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SIX WEBKS IN THE CANADIAN ROCKY MOUNTAINS.

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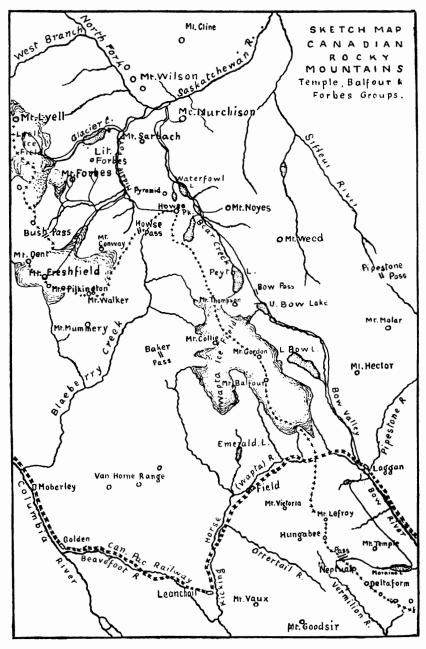
(Read before the Alpine Club, February 3, 1903.)

AST summer (1902) Professor Collie arranged with Mr. Stutfield and myself to make another expedition to the Canadian Rockies, our plan being to revisit the head-waters of the northern Saskatchewan, to explore the Freshfield group, to attempt the ascent of Mt. Forbes, and then, if time permitted, to follow Mr. C. S. Thompson's route up the W. branch of the Saskatchewan to the S. border of the Columbia Ice-field.

We left Liverpool July 3 on the Allan liner 'Tunisian,' which was taking home over six hundred men of the Canadian Coronation contingent—an event which occasioned enthusiastic demonstrations in the Mersey, and equally stirring scenes on our arrival in the St. Lawrence.

On July 18 we arrived at Banff, where Mr. Thompson and Mr. G. M. Weed of Boston, had agreed to meet us. Both had arrived, and were ready to start northward with us on the 19th, as had been arranged, but this plan was upset by the extraordinary behaviour of our baggage. Three important packages had completely baffled the vigilance of the Canadian Pacific Railway officials, and had disappeared into the unknown. It transpired later that Collie's bag had left the train at Regina, while Stutfield's had elected to go on to Field. Mine, which appeared to have travelled through to Vancouver, returned in good time and surrendered to the authorities at Banff, but unfortunately the other two remained in hiding. While awaiting the result of our urgent telegrams to headquarters another misfortune happened; Mr. Thompson

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learnt that his home in Texas had been destroyed by fire, and,

to our great regret, was obliged to leave us.

When four days of fine weather had been wasted we decided to make an expedition to Moraine Lake, at the foot of Mt. Temple, and after buying blankets, &c., to replace the missing equipment, left Banff for Laggan, but on arriving there found that our head man, Fred Stephens, misunderstanding our telegram, had sent the baggage horses ahead along the trail, not southward to Moraine Lake, but northward up the Bow Accepting this last mischance as the intervention of fate, we decided to wait no longer for the baggage, but to push on after the horses. As it was too late to start that day, and as the Lake Louise Hotel, like all the hotels along the western sections of the C.P.R., was quite full, we took possession of a strip of waste land between the line and the Bow River, laid our blankets on the grass, and were lulled to rest by the sonorous baritone of a yard engine engaged in shunting freight cars.

Next morning, July 24, we rode up the Bow Valley, and in the afternoon caught up the baggage horses some distance below the Lower Bow Lake. Our outfit was now a large one, including, in addition to Weed and our three selves, Hans Kauffmann, of Grindelwald (one of the guides stationed by the C.P.R. at Lake Louise), Fred Stephens, Dave Tewkesbury, Clarence Murray, Jack Robson, and, lastly, seventeen horses. Since our last visit in 1898 the C.P.R. Company had made a new trail through the chaotic wilderness of burnt timber N. of the line, and notwithstanding the abnormally rainy spring the upper valley was comparatively dry, so that travelling was unusually easy and pleasant; nevertheless, in order to allow the new horses to become seasoned, we made at first short journeys, and took three days to reach the Bow Pass. These short marches add much to the charm of travel in the Rockies. If an early start has been made the horses may be unloaded at 1 or 2 o'clock, and the afternoon is then free for fishing, shooting, photography, or climbing, while in a thicklywooded region the axemen generally go forward to look to the next day's trail.

At Bow Pass the weather broke, and we journeyed down Little Fork (Bear Creek) in clouds and rain, to the disappointment of Stutfield and myself, who had already traversed this picturesque valley in 1898 without seeing Howse Peak, Pyramid, and the other fine peaks which overhang it. In the upper part of this valley we could realise the rapidity with which a trail through the woods deteriorates. Within

the last three weeks two of our men had made the journey to Bear Creek Mouth and back in order to cache a supply of bacon and flour for our use; yet in the interval the wind had brought down numerous logs across the trail, and the outfit was frequently halted while the woods echoed to the blows of Fred Stephens's axe. On the fifth day out from Laggan we camped at the junction of Bear Creek with the Saskatchewan, where our provisions had been left in a log hut used during the winter by two trappers—Ballard and Simpson. They were then absent, having gone N. with the Rev. Jas. Outram, who had left in the hut a letter informing us that we should find him at Glacier Lake, about ten miles to the W., and that on our arrival he would join us in an attack on Mt. Forbes.

The crossing of Bear Creek is always a matter of some anxiety in the early summer, and, as the waters were much higher than we liked, it was decided to stay a day at this camp, in the hope of the stream falling. Next morning (July 29) Collie, Stutfield, and Weed, with Hans Kaufmann, started through the woods to the S.E. for the ascent of Mt. Murchison, whose summit rose 6,500 ft. above the camp. while Tewkesbury and Murray accompanied me two or three miles up the creek to look for a canyon discovered by Stephens on the previous day. We found it well worth a visit. Bear Creek, which near its mouth is a swift torrent 50 yards wide, has cut a narrow channel 100 to 150 ft. deep in the limestone rock. In some places this chasm is but $\overline{6}$ to 8 ft. wide, in others its sides contain ancient pot holes similar to those in the Glacier Garden at Lucerne, one or two of these rock cauldrons being of unusual size.

At 8 P.M. the climbing party returned. They had avoided the entanglements of the wood by ascending a dry water-course leading up to a gully on the W. face of the mountain, and, climbing rapidly, had made the first ascent of the W. peak of Murchison (11,100 ft.).*

On the following day the creek had fallen 6 inches or 8 inches, and by 8.30 a.m. the whole outfit had safely crossed to the left bank. Hitherto our direction since leaving Laggan had been N.N.W.; we now turned westward and followed a good trail up the right bank of the Saskatchewan, obtaining splendid views of Murchison to the E., of Forbes to the S.W., and of the other mountain masses so picturesquely grouped

^{*} The heights given in this paper have been calculated by Professor Collie from the corrected barometer readings obtained by comparison with the mercurial barometer at Banff.

round the meeting-point of the three chief branches of the river.

Above the mouth of the North Fork the bed of the Saskatchewan, here called the Middle Fork, opens out into an expanse of slingle and gravel flats, easily traversed when the river is not in flood. Ascending these flats and following the course of the valley as it curves round the base of Mt. Sarbach, we halted at an old Indian camping-place about a mile above the point where Glacier Lake Creek flows in from the W., and opposite to a comparatively low but conspicuous peak called Little Forbes, which stands on the left bank of the stream. In the afternoon Collie rode over to Mr. Outram's camp to announce our arrival, and next morning we continued our march up the valley. Our course was now nearly due S. towards the Howse Pass, the chain of mountains to the E. being the same which had been to the W. as we descended Bear Creek. Nearly abreast of Howse Peak—the highest of the chain—the Middle Fork branches into three streams, the creek from Howse Pass being joined by two larger torrents from the W. Of these latter the southern issues from the Freshfield Glacier, while the northern drains the S. slopes of Mt. Forbes.

Turning westward up the shingle flats which have been formed by the two torrents, and which were marked by numerous tracks of Rocky Mountain goat, we camped at the margin of the wood on the right bank of the Freshfield Creek. Our first impressions of this valley were not cheering. It had rained all the morning, the clouds lay low on the hill-sides, and our view was confined to the uninviting expanse of sand and shingle framed in sombre, dripping woods. horses, as soon as they were released, showed their disapproval of the place by starting back towards the Middle Fork, in search of a more attractive feeding-ground. Later in the day Mr. Outram joined us with his guide, Christian Kaufmann, and the two trappers, Ballard and Simpson, and we now learnt that he had reached the head of the West Fork, and had, amongst other expeditions, made the first ascents of Mt. Columbia and Mt. Lyell.

The rain continued, and it was not till the second evening that the clouds lifted and disclosed superb views of Howse Peak to the E. and of Mt. Forbes only a few miles to the N.W. As it was certain that there was much new snow on Forbes we had already decided to visit the Freshfield Glacier first, and Stephens and Tewkesbury—both expert woodmen—had spent the afternoon in cutting a trail through the ravine

to the S.W.; meanwhile the brothers Kaufmann went out with their rifles and brought back two wild goats. The following day Tewkesbury and Murray set out for Laggan in quest of the missing baggage; the rest of the company ascended the left bank of Freshfield Creek through a beautiful wood of pine and fir, with undergrowth of azalea bushes, and camped a short distance below the snout of the glacier (ca. 5,200 ft.). This was the most attractive camp we had yet occupied; the tents nestled in fresh green woods untouched by fire, and the gaps between the trees revealed charming glimpses of the graceful pyramid of Mt. Freshfield rising above the glacier to the S.W., and of the broad snowy shoulders of Howse Peak to the E.

After losing a day through broken weather, we set out at 5.0 a.m. on August 4 for the ascent of Mt Freshfield. The lower part of the glacier is but slightly crevassed, and an easy walk of about two hours led us to the foot of our peak. About a mile up the glacier we passed the series of ice-borne blocks of limestone noticed by Collie in 1897, the largest block being remarkable for its rectangular shape, and farther on, as the glacier opened out, came in sight of the row of stately presidents—Dent, Freshfield, Pilkington, and Walker—brilliant in the morning sun. The peaks of this district depart from the regulation writing-desk form seen so often in other parts of the range, and the snow and ice scenery struck me as the most picturesque I had yet seen in the Rockies.

At the foot of the mountain, Robson, who had accompanied us to see something of the ice-world, turned back, well admonished to take no liberties with the crevasses, while we ascended over screes and rocks to snow-slopes above. Here we roped in two parties—Outram, Weed, and Christian on one rope, Collie, Stutfield, Hans, and I on the other—and ascending obliquely, first to the S. and later to the W., gained the N.E. arete. The snow on this ridge soon gave place to loose rocks, in several places appearing from below to be extremely difficult, but Hans, who was leading, always succeeded in scaling them with less trouble than we had anticipated. As we neared the actual summit the rocks unexpectedly became firm and an enjoyable scramble brought us to the top—a corniced snow-cap—at 1.5 p.m. The height, 10,900 ft., was considerably less than we had estimated.

In place of the perfect weather of the morning there was now a cold wind and an overcast sky; nevertheless Forbes, Lyell, and most of the high peaks to the N. were clear. But we were now on the continental divide, and the view most interesting to us was that to the W. into British

Columbia. Deep below us was the narrow valley of the South Fork of the Bush River; we could also trace the course of the main stream further W.; but the North Fork and its branches were masked by the bold pyramid of Bush Peak. It was too cold for a long halt on the summit, therefore, at 1.45, we began the descent, following the S. snow-ridge for a short distance till clear of the cornice. We then turned E., descended steep slopes of deep, soft snow and broken rocks till able to regain the upward track below the aréte, and after a pleasant walk down the glacier arrived at the camp at 6.30 p.m.

As there was now some promise of settled weather we were anxious to try conclusions with Mt. Forbes, and, returning to the shingle flats, camped between the two torrents. In order that we might take the horses to the foot of the mountain, Stephens and Simpson began at once to cut a trail on the left bank of Forbes Creek, and two days of fine weather had to be given up to this task. During this time the snow was rapidly disappearing from the great eastern precipice of Forbes, down which avalanches fell frequently.

One of our excursions while awaiting the completion of the trail was up the wooded slopes to the N. of the shingle flats, and about 2,000 ft. above the creek we found a wide grassy basin in which from forty to fifty wild goat were feeding. They seemed to be very little alarmed by our invasion of their sanctuary, and wandered leisurely away up the slopes to

the N.E. in the direction of Little Forbes.

As soon as the trail was finished we moved our camp a few miles up the Forbes Creek to a semicircular clearing sloping to the N. bank of the stream. It was another excellent camping-ground, with plenty of grass, the want of which had been a serious inconvenience on the shingle flats, as the horses, straying in search of food, were invariably missing when wanted. The height of the camp was about 5,500 ft. Above the woods to the N.W. rose the rocky cone of Forbes, cut away on the E. into cliffs which fell abruptly 4,000 feet to a small glacier below; while immediately opposite to us on the S. side of the creek were the steep, avalanche-scored slopes of a much lower but very beautiful mountain which we named Coronation Peak.

On the afternoon of August 9-Coronation Day—we ascended the densely wooded slopes N.W. of the camp as far as the tree limit (ca. 7,000 ft.), with the intention of climbing Mt. Forbes next day. A suitable sleeping-place was found on the banks of a stream fed by the nevé which fills the



Photo by H. Woolley.] [Swan Electric Engraving Co. MOUNT FORBES FROM THE S.E.

hollow between the S.W. and S. ridges of Forbes. Stephens and Robson, who had volunteered as porters, returned to the camp, and we were soon gathered round a fire of blazing pine logs—the one luxury never denied to the climber in the Rockies.

A more charming bivouac could not be desired. We were surrounded by sheltering pines; the floor was carpeted with moss and heather; and the slopes beyond the trees were bright with the deep crimson painter's-brush, with yellow lilies, and many other flowers. Moreover, it was a splendid cloudless evening, and the view at sunset of the deep, silent valley below us, with the snows and hanging glaciers of Coronation Peak as a background, was strikingly beautiful After supper each of us made himself a bed of the branches of balsam spruce, which experience had taught us formed the softest couch, and we turned in with every prospect of a fine morrow.

At 5.15 next morning we began the ascent in perfect weather, having decided to climb by the S.W. ridge, which was in full view from the bivouac, and on which no serious obstacle was visible till within a few hundred feet of the summit. Mounting northward, first by grass slopes and later by screes and rocks till 7 o'clock, we roped in two parties, as on Mt. Freshfield, left the rocks, and struck diagonally up snow slopes towards the foot of the ridge. Here rock-climbing of an easy description began, and after following the arête for half an hour we stopped for breakfast at a convenient ledge on the S. side of the ridge, sheltered from the keen north wind now blowing, and commanding a fine view to the S, extending to the great peaks beyond the Kicking Horse River.

After leaving the breakfast place greater care was needful, and progress became slower, owing to the looseness of the rocks; we hoped that as we ascended they would become firmer, as had happened on Mt. Freshfield, but this was not the case. About the point where the S.W. and S. ridges converge the climbing grew more difficult, the ridge became extremely narrow, having a precipice on either side, and several steep pitches had to be surmounted; and a few hundred feet below the summit we encountered an obstacle which caused considerable delay. At about the narrowest point a steep break in the ridge necessitated the ascent of an upright buttress, so devoid of good holds that it tested even Hans's skill, and so high that our rope was too short, and our party of four had to unrope and to go up in two instalments.

It was at this point that we observed a cloud of white smoke, rising apparently out of the Columbia Valley over thirty miles to the S.W., floating southward with the wind and gradually dispersing to a pale blue haze, which crept slowly round to the southern horizon. Being all photographers, we witnessed this outbreak of a forest fire with dismay, as it probably meant that the period of clear views had passed and that we were doomed to a repetition of the smoky atmospheres of 1898.

On roping again we had to ascend a short section of the arete where the stratified rocks, which alternated with intervals of snow cornice, were shattered through and through. The narrow crest of the ridge seemed to be held together only by the snow frozen against its sides, and in case of the snow melting it appeared that the first westerly gale might easily hurl the whole structure down the great eastern precipice, on its way to augment the shingle flats of the Middle Fork. In places the piled-up snow certainly favoured us by bridging over spaces where the loose rocks, if bare, would have been a source of danger. Beyond this section there was no more climbing; a short snow slope ending in a cornice overhanging the eastern escarpment was surmounted, and at 2.15 we all stood on the summit, 12,000 ft. above sea-level.

The view was the most extensive we had yet enjoyed. Of the vast sea of snowy peaks and crests which surrounded us on all sides, the finest were Goodsir, more than fifty miles away to the S.E., Sir Donald to the S.W., two high peaks of the Selkirks N. of the Hermit Range, Bush Peak almost due W., and away beyond the Lyell snow-fields in the N.W.

Mt. Columbia, probably the highest of all.

On the N. side of Forbes a steep snow-slope falls away to a glacier, which descends to the head of Glacier Lake Valley, and Christian, who had seen this slope from below about ten days before, considered that we should save time by descending it. Accordingly, at 2.45 we left the summit and started down a not very strongly marked snow-ridge to the N.W. As this soon became too abrupt for safety, we doubled back on to the N. face, down which Christian cut steps in the hard snow during the descent of some 1,500 ft. The slope was so steep that it would hardly have been safe had not the cold wind, fortunately for us, kept it in good condition. Ten days later we noticed from the Lyell Glacier that at least a third of the area of surface snow on this same slope had become detached, and had slid apparently in one immense flake on to the glacier below. At the foot of the slope we were checked by

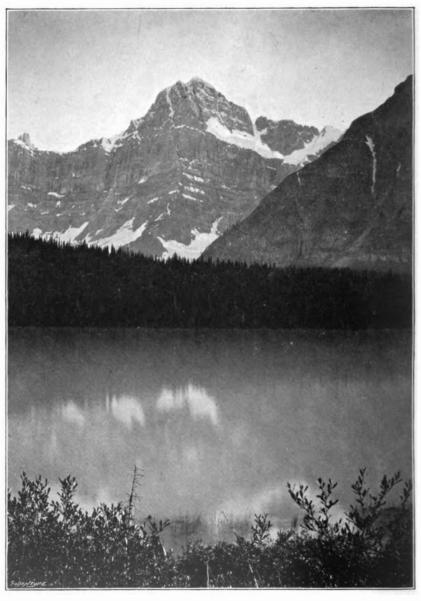


Photo by II. Woodley.] [Swan Electric Engraving Co. Howse Peak from Waterfowl Lake.

a wall of loose rocks; but after some delay a way down was found. Then, turning S.W., we passed through a gap in the continuation of the N.W. ridge, and after traversing the snow basin on the W. side of Forbes, gained, at 5 p.m., the S.W. arete exactly where it had been struck in the morning. Hans went up to the breakfast place for the sacks which had been left there, and at 8 p.m. we had regained our comfortable bivouac.

We were all much pleased with the way in which Christian and Hans had worked during this expedition, as well as on Mt. Freshfield, and agreed that if the Brothers Kaufmann may be taken as representative of the Swiss guides employed by the C.P.R., the company is to be congratulated on its fortunate choice.

Next morning we awoke to find the atmosphere hazy with smoke. Collie, Outram, and Weed set out for the head of Forbes Creek, where they found at 7,600 ft. a pass across the main divide into British Columbia, which they named Bush Pass, while Stutfield and I returned with the guides to the camp, arriving just as Stephens—an incurable pessimist as regards mountaineering—was setting out with provisions in search of us.

Mr. Outram, the indefatigable, intent on climbing Mt. Bryce, now left with his outfit to return to the Columbia Icefield; our own party remained another day, partly in order to rest the horses, which had just returned from Laggan with the long-lost baggage.

While at this camp we were surprised at the coldness of the nights, the water in the pails being generally frozen in the morning, although the situation was sheltered, and we were only in the second week of August. Curiously enough, during the two nights spent at the high bivouac the temperature had been comparatively warm. On leaving Forbes Creek, we returned down the shingle flats to the Middle Fork, ascended the valley about a mile in the direction of Howse Pass, and camped in a burnt wood beside a stream flowing from the western slopes of Howse Peak. In the meanwhile the smoke in the air had increased, and it became evident that a forest fire had broken out somewhere along the Middle Fork.

On August 14 we started at 6 A.M. for Howse Peak, steering eastward towards a long bare-backed ridge which abutted against the W. slopes of the peak and offered a tempting line of approach thereto. After a toilsome walk through burnt woods and fallen timber, which appeared to have been

levelled by a great gale blowing from the direction of Howse Pass, we emerged above the tree line and were immediately enlightened as to the locality of the new fire. About 10 miles to the N. volumes of smoke were pouring out of Glacier Lake Valley—a most unwelcome sight, as a visit to that valley was the next in our programme. The walk up the ridge, however, was not such a straightforward affair as had been expected, as about half-way up we were stopped by an intersecting line of precipices, which gave us considerable trouble and afforded Hans another opportunity of proving his skill as a rock climber. On gaining the E. end of the ridge we put on the rope, and began the ascent of the long slopes of neve. We had not anticipated much entertainment from this part of the walk, nor were we mistaken. The higher slopes were sufficiently unbroken to be tedious, and the snow was soft, so that we were heartily glad to reach the heavily corniced summit at 2 o'clock.

Howse Peak (10,800 ft.) is a typical Rocky Mountain peak of the writing-desk form; on the S.W. snow slopes descend from the summit two or three thousand feet towards the Howse Pass, but on the E. and N.E. an almost sheer precipice plunges down to the Bear Creek Valley, 5,000 ft. below. Looking S. from the summit a multitude of similarly formed peaks are seen, all tilted in the same direction, and suggesting to the imagination a frozen sea with the waves arrested in the act of breaking towards the N.E. Although the distant view suffered from smoke haze, the near view was most interesting, Bear Creek with its many lakes to the E., and Middle Fork with its shingle flats and network of channels to the W., being spread out below us as on a map. At 2.25 the bitterly cold wind drove us from the top, and after indulging in a series of glissades down the long snow-slopes we arrived in camp about 6 P.M.

Two days later we passed through the picturesque gorge by which the waters of Glacier Lake escape, and in which there is a remarkable natural log-jam, and camping on the wooded slopes at the N.E. end of the lake were detained there two days by bad weather. The fire, which had swept through the woods on the N. shore of the lake and had almost exhausted itself, was still burning in two or three places. On account of the risk involved in taking the outfit through the smouldering timber, and also of the uncertainty as to feed at the head of the valley, Stephens proposed that we should leave the horses behind and convey our baggage up the lake on a raft, and during the two wet days he and Tewkesbury were busy felling and arranging the logs.

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On August 19 the weather was again fine, and nearly all the smoke haze had disappeared, and as the raft was now finished we loaded it with the needful stores and poled or paddled it up the lake, a distance of four or five miles. This operation was considered a great triumph of Anglo-Saxon energy and resource over natural obstacles; but it must be admitted that the voyage was not a speedy one, nor should the fact be suppressed that the raft reached the head of the lake with only three men on board out of an original crew of eight, all the other Anglo-Saxons having preferred, under one pretext or another, to land and complete the journey on foot.

Beyond the head of the lake the flat floor of the valley extends four or five miles to the end of a glacier descending from the Lyell Ice-field, and down this valley the glacier stream meanders in many devious branches. The whole depression was probably at one period filled by the lake, but the alluvial matter is steadily encroaching on the latter, and will in time fill it up-a process which seems to have occurred in several other places in this district. As our object in coming up the lake was to visit the Lyell Ice-field, which, like the Columbia Ice-field, farther N., lies astride the continental watershed, we set out next afternoon to find a bivouac near the glacier. Our party soon became scattered, some taking to the wooded slopes on the N. side of the valley, others to the mud and shingle flats. I was one of the latter party, and do not think I have ever struggled through a more hopeless combination of swamp, willow thicket, and tangled woods than we encountered about a mile below the glacier.

The scenery at the head of Glacier Lake Valley is most striking. Two glaciers descend from the S.W. and N.W. respectively almost to the very floor of the valley. The former is fed by the snows on the N. and N.W. of Forbes; the latter and larger is one of the principal outflows of the Lyell ice-fields. It is supported by a line of imposing cliffs streaming with waterfalls, and swept by ice avalanches which fall continually to form a fresh glacier 500 ft. below; but the bulk of the ice descends to the lower level in a great ice-fall over a depression at the S. end of the cliffs.

At 5 a.m. on the morning of August 21 we left our bivouac on the old terminal moraine, carried our sleeping-bags about a mile up the left bank of the Lyell Glacier, and left them there. We then enjoyed a fine walk up the moraine, gradually approaching nearer to the ice-crested cliffs, and eventually, about a mile beyond their N. end, gained a

footing on the upper glacier. Steering at first due N., we reached a rocky ridge, from which we looked down into a valley running eastward to the N. fork, and separated from Glacier Lake Valley by a range of bold flat-topped bluffs. The valley floor was occupied by a typical Rocky Mountain glacier stream flowing in such an intricate network of interlacing channels that we were thankful not to have approached the ice-field by this route. Then followed a long tramp N.W. up gentle slopes of soft snow towards Mt. Lyell, from the western summit of which we had looked forward to an interesting view into the Bush River basin.

Unfortunately Lyell was persistently enveloped in dense clouds, although most of the other high peaks were comparatively clear, and when at last all prospect of the clouds lifting became hopeless, we decided to turn back. Disappointed in our purpose, but somewhat consoled by the splendid views of Mt. Forbes, the centre during the whole day of an everchanging succession of fine cloud effects, we returned down the glacier pursued by the inevitable cold wind, which hitherto had never failed to herald our appearance above the snow-On reaching the moraine we picked up our packs and crossed the lower glacier to its right bank, having decided to descend the valley on the apparently more open S. side of the stream. For a time all went well, but the nearer we approached the lake the deeper, wider, and more numerous became the watercourses we had to wade, till at last Collie and Weed, taking the bull by the horns, forded the main channel waistdeep, to the admiration and delight of the rest of the party, who allowed themselves to be ingloriously ferried over to the camp on the raft.

As the time at our disposal was now too short to enable us to go farther north, we decided, on leaving Glacier Lake, to return to Laggan in order to visit Moraine Lake. On our return voyage a favourable wind enabled us to sail the raft to the foot of the lake, where Stephens was waiting with the horses, and we gained Bear Creek Mouth the same evening. Heavy rain fell on our first day in Bear Creek Valley, but during the fine weather which followed we enjoyed, for the first time in my experience, the striking views of the E. faces of Howse Peak and Pyramid towering in grand broken precipices above the dark woods which surround Waterfowl Lake. We also ascended a peak of 10,000 ft. on the E. side of the valley, commanding excellent views of the Murchison group to the N. and of the mountains between Bear Creek and the Siffleur Valley to the E. This peak, which we named Mt. Noyes.

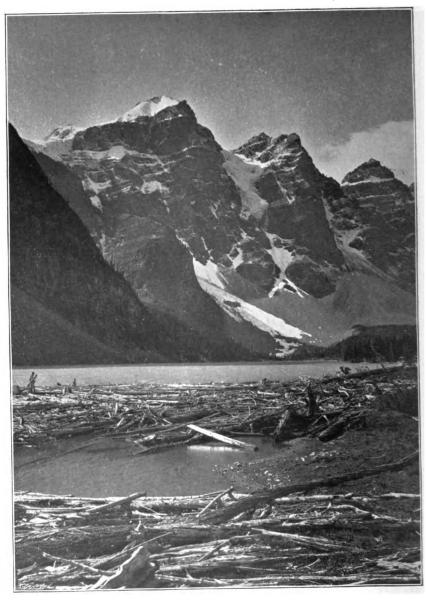


Photo by H. Woolley.]

(Swan Electric Engraving Co.

MORAINE LAKE.

stands S.E. of Waterfowl Lake, and the ascent was made from a corrie on its W. side.

During our return journey we had proof of the increasing interest which is being taken in this part of the Canadian Rockies; between Bear Creek Camp and Laggan we met three different outfits-all American-two being shooting parties: so that altogether five outfits had gone N. by the

Upper Bow Valley trail since July 1.

From the day of our arrival at Laggan, on August 27, the weather changed, heavy rain being followed by cold winds, with frequent snowfalls. The next day we started S.E. along a new trail, which was being made by the C.P.R. from Lake Louise round the base of Mt. Temple to Moraine Lake, one of the most picturesque of the many beautiful lakes of the Rockies. It derives its name from a great rocky mound, which blocks its lower end, and under which the waters of the lake escape by many hidden channels. This mound is, however, not a moraine, but a pile of fragments, the result of a great rock-fall from a ridge to the E.

A range of peaks (Wilcox's Desolation Range) rises from the S.E. margin of the water in bold precipices, seamed here and there by small glaciers and snow couloirs, and beyond the head of the lake sweeps round westward to a well marked depression at the head of the valley. Nine of the principal summits in this range have been named in order from E. to-W. by the Indian names of the numerals, with the exception of the highest (No. 8), which is now known as Deltaform. The ninth peak is called Neptuak, and the above-mentioned depression—the Neptuak Pass—lies between it on the S. and a remarkably bold and rugged mountain, named Hungabee, on the N.

After giving the horses a day's rest at Moraine Lake, we moved up the valley to the tree limit, camped in a wood of old weather-beaten larches, which afforded us some shelter from the biting wind and driving sleet, and remained there five days, in the hope of climbing either Deltaform or Hungabee.

In more genial weather this would have been an excellent To the S, on the opposite side of the valley, rose the tremendous stratified cliffs of the western three Desolation peaks, with interchanging bands of differently coloured rock running along their faces, their appearance rendered still more remarkable by the countless horizontal ledges being picked out with lines of newly-fallen snow. Below us lay the glacier running along the base of the range, and loaded almost from end to end with rock débris fallen from the cliffs above. To the W. were seen the Neptuak Pass and the vertical, terraced walls of Hungabee, while to the N.E. Mt. Temple's snow-tipped pyramid was just visible over the inter-

vening slopes.

On our third morning in this camp the weather was fine. and, as there was too much new snow on the rocks to justify an attempt on Deltaform or Hungabee, we set out at 8.45 for Neptuak. Our route to the pass lay up the stony head of the valley, which, on account of the sparseness of vegetation and the wide expanses of rock débris, was called by its discoverers Desolation Valley—a name, however, which is not descriptive of the lower wooded portion below the glacier. Arrived at the Neptuak Pass (8,100 ft.), we were once more on the continental watershed, as the stream seen below on the W. side is one of the sources of the Vermilion River, which flows into the Kootenay. Viewed from the pass, Neptuak itself presents an entirely changed aspect; instead of the broad precipice visible from Desolation Valley, we now saw above us the steep N.W. ridge running in an apparently straight line to the summit. This view of the mountain may be roughly compared with that of the Eiger from the Little Scheidegg.

Cutting steps up a steep slope of hard snow we gained the ridge, and keeping it a few yards to our left ascended about 1,500 ft. over broken ledges and loose screes to a point where the ridge suddenly became steeper, and here we put on the rope. During the ascent we made a closer acquaintance with the variegated strata seen in the cliffs from below. First we encountered a layer of light-coloured limestone, very much shattered; then came a bed of much firmer darkbrown rock, then more pale loose limestone, and at the summit, nearly black limestone with white veins.

After putting on the rope, the climbing became exceedingly interesting and enjoyable. Had the rock been firm there would have been no special difficulty; but as it was, great caution was necessary, especially when on the light-coloured limestone. The top of Neptuak (10,500 ft.) consists of a narrow ridge of snow-laden rocks running E. and W., and it was necessary to traverse its full length to gain the highest point at the E. end, where we arrived at 3.0 p.m.

The abrupt cliffs of Hungabee to the N.W. had been in sight during almost the whole climb; later, Mt. Temple to the N.E. and Goodsir to the S.W. had appeared. Now we were

suddenly confronted to the S.E. by a near and striking view of Hungabee's rival, Deltaform, whose summit overtopped us by several hundred feet and whose steep sides, built up of tier above tier of rugged precipices alternating with horizontal snow-covered ledges, held out little hope to the climber of an easy victory on this side. Neptuak, in spite of its unpromising appearance from below, had given us for our last expedition a most delightful climb, and had rewarded us with one of the most interesting views we had yet enjoyed.

We remained two days longer at the Desolation Valley camp, still hoping to be able to attack Hungabee; but the weather became so bad that climbing was out of the question, and as our time had nearly run out we returned to Banff on

September 5.

During our last week the weather had not been favourable, but with this exception we had little cause for complaint. The enjoyment of the expedition had been increased by the unusual coolness of the summer, which kept down the mosquitoes and made travelling more agreeable; the rarity of forest fires had favoured us with a clear atmosphere and good distant views, and we brought away with us pleasant reminiscences of a delightful journey through a highly interesting and picturesque region which, as Mr. Stutfield prophesied four years ago, is destined to become one of the most favourite mountain resorts of the American Continent.

An Eccentric Holiday.

By T. G. LONGSTAFF.

'Afoot and light-hearted I take the open road.'

WE were only two: but we each had an alarm watch, a pair of crampons, and a silk rope, so that we had nothing to fear except the rucksacks, and these improved on acquaintance as if they had been mortals. A silk rope is useful in many ways to the guideless climber. For instance, it will obtain civility from haughty hotel-servants, and even guides themselves may be beguiled into conversation by its means; if they will ask its price the owner's respectability is at once established, and he is put down as a mad, and not as a merely mean, person.

The question of an early start on the first morning was warmly debated, for Rolleston had come straight from the luxuries of town and I from those of the Maritimes. We