Wm. S. Vaux, a lover of the mountains, gives distinction to the room. On the walls are various pictures of mountaineering scenes. On the same floor are the office and kitchen; from the hall a door opens into a large dining tent where meals are served to all who come at appointed times. Upstairs is a fine smoking room with sporting pictures upon the walls and next to it, commanding from its windows a view stretching from Mt. Edith to the valley of the Spray, is the library—a truly delightful room. On this floor also are two small rooms. Members sleep in little tent-houses scattered among the trees. From the rocks behind the house rises a spring of pure, cold water.

Ninety-six members stayed in the Club House last summer, and all hoped to come again. Thirty-four towns were represented in Canada and the United States, in England, Scotland and Ireland, and in far South Africa.

### ART COMPETITION

The Judging Committee were Mrs. P. Burns, of Calgary, Alberta, Mrs. Dixon, of Manchester, England, and Mrs. Benson, of Dublin, Ireland.

In Class 1—Alpine Photographs—the first prize was awarded to Miss M. and Mr. George S. Vaux.

In Class 2—Alpine Flowers—there was only one exhibit. Mrs. Henshaw was awarded the prize for the high standard attained.

In Class 3—Alpine Scenes in oils—there were three entries. The first prize was awarded to Mrs. Blair Thomas.

In Class 4—Alpine scene in water colours—and in Class 5—Etching of Alpine scenes—there were no entries.

The Camp opened officially on August 2nd and closed on August 9th. The work of erection, in charge of E. O. Wheeler, son of the President, was begun two weeks before the opening day. During this time a special camp was in operation, open to receive members, but the only members taking advantage of the opportunity was Mr. Val. A. Fynn, of St. Louis, who turned to with a will and did most effective work in camp construction.

### ATTENDANCE.

The attendance was greater than that of the previous year. In all, on hundred and ninety persons were placed under canvas. A special feature was the steady attendance from start to finish.

Our experience in previous years had been that the attendance fluctuated during the period, people coming and going, but at Lake O'Hara there were a hundred and fifty persons in camp from beginning to end. A synopsis of the attendance by Provinces, States and Countries is here given.

#### IN CANADA:

BRITISH COLUMBIA—Deer Park, Field, Golden, Kelowna, Revelstoke, Rossland, Vancouver, Victoria.

ALBERTA—Banff, Calgary, Cowley, High River, Lethbridge, Medicine Hat, Millarville, Ponoka, Red Deer.

SASKATCHEWAN—Prince Albert, Regina, Swift Current, Yellowgrass.

MANITOBA—Winnipeg.

ONTARIO-Kingston, Ottawa, Port Hope, Toronto, Woodstock.  
QUEBEC-Montreal.

FROM THE UNITED STATES OF AMERICA:

CALIFORNIA-Berkeley.  
ILLINOIS-Galesburg.  
INDIANA -Fairmont.  
MASSACHUSETTS-Boston.  
MISSOURI-St. Louis.  
NEW JERSEY-Summit.  
NEW YORK-Brooklyn, New York.  
PENNSYLVANIA-Philadelphia.  
S. DAKOTA-Sioux Falls.

FROM OVER SEAS:

ENGLAND-Birkenhead, Birmingham, Bradford, Cheadle, Haselmere, London, Manchester,  
Oxford, Prestwich, Teddington, York.  
IRELAND-Black Rock, Dublin.  
SCOTLAND-Hamilton.  
AUSTRIA-Vienna.  
HOLLAND-Rotterdam.  
SWITZERLAND-Interlaken, Zermatt.

**Statement Of Treasurer.**

From July 1st, 1909 to May 31st, 1910.

Receipts.	
Balance on hand July 1st, 1909	\$1,840.21
Fees—Associate members	\$ 372.25
Active-Life	689.50
Active-Ordinary	1,270.76
Graduating	207.40
Subscribing	36.00
	<hr/> 2,575.91
Club House Accommodation	715.47
Camp Account	2,082.32
Journals	236.75
Ribbon	26.62
Ice Axes	221.50
Library	1.85
Piano	74.00
Interest	19.23
Club House—O. Rohde	\$ 15.00
Mrs. Solly	15.00
Mrs. Leigh	<u>5.00</u>
	35.00
Total	<b>\$7,828.86</b>
Disbursements.	
Camp Account	\$2,509.39
Ice Axes	285.80
Club House Building	295.26
Club House Camp & Supplies	906.72
Building Club House camp and teaming	526.18
Club House Furniture	530.65
Printing and Stationery	152.28
Journal	710.91
Postage and telegrams	50.75
Wages	1,160.25
Photos sold by Club	4.50
Insurance	196.00
Piano	74.00
Ribbon	28.66
Library	17.52
Grant to Rev. G. Kinney	100.00
Transfer C. E. Peck to Building Fund	10.00
Transfer to Building Fund (O. Rohde, \$15; Mrs. Solly, \$15; Mrs. Leigh, \$5.)	35.00
Balance in Bank	229.99
Cash	<u>5.00</u>
	234.99
	<hr/>
Total	<b>7,828.86</b>

—C. W. ROWLEY, Hon. Treas.

**Receipts And Expenditures, O'Hara Camp 1909.**

Receipts.	
Alberta Government	\$1,000.00
British Columbia Government	500.00
Board and Accommodation	1,691.50
Baggage, Hire of ponies	233.75
Sale Ice Axes and sundries	283.15
Sale, Auction	36.50
Employees Fund collected	215.40
Hiring guides	4.50
Sale of Provisions to Survey Party	55.57
	<hr/>
Total	4,020.37
Expenditures.	
Provisions	956.43
Wages	446.70
Outfit	821.44
Freight, etc	173.80
Ice Axes	235.80
Alpenstocks	12.00
Horses	694.75
Canadian Pacific Railway for guides	90.00
Bonus for employees	214.80
Printing	35.00
Balance	339.65
	<hr/>
Total	4,020.37

**Banff Club House Building Fund.**

Synopsis	
Receipts.	
Balance on hand July 1st, 1909	\$ 471.03
Subscriptions	1,998.62
Vaux Family	175.00
Interest	9.13
Notes discounted	4,971.05
	<hr/>
Total	7,624.83
Disbursements.	
Sundry cheques to contractors	\$3,203.50
Sundries	1.35
Payments on notes discounted	4,375.85
Balance in bank	9.13
Balance from General Fund-Mrs. Leigh	5.00
	Mrs. Solly 15.00
	O. Rohde 15.00
	<hr/>
	44.13
	<hr/>
Total	\$7,624.83

C. W. ROWLEY, Hon. Treas.

**Building Fund.**

J. H. Alexander	37.50
A. F. Armistead	20.00
G. Arthur	20.00
*Mrs. A. H. Benson	15.00
Dr. Bonar	30.10
J. F. Boyce	50.15
*F. C. Brown	20.00
Mrs. P. Burns	50.00
R. B. Cochrane	10.00
C. H. Copeland	10.00
Miss W. J. Creech	15.00
N. Culp	20.00
Miss E. I. Cummins	10.00
A. M. Dallas	10.00
*B. S. Darling	5.00
R. J. Deachman	50.00
*Miss De Beck	5.00
+ H. B. Dixon	50.00
Miss Dow	10.00
W. A. Duff	5.00
Miss F. M. Field	20.00
F. W. Freeborn	20.00
V. A. Fynn	50.00
G. A. Glines	50.00
F. W. Godsal	50.00
A. C. Graham	10.00
*W. H. Gunn	5.00
*Miss Hannafin	5.00
B. Harmon	10.00
+ Mrs. Henshaw	10.00
E. N. Higinbotham	10.00
Miss C. M. Holditch	20.00
R. B. Hood	10.00
*G. Howcroft	5.00
*Mrs. G. Howcroft	5.00
J. C. Huffman	2.50
E. Humphreys	20.00
J. S. Hunt	25.00
W. G. Hunt	50.00
*E. Ings	5.00
*Miss E. Johns	5.00
t*S. L. Jones	40.00
J. B. Kay a	100.00
A. L. Kendall	10.00
Mrs. Leigh	10.00
Miss M. Lennox	10.00
*C. A. Lett, Jr	5.00
C. F. Lindmark	20.00
C. O. Main	5.00

The Canadian Alpine Journal - 1910

Miss D. Maus	10.00
A. E. Miller	10.00
+*S. H. Mitchell	50.00
Miss E. Moore	10.00
T. Morrison	20.00
*A. L. Mumm	50.00
*Miss Maclay	15.00
*E. F. M. MacCarthy	24.33
Miss E. MacNab	10.25
Miss M. N. MacKenzie	30.00
C. B. McClelland	20.00
Miss McClinton	10.00
W. B. McKechnie	30.00
J. B. McLaren	30.00
Miss E. J. McLean	10.00
+ P. D. McTavish	50.00
Miss Oldham	10.00
*Mrs. E. Parker	10.00
H. Parker	50.00
+*Miss J. Parker	10.00
Miss B. L. Parlsow	10.00
*Miss R. Paterson	5.00
J. D. Patterson	100.25
C. W. Peck	10.00
E. F. Pilkington	20.00
*H. L. Pim	5.00
J. T. Pollock	10.00
*Miss Raymond	25.00
A. L. Reading	5.00
C. A. Richardson	7.50
*O. Rohde	15.00
*C. W. Rowley	25.00
*Mrs. J. N. Shaw	5.00
Miss J. Sherman	10.00
*Mrs. Solly	15.00
*Mrs. Spence	51.04
E. L. T. Taylor	50.00
*Mrs. Thomas	5.00
*Miss Thomas	5.00
J. J. Trorey	10.00
John Watt	20.00
F. J. Webber	10.00
+*A. O. Wheeler	50.00
Mrs. J. A. Wilson	20.00
L. C. Wilson	10.00
F. Yeigh	10.00
<hr/>	
Total	1,998.62

+ Debentures presented to Club.

\*Gift to Club.

**Subscriptions Unpaid and Partially Paid.**

Dr. G. A. Anderson	50.00
C. H. Gillis (3rd sub.)	50.00
E. A. Haggen	10.00
A. H. Hartevelt (2nd sub.)	25.00
J. C. Huffman (2nd sub.)	10.00
Dr. A. L. Kendall	20.00
Miss LeSueur	10.00
Dr. W. M. Mckechnie	20.00
R. E. Plewman (2nd sub)	20.00

**Gifts Towards Furnishing the Club House.**

Mrs. P. Burns, 5 doz. each of knives, forks and spoons, double Majestic Range, large mirror; Miss Mollison, several dozen plates and dishes; Mrs. Rowley, 1 doz. sugar bowls and cream jugs, 1 pair portieres, lamps, bed and mattress; C. W. Rowley, pictures and frames, flags and hammock; Winnipeg members, library table and clock; sundry members, piano; Mrs. S. L. Jones, sofa pillow; Miss Gillis, pillow; Misses Adams and Springate, 1 doz. cups, saucers and plates; Mrs. Parker, 1 doz. plates and two brass trays; Miss Parker, candlesticks, plates and dishes; Mrs. J. B. McLaren, curtain; Mrs. Henshaw, 1 dozen cups and saucers; Miss E. Bailey, sugar bowl and cream jug; Miss E. Sinclair, cups and saucers; Dr. Mary Crawford, ink bottles and stationery; R. E. Burch, ink bottles; F. C. Brown, lamp and picture frames; A. O. Wheeler, pictures; Tom Wilson, picture; Miss A. E. Patteson, two water color pictures; H. G. Wheeler, two chairs and two tables; Mrs. H. J. Palmer, pictures, vases, etc.

J. D. Patterson	46.60
S. H. Mitchell	10.00
Miss A. L. Foote	5.00
J. N. Wallace	8.00
F. W. Freeborn	5.00
Mrs. Parker	4.00
Dr. M. Crawford	5.00
C. H. Gillis	5.00
Miss J. C. MacKay	2.00
Miss E. R. Smith	2.00
E. O. Wheeler	5.00
Miss A. E. Patterson	10.00

The money was used for furniture, dishes, teapots, waste baskets, pillows, towels, etc. The balance in hand is to be used for a kitchen porch this summer.

**Memorials.**

Fireplace in Assembly Room in memoriam William S. Vaux, Jr., by his family.

Grandfather's Clock in memoriam Hector G. Wheeler, by his relatives.

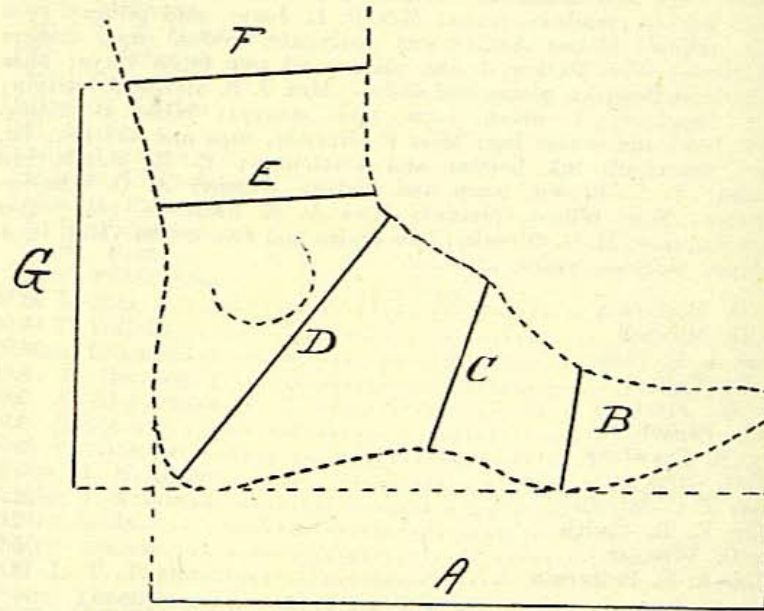
C. W. ROWLEY, Hon. Treas.



# MARTIN CURSCHELLAS

## SCHUHMACHER

### ANDERMATT, SWITZERLAND



#### INSTRUCTIONS FOR MEASUREMENT

A =            cm. B =            cm. C =            cm.  
D =            cm. E =            cm. F =            cm.  
G =            cm.

Name \_\_\_\_\_

Full Address \_\_\_\_\_

**NOTES.**—Write distinctly. Measure over mountain stockings you intend to wear. **Two** pairs should be worn. Take measurements when standing. Pull gently on tape when measuring. Check your measurements. Give dimensions in Centimeters. One inch = 2.54 Centimeters.

Centimeter measurement is frequently found on the reverse side of tape measures.

THE SWITZERLAND OF  
❁ ❁ ❁ AMERICA ❁ ❁ ❁

Banff  
Lake Louise  
Lakes in the Clouds  
Field  
Glacier

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are reached only by the incomparable  
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Canadian Pacific Railway

ROBERT KERR

Passenger Traffic Mgr.

Montreal, Quebec.

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IN SEPTEMBER AND OCTOBER

Permanent Camps in the Yoho Valley.

Trips Arranged to any Points of Interest in  
in the Canadian Rockies.

Make a Trip to Ice River Valley. Few  
have seen it, but all who have are enthusiastic.

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PACK HORSES

*SEE US.      WRITE US.*

We know the mountains and can tell you  
everything about them.

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House, Banff, Alberta.



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TENTS AND CAMP OUTFITS

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HAMMOCKS, REFRIGERATORS

SCREEN DOORS AND WINDOWS

LAWN MOWERS & SPRAYS, Etc.

We have opened up our second floor as a sales-room, and are displaying the finest assortment of Mantels, Grates, Ranges, etc., shown in the West. We extend an invitation to inspect these lines, as we know you will find them as represented.

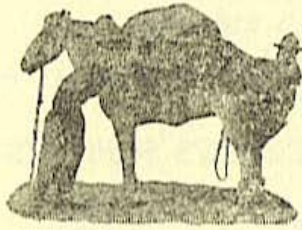
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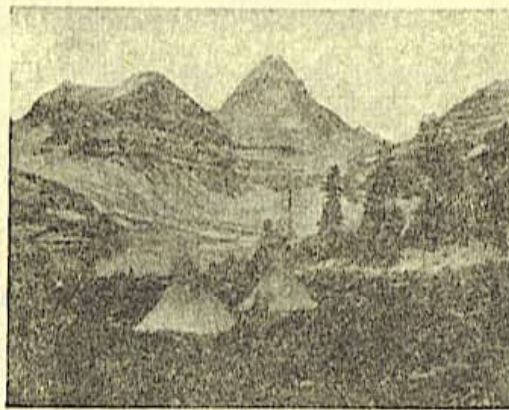
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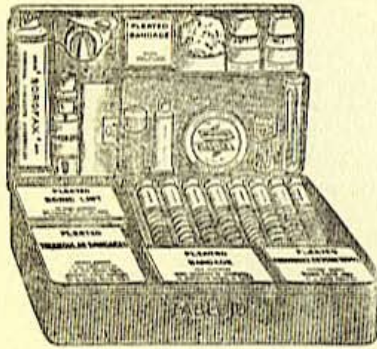
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# THE GRAND TRUNK RAILWAY SYSTEM

Its Rail and Water Lines together will total 15,889 Miles.

In 1909 it carried 19,233,485 tons of Freight  
and 13,916,147 Passengers.

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Many people fail to appreciate the commanding position that the Grand Trunk Railway System, with headquarters in Montreal, occupies among the Great Railway Systems of the North American Continent. It is the Pioneer Railway of Canada and one of the earliest built and operated on this side of the Atlantic.

The present total mileage of the Grand Trunk, including its subsidiary lines, is 5,400 miles, with a double track mileage of 1,035, which makes it not only the longest double track railway in Canada, but one of the longest continuous double track railways under one management in the world.

## GREAT RAIL AND WATER SYSTEM

Including the mileage of the Grand Trunk Pacific main line now under construction and contemplated 3,640 miles, of which 3,044 miles are under contract, also 5,618 miles of branch lines—the total length of the entire System of Railways will eventually amount to 14,650.

In addition to the rail mileage the Grand Trunk operates steamer lines on the Great Lakes, between Midland, Depot Harbor and Fort William, Milwaukee and Chicago. It also owns and operates large car ferry steamers on Lake Ontario, between Cobourg and Charlotte (60 miles) and on Lake Michigan between Milwaukee and Grand Haven (distance 80 miles), the total mileage of lake lines being 1,239 miles. Adding the lake line mileage to the rail mileage above gives a grand total of 15,889 miles of rail and water lines.

## GRAND TRUNK'S ENORMOUS BUSINESS

With regard to the amount of business handled: The Grand Trunk also stands in the forefront. During the year 1909, on the entire Grand Trunk System, the number of tons of freight handled amounted to 19,233,485 tons, while the number of passengers handled was 13,916,147. According to the official reports for 1909, the Grand Trunk takes rank among the ten largest Systems on the North American Continent, based on the business handled (freight tonnage, and passengers), while on its lines in Canada only it handled 1,431,754 tons of freight and 1,167,000 passengers more than the railway ranking next as a common carrier; also, according to the Government reports, it handled 25 per cent. of the total freight hauled, and 33 per cent. of all the passengers carried by all the railways in Canada.

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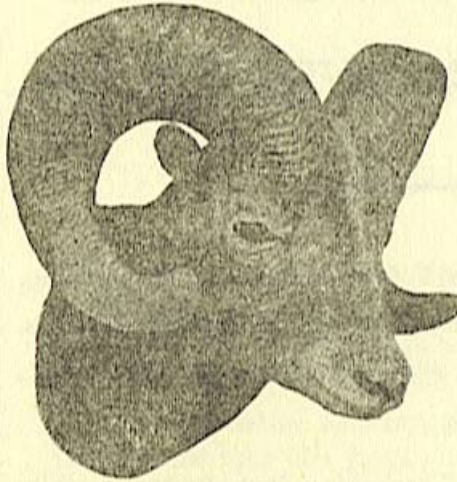
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