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Winthrop Ellsworth Stone, Ph.D. Ll.D., Late President Of Purdue University

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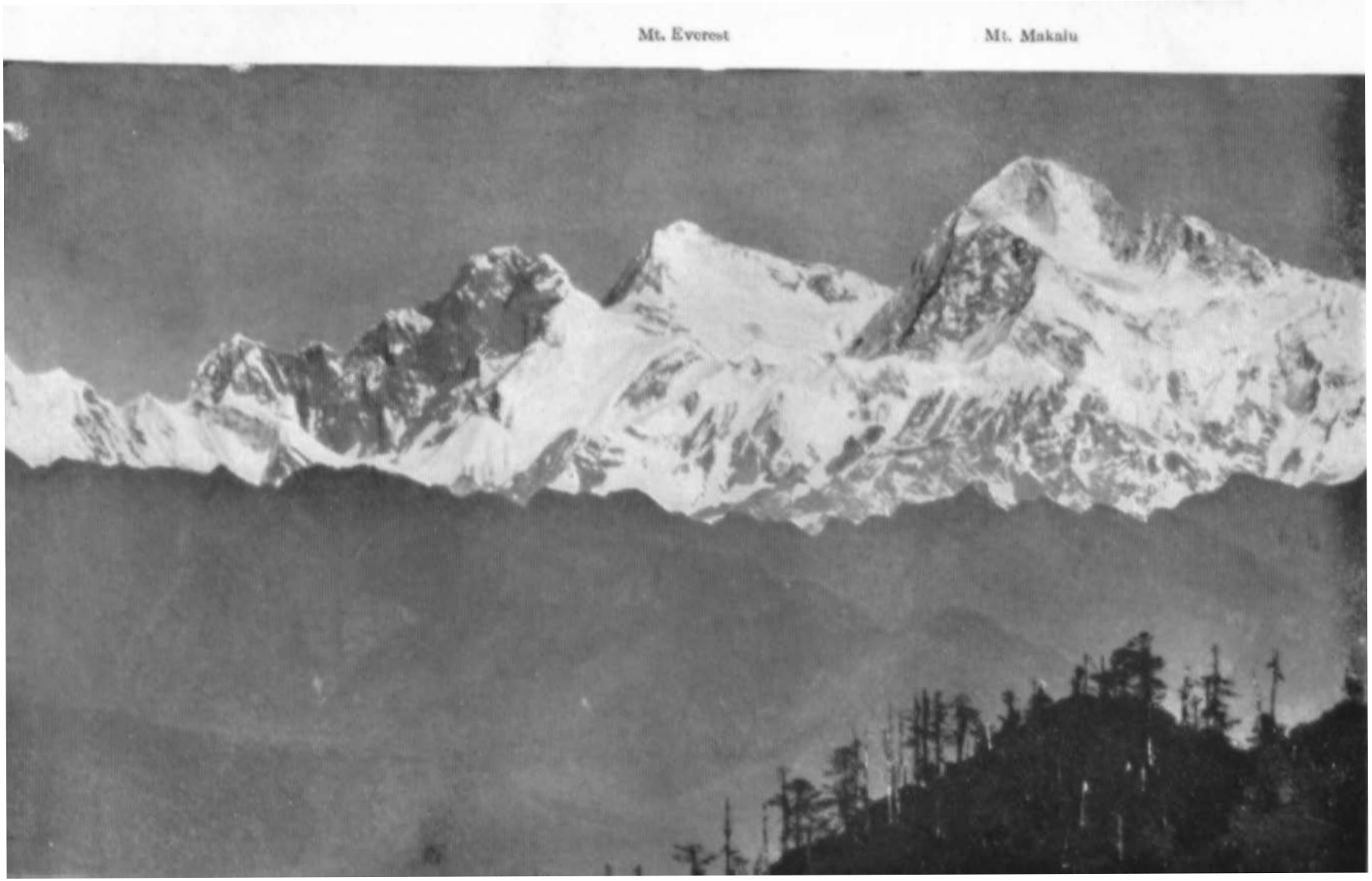

Mount Everest From Sandakphu 16 Miles West Of Darjeeling.
Tele-Photo By Mr. J. Burlington Smith, Darjeeling. By Courtesy Of Royal Geographical Society

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MOUNTAINEERING SECTION

Mt. Everest[1]

By A. L. Mumm

Mt. Everest, the highest measured peak on the earth's surface, was so called in honour of Lt. Colonel Sir George Everest, superintendent of the great trigonometrical survey of India. Everest joined the staff of its originator and first superintendent, Colonel William Lambton, as chief assistance in 1818, succeeded Lambton on his death in 1823, and himself directed the survey for 20 years. During his tenure of office a commencement was made of the survey of the Himalayan mountain system, a gigantic task, the natural difficulties of which were greatly increased by the fact that for about 600 miles the southern portion of the range lies within the territory of the semi-independent state of Nepal. He intended to carry a series of stations in Nepal along the mountains, as was done in other parts of the chain farther to the west, but the Nepalese government refused permission for this. On the north, Nepal is conterminous with Tibet, which at that time was even less likely than Nepal to sanction the presence of a survey party within its borders. Little could be done by means of observations from the east and west as the mountains are seen "end on" and the nearer peaks shut out the more distant from view; and so it has come about that most of the precise knowledge we possess of the heights and positions of the great Nepalese peaks has been obtained by observations taken at enormous distances from stations in Bengal and Oudh.

When Everest retired this process had not yet begun, and Dhaulagiri, a mountain in Western Tibet, which just falls short of 27,000 feet, was generally regarded as the highest mountain in the world. The system of long range observations from the plains of India was instituted by Everest's successor, Sir Andrew Waugh, and at the time of Sir Joseph Hooker's memorable Himalayan journeys Dhaulagiri had been superseded by Kanchenjunga (38,146 ft.).[2] Hooker had a distant prospect of the Makalu-Everest group on two occasions from view points near Darjeeling; he describes it as "a beautiful group of snowy mountains, the chief being, perhaps, as high as Kanchenjunga, from which it is fully eighty miles distant to the westward", and "a white mountain mass of stupendous elevation called by Nepal people 'Tsungau' "; subsequently, when he was a good deal farther north, he again saw "the most lofty group of mountains in Nepal. . . .their height, judging from the quantity of snow, must be prodigious."

About a year later—between November, 1849 and January, 1850—six separate sets of observations were sent in by the surveyors, which presently revealed the existence, in the direction indicated by Hooker, of a peak surpassing in height all those previously known. The figures were very close, ranging from 28,990.4 to 29,026.1 feet, and the average worked out at 29,002.3 feet.

1 This article was written before the expedition to Mt. Everest had started.

2 The height of Kanchenjunga was ascertained by the same method as the Nepalese peaks. It is on the frontier of Nepal and Sikkim the latter at that date a troublesome little native state, even less accessible than Nepal to European travellers.

The announcement of these results was made by the official computer at Calcutta in 1852 and the newly discovered giant received the official designation of Peak XV, but four years later, as no native name appeared to be forth coming, Waugh named it after his late chief, and so "Mount Everest, 29,002 ft." took its place in the maps, where it still remains, in spite of all the efforts that have been made to dislodge it.

The subsequent history of the mountain consists almost wholly of a long controversy or series of controversies about its name. Shortly after that name had been bestowed, Mr. Brian Hodgson, a distinguished Orientalist and a former political resident at Katmandu, the capital of Nepal, came forward and maintained that there was an existing native name for the new peak: "Devadhunga, the Abode of the Deity" and that it ought to be preserved. He had assumed that Peak XV was one of the summits of the snowy range which forms the most imposing feature in the eastward view from Katmandu, and with which he was, therefore, familiar. Waugh doubted this, but as the cause of Devadhunga was strongly supported by the Royal Asiatic Society, he appointed a committee of four members of the Survey to go into the matter more closely. The question naturally arises: why did he not try to get leave to send one of them to Katmandu, and settle the matter on the spot? Perhaps the outbreak of the Indian Mutiny (May, 1857) here comes into the story. At any rate that course was not adopted and the surveyors each independently worked up to the case on the data which were already to hand. The result of their investigations was that the snowy summits referred to included Peaks XIX and XX of the Survey, and that Peak XV was not among them. The most carefully worded report states that it is "demonstrable that the summit of Mt. Everest is not visible from Katmandu, or any part of the valley of Nepal as a conspicuous or recognizable prominence, if indeed it at all tops the intervening snowy range", a strikingly accurate calculation, as will appeal-presently.

In the meantime those famous travellers and mountaineers, the Schlagentweit brothers, had begun their magnetic survey of the Himalayan chain, and Herman Schlagentweit, while Hodgson's guest at Darjeeling, had observed from a station near by a great mountain which he sketched and identified with Peak XV. He was not far wrong, for it was Makalu (Peak XIII of the Survey), a huge neighbour of Mount Everest, 27,790 feet in height, which is the most conspicuous object in the views to the northwest and west from the Sikkim-Nepal border; Mount Everest, twelve miles further away, is always more or less hidden by it, and at some points completely so. Hodgson had already reached a like conclusion. Later on in 1857, when Schlagentweit visited Nepal, he again practically followed Hodgson, identifying with Peak XV the highest summit of the snowy range visible from Katmandu which has been already mentioned. For this summit he was given the Nepalese name of Gaurisankar.

These facts and conclusions were set forth in the second and third volumes of the Schlagentweits' book which appeared in 1862-63. The authorities of the Survey, presumably considering that they had already disposed of the matter, took no further steps and Mount Everest kept its place on English maps, but the claims of Gaurisankar to be the proper title of Peak XV were at once warmly espoused, and for about forty years generally accepted by Continental geographers.

During the first twenty of these the history of Mount Everest is a blank. Then, in 1883, Mr. W. W. Graham climbed a very lofty peak[3] in the neighborhood of Kanchenjanga, and startled the world on his return with the information that from it he and his Swiss companions had seen

3 Mr. Graham's claim to have reached the summit of Kabru (24,015 ft.) gave rise to another lively controversy, which, however, does riot concern us here.

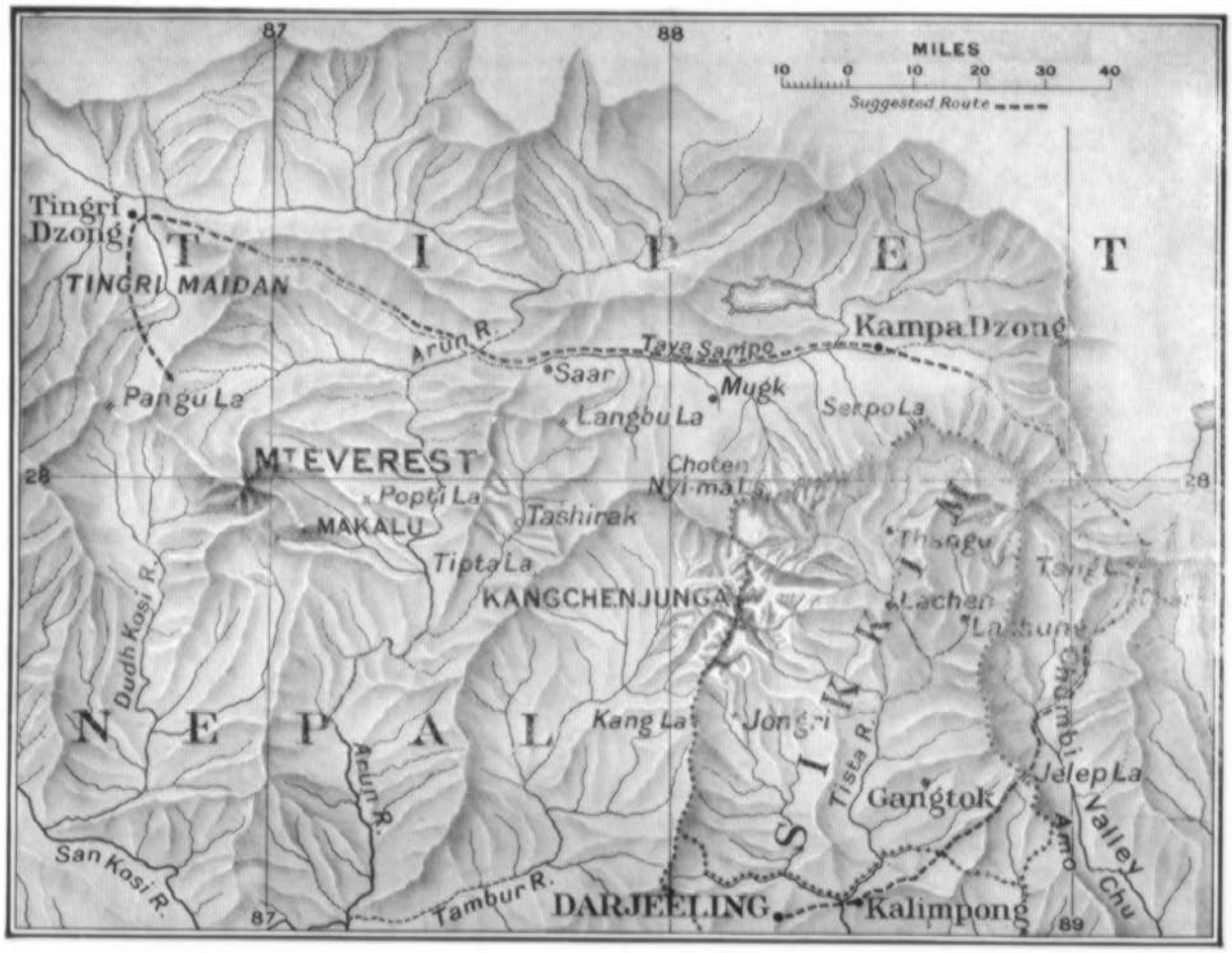
mountains to the north of Mount Everest and beyond it which they judged to be considerably higher. This statement was entitled to respect and there was nothing inherently impossible in it, but the attitude of Wait and See was the only possible one in regard to it. But Mr. Graham's account of his doings had a further result. Coupled with a remarkable report issued by the Survey on the Darjeel-ing and Nepal Boundary it provided an opportunity for Mr. D. W. Freshfield to enter the lists as a strenuous advocate of native names and to reopen the whole controversy. No fresh facts were available but he gave a novel turn to the discussion by arguing that any suitable local name was preferable to an English one, and that in order to be suitable it was by no means necessary that it should have been used by natives as a name for Peak XV itself; something much less than this would suffice. He supported this doctrine by many ingenious analogies derived from the history of mountain nomenclature in the Alps, but did not succeed in persuading the Survey to renew the argument on this basis.

The controversy then died away for a time. It was revived once more by Mr. Freshfield on the strength of some photographs taken in 1898 by Dr. Kurt Boeck, a German mountaineer, and in the same year Colonel L. A. Waddell, then Resident at Katmandu, brought forward a Tibetan name, Chomokankar, as a new substitute for Everest. But further detail would only be wearisome. In the meantime the mountain itself remained as remote and mysterious as ever. It had of course long since been distinguished from Makalu and it had been brought a little nearer by telephotography, but the nearest point from which it had been seen was seventy miles away, and nothing whatever had been seen of any portion of it except the upper part of the eastern face.

We have come to two relatively eventful years which did make some slight but real additions to the meagre sum total of our knowledge. In 1903, thanks to the intervention of the Viceroy of India, Lord Curzon, the Nepalese Government permitted a surveyor, Captain (now Colonel) H. Wood, R. E., to visit Nepal, and the central question of the controversy, the identity of Gaurisankar, was at last set at rest. Captain Wood established that Schlagentweit's Gaurisankar was Peak XX of the Survey, about seventy miles from Katmandu, and 23,440 feet in height; from one of his stations near Katmandu, the top of Mount Everest was just visible over one of the ridges of the Gaurisankar group, thirty-six miles beyond it. Whether Schlagentweit ever actually saw Mount Everest must be left doubtful, but it is a point of no importance; if he did, he was certainly not aware of it. Captain Wood's report has been generally accepted as settling the question in favor of Mount Everest. Mr. Freshfield made a final effort in favor of Colonel Waddell's Chomokankar, but the controversy is now no longer a living one.[4]

Captain Wood's work was accomplished in October-November. Some time before this the British Mission to Lhasa, under Colonel Sir Francis Younghusband, had entered Tibet, and settled down for its five months' halt at Khampa Dzong. There, during weeks of perfect weather, Mount Everest was clearly visible, day after day, offering a far more unobstructed view than any obtained previously. The great peak was, of course, photographed. From this angle it appeared not as the highest peak of the group, but as "one massive summit standing by itself." But this was not all. The Mission, after some regrettable fighting, arrived at Lhasa in August 1904, and by one of the terms of the Convention of 7th September, the Tibetan government agreed to the despatch of an expedition under Colonel Ryder and Colonel Rawling to explore and survey the upper valley of the Brahmaputra. This expedition started early in October, and soon afterwards

4 Mt. Everest appears in the 1908 edition of Stieler's Hand-Atlas, the leading German Atlas, and Gaurisankar occupies the position of Peak XX.



Sketch Map Showing The Route Originally Proposed For The Expedition.
By Courtesy Of The Royal Geographical Society

some members of the party passed within about sixty-five miles of Mount Everest, which they described as "standing alone in its magnificent solitude." They were the first white men to see the northern face. Apparently no photographs or sketches were taken,—for their purposes Mount Everest was only a side show,—but the belief that there were any other peaks near it of equal or greater height was finally exploded.

There are two routes to the immediate neighborhood of Mount Everest. The shorter, and more direct, is the southern route through Nepal, but anyone approaching the great frontier peaks from the south would reach them at comparatively low level and would be confronted with walls of both great steepness and prodigious height. Nevertheless if Nepal were as open to travel as Sikkim has now become, climbers would long ago have made a closer acquaintance with the Everest group. But Nepal, alone among the many political areas into which India is divided, is now even more rigorously closed to white men than in the days of Hooker and the Schlagentweits. The ordinary traveller can only enter the country as the guest of the Resident at Katmandu; the wanderings even of the Resident are confined within definitely prescribed limits, and of course his visitors are subject to the same restrictions.[5]

The alternative northern route is via Sikkim through Tibet, where the base of the mountains is far higher, while there are grounds for believing,—or at least hoping,—that they slope much more gently toward the lofty Tibetan plateau than to the deep-cut valleys of Nepal. The snow line is also much higher on the northern side of the range, being probably well over 19,000 ft. But Tibet is a foreign country, and political difficulties bar the way here also, so that prospects for coming to closer quarters with Mount Everest have been few. They were fully described to the Royal Geographical Society[6] last November, by Brig.-General the Hon. C. G. Bruce, C. B., who was himself concerned in all of them. As long ago as 1893 a visit to Mount Everest was discussed by him and Sir Francis Young-husband, but did not progress beyond the stage of discussion. In 1907 he planned an expedition very much on the lines of the one now starting, with Captain T. G. Longstaff, and the present writer, but the Secretary of State for India, Lord Morley, refused permission to enter Tibet, and the party went elsewhere. A year later General Bruce came very near to enjoying the unlooked-for privilege of a trip to the Everest region through Nepal. The Prime Minister of that country did his utmost to forward the plan, and the expedition was actually ready to start, but had to be abandoned at the last moment, the inveterate anti-foreign sentiment of the Nepalese having proved too strong to be overridden.

Thus when the idea of an Everest expedition was revived after the war, matters still stood as they were in 1904.[7] The revival was due to the energy of Sir Francis Younghusband, the then newly elected President of the Royal Geographical Society, and the subject was seriously taken up in 1919 by that Society, and the Alpine Club. The President of the Alpine Club, Dr. Norman Collie, counts a Himalayan season among his many seasons of climbing and exploration, while Sir Francis Younghusband has seen more of Mt. Everest than most people, and has had plenty of experience as a climber in the course of his extensive travels in the mountain regions of Asia. Having regard to the position he occupied in relation to the proposed expedition, it was a matter of the first

5 This is an irritating state of things for would-be explorers, but the Indian Government considers a scrupulous respect for the policy of exclusion a cheap price to pay for the privilege of free access to Nepalese territory as a recruiting ground for the Gurkha regiments.

6 geographical journal, LVII, 1-14, a paper of the greatest interest and value

7 It should be mentioned that recent discoveries, as to the effects of refraction on observations taken at great distances render it probable that at least 140 ft. should be added to the official height of Mt. Everest.

importance that he possessed a first-hand knowledge of the technical side of mountaineering.

So far then the omens were favorable. But about the time that General Bruce read the above-mentioned paper, word came from India that the moment was not propitious for asking favors from the Tibetan Government, and it seemed probable that political obstacles would once more block the way, and that for twelve months longer at any rate the mystery and isolation of Mount Everest would remain inviolate. In the meantime however, Colonel Howard Bury, who had gone to India as an ambassador of the Royal Geographical Society to smooth the way for the expedition in high quarters, had succeeded in completely transforming the situation, and just before the end of the year a telegram arrived saying that the Tibetans had given the necessary permission, and that all was well.

In a way it was unfortunate, for preparations ought to have been begun two months earlier. But the opportunity was not to be wasted. Informal meetings of Himalayan experts and others were hastily called together, and before many days had passed a joint Committee of the Geographical Society and the Alpine Club was formed to organize the expedition, the Alpine Club being represented by the President, his immediate predecessor Captain J. P. Farrar, D. S. O., and Mr. C. F. Meade, who has climbed for three seasons in the Garhwal Himalaya, and on one occasion made a record by camping at a height of 23,500 ft. The post of Secretary has been filled by Mr. J. E. C. Eaton, Hon. Secretary of the Alpine Club, whose climbs in the Freshfield Group in 1910, are recorded in the pages of this Journal.

It was proposed in the first instance that the coming season should be devoted wholly to a reconnaissance of Mount Everest, and a survey of the untrodden regions to the north of it, preparatory to a second expedition in 1922, in which the ascent of Mount Everest should be the first object, but the programme finally adopted does not exclude an attempt being made on the mountain itself this year if a favorable opportunity presents itself, though the principal aims are still the reconnaissance and survey. This modification carried with it the corollary that the young climbers who are to make the final attack should go out this year, a point which had not previously been settled.

There was much to be done, and very little time to do it in, but the joint Committee worked very hard, and finally all instruments, articles of equipment, etc., were collected and duly embarked on the appointed day, and by the middle of April all the members of the expedition who were not already in India, had left England. Long before these pages are in type they will have started from Darjeeling, and a new chapter in the history of Mount Everest will be opened.

A great deal has been written since January, both on the scientific and the practical aspects of the expedition—the contributions it is likely to make to our geographical knowledge, to geology and to meteorology; its method of transport,—mules, yaks and native porters (even aeroplanes have been considered) ; the nature of the country it will have to go through; and its chances of success in the event of an attempt on Mount Everest being actually made. It would be easy to enlarge on these topics at almost any length, but it is time to bring this article to a close. Before doing so, however, it may be of interest to add a few personal notes on members of the expedition.

Colonel C. K. Howard Bury, (born 1883), is in command of the expedition. He has had considerable experience of Himalayan travel, and, though he modestly disclaims the title of ‘’mountaineer,” he has done a good deal of chamois hunting in Tyrol, and climbed some of the Dolomite peaks near Cortina. It is universally recognized that it was his diplomatic tact and persuasiveness which rendered the expedition possible.

Mr. Harold Raeburn (born 1865), the mountaineering head of the party, has a wonderful

climbing record as a leader of guideless parties on many successful expeditions of the highest class, in the Alps, Norway, and the Caucasus. In 1919 he performed the unprecedented feat of travelling the Meije, in Dauphine alone. Last summer he was in Sikkim, and visited the Kanchenjunga group, but was prevented by bad weather from accomplishing much in the way of climbing. He is reported to have said he thinks he is all right up to 22,000 ft. but would not be good for much beyond that height.

Mr. A. F. R. Wollaston (born 1875), has had several seasons in the Alps, but is best known as an explorer in the tropics. He was a member of an expedition to Ruwenzori in 1905-6, just six months before the arrival there of the Duke of the Abruzzi, and achieved some climbs, but was hampered by the fact that no other member of the party had any Alpine experience. Since then he has made two expeditions into the interior of Dutch New Guinea. In the first 1909-10 an unlucky choice of routes was made, and the party returned after enduring great hardships without having attained their goal; the second party, under his leadership, succeeded in forcing its way to the central mountains, and reaching the snowy crest of the range, but could make no stay owing to a shortage of provisions. He is the medical officer of the expedition and in charge of the botanical and zoological departments.

Dr. A. M. Kellas, Lecturer on Chemistry at the Middlesex Hospital Medical School, has a unique record as a Himalayan climber. In the course of four or five seasons he has made a large number of ascents, ranging from 20,000 to 23,000 feet, mostly in the regions to the north of Kanchenjanga, but he has also been three times to Garhwal and made three attempts on Kamet (25,477 ft.) He has carried out most of his climbs without any companions but natives, some of whom he succeeded in inspiring with a mountaineering ardour almost equal to his own. He has also accumulated a large store of observations of the utmost value on the physiological effects of high altitudes. Last December he made the very latest addition to our knowledge of Mount Everest by ascending a point about 16,000 ft. high, a little to the south of the Kanchenjanga group from which he obtained photographs that included views both of Mount Everest itself, and a large stretch of country to the north, which had previously hardly been seen except perhaps by Mr. W. W. Graham's party.

Now we come to the younger members of the expedition whose principal duty will be to try what work the human frame is capable of doing between 25,000 and 29,000 ft. Mr. G. H. L. Mallory (born 1886) is one of those gifted people who in recent years have carried rock-climbing in the British Isles about to the limit of what is humanly possible. He had also earned a great reputation as a mountaineer in many unguided expeditions in the Alps. The first person to be chosen as his companion had the misfortune to receive a very unfavorable medical report. His place was taken at the last moment by Mr. G. H. Bullock (born 1888), an old friend and school fellow of Mr. Mallory, and a climber of exceptionally fine physique. Readers of the alpine journal will perhaps be interested to know that both of them were at one time among Mr. R. G. L. Irving's "recruits."[8]

The party is completed by two members of the Indian Survey. One of them, Major E. O. Wheeler, R. E., M. C., needs no introduction in these pages; his colleague, Major H. T. Morshead, R. E., D. S. O., (born 1882) is the only member of the expedition except Colonel Howard Bury, who does not belong to the Alpine Club, but he has had experience both as a Himalayan traveller and as a climber; last year he and Dr Kellas reached 23,600 feet in an attempt on Kamet, and were

8 See alpine journal XXIV: 367.

ready to go considerably higher but the coolies failed them. Like Mr. Mallory and Mr. Bullock he is an old Winchester boy. He and Major Wheeler have a very big job to tackle, and it may be that they will be responsible for the geological department as well as the survey, but it is to be hoped that their instructions will not be such as to preclude their joining in any climbing that takes place.

The First Ascent Of Mt. Eon And Its Fatality

By A.H. MacCarthy

The Jubilee Encampment of the Alpine Club of Canada, held at Mount Assiniboine in 1920 offered a large number of members an opportunity to get good views of Mount Eon from the summits of Towers, Terrapin, Magog, and Assiniboine, and the sight of this magnificent virgin peak stirred the ambition of many of them to make an attempt on it; however, owing to the excellent and varied climbs near at hand only one party of three members made an attempt that year, and they were defeated by the cliffs high up on the northeast shoulder.

The Walking Tour Camp at Assiniboine in 1921 again offered excellent facilities for another attempt and, after the several discussions I have had with Doctor Winthrop E. Stone concerning its formation and probable best lines of approach, I was not surprised to receive word from him, upon his arrival at the Club House at Banff early in July, that, if weather permitted, he and Mrs. Stone intended to make a short trip in to explore Eon after they had conditioned themselves on the trail; for he had made a careful study of the peak in 1920, had consulted Mr. Wheeler and the members of the former expedition, and felt confident that a feasible route could be found on the southeast or south side, and he and Mrs. Stone would like very much to "crown a big one this year."

After a short stay at the Club House and several days on the trail, they set out from the Assiniboine Camp on July 15th for a four days trip, having sent in their dunnage and provisions to Marvel Pass by the Walking Tour packer, Ralph Rink. Crossing Wonder Pass and the valley of Lakes Gloria, Terrapin and Marvel, they ascended Marvel Pass and made a bivouac near one of the small lakes in the pass, a short distance south of the col that divides the east face of Mount Gloria.

The next day was spent in prospecting the pass and the lines of approach to Mount Eon, and, the sky being clear on the morning of the 17th, an early start was made over Mount Gloria by way of the col, but upon reaching the morainal basin between Gloria and Eon instead of taking the route up the northeast shoulder of Eon tried by the 1920 party, they worked to the south and, gaining the first broad ledge at 7,800 feet elevation, passed around the southeast arête to the base of its wide south face where at its east end a yellow capped outlying tower on a level with the ledge served as their "key" to the mountain, for the tower and the summit of the mountain are clearly visible from each other as is also almost the entire 3.300 feet of slope, ledge, couloir and chimney elevations between them.

With this tower as their point of departure, they first ascended three slopes and broken down ledges of easy gradients for an elevation of about 800 feet, followed by steep ledges and couloirs of excellent firm rock for another 500 feet or more and then ledges with broken faces which made them fairly easy but very interesting to negotiate and which carried their route over to the southeast arête at about 9,500 feet. This arête they followed more or less closely but always on its south side until they reached the snow band that completely crosses the south face at 10,300 feet and lies at an angle of about 50°; but the snow being in excellent condition and firmly annealed to the underlying-ice, they were able to kick secure steps and mount to the ledge above by way of a

slight rock cut near the central point of the band and directly below the summit. Above this band the route rises up broken ledges and short couloirs of unstable rock to a final wide, steep, irregular chimney that opens with dangerous sloping top sides on to the summit.

They had made excellent progress throughout the whole day, were both in first class condition and, upon reaching the base of this chimney at about 6 p. m.. felt that they were near their goal; so, after placing Mrs. Stone in secure footing in its base and clear of any possible rock falls, Dr. Stone ascended it until he could see over the top slopes but was still unable to determine whether or not a higher point lay beyond, and in response to Mrs. Stone's enquiry if they were near the top he replied he could "see nothing higher" but that he would go up and make sure; that the rock was very unstable and to be careful and keep under cover.

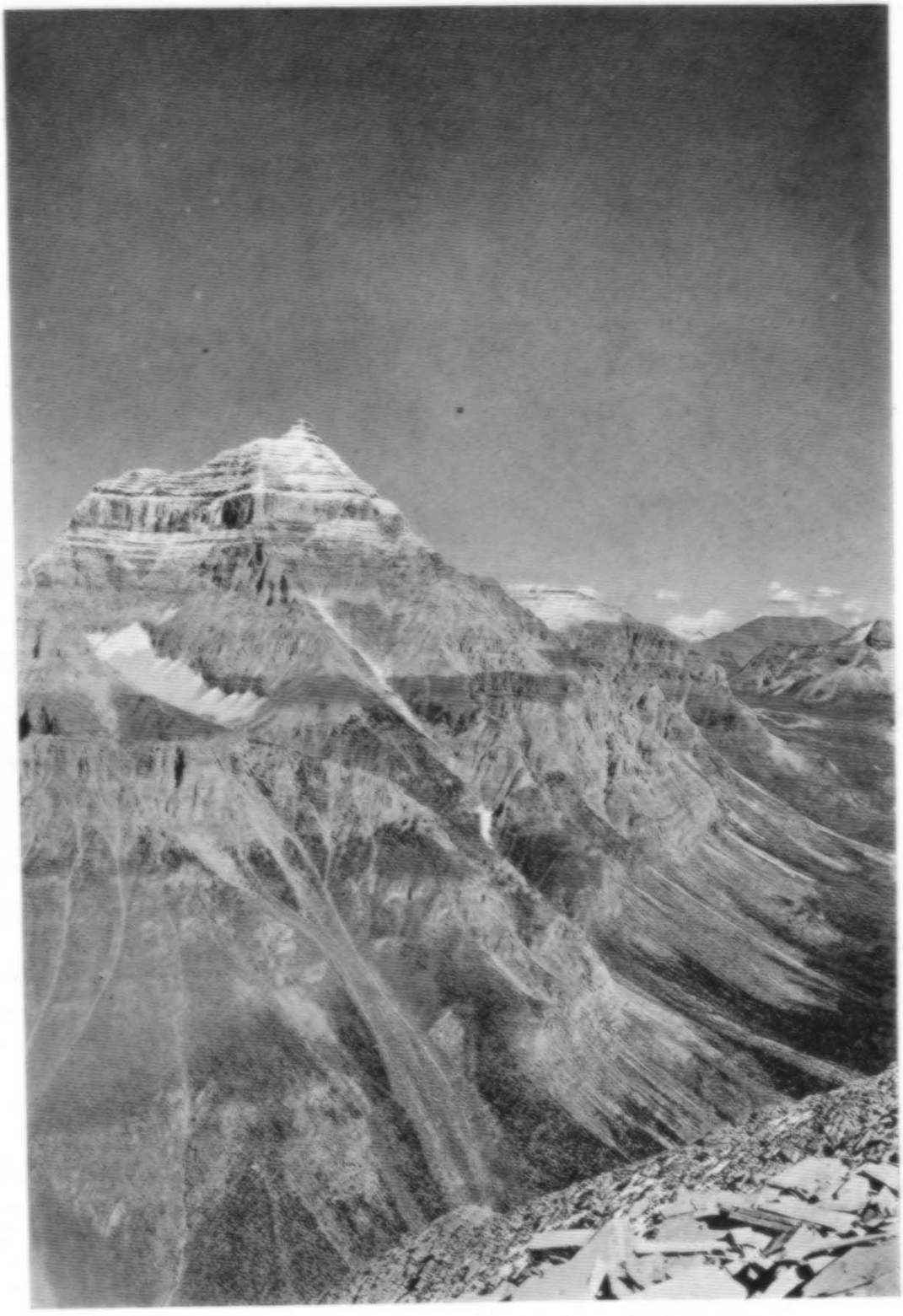
Dr. Stone then climbed out of the chimney and disappeared for a minute or so and shortly afterwards, without any warning, a large slab of rock tumbled off from above, passing over Mrs. Stone, and was closely followed by Dr. Stone, who spoke no word but held his ice axe firmly in his right hand. Horror stricken at the sight, Mrs. Stone braced herself to take the jerk of the rope, not realizing that the Doctor had taken it off in order to explore beyond its length.

The first fall was for about sixty feet to a narrow ledge and then the body descended from ledge to ledge until it seemed to Mrs. Stone it must have gone completely to the bottom of the mountain side.

Dazed and rendered inert by the disaster, Mrs. Stone had not sufficient strength to move for a long time and when she was able to control herself it was then too dark to attempt to descend, so she was forced to remain at the bottom of the chimney, only forty feet from the summit, throughout the night. With the first rays of light in the morning she began working down, looking as she went in the hopes that she might find her husband alive, but realizing such a thing could hardly be possible. Fortunately, by recognizing various prominent features of the formation, she was able to keep more or less to the line of ascent and made fair progress during the day, but owing to the delay in search, lack of food, and her unstrung condition, she was unable to reach the lower ledges before darkness set in, and so was forced to seek shelter under a rock for the second night.

The next morning early she began the descent again, searching each ledge and keeping in view the yellow capped tower which she finally reached at about mid-day; but in her haste to find her husband's body or to get down from the mountain to secure assistance, she became confused and mistook the route here, descending to the cut between the tower and the broad ledge instead of staying on the ledge and so worked along the lower narrow ledge to the eastward until it broke off sheer for a hundred feet or more. Then realizing she had gone astray, she retraced her steps for a short distance and seeing a scree slope that seemed to carry up from timber line to the ledge below the one she was on she decided to try this line and, securing her rope around a rock, let herself down a broken chimney until she was about ten feet from the ledge. Here the rope ended and she was forced to drop to the ledge, soon only to find that it broke off at both ends in smooth faces, and did not connect with the scree slopes below, thus completely trapping her: for she could not climb the chimney unaided and the end of her rope was out of reach. Her efforts to build up a pile of rocks by which to reach her rope's end were unavailing and her strength was not equal to the task, so here, on the narrow sloping ledge, she was forced to remain without food or shelter and with no clothing other than the flannel shirt and knickerbockers she had been climbing in until she was rescued on Sunday the 24th, eight days after the accident.

It was providential that she discovered a small seepage of water coming from a crack under the cliff, for by scooping out two small holes about the size of a watch and directing the trickle to



Mt. Eon From The Southwest. Photo, A.O. Wheeler

them she was able to get a swallow from each every four hours. To this supply of water, the fact that her narrow ledge was on the south side of the cliffs where they and she received all the warmth of the sun during the daytime and her firm balance of mind, causing her to wind her watch and to thus regulate her hours for taking her meagre supply of water, she can ascribe her coming through the terrible ordeal alive.

When Dr. and Mrs. Stone failed to return to the Assiniboine Camp on the 18th, as planned, it was thought that some unforseen difficulty had delayed them, as is not unusual on such expeditions; but when they did not appear on the morning of the 19th it was feared that an accident might have happened and Mr. Raiman of Brooklyn, N.Y., set out with some provisions to try and locate them, but being unable to make Marvel Pass he continued on to Trail Centre Camp. While en route there he met Mr. Waterman of Summit, N. J., and Dr. Gilmour of New York City, and reported to them the missing of the Stones, and his failure to locate them. They immediately pushed on to the Assiniboine Camp and, finding that no news had as yet come in, they urged that assistance be sent for and the next morning, the 21st, set out with the packer, Reno Fitten, and a supply of milk for the Wonder Pass Trail Gang's camp, where they interviewed Frank Gombert and Jack Betteridge and learned of the location and condition of the Stones' bivouac as the latter found it on Sunday the 17th. With Gombert they then ascended Marvel Pass and found the bivouac just as it was found four days before, and so felt certain that a serious accident had occurred and that the situation called for the best assistance possible, for their careful search failed to disclose the route taken by the Stones. Returning to Assiniboine Camp late that evening they were gratified to learn that Mr. Burnett had already dispatched the packer Childs to Banff to secure, if possible, the services of a Swiss guide and that he, with Messrs. Gooding and Elmer, had gone with an extra supply of provisions which they left at the Stones' bivouac, and then returned to the Assiniboine Camp at ten that night.

The next day, the 22nd, Reno Fitten, Frank Gombert and another member of the Trail Gang, ascended Marvel Pass and, working around the south shoulder of Mount Gloria, explored the basin between Gloria and Eon, but save for a few indistinct prints that seemed to resemble those of a boot, they found nothing to indicate the Stones' route; however, upon their return to the Assiniboine Camp, they found Rudolph Aemmer and Bill Peyto of Banff, who had made the forty-five mile trip out in one day, and Fitten gave them an account of his day's trip and drew a sketch of the route he had taken, and all agreed that the south side of the Eon was the most promising place to begin the search.

Messrs. Waterman and Dr. Gilmour volunteered their services to Rudolph in whatever capacity they could serve, as well as did all others present, but, as it was now four days beyond the time when the Stones were to have returned, it seemed evident that an accident had occurred that must have resulted fatally to both and Rudolph decided it best to take but a limited number who were in condition for heavy work, as he knew the men of the Trail Gang were available to pack in provisions for them.

Accordingly, on the 23rd, he set out with Peyto, Childs, and a member of the North West Mounted Police, furnished by Mr. Stronach, Superintendent of the Park. Ascending Marvel Pass they found the Stones' bivouac still undisturbed and the next morning, taking Fitten and Gombert's route around Gloria into the basin, they worked up to the broad ledge of Eon and out to the summit of a south spur at 7,800 feet elevation that commanded a good view of the lower reaches of Eon's south face. After a long and careful scrutiny of the mountain side with field glasses they were about to give up the search for the day, as it was growing late, when they were startled by hearing a call

from a point to the westward, and they discovered Mrs. Stone on a ledge almost a quarter of a mile away and 300 feet below them. Quickly firing a shot to notify her that rescue was at hand, they worked around the mountain side and were soon on the ledge above her. Rudolph then descended with the aid of a rope and, by the use of a rope from above and Rudolph's assistance below, Mrs. Stone was raised to the broad ledge; but the eight days of exposure with no food had rendered her too weak to walk, so Rudolph, strong and resolute, carried her on his back around the base of Eon for about a mile up and down and along this much broken and unstable ledge and then down the morainal basin to timber line where they made bivouac for the night.

Here, fortunately, they were soon joined by Dr. Fred Bell of Winnipeg, who immediately took charge of Mrs. Stone and, from the supplies brought in to the lower bivouac, gave her such food as her condition would warrant. During the two days here, while she was gaining strength, the weather was bad, but Rudolph and his men made a careful search of the lower reaches of the mountain side without result. Bythe use of an improvised stretcher, Mrs. Stone was then carried to a bivouac in Marvel Pass not far from the bivouac she and the Doctor had started from eleven days before. Here another rest was taken for two days while the Trail Gang slashed the trail from the pass down through the valley of the three lakes and up to join the Wonder Pass Trail. With this work completed, members of the Trail Gang assisted in carrying Mrs. Stone out on the stretcher for fourteen miles to the Trail Centre Camp where Miss Brown, manager of the Camp and Mrs. Fred Bell, did everything possible for her comfort. .

This heavy work in bad weather had seriously told on all the members of the rescue party, and especially so on Rudolph, the leader, who bore the responsibility and had not spared himself in the work; and it was realized that all must have a rest and that a fresh party must be organized to continue the search.

During all this serious time, Mr. Wheeler, Director of the Alpine Club of Canada, and also of the Walking Tours, had been in the north on his official Survey work, but upon his arrival at Banff, he promptly took charge of affairs and on August 2nd, set out in charge of the new party which consisted of Rudolph, Edward Feuz, Conrad Kain, Lennox Lindsay, Mrs. MacCarthy the writer, and Ralph Rink in charge of the transport. Pushing through as quickly as possible on saddle ponies, the Trail Centre Camp was reached late that afternoon where all were gratified to find Mrs. Stone making rapid improvement, Dr. Stone's younger son, Richard, having joined her there two days previously.

Mrs. MacCarthy remaining in camp to care for Mrs. Stone, the rest of the party, accompanied by Richard Stone, left the next morning with a pack outfit and made camp that night in Marvel Pass about half a mile from the Stones' last bivouac. During the night and early next morning a storm swept the pass and left a blanket of fresh snow on all the peaks, so the work for the day was confined to a reconnaissance trip to the northeast shoulder of Mount Alcantara, from which point a complete view was had of the south face of Eon down to the broad ledge.

Early on the 5th of August, under the guidance of Rudolph, Edward, Conrad, Mr. Lindsay and I circled the shoulder of Gloria and reached the "key" tower at about 10 a. m. As the former search had covered the lower sections of the mountain with no results, and, as the stretches for 1,500 feet or more below the summit are much broken and rough and it seemed probable that the body must have become lodged in a couloir or depression higher up than was at first supposed, it was decided to follow, as nearly as possible, the Stones' route to the summit and to make the search on the way down; thus giving us an opportunity to learn, if possible, the cause of the accident, and also to recover the Doctor's ice-axe and rucksack.

Ledge Where Mrs. Stone Was Trapped For Six Days - Shown By An X. Photo, E. Feuz

Where Dr. Stone's Body Was Found Shown By X. Photo, E. Feuz

All five members, therefore, went on one rope, with Edward leading, and after a short search their trail was picked up and followed by the foot prints in the scree patches and the nail marks on the rocks almost continuously to the base of the chimney at the summit. Upon reaching the 10,000 foot ledge at the southeast arête at 1 p.m., Edward sighted the body lying on this ledge about 300 yards to the west of us arid directly below the summit. Realizing the heavy task that must be accomplished, a short rest was taken and an attempt was made to eat some luncheon but with little success, so we continued the climb. Considerable time was required to negotiate the snow band as there was but a light covering of snow over its ice base in places, thus requiring the cutting of a number of steps at its lower and top sections. A short distance above its upper line Conrad discovered and recovered the Doctor's ice-axe. From here to the summit the formation is badly broken and great care was required by all members to avoid starting rock-falls; and instead of mounting by way of the final chimney, a slight deflection was made to the westward up a badly broken line until the summit was reached at 3 p. m. and the Doctor's ice-axe planted where it was apparent to all of us he had carried it twenty days before.

An examination of the chimney from above, opening onto the summit with its sloping top sides strewn with large unstable slabs, made it evident to us that in climbing out of the chimney and disappearing for a minute or so Doctor Stone had stood on the summit of the mountain and walked a short distance to make sure that there was no higher point beyond, then upon returning to the chimney he had stepped on a loose slab of rock near the edge that had slipped from under him and carried him over the cliff.

A cairn was built by all hands at a spot on the summit, where it could best be seen from the surrounding valleys, and the following placed in it:

"Friday, August 5th, 1921.

This monument was built by the undersigned in tribute to their comrade of the mountains, Doctor Winthrop E. Stone, President of Purdue University, LaFayette, Indiana, U. S. A.; who, on July 16th, 1921,[9] with his wife, virtually completed the first ascent, reaching a point not more than 50 feet from this spot. Dr. Stone's ice-axe crowned this monument.

Albert H. MacCarthy, A.C.C.
Lennox Lindsay, A.C.C.
Edward Feuz,
Rudolph Aemmer,
Conrad Kain. "

The summit of Eon is somewhat irregular but all on practically the same level and the spot chosen for the cairn was perhaps a hundred feet in a horizontal line northeast from the top of the chimney, and it was thought that in climbing out of the chimney the Doctor had gone directly north from it for about fifty feet until he could assure himself that he was on the summit and then when returning to report the good news he slipped and fell.

After taking a picture of the cairn, Conrad led off and we descended by the southwest arête and the slopes and ledges on the Aye side of Eon to the 10.000 foot ledge which is about 20 feet in width and slopes about 20° from the horizontal. Traversing the ledge to where the body lay, we were gratified to find that, owing to the high elevation and the proximity of large snow patches, thus making the nights cold, the body was in a good state of preservation with no sign that any

9 At the time this inscription was written the actual date of the fatal accident was apparently not clear to the party who erected the cairn. It occurred on Sunday, July 17th.—Editor.

animal had molested it. It was evident from the large scalp wound across the top of the head that the Doctor met death instantly upon striking the first ledge in his fall of 850 feet.

After careful preparation of the body by the use of medical supplies, oiled silk, blankets, canvas, and lashings, all supplied by Mr. Wheeler, two one hundred foot climbing ropes were bent on and a start made from the cliffs at 6 p. m., and Conrad, Edward and Rudolph did heroic work on that perilous mountain side, until 9 o'clock when we reached the 9,400 foot level and it was too dark for such work, so the body was placed in a secure, sheltered spot and we descended to 9,000 feet and made bivouac under a large rock that had slid from its base and so lodged as to give excellent shelter on three sides and from above, with a small stream running near one side. At 9,600 feet Rudolph found the Doctor's rucksack intact, containing Mrs. Stone's sweater, kodak, and a small supply of provisions.

All hands were ready for the start when the first streaks of light came at about five in the morning for the little stream had frozen solid, the ledges were covered with ice and the rarefied air was penetratingly told. The best route for the lowering was down the open exposed stretches of the mountain side which called for as rapid work as possible and, save for short intervals when shelter was sought behind boulders and ledges, during occasional rock falls from above, no rest was taken until 1 p. m., when the scree slopes above the broad ledge were reached; here a halt was called and the few crumbs that remained from the small sandwich breakfast were devoured.

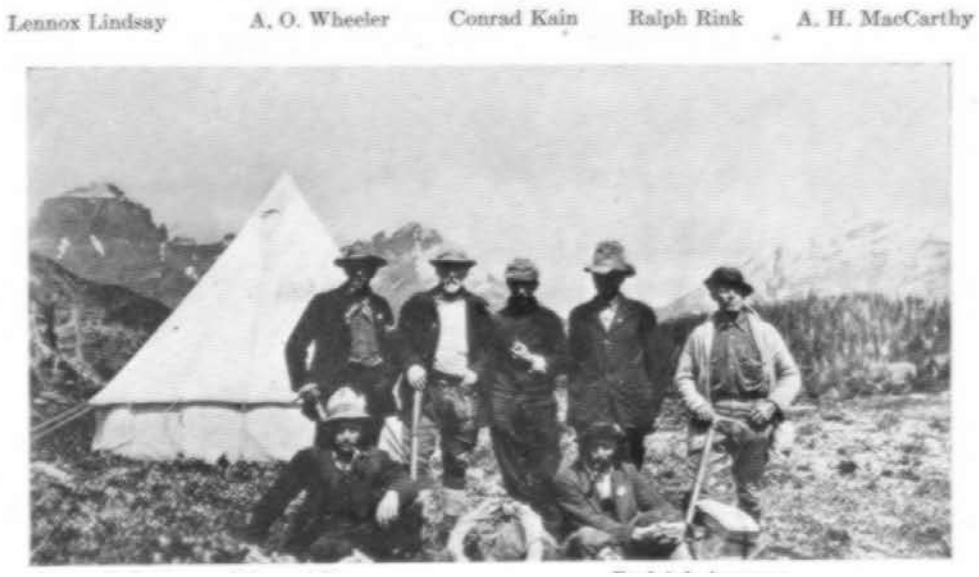
By the use of a shoulder pole and guy lines, the slopes and lower ledges were traversed and the bivouac at timber line in the basin between Eon and Gloria was reached at 5.30 p. m. with every member of the party completely exhausted from their heavy labour and lack of food, and it was realized that before further work was possible all must have a comfortable night's rest; so a return was made to the Marvel Pass Camp which was reached at 8 p. m. just in time for a good hot supper that in some mysterious way Mr. Wheeler seemed to know we would need and would come for, and he had prepared for us.

In the morning Mr. Wheeler and Richard Stone left for the Trail Centre Camp to report to Mrs. Stone the recovery of the Doctor's body, while our party returned to the bivouac at nine o'clock and, after constructing a skid of small green logs, the final descent of 1,500 feet to the bottom of Aurora Creek was completed and here we were joined by Rink with one of his strongest pack horses. After luncheon a trail was cleared up the many long, rough, tree-grown rock slides and ledges and the Marvel Pass Camp was reached at 8.30 p. m.

At 8 a. m. Monday, camp was broken and good time was made down the new trail cut out by Rink to join the Wonder Pass trail and, after a short rest at the Trail Gang's camp and another at Trail Centre Camp in mid-afternoon, camp was made for the night at 7 p. m., near the Walking Tour's Fishing Camp. An early start from this point next morning with relay pack horses brought us to the Eau Claire Camp at noon, Tuesday the 9th, where we were met by Doctor Stone's brother, Harlan F. Stone, and the Doctor's elder son, David, who took charge of affairs thereafter.

On Wednesday evening, the 10th, the Stone party left for LaFayette and we bade good-bye to the earthly remains of our fine comrade of the mountains whose last conscious thought probably was one of satisfaction in having conquered a magnificent virgin peak.

Cairn On Summit Of Mt. Eon Erected In Memory Of Dr. Stone. Photo, E. Feuz



Party Who Recovered Body

A Visit To The Saskatchewan Valley And Mt. Forbes

By J. W. A. Hickson

I reached Lake Louise on July 20th, 1920, and was joined there a week later by a young friend, E. L. Reford, of Montreal, whom during the following weeks I introduced to the joys and surprises of mountaineering and the discomforts of camp life in the Canadian Rockies.

The hotel had an unusually large complement of interesting British and American alpiners, most of whom were waiting for the opening of the Assiniboine Camp of the A. C. C., which had been delayed owing to the unforeseen lateness of the season. The delay prevented my companion and myself attending the camp, since we had already made arrangements for a long planned trip to the Saskatchewan River and Mt. Forbes; and, as he had only a limited time at his disposal, it was necessary for us to start as soon after the first of August as possible. We actually left Field for the north on August 2nd.

Taking train No. 13 that morning from Lake Louise we met Edward Feuz in Field, where, mirabile dictu, we found most of our baggage and supplies already on the horses, so that we were en route to Emerald Lake before noon. In addition to our Swiss guide, there were two men, Bert McCorkill, the horse wrangler, and Lagacé, a cook, brother of Peter Lagacé, who looked after us on our second trip to Mt. Moloch. Including our pack horses we had fourteen in all. Supplies had been ordered for a month. We were actually out 26 days; too long, as it developed, for McCorkill, whose morale declined most disconcertingly after the first ten days. He had been with us before on short trips, and on those had been cheerful and obliging, hence our surprise was great at the rapid transformation which absence from Banff worked on his character or, at least, on his capacity to control certain aspects of it.

Almost immediately after leaving Field he made the mistake of steering for the Natural Bridge and then following a lower trail up Emerald Creek. Now Feuz and I remembered very well that the trail by which we had returned from the Saskatchewan River in 1913 joined the main road to Emerald Lake near the fourth mile post, and mentioned this to our man; but he had got it into his head that this was the better route. It was for the most part very rough, and extremely indefinite; and it entailed a nasty and quite unnecessary crossing of the creek, which was very high and in which some of our baggage got inconveniently wet. At last, after two hours of plunging about between high trees and thick brush, our guide became amenable to the suggestion that we keep to the right and attempt to reach the upper trail. This we managed to do after a hard pull up a very steep hill; very trying for heavily laden pack horses. Thereafter the going was good, and relatively easy until we reached the sharp descent to Kiwetinok Creek, followed by a correspondingly steep climb up the further side. At six p.m. we reached a pleasant meadow some fourteen miles from Field, in which we made camp.

An overcast morning was followed by a fine bright day. We were moving again by 9 :20 o'clock. The trail was good. About noon we halted for luncheon in the wide meadows of the Amiskwi and usually, when on the march, spent an hour in this way; for I had decided that I would not during this season submit to a favorite practice of long days in the saddle without stops for food. A few cups of tea are very helpful to the nerves, and tend to promote a better humor among the men. The trail continued to be easy for another couple of hours; then when it became steeper, we got into wood and had some trouble with the packs. My new dunnage bag got ripped by a sharp branch, and Reford lost an important instrument which was found by Lagace two miles behind on the trail. We reached the summit of Amiskwi Pass about 5:30 o'clock and camped there

for the night. Notwithstanding that a cool breeze was blowing from the north the activity of the mosquitoes was quite unbearable. Reford was unfortunately feeling quite unwell; he had a fairly high temperature and spent a miserable night, and next morning I felt uncertain whether he ought to continue with us or return to Field, Happily it was decided that we should all proceed northward, and within the next twenty-four hours a few drugs, assisted by the vis medicatrix worked a marked change for the better in his condition.

We left our camping ground at nine o'clock on the morning of the fourth, the earliest start we made on the trip. With a large outfit it is hardly possible to do better unless one rises before the sun. A short descent from the pass is followed by a long ascending traverse of a clay hill overlooking the Blaeberry, from the higher slopes of which one obtains splendid views of the double-peaked Mummery and of the glacier which descends on the southeast side to Blaeberry Creek. The trail leads up to an altitude of at least 7,000 feet, and then begins to drop very sharply for almost two thousand feet. Either way this big hill is hard on horses and packs, and is, I imagine, one of the reasons why outfitters avoid it by mostly choosing the route by Bear Creek. At the foot of the hill the trail reaches a turbulent little stream which flows into the Blaeberry, and at the side of which we rested and ate. The day was very warm and was to be a fatiguing one before we made camp.

Crossing the creek, which was very swollen, as were all the streams we had to cross on this trip, we bore to the right and after passing for an hour through some easy wood emerged on the flats, where we saw traces of the devastating work of snow slides in piles of split and flattened trees, which had been carried across the valley. Here the trail was not easy to follow, and owing to rock slides we were soon forced to make numerous crossings and recrossings of the swiftly flowing stream; a work of difficulty and risk. Our progress was necessarily slow. No camping ground being visible, we had to push on for Howse Pass, leading up to which the trail becomes steeper and rougher, indeed quite rocky. On the way, one of the horses got its foot so badly caught and cut between the boulders that it became practically useless, and had to be put out of existence a week later. Not until 8 p.m. did McCorkill and myself, who were riding ahead of the party, reach a fine meadow near the summit of the pass, and it was practically dark before the remainder of the party came up with us. Of course, no time was lost in getting supper and putting up the tents which remained unbrushed for this one night. Our stuff, some of it very wet through immersion in mountain torrents, lay around in indescribable chaos. If the weather had changed we would have been in a dreadful mess. The temperature did fall very sharply during the night; and at this, our lowest camping ground, we had the thickest ice on our buckets of water.

We perceived next day that we were not far from our camping ground of 1913, when bad weather rendered futile our desire to try Howse Peak. Naturally we made a late start; somewhere about noon. Howse Pass is open and wide and the way over it is easy. From the pass the trail which is not difficult to miss (by following the right bank of the river) and would have been missed by our horse wrangler, follows the bed of the South Fork of the Saskatchewan, the water of which, though very high, was not dangerous to ford. More troublesome and risky was the crossing of the Middle Fork at the flats (about two hours from the pass) whence we followed Forbes Creek for a brief space and then struck into the wood on the right. The trail, which at first leads away from the stream, although requiring to be cleared a bit, was on the whole not bad, and must certainly have been travelled a few times, if not fairly recently, since the first visitors to Mt. Forbes in 1903. By 5 p.m. we seemed to have got as far as it was advisable to take our pack train, more especially as the ground alongside of the creek afforded suitable feeding for the horses, whose wants have to be, or,

Mt. Forbes From Southeast (From Above Howse Pass). Photo, A.J. Campbell

Mt. Forbes From Northwest (From Near Glacier Lake). Photo, A.O. Wheeler

at all events, are more frequently considered on these trips than are human desires. We were still a respectable distance from our peak on its south side, but had a fairly good view of the ridge we proposed to traverse. To the south and west of our camp the smoke, which had been accumulating for some days, became so thick this evening that Howse Peak, which was less than eight miles in direct line from us, was only faintly visible through the brassy, lurid glare of the declining sun. The four days and nights spent here and in the vicinity were very fine, and unusually warm.

Next morning, Aug. 6th, the atmosphere being clearer, we eagerly examined with our glasses the southwestern ridge of Forbes. Trying to make some allowance for distance, it seemed that although the part of the ridge above the large crest or knob, which the first ascenders designated little Pic Tyndall, might prove to be difficult, below this point the climbing ought to be fairly easy. This was illusory, as was also our estimation of the length of the climb. We hoped and even expected that there would be some way around a couple of threatening gendarmes; but the peak gave us some surprises next day, and almost defeated us.

After an early luncheon, Feuz, McCorkill and I left camp on horses; Reford still not feeling sufficiently well to undertake prolonged exercise, and proceeded in the direction of the mountain. But soon we had to tie up our steeds and proceed on foot. In half an hour we were halted by a deep canyon through the walls of which foamed a mountain torrent. A little exploration disclosed a place of crossing over the boiling stream. The precipitous crossing over its perpendicular bank could be safely effected by the aid of a tree with most convenient branches that served as hand and foot holds and connected with a most suitable arrangement of jammed logs across the stream. This was a very lucky find. McCorkill here left us and returned to camp; and Feuz and I—he much laden and I, more so than I enjoy—made our way slowly up through the timber, perspiring heavily in the great heat and under ferocious attack from bloodthirsty mosquitoes and bull-dog flies. Unfortunately on these expeditions you cannot choose the time of day at which you would prefer to take exercise.

In less than two hours we got through the wood and crossed the rivulet which descends in pretty falls on the southeast side of Forbes. Climbing down a few hundred feet into a small alpine meadow, we soon found a suitable place to bivouac; we had no tent to put up and had not even brought a blanket, I being desirous of trying whether I could with impunity spend a night in the open. The great dryness of grass, brush and timber, suggested that it would be advisable to make our fire outside the zone of trees. While collecting material for the purpose we ran across traces of an old camp, in the shape of tin boxes and bottles and charred wood, which we inferred had been left by the first climbers of the peak. From our position some few hundred feet below timber line we had an excellent view of the long, deep valley leading up to Bush Pass, on the floor of which snow was lying at a remarkably low level, in some places apparently below 5,000 feet.

On account of the difficulty of sleeping under such novel conditions, and because, according to your position as regards the fire, you were either too hot or too cold, we decided soon after 2 a.m. to have some food and warm coffee, and about 3 o'clock started upwards from our bivouac. As nothing was to be gained by haste, we proceeded slowly over the grass and then over a big scree slope which lies right beneath an outcrop of rocks on the south side. At the top of it, owing to lack of light, we had to halt for three quarters of an hour. Finding these rocks feasible, though steep, we climbed them to have a look around and, traversing to the left and ascending about 100 ft., we made to the right and were able to reach the snow of the east side. We now put on the rope. Higher up the snow was hard and a few steps had to be cut, but the slope was easy and led to the col connecting with the west side of the peak. On the col, we stopped to survey the scene, take stock of

the weather, which after indications of uncertainty was looking more favorable, and to partake of a little refreshment. Neither of us was feeling up to par, and the food was consumed rather according to regulations than from desire.

After the first few hundred feet there were from this point onward few easy places on the long southwestern arête. It presented a series of very steep faces and frequently narrowed to a very fine edge. From a careful reading of the account of the first ascent, I am inclined to think that we followed the ridge more closely than did the earlier party. Possibly faster time and even an easier ascent could have been made by occasionally leaving the rocks and following the snow on the right. There was no such alternative on the upper part of the ridge, and even on this lower part we decided that it was safer in the case of a party of only two persons to stick to the rock rather than trust ourselves to the fresh snow which lay at a dangerous angle on a coating of ice. Undoubtedly our course was the more fatiguing one. It required four hours of steady climbing to reach the prominent crest already referred to as Pic Tyndall, at some 11,000 feet, which forms a sort of natural division between the upper and lower portions of the ridge, and from which it is set slightly more northwards. Its upper part is much shorter both as regards distance and vertical height; but also not only more formidable in appearance, but much more difficult in reality. The time was now 11.30 o'clock, and this meant that we were over an hour behind our schedule.

Our eyes were soon opened as to the nature of the remainder of the climbing. It is not unsensational. On leaving the crest, one drops down to a notch and is immediately confronted by an upright gendarme or buttress which offers but scanty footholds. It is one of three—of which only two were visible from our main camp—which bar the way to the summit. There is no possible way of circumventing the first one. A short inspection determined Feuz to exchange his nailed boots for rope shoes, while I strongly reproached myself for having thoughtlessly left mine below. What a stupidity! Having negotiated the most difficult part of the buttress Feuz reached a place of comparative safety and held the rope tightly for me. It was a case of ce n'est que le premier pas que coûte. Here and elsewhere on this climb our long, English rope proved to be indispensable through its enabling the leader to reach a good position before the second man moved. On such a ridge we had to reduce the risks to a minimum; for if a serious slip occurred, the party was probably finished. Sheer descents of several hundred feet confronted us on both sides of the arête; carried down on the eastern side by precipitous cliffs and snow and ice for several thousand further. Higher up there was a tough piece of knee and finger work on a very exposed edge where no footholds were available. Until we were within a few hundred feet of the summit only one man moved at a time, a fact which greatly reduced our rate of advance.

On reaching the third and final upright buttress, the most formidable difficulty of all confronted us. At this point we stood on one of the narrowest bits of the arête with a tremendous drop on our right, that is, on the eastern side. On the disintegrating surface of the wall, which broke away when one tried to ascend it, neither rope shoe nor nailed boot was of any avail. Higher up, out of ordinary reach, there appeared to be securer handholds and I suggested to Feuz that I might try to shove him up to them; but the suggestion was not favourably received, doubtless owing to the smallness of our party and the possibility of my not sustaining his weight, as well as to the uncertainty of whether the upper surface of this obstacle might not be as unreliable as the lower. If he ascended part of the way and then was obliged to return the situation might be very dangerous. Feuz was of opinion that the Collie-Outram party had indeed climbed up over this buttress[10], even

10 0f this there is no reasonable doubt, after re-reading their account of the climb.

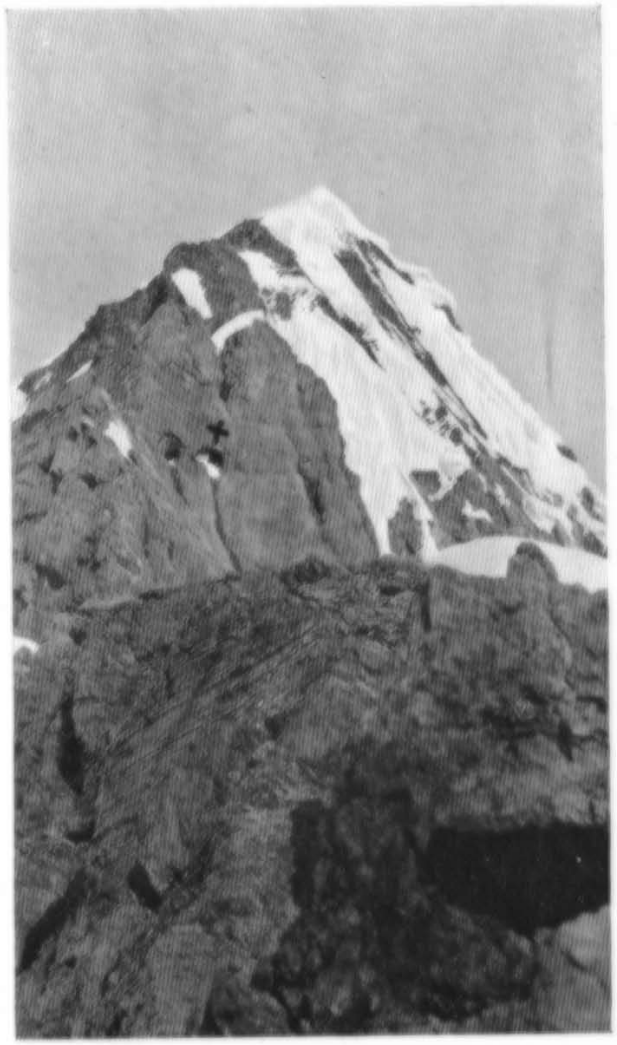
going the length of asserting that he could perceive the marks made by their nailed boots—after 17 years. But, as he said, there were two Swiss guides in the party besides five strong amateurs. Our position was most perplexing. We were within 300 feet of the summit in vertical distance and had been over seven hours on the ridge. Not to complete the climb would in itself be distressing; but to think of the alternative, namely, retraversing our route, was still more disturbing. Feuz fingered and tried the rotten wall again and again in vain. What was to be done?

A little beyond us and on our right we had already noticed what appeared to be a hole that led up perpendicularly into the huge bastion forming the final rocks of the mountain, and ended just above the wall which was frustrating our efforts to reach the top. It suggested to us a possible avenue of escape from our serious impasse. In order to reach it and take a look, great care had to be exercised, for which purpose I had to pass Feuz and descend backwards by knees and hand along a narrow groove on the right side of the main arête until I reached a small niche where I could conveniently stand. With the rope belayed around a sound rock, Feuz worked his way past me and with some difficulty reached the shelf whence he could enter into and examine the promising rock funnel. The result was not encouraging; and it looked as if we were in a cul-de-sac. I now moved slowly down to gain the same shelf on which Feuz stood in order to give him more rope to make an inspection of the corner beyond, the formation of which raised hopes of a possible traverse around the barrier wall. Nothing-came of this, however, but as Feuz was returning to where I was comfortably and securely seated, he glanced once more up the hole and perceiving daylight at its top, shouted to me that there was still a chance for us. This joyful news had a most bracing effect, and I immediately joined him under the aperture where he had already begun changing his footgear. At its base the hole was well filled with snow; higher up with solid ice, between which and its curved wall there was on one side just enough room for a human body to pull itself through.

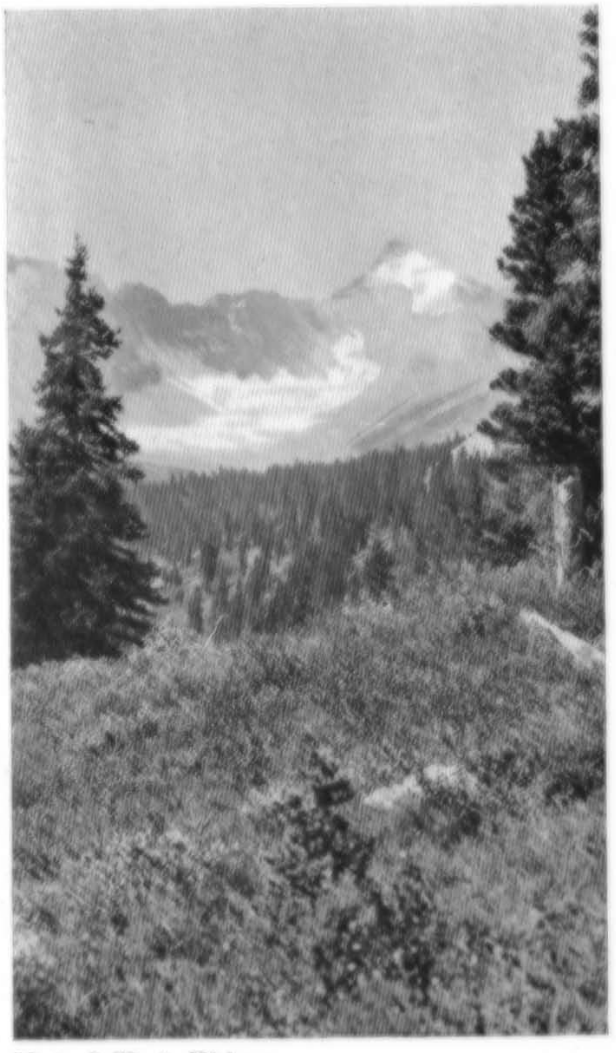
Leaving his rucksack to be sent after him, Feuz worked himself into the rounded aperture, and cut steps and handholds in its icy contents. This was by no means easy work, since he had to chop mostly from underneath while backing himself firmly against the rock. Indeed, only by backing oneself against ice and rock wall and employing knees as well as hands to utilize the few holds was it possible to execute the 30 to 35 feet of strenuous gymnase, the overcoming of which was for us the crux of the climb. A few steps to the left from its upper end brought us again to the main ridge, on which there were no more difficulties. Between us and the summit there lay however, a mass of curiously and loosely piled plaque-like stones which afforded only a most unsteady footing. At this point “the sensation was as if we were walking along the top of a very ill-constructed Scotch dyke, only with a big precipice below on either side”.[11] My companion bade me move with caution and step lightly, and even as he spoke some of the thin support fell away from under my feet, and rolled down both sides of the flimsy arête, so that I was thankful to have the rope. On the last hundred feet of the peak steps had to be cut in the glare ice of the western side. This white pyramid, when seen several days later from Glacier Lake, suggested a resemblance with the beautiful crest of the Swiss Weisshorn.

It being 3.30 p.m. when we reached the summit, 11,900 feet, on which, naturally, we found no record of the first ascent, we realized that there was little time to be spent in looking around. Under the circumstances this was not so deplorable, for the thickness of the atmosphere, through smoke, cut off our view almost completely to the north and west; a great disappointment of the climb. We descended almost immediately to the uppermost rocks and shale on the northwestern

11 Stutfield and Collie—”Climbs and Explorations in the Canadian Rockies”—Page 279.



The Summit Of Mt. Forbes. Photo, J.W.A. Hickson
The Hole Through Which The Ascent Was Made Is Shown By X.



Mt. Athabaska From The S.E. Photo, J.W.A. Hickson

side, where we rested some twenty minutes, tried to eat and left a tin box with our record. Had the snow on this side of the mountain been in good condition, we would have chosen and could have rapidly descended by this route. But it was obviously very hard, in many places quite icy, and fairly steep, and with a party of two was not to be seriously thought of, more especially considering the step-cutting which it would have involved. Happily the western side seemed to offer a not difficult way of descent, and in the event relieved us of the anxiety of being benighted on the peak.

From a mountaineering point of view, this route calls for but little notice. We worked down steadily over scree slopes and easy rocks, varied with a little step-cutting in order to connect up from time to time with the main arête. In three hours we had made considerable progress. Here, as on many other peaks, we found that the steepest pitches were just above the main snowfield and several of them required careful use of the rope to negotiate. Shortly before 8 p.m. we reached, at slightly less than 9,000 feet, the lower snow on the west side of the mountain. It was in good condition and we came down easily over the steep little pass on to the western glacier, which was considerably crevassed.

Naturally we were anxious to get off the ice sheet before nightfall and find shelter in the timber, but neither conditions nor luck favored the aim. Having selected the right side of the glacier (or the wrong one, as it turned out) by which to descend, we found it impossible to cross the crevasses near its tongue. There was no alternative except to retrace our steps and attempt to work across to the left side. At 9:30 o'clock we found ourselves in a maze of crevasses and séracs among which we stopped to take some food. The cold prevented us resting for more than fifteen minutes, and we continued our weary, sinuous course over and around crevasses until we reached the snow tongue on the east side of the field. Near it, on some inconvenient rocks, we lay down and rested in a fitful manner until the first rays of daylight enabled us to descend to a charming alpine meadow. Here we enjoyed a liberal supply of heartening tea, and thereafter started on the last lap of the trip back to the main camp. Recrossing the canyon at the place marked by the tree, we reached our companions in time for a second breakfast. Not the slightest ill effects were experienced from two nights' exposure in glacial altitudes.

Mt. Athabaska

Ten days later, after an arduous trip up the rather rough trail of the North Fork of the Saskatchewan, Feuz, Reford and the writer made a most enjoyable and fairly rapid (second) ascent of Mt. Athabaska, circa 12,000 feet, from a camp near the foot of the glacier of the same name. This was within exactly two days of twenty-two years since the first ascent by Messrs. Collie and Woolley, whose record we found in a state of perfect preservation on the summit rocks.

Ascending by the northwest, for the most over glacier, we reached the top at 9:35 a.m. and, after spending an hour there (where we had excellent and interesting views of Mts. Saskatchewan and Bryce, but could see next to nothing in a northwesterly direction owing to our persistent enemy, the smoke) got back to camp shortly after 2 p.m. A visit to the Columbia Icefield a few days later was rendered most fatiguing owing to a heavy fall of snow, which was also responsible for such a severe injury to my right knee in a small crevasse that I could scarcely walk back to camp. The limb was practically useless for a week.

Feuz and I ended our climbing season with an ascent of the dolomite peak, Mt. Louis, near Banff. The nature of the climb has been well described by Val. A. Fynn in A.C.C. Journal, Vol. ix. We varied his route by avoiding the main couloir on the southeast by which he and Feuz commended the ascent. Keeping to the right of it, we crossed it fairly high up and thereafter made

another slight variation. On the upper part of this remarkable and difficult peak there seems to be little chance of an alternative route. With the ordinary nailed boots the climb is, I should think, scarcely feasible.

The First Ascent Of Mt. French

By Henry S. Hall, Jr.

During my first visit to the Canadian Rockies in 1915, 1 saw from the higher summits near Lake Louise, when the atmosphere was clear, certain peaks to the south of Mt. Assiniboine, for which the Swiss guides knew no names. The region was at that time, as I later learned, being for the first time surveyed. Four years later, on a perfectly clear September day, I sat alone on the top of Mt. Rundle, looking longingly at the splendid peak of Mt. King George, which M-r. Val A. Fynn and Rudolph Aemmer had climbed a few weeks previously. The next year, from the Summit of Assiniboine, I had the opportunity to examine more closely Sir Douglas, King George and Joffre and the other peaks which had been placed definitely on the map only since I had first seen them in 1915. Some day I hoped to become more closely acquainted with these "war peaks."[12]

After the Alpine Club of Canada Camp at Lake O'Hara last summer (1921), I persuaded a friend of mine from Boston, Marcus Morton, Jr., to join me on a short trip to this region south of Banff. Edward Feuz, whom I had previously engaged, had been called away from camp, and as there were no other guides then available, we decided to start, ourselves, from Banff along the route of Mr. Wheeler's Walking Tour Camps. At least we should see the country and do some climbing, if we were able to rejoin Edward at Trail Centre. Dispensing with any outfit and carrying about fifteen pounds apiece in our rucksacks, we walked out of Banff on Saturday afternoon, August 6th, and made Eau Claire camp in a couple of hours. This camp, the first on the Walking Tour, is conveniently situated on a small river terrace about a quarter of a mile below the junction of the Spray and Goat Creeks, seven miles south of Banff, at the end of the gravel road, from which a branch road leads up to lumber camps on the flanks of Sulphur Mountain. Beds, mattresses, blankets and "super" camp meals, together with the most cordial attentions to our comfort, gave us a most favorable impression of this camp.

After enjoying a hearty supper, we retired at twilight with the expectation of seeing some goats come down to water across the river the next morning, as we were told they had done so without fail for the last two weeks. It didn't take very long to count the goats when we looked out at sunrise, but the early rising provided sufficient excuse for a timely start, and then, too, there was no pack train to delay us an hour or two in getting on the trail. Leaving camp at about seven o'clock, we had covered the seven miles to Moose Lodge at the Canmore Gap in two hours, and then, after being deceived by an impudent little pond, came upon the Upper Spray Lake in time for a refreshing plunge before stopping for lunch. Mt. Louis was visible at intervals to the northward, from Moose Lodge to this point, until cut off by the rocky spur at the head of the lake. The high peak diagonally across the lake to the westward, reminded me strongly of Storm King in the Needle Mountains of the San Juan region in Colorado, so stern and forbidding does it appear from this angle. As the Lower Spray Lake is approached, a prominent line of rock peaks appear to the southwest, which we at first incorrectly supposed to be the British Royal Group, but which developed upon closer

12 **See sheets No's, 9, 10 and 11 of the Alberta-British Columbia Interprovincial Boundary Survey Atlas, Ottawa, 1917.**

inspection, into our objective, the British Military Group. Still less did we realize that the curious twisted double summit at the left of the group would turn out to be Mt. French, which we were to climb a few days later. Maps had been left behind, unfortunately, so it was not until we reached Trail Centre Camp (23 miles), late in the afternoon, after passing the Government fish hatchery and Canadian Mounted Police cabin at Lower Spray Lake, that we found out on examination of Mr. Wheeler's sheets, what really bad guessers we had been. Trail Centre camp is situated about half way between the junction of Bryant Creek with Spray River, and Lower Spray Lake, on the bank of the river in a most desolate, but at the same time not unpleasing area of "silver forest." The trees had been killed, but scarcely blackened by fire and stretch a gray, gaunt forest for several miles in every direction. The next day was spent in nursing blisters, the result of too long neglected socks, and in waiting for Edward Feuz and a pack outfit which was then returning from Mt. Eon. Two hours of fishing in the Spray, with crude, improvised tackle, netted us nothing more than two trout,— not a very satisfactory haul in comparison with recent performances at the same spot that we later heard of.

On Wednesday, August 10th, with Edward Feuz, we left Trail Centre, Ralph Rink accompanying us in all capacities, and a fine all round man he soon proved himself to be. The trail for the first few miles is very fair, an occasional log being easily crossed or circumvented. Morton and I preferred to walk, but Edward rode a horse which was used as a ferry at all the fords, thereby justifying its presence, a fact for which Edward seemed very thankful. When opposite White Man Pass I missed a fine opportunity to photograph two goats. Ralph was riding one hundred yards ahead with the horses and suddenly stopped, motioning me to get out my camera, and pointing to the brook. Hurrying up to him through the trees, I saw the goats not two hundred feet away, one drinking and the other facing in our direction. The sun was wrong, unluckily, and as I tried to work around to get it behind me, the second goat stopped drinking, looked up, and as I changed focus to get what would have been a most unusual picture they spun around and dashed away. Everyone who hasn't been in a similar predicament will wonder why I didn't snap them on the run—that is what I wondered too, after it was all over, but probably nothing but a Graflex would have been the slightest use. When Edward, who had been some distance in the rear, came up to where we stood, he did not hesitate to express his opinion of anyone who had stood fifty feet from goats without getting a photograph of them, and perhaps he was right! The goat incident put us on the qui vive for game the rest of the day, but without result.

Mts. Birdwood and Smuts, which appear very prominently on the skyline from the Lower Spray Lake, were now not far to our left, as we advanced up the valley through lovely park-like meadows, bordered by virgin timber, alternating every few miles with areas of burnt ground. Edward, after an examination of the great, almost sheer slabs of rock of Birdwood, decided that there lay an attractive new climb, and subsequent views of this peak from the south did not decrease our respect for its appearance. In one burnt area, where the trail is largely obliterated, Morton and I, after delaying to use the Zeiss glasses on Mt. Sir Douglas, ahead on our left, looked in vain for signs of the pack train. It had apparently vanished. We lost no time in pursuit, but unanswered yells on my part made it evident that we were well behind. Zigzagging over the valley floor, we presently picked up the trail and after pressing ahead for half an hour, through a burned area, came suddenly upon a welcome scene. On the edge of the woods on the left side of the valley, Edward had decided to camp on the exact spot used by Dr. Hickson and himself two years, to the day, previously (14 miles). As the weather threatened, we proceeded energetically to get up the tent, using the pegs just as they had been left two years before. After we had hustled everything into the

tent and prepared for the worst, the storm changed direction and, after a few drops of rain, passed over Palliser Pass, about a mile south of us. Rink soon had supper on the way, but while we were all engaged in helping him, the gophers got busy on Morton's socks which had been hung on a nearby bush to dry. In less than ten minutes from the time he took them off his feet, the heel was eaten out of one and another was by mere chance seen just in time to be rescued as it disappeared down a hole. Vengeance upon the gophers was immediately sworn. The gophers, as far as I know, all escaped, but a lumbering porcupine, headed towards the larder a little later, paid a high price for his inquisitiveness, and we were not further troubled by uninvited guests that night.

During breakfast the next morning, a lively discussion took place to decide whether we should, after crossing Palliser Pass, turn west into unsurveyed country and perhaps try Mt. Queen Mary, or cross North Kananaskis Pass with a view to capturing one of the British Generals. Our time was limited and Edward thought, whereas Mts. French and Robertson would probably be fairly accessible, that the approach to Queen Mary might be not only difficult, but perhaps impossible from this side. Leaving the matter for final decision later in the day, we started slowly up the northern approach to Palliser Pass at 8.30, through dead and fallen timber and along the spine of an old moraine. At Belgium Lake, the source of the Spray River, remains of another camp were passed, probably that used by Mr. Fynn's party in 1919. A small ice fall above this lake tumbles down from the cirque glacier, nestling among the cliffs of Mts. King Albert and Queen Elizabeth. On the opposite side Sir Douglas is hidden by intervening ridges.

Soon the Boundary Survey monument was passed, indicating that we had reached the Continental Divide, and the drop, gradual at first, but soon very abrupt, begins into Palliser Valley. Nothing but desolation and destruction greets the eye from a slight rise on the trail half a mile south of Palliser Lake. The trail at first merely obstructed by a tangled mass of dead timber, soon becomes engulfed in the confused piles of debris and then disappears from time to time, finally to lose itself altogether as the undergrowth and great gray trunks combine to form an almost impossible maze. The pedestrians very soon decided to save themselves much crawling and incidentally to improve their balance by seeing how far they could walk along logs without dropping to the ground. Our paths diverged and we had quite a bit of competition in following out the different "log paths." Rink had not brought extra axes for us to help him in cutting out the trail, but we were amazed at the way he and the leading pack-horse found passages through places where we had found it less effort to keep on the logs than to walk on the ground. Blueberries in great profusion proved such an attraction, and delayed us so much once, that the pack train was only rejoined by dint of a diligent search and a few yodels. The horses always made better time when Morton and I wanted to stop for something. By one o'clock we reached the mouth of Le Roy Creek, and as the horses were tired, we stopped for lunch in full view of the mighty eastern precipices of the British Royal Group. I have seldom been so impressed with a new and previously unpictured group of peaks, as I was with this great, almost perpendicular wall six thousand feet high. A slight haze confused the perspective and led us on to somewhat fanciful exaggerations of the mind, as we leisurely ate luncheon. Edward and Rink were not at all enthusiastic at my suggestion that we make a closer inspection of the Group, and as one horse was already quite lame and another looked ready to drop, we decided to turn up Le Roy Creek. This was at least familiar going to Edward.

Taking to the logs again, Morton and I soon got ahead of the horses and climbed rapidly up the steep valley, continuing well above the stream over slide rock, to avoid the worst of the fallen timber. A large mass of this timber had in one place surged against a huge boulder telescoping and snapping many two and three-foot trees and presenting a most unusual sight. One seventy-foot

tree had turned a complete somersault, and lay on the boulder with its roots thirty feet or more in the air. Once or twice we saw the pack train following the gravel flats several hundred feet below us, but these did not last long, and the horses had to be led into the heavy fallen timber again. The air now grew sultry and dark storm clouds were accumulating about the summits of the Royal Group, and the faint ring of the axe far below told us that Rink was in trouble, so we waited near the junction of Le Roy Creek and the creek coming down from Mt. Beatty. In half an hour a slowly moving, exhausted string of horses appeared over the brow of a ridge below us, and Rink signalled by unmistakable signs that the outfit was all in. Luckily we had again struck a camp site used by Dr. Hickson in 1919 (10 miles), and no time was lost in throwing off the packs and pushing up the tent under a driving rain. The rain would not be denied, however, and increased to such violence that there were soon many leaks in the canvas. A fire was nursed along under a slicker for a while, but the rain abated obligingly at supper time, but no sooner had we eaten and piled the fire high with wood, as it was now turning much colder, than a perfect deluge began, and as we slipped into the sleeping bags, trying to dodge little rivulets from the roof, vivid flashes of lightning followed almost at once by loud booms of thunder made us think that the elements must all be conspiring against us. The fire heaped high, was still struggling bravely as we went to sleep, and muffled mutterings from other parts of the tent told me that I was not the only one trying to find respite from the persistent little bombardment from above.

The following morning broke cold and clear, but with that most discouraging of sights to the climber, fresh snow about half way down the mountain sides. If the Royal Group had been impressive yesterday, it was undeniably grand that morning—its great black sides coated on their upper portions with a dazzling white powder and Mt. King George with its pure, glacier crowned summit rising upwards of 11,000 feet into the deep blue sky. Queen Mary's long white ridge to the North and Princess Mary to the south with the five Princes, each rising above the main ridge, complete this small, but in many respects, the most striking isolated group of peaks in the Southern Rockies. No hint of the large King George glacier in the centre of the group, crossed by Mr. Fynn and Rudolph in 1919, is to be had from this side.

After driving the cold, bedraggled horses back to camp, we left Edward and Rink to dry things out a bit as the day's march was to be only to a point just over North Kananaskis Pass, which we had hoped to reach the day before. A cold southeast wind blew fleecy clouds across the ridge of Mt. Beatty and soon belted the Royal Group with a rapidly thickening band of mist presently to cut off the snow covered portion from view entirely. By ten o'clock, as we drew near the Pass, it had completely clouded over and a biting wind swirled wisps of cloud through the narrow gap between Mts. Maude and Beatty. Half an hour later, when we were fully anticipating another storm, the mists thinned and in a few minutes the sun shone brilliantly from an almost cloudless sky. Sounds of falling rocks attracted our attention to Mt. Maude where Morton presently noticed seven goats walking slowly up the rocks just below the sky-line. Not knowing just where Edward would think it best to camp, we sat down and followed the goats through the glasses, as they reached the sky-line. Up and down they jumped, travelling in single file silhouetted against the sky beyond and so fascinated were we in watching them across Lake Maude, that we quite failed to see fifteen more in a group not more than three hundred yards behind us, which Edward watched for some time from the Pass, before he noticed us to call our attention to them. He had not seen ours, however, so we felt better about it. The group of fifteen, including four young, were being gently but firmly driven up the ridge of Mt. Beatty by the leader, a splendid big fellow. He would stand guard in the rear for a minute or two, and then with a few vigorous "humps" catch up and face the enemy again,

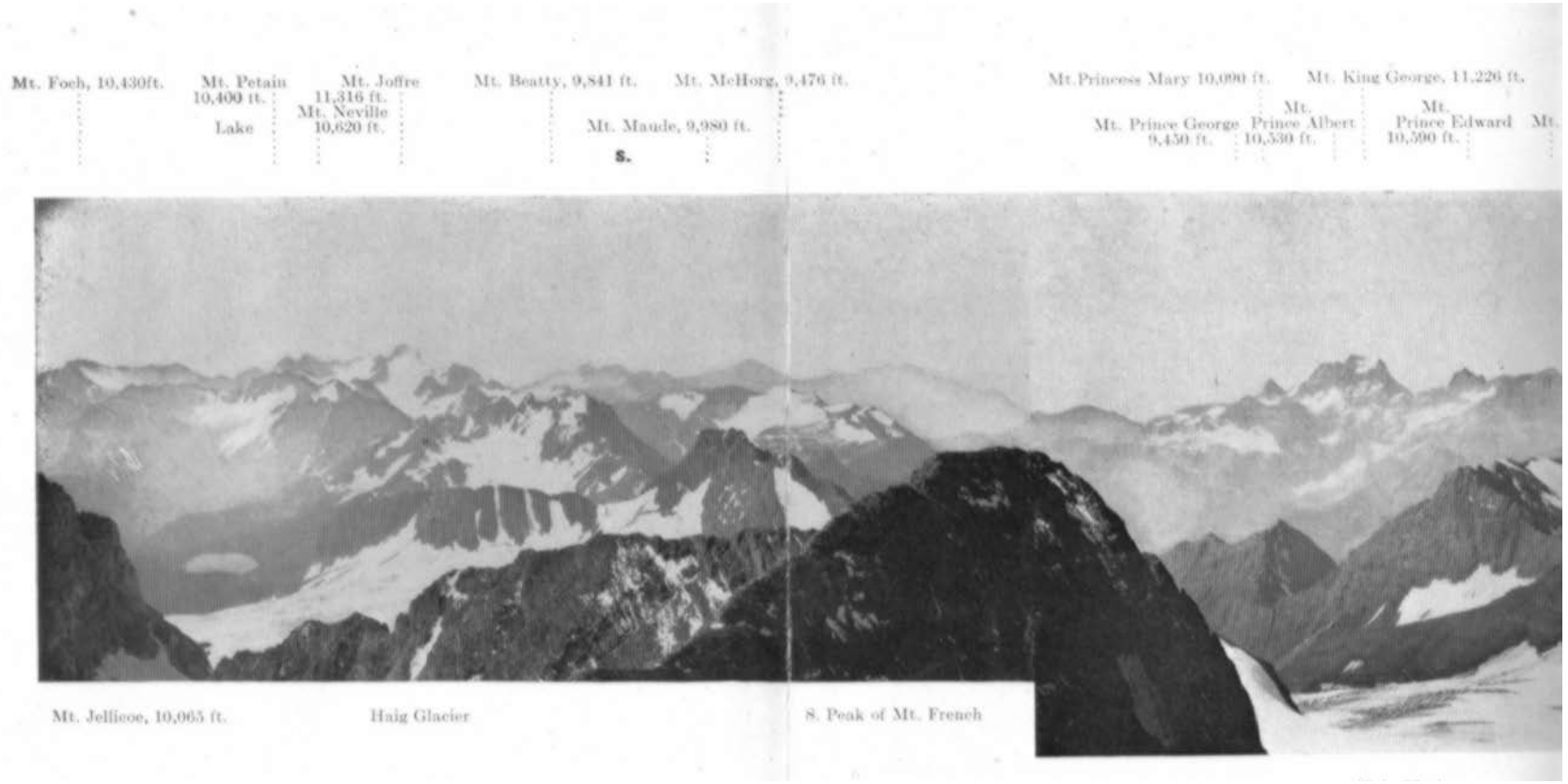
repeating the performance for over an hour until he had the herd well up on the crest of the ridge out of harm's way.

The east side of the Pass, which is itself just above tree-line, has evidently not, at least in recent years, been burned, and presents a refreshing sight after the totally devastated area to 'the west. Maude Brook, swollen and discoloured by a dark glacial stream from Mt. Beatty, runs gaily through alternate park and woodland, joining a light gray stream from the north, the whole to be suddenly swallowed in a canyon a few feet wide and a hundred or more feet deep. So suddenly did I come upon this remarkable cleft in the ground, that I literally nearly tumbled into it. No water was visible at the bottom, there being deep snow still enclosed within the gray limestone walls of this remarkable and appropriately named Turbine Canyon.

After pitching camp three hundred yards above the Canyon, near a spring (4 miles), in a spot which seemed but shortly removed from Paradise, and eating a hasty lunch, our thoughts and steps turned to the large glacier which we had caught a glimpse of from across the creek.

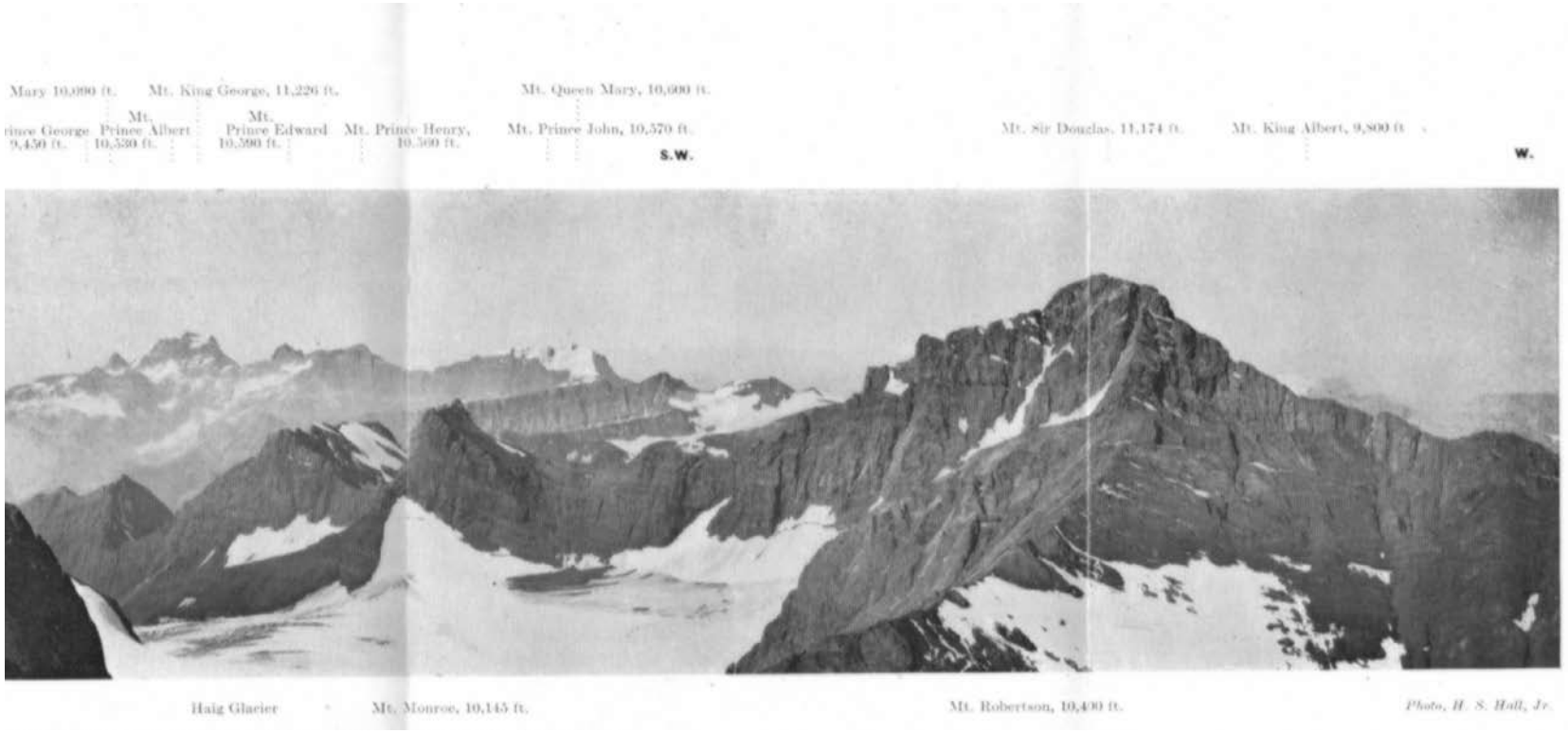
Twenty minutes brought us through the woods and on to the moraine of the great glacier which flows from the heart of the British Military Group and may be called Haig Glacier. The main body of ice extends in a southeasterly direction between Mts. Maude and Jellicoe, its tongue being bisected by a great cleaver ridge on both sides of which ice tongues terminate. One snout gives rise to North Kananaskis River, which flows directly into the main valley, the other supplying the stream which unites with Maude Brook to cut its way through Turbine Canyon, thence to join the former. A second large ice tongue flows directly south between Mts. Maude and Monro from the névé field on the west of the divide, and from it issues Le Roy Creek. The third tongue squeezes through a deep defile, perhaps not more than one hundred and fifty yards wide, between Mts. French and Robertson and fed by further slides from the encircling walls of these peaks, swells to half a mile in width and flows north for two miles to the base of Mt. Murray, there to supply the waters of French Creek. A separate glacier two and a half miles in length, rising between Mts. French and Smith-Dorrien and ending to the south at the source of the Upper Kananaskis River, causes Jellicoe to sail as a great battleship through a sea of ice. Still another large glacier rises on the north side of the divide on the west slope of Mt. Robertson and parallels the north tongue of Haig Glacier. None of the peaks of this group are crowned with ice, as is the case in both the French Military and Royal Groups, a rather remarkable fact when it is observed that the first, second third and fourth peaks respectively in each group, are of almost exactly the same relative height as the corresponding peaks in the other groups. A possible explanation for this fact is that the main glaciers of this group have been more active in narrowing down the summit ridges of these peaks than those in the other groups.

The ice appearing but slightly crevassed, we walked up onto it in a general northerly direction. Our friends the goats were still to be seen near the top of Maude. Edward was immensely pleased at the glacier, the farther we walked on it, declaring it to be one of the finest he had seen in the Rockies. By three o'clock we had reached the end of the dry glacier and could see Sir Douglas, Robertson and French across the névé field ahead. It was decided to work up the ridge of Jellicoe if feasible, so as to obtain a better view of the whole district, and particularly to see what lay to the east. Accordingly we left the ice, climbed over easy rocks and, after passing over a Cambrian fossil bed, which would have made a paleontologist quite happy, came to a sheer drop of some hundred feet at an altitude of ninety-two hundred feet on the south ridge of Jellicoe. Edward used the glasses, I took pictures and Morton absorbed the view. The lateness of the hour compelled us to hurry back over the fossil bed, much to my regret, and after almost stepping on some ptarmigan,



Highest Peaks Of The Canadian Rockies South Of Mt. Assiniboine. Photo, H.S. Hall, Jr.

Panorama From Mt. French. (attaches to photo on next page)



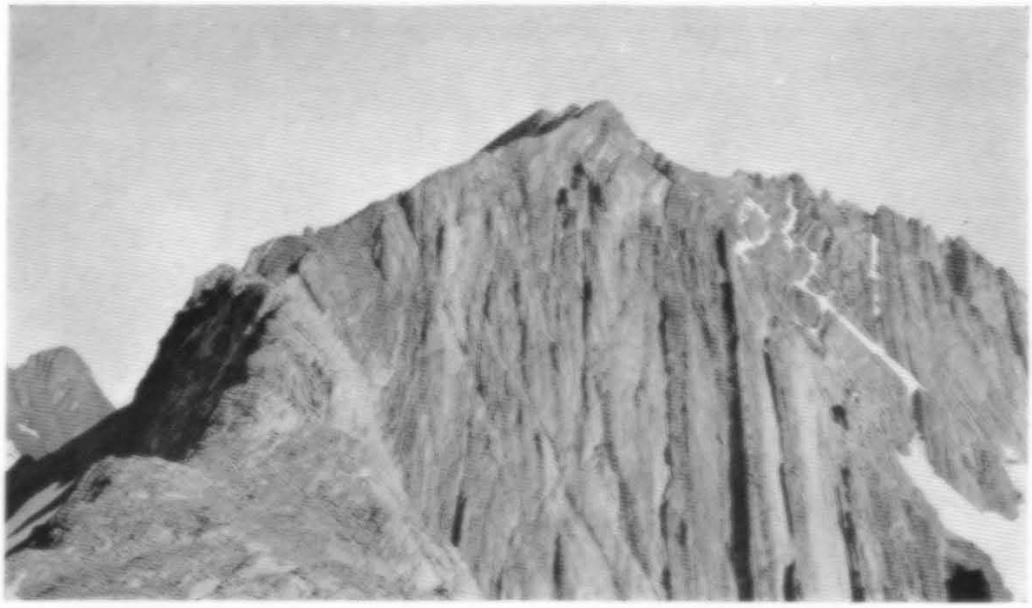
Highest Peaks Of The Canadian Rockies South Of Mt. Assiniboine. Photo, H.S. Hall, Jr.

Panorama From Mt. French. (attaches to photo on previous page)

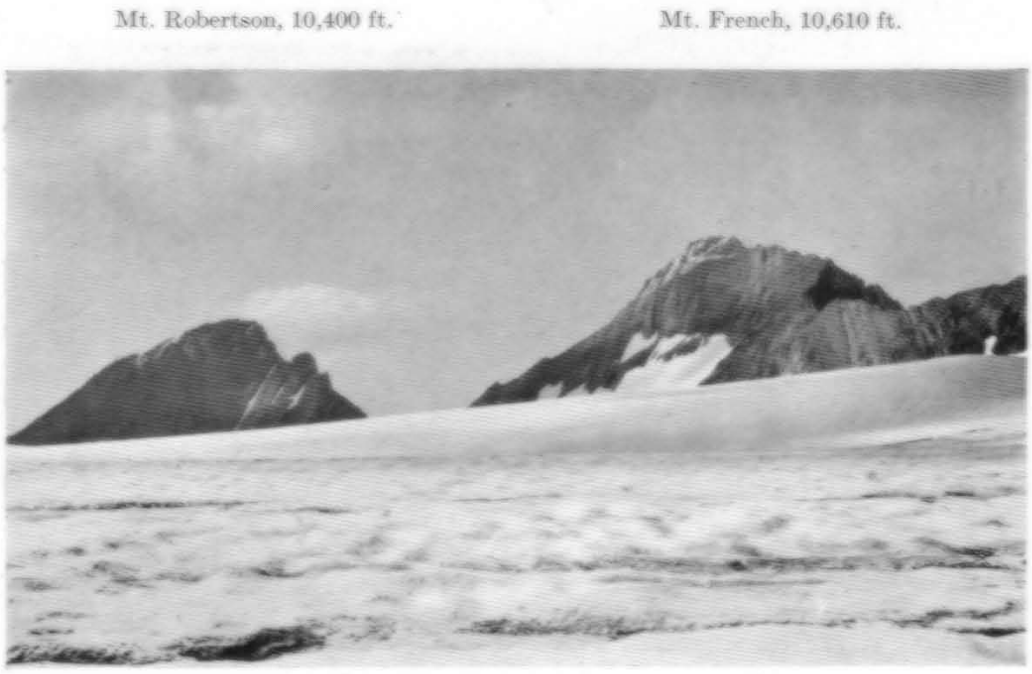
we regained the ice, crossed it quickly and directed by a column of blue smoke, arrived at camp to the good old tune of "Come and Get it" from Rink. As we sat at supper the sun set over the pass behind us, throwing a long dark shadow on the gray, limestone ridge across the valley. A chill filled the air five minutes after the sun had gone, and we were glad to slip into our blankets in anticipation of an early start for Mt. French the next morning.

After a short struggle with frozen boots and a good hot breakfast before dawn, we left camp the next day, August 13 at 5.15 a.m. Walking rapidly through the woods we soon reached Haig Glacier, went up the centre of its gently inclined snout and headed in a general northerly direction by the route decided upon the previous afternoon. A strong north wind with the temperature well below freezing, made woolen gloves very welcome, and it was not until an hour and a half after leaving camp, that the first sun's rays struck our backs from over the shoulder of Jellicoe. The broad, gently undulating and almost wholly uncrevassed surface of Haig Glacier would make an ideal landing place for aeroplanes, and of course offered us an excellent boulevard with its firmly frozen surface. The west slope of Mt. French appeared nothing more than a scree slope, so Edward suggested that if we were to be disappointed with the mountain, it had better be on the way down, and that we might as well find a worth while route up. Accordingly from the névé field at about ninety-two hundred feet, we worked up to the ridge between Jellicoe and French at its lowest point, with the idea of at least having a scenic if not interesting route. The ridge was gained easily in about twenty minutes at 7.45, and a short halt made to rope up and rest, our first one since leaving camp, before tackling the ridge which the map indicated to be nearly a mile in length. Now walking, now climbing over easy but rather rotten rocks, we made good progress for an hour and a half, reaching the lowest peak of the mountain at 9.30.

Thus far, the going had been altogether too easy, and we could not believe that Mt. French could fall with so little resistance. Our ideas in this matter were soon confirmed by the sight of a knife ridge with a perpendicular side in our direction and as it soon turned out an 80° slope on the opposite side. Beyond were two summits which were evidently our objective. Working slowly along the rotten and in some places extremely narrow ridge, one moving at a time, we came to a point about one hundred yards from the end of the ridge. Here Edward looked ahead, called back that the thing looked "no good" to him, cautioned us to anchor well and crept gingerly along, sometimes on top and then on the east side, gripping the crest with his left arm and reaching ahead for hand holds with his right. The eighty-foot rope was none too long, so it was necessary for Morton and me to follow along on to this narrow and shaky bit before Edward could firmly secure himself. The ridge in cross section, was not more than six to twelve inches thick, for at least three feet from the top, and the gray limestone was of such extreme rottenness that a good shove might easily have caused a section to fall out and go either straight down about four hundred feet on the west or a little less straight but at least five times as far on the east. Edward called back when he had reached a more secure position, that it would make a fine picture, but my camera being inside my rucksack, I did not accept this suggestion very enthusiastically and so lost a chance to get the type of picture for which Abraham is so deservedly famous. With Edward well anchored, I moved up to Morton, who was in the middle of the rope. He advanced to Edward, I came on and the difficult bit was over. It had taken forty minutes to do about forty yards, but there remained little farther to go and after a short scramble we reached the central summit of Mt. French, (10,610 ft.) at 10.30 a.m. An easterly peak of almost exactly the same height was easily reached by Edward in a few more minutes, where he put up a small cairn. While I took photographs, Morton started building a cairn or eating the lunch, I do not remember which. Edward returned and finished the



South Ridge Of Mt. French. Photo, H.S. Hall Jr.

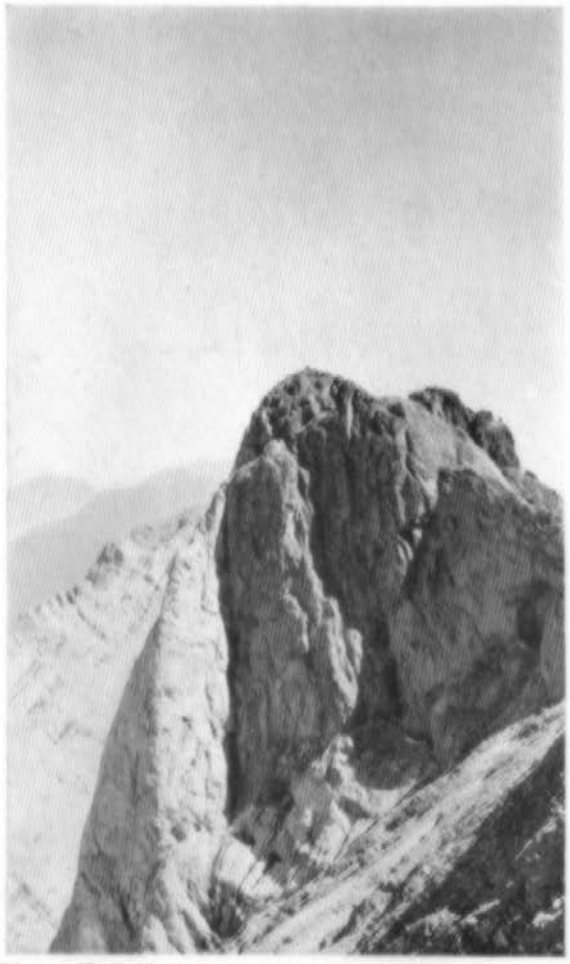


Haig Glacier At 9,000 Ft. Photo, H.S. Hall, Jr.

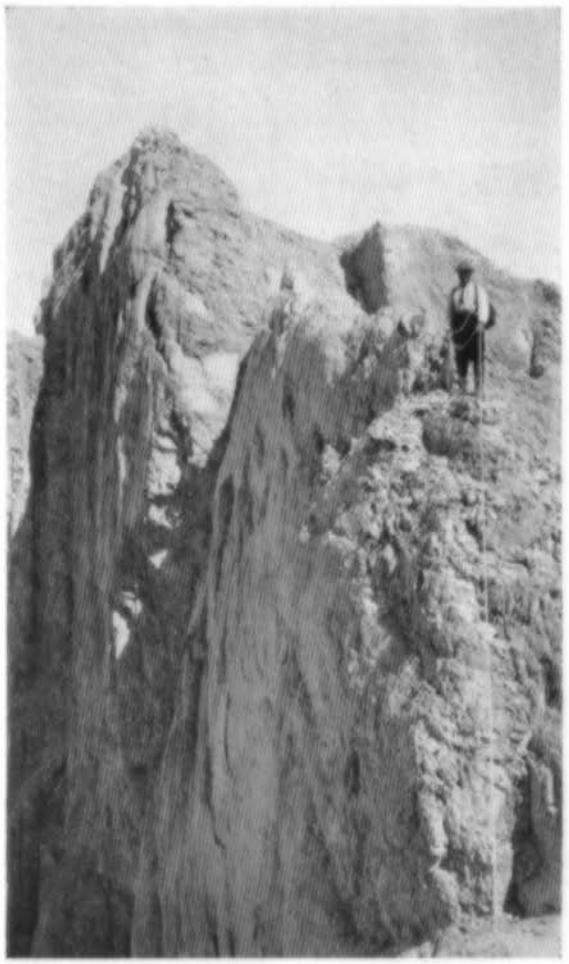
cairn and most of the lunch, so I was soon compelled to desist from the view and save my share. With all due respect to the Swiss guide and a profound appreciation of his merits, it must be said that he has a great weakness for hurrying down altogether too soon, I parleyed for time and finally got him interested through the glasses with the east face of Sir Douglas. A black, low lying smoke screen from forest fires further west, cut off the Selkirks, but the Lake Louise Group was visible, the Assiniboine Group, Royal Group, French Military Group, and probably the plains to the east, though we were not unanimous on the latter point. Beyond Joffre and slightly to the westward are one or two peaks which must be well up in the ten thousands, if not eleven thousand feet in height, but they are evidently well west of the Divide and so would not come within the area of the International Boundary Survey. Mt. Robertson appeared nothing more than a scree pile from here, so it was decided to do it on the way back in order to have a closer look at Sir Douglas from this side.

After depositing the usual record in a Players Navy Cut tobacco tin, we left the summit at 11.30 a m., negotiated the narrow bit without undue delay, passed over the southwest peak and struck down an easy scree slope towards Haig Glacier. The glare on the névé was intense in the middle of the day, and we were glad to reach the rocks of Robertson after passing a curious trough sixty feet deep and one hundred feet wide cut between the glacier and cliff, as it rounds the lowest shoulder of the mountain. This unusual formation aroused our curiosity considerably, but we could think of no other explanation than the persistent suction of wind currents passing through the narrow gap between Robertson and French and the effect of the hot sun striking directly on the rocks for hours each day. Robertson is a crumbling mass and not attractive to climb upon. We worked up three or four hundred feet to the east ridge, followed it for one hundred yards, came upon a vertical barrier which would have necessitated considerable detour, looked at our watches, noting the flight of time, and decided to beat a retreat to camp. Soft walking, punctuated by unexpected pools of concealed slush marked our progress back over the glacier as far as the clean ice which was a little better. Where this morning there had been hard ice, were now dozens of little rivulets and the whole surface glistened with running water. In place of the rather modest little sub-glacial stream of earlier in the day, we now found a boiling torrent pouring from beneath the ice and were fortunate in being able to cross it before stepping off the ice snout. Prospects of a demonstration from Rink, of his varied attainments in the culinary art, caused us to run down the last grass slope through a fringe of woods and into camp with hungry countenances which might have discouraged one less versatile than he. Bannock, bacon, beans, flapjacks, jam and coffee never disappeared faster than on that lovely August evening as the sun drew close to the pass above Lake Maude and the long dark shadows stole down from the peaks above.

Our time was now limited to four days before it would be necessary to reach Banff, so we started the next morning on the sixty-mile return journey, by way of the Kananaskis Lakes and Mud Lake. The horses took to the home trail during the night, in spite of the hobbles, but were detected by the sound of their bells in the morning at the further end of Lawson Lake, driven back and packed with only an hour's delay—Rink was not quite so optimistic as to expect that, when we failed to hear the familiar tinkle at breakfast. Following a good trail, obliterated in one place by a recent avalanche, Morton and I were soon at the first of the five fords of the Kananaskis River which occur before reaching Kananaskis Lake. While we discussed means of getting across safely without a horse, the outfit overtook us and the welcome ferry was used to save an undesired wetting. Lyautey Glacier, emerging from its picturesque cirque to descend into the dark green woods below, is in sight until the river turns sharply to the east. Thence only the well forested



Twin Summits Of Mt. French. Photos, H.S. Hall, Jr.
Our Cairns From South Peak.



Ridge Below West Summit.
Point Shown By Arrow In Opposite Picture.

parallel limestone ridges of the Spray Range are seen for the next few hours. By three o'clock the beautiful Upper Kananaskis Lake, dotted with wooded islands, was reached. Threatening clouds and a heaviness in the air caused us to press on to the Lower Lake, where we arrived just in time to put up the tent again as the storm broke (12 miles). This time the wind was worse than the rain, but by late suppertime the sky had cleared and the ridges beyond the lake faded into a deep purple light. Yodels of exuberance from one of us brought an answering shout from the opposite shore half a mile away. From there to Banff, the scenery is rather commonplace, except for an occasional view of the higher peaks in the distance for a few miles after passing Mud Lake, where we camped the next night (19 miles). Forest fire smoke had now drifted in from the west, hiding, or causing to loom indistinctly through the blue haze, the higher peaks, so photography was out of the question. From Mud Lake, the north shoulder of French is visible up French Creek, and two or three miles beyond, a final close view is obtained of Birdwood and Smuts, which appear no less formidable here than from the south and west. The last night was spent at Fishing Camp of the Walking Tour (14 miles) at the lower end of Upper Spray Lake, where Edward had hard luck with a trout large enough to have provided a good supper for all of us. I saw the fish lying on the bottom and called to Edward to come down prepared to take our supper back to camp. With an improvised tackle, he coaxed the fish near him, hooked it, swung it high out of the water and held it aloft, when all of a sudden the wriggling beast jumped off the line, dropped to the ground, made two or three tremendous bounds into the water, and was gone! I scarcely think Edward will ever fully recover from the shock!

Over a well worn trail, the same one used on the outward trip, we walked the remaining twenty-three miles to Banff in about seven hours the following day, arriving in the rain, but highly pleased with the outcome of our trip and grateful to Mr. Wheeler and the Walking Tour for the excellent accommodation at their camps, and particularly for the first-rate packer and outfit supplied us on very short notice.

Traverse Of Terrapin, And Descent Of West Ridge Of Magog.

E. O. Wheeler.

On July 27th, 1920, a party consisting of A. H. MacCarthy, L. H. Lindsay, and the writer, set out from the Assiniboine Camp to make a circuit of Mts. Towers, Terrapin, and Magog, if possible, or at any rate to prospect the best routes for climbing those and other convenient peaks during the forthcoming Camp. Beyond that, we had no very definite idea for making a climb.

We crossed Wonder Pass and skirted more or less level to the west along the slopes of Mt. Towers. From here we could see that we should have a choice of extremely hard work, in descent and ascent, or what might prove an impossible traverse, to skirt Mt. Terrapin on the south. So we decided to keep up to the col between Mt. Terrapin and the long ridge leading to Naiset Point, to see whether we could get over the top of Terrapin to Magog.

Some hot scrambling over scree brought us to the col. Here we put on the rope, and with MacCarthy leading, descended a few feet to a steepish ice-filled couloir on the north face of Terrapin. At first we were able to scramble upwards, partly on cold wet rock and partly on ice and snow; but soon the angle became steeper and the couloir narrower, and MacCarthy was forced to cut a good many steps. I expect he found it warm work—personally I found it unpleasantly cold watching him and dodging pebbles and bits of ice! However we reached the top at length, and were

Part Of The Assiniboine Group From The N.W.

glad to get out on to the steep sunny slabs which forms the west wall of the couloir at the top.

We ascended the slabs a few feet and then traversed out to the north on a narrow ledge, and so round the corner on to the north face. Here the ledge widened and soon became a scree slope up which we zig-zagged to the top of Terrapin—a first ascent. It was comfortable and warm at the summit and the view was excellent; but time was getting on; so, after a hurried lunch, we "slopped" down the scree to the col between Terrapin and Magog.

The icefall between Magog and Terrapin, which leads to the lake, looked uninviting and we should not have seen much of the mountain had we gone that way. It was clearly impossible to skirt Magog on the south without making a considerable descent; so the only alternative seemed to be to go over the top, or at any rate over a shoulder of it, and down to the glacier between Magog and Assiniboine.

Personally, I was somewhat doubtful about getting up to the shoulder from where we were, but MacCarthy was confident it could be done and led off. We went up gradually narrowing ledges for one hundred feet or so, to the bottom of a very steep eighty-foot crack. Hand and footholds were most minute and, as I discovered when it was my turn to go up, were situated in the most uncomfortable positions possible. However, after some twenty minutes' strenuous work, MacCarthy disappeared over the top and shortly afterwards called down that he was well anchored and that it looked all right ahead. So the axes and sacks were hauled up and Lindsay and I followed one at a time. Our eighty feet of rope just reached. I don't think either of us went up quite like the ice-axes, but I for one was very glad indeed that I had the rope on and a strong man holding the top end of it. This pitch was afterwards dubbed "The Golden Stairs".

After a short breather we went to the shoulder southeast of the final peak of Magog, without meeting any serious difficulty; thence, across the hanging glacier at the top, to near the summit of the mountain. No cairn was visible so, as we had already bagged one first ascent that day, we skirted the final peak on the northwest, and, gaining the west ridge a little below it, started down.

The ridge drops abruptly to the col between Magog and Assiniboine. The rock, however, is excellent, and always gave a choice of moving on the ridge itself or slightly to one side of it; so, although we had to move one at a time, we made good time down. Here again I was very glad to have MacCarthy on the end of the rope above me, for in places the slope nearly approached the vertical.

At the foot of the ridge we stopped by a tiny drip of water to eat a sandwich and a bit of chocolate, and then made all speed for camp, following the usual Magog route over the glacier under Mt. Assiniboine to the top of the waterfall; and thence, down the cliffs close to the waterfall, to Lake Magog and so to camp.

The expedition made a most delightful day. I found a good deal of the climbing difficult and some of it very difficult; possibly it seemed worse to me, being my first real climb for some years. However that may be, Lindsay and I owe MacCarthy our best thanks for a most interesting climb.

The First Ascent Of Mt. Sturdee

By W. W. Foster.

The pamphlet issued as a guide to those interested in the 1920 Camp of the Alpine Club of Canada listed Mt. Sturdee (10,300 ft.) as an unclimbed peak. With the exception of Lunette Peak,

Mt. Sturdee from Wedgwood Col. Photo, P. S. Thompson

Mt. Sturdee from Assiniboine Col. Photo, P. S. Thompson

which is an outlier of Mt. Assiniboine itself, Mts. Sturdee and Magog are the nearest peaks to the Matterhorn of the Rockies, but, whereas Magog lying northeast of the Assiniboine massif is known by sight to all and in a more intimate way to most of those fortunate enough to attend the Reunion Camp, Sturdee on the southwest flank is comparatively a stranger.

On the evening of August 1st one of the notices issued by Major E. O. Wheeler, in charge of climbing, read:

"Mt. Sturdee (1st ascent):
Party: Captain P. S. Thompson,
Mrs. P. S. Thompson,
Mr. E. L. T. Taylor,
Lt.-Col. W. W. Foster—Guide."

—with the result that at 4 o'clock on the following morning, beneath a cloudless sky, this party moved off in the half-light from the camping ground, traversed the shore of Lake Magog, and ascended the rock face rising from the lake to the Assiniboine Glacier, the route so far being that usually followed in approaching Mts. Magog and Assiniboine.

Once upon the glacier a direct line was made for the col connecting the massif of Assiniboine with the Wedgwood-Marshall group and usually referred to as the Wedgwood Col.

Approaching this col occasional glimpses could be obtained of the summit of Mt. Sturdee until, the ridge of the col being reached, Sturdee, across the valley beyond, stood out in full view—a rugged peak approached by sharp and deeply indented arêtes.

From Wedgwood Col Mt. Sturdee was reconnoitered by the aid of powerful glasses and, after due discussion, a decision was reached to cross the glacier filling the valley between Sturdee and the Assiniboine. There was an obvious alternative in the ascent by the west arête but, being longer and with time an important factor, the east arête was selected.

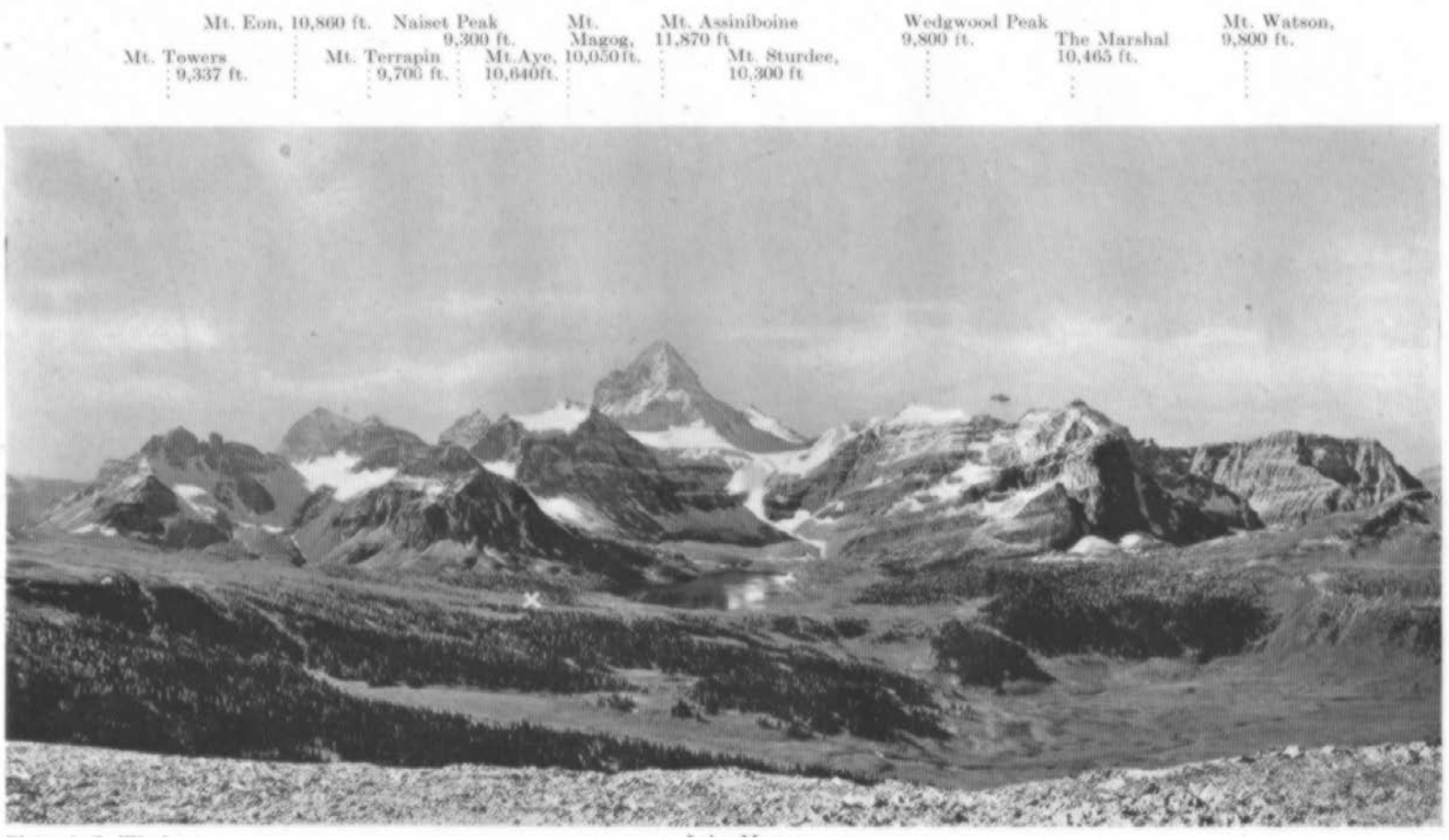
An ascent to the Sturdee-Assiniboine Col presents little difficulty. There is a fairly steep ice face to negotiate which is chiefly covered by deep snow and also an opportunity to use the rock ledges on the Sturdee side.

The col was reached at nine o'clock and a halt made for refreshment beside a pool of melting snow and ice.

A few minutes later the real climb commenced, its interest tremendously accentuated by the knowledge that every step was over ground hitherto immune from human intrusion.

Some very fair climbing, short sections of which had decidedly good rock, occupied the first period. It was followed by the choice of a somewhat strenuous chimney or a steep snow field; owing to the condition of the snow, soft and possibly liable to slide, it was decided to keep upon the rock.

Another hour, and a little beauty spot was disclosed in a tiny lakelet formed by the melting snow lying in a depression between two of the sharp pinnacles of which the arête is composed. From this miniature lake in the clouds there is a short but really good climb entirely on rock. It terminates with the rather spectacular alternative of emerging upon the summit from a chimney with a forbidding overhang to the valley below, or of utilizing a cleft rock with a 30 to 35 foot crack of very meagre width; however, by discarding haversacks, the crack was just wide enough to permit working up between its perpendicular walls to the actual summit, a little plateau of decomposing rock. It is not within the province of this memo to attempt a description of the incomparable majesty and beauty disclosed from the summit of one of the major peaks. Only those who have been privileged to let the eye roam across countless mountains, glaciers, snowfields and



Central Portion Of Mt. Assiniboine Park, Showing The Assiniboine Group. Photo, A.O. Wheeler
Site of Camp Assiniboine shown by white cross.

valleys containing lakes and woods, and see the gorgeous colouring and attendant beauty of it all can realize what the summit of a peak gives in return for its capture.

Having built the traditional cairn with extreme care that it should be quite high enough and also well in view of the party making the ascent of Mt. Marshall, who could be plainly seen upon the skyline nearing their destination, the descent commenced, following, with enough variation to obtain a little glissading, the upward route. At four o'clock the Wedgwood Col was reached and an hour later the party was enjoying (?) the shower with which the waterfall from Assiniboine Glacier, augmented by the heat of the day, invariably greeted the homeward bound climber descending the steep cliffs from the glacier to Lake Magog.

At 7 o'clock the Camp was reached, and another peak officially added to the conquests of the Alpine Club of Canada.

Of Mt. Sturdee it can always be said that it will always be a fascinating, although not strenuous climb. It provides a variety of work, some ice and snow, and, although not good, the rock is much firmer than that encountered upon the majority of peaks in the vicinity; whilst the striking outlines of the peak itself, a huge rocky backbone, sharp pinnacles its vertebrae, will always ensure Sturdee being classified as one of the distinctive features of the Assiniboine group. . . .

First Ascent Of Mt. "Fifi"

By L. S. Crosby.

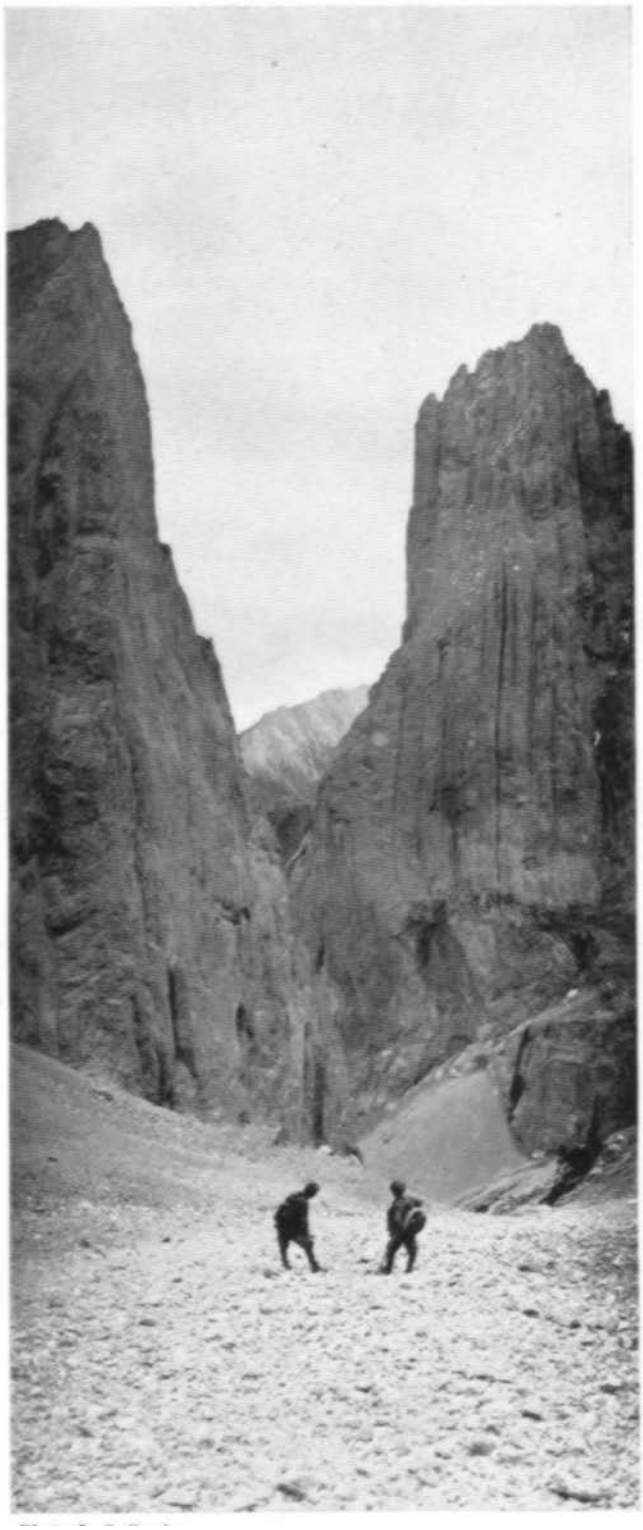
It was the beautiful afternoon of September 4th, 1921, that Dr. J. W. A. Hickson, Edouard Feuz and the writer left Banff on saddle horses to find a camp site somewhere up Fortymile Creek as near the foot of Fifi[13] as possible.

We made good time along the motor road, and about half way up Mt. Edith Pass overtook Ray Lagacé, who had left town an hour before us with the two pack horses carrying our outfit. At the summit we obtained a fine view of Edith, Louis, and Fifi, in silhouette, against the rays of the setting sun. It must be from ignorance alone that the many tourists who make riding excursions in the vicinity of Banff, do not reach the cool recesses of Edith Pass more frequently. The view from the summit, which has an elevation of 1800ft above the Bow River Valley, well repays one for so easy a climb.

At 5 p. m. we reached a point well up Fortymile Creek just where the shadow of Fifi spread across the valley. Here we pitched camp in a nice clump of green timber, a little to the left of the main trail, and a mile beyond the regular camping ground. Immediately after locating our camp ground the Doctor produced his binoculars, and he and Edouard "glassed" the mountain in the fading light, but no route to the summit could be discovered either on the north or east faces. After a hearty supper and the usual chat around the open fire, we turned in and enjoyed a good sleep. The call to "show a leg" came at 5.30, and at 6.20 we were on our way to make our first acquaintance with Fifi.

The weather looked very uncertain and snow clouds could be seen hovering around the peaks, only a few miles to the westward; fairly good breaks occurred overhead, however, so we decided to take our chances. A convenient log-jam bridged the creek just at our camp and in a few minutes we were ascending the ridge to the west of the draw separating Louis and Fifi. Some fallen timber was encountered, but on the whole the going was easy and we soon reached the entrance

13 Elevation about 8,500 ft. Name not yet confirmed by Geographic Board.



Mts. Fifi And Louis Looking East From Amphitheatre. Photo, L.S. Crosby

Mt. Louis From Summit Of Mt. Fifi. Photo, L.S. Crosby
South Tower Of Mt. Fifi In Foreground.

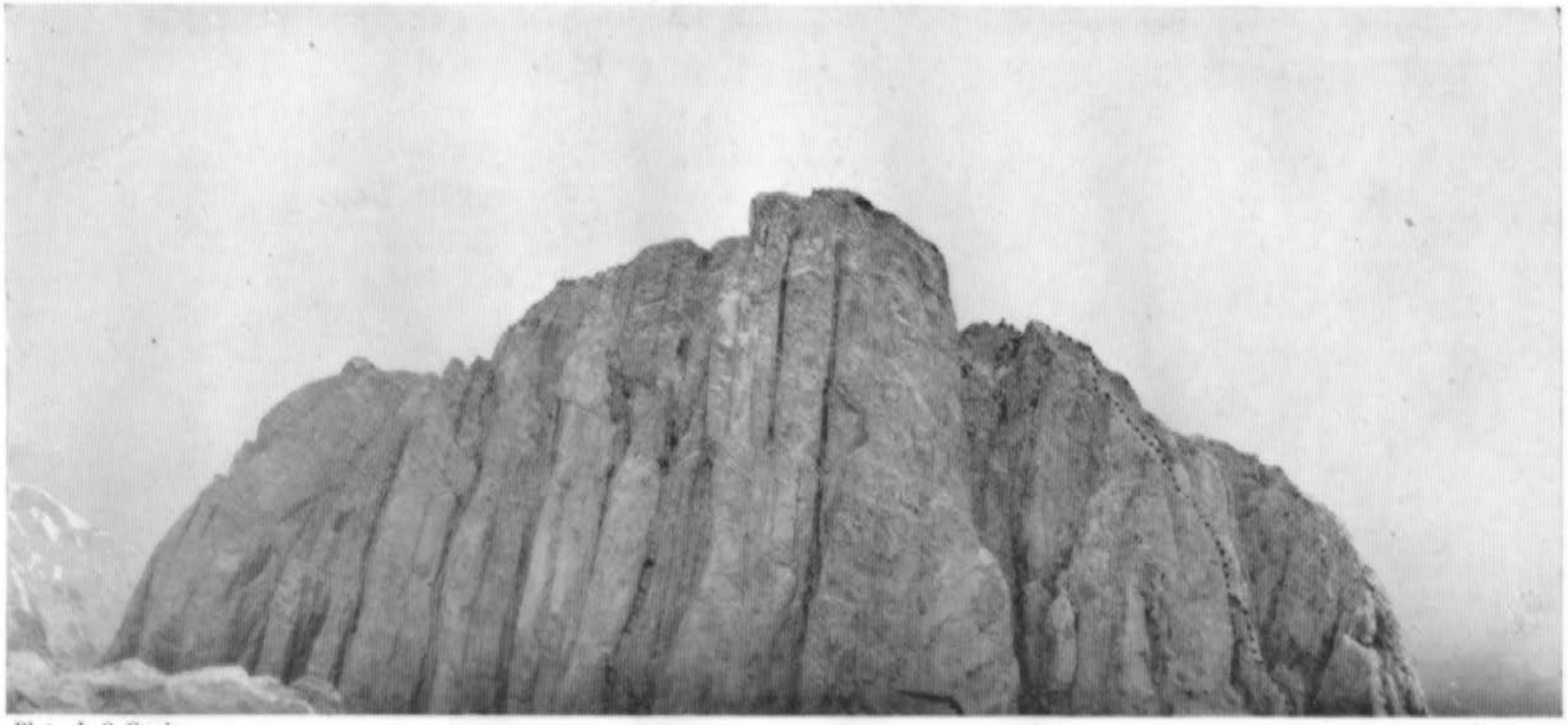
of the wide couloir at the base of the two peaks. After proceeding up the couloir a few hundred yards, we halted to "glass" the southeastern side of the mountain, but no feasible route could be discovered on this face, which was practically perpendicular and offered no suitable cracks for an ascent. The sun shone on the top of the peak for a moment and our attention was directed to its peculiar broken summit. It appeared to be divided by a gulch running deep into the mountain from the southwest. Hoping that this would offer a possible way to the top, we decided to explore it by following up the couloir into the amphitheatre nestled between the peaks at an altitude of 7,000 feet. The view of Mt. Louis from this point was most impressive, standing up as it does like a glorified Rheims Cathedral with 1,500 feet spires. From where we stood the most northerly slab of Louis shows an overhang of several degrees running up to 500 or 600 ft. from the base; from thence it continues almost perpendicularly to the top.

Leaving the orchestra of our gigantic theatre, we worked our way well around to the south of Fifi, and after a thirty-minute scramble over some good rock, reached the balcony. The view from here was the most impressive of the whole climb and I did not fail to make use of my camera, although the light was none too good. As hoped, we found a narrow couloir running deep into the mountain from the south and at right angles to the perpendicular stratified slabs of which the whole peak is composed. Here we erred by climbing slightly too high up the ridge leading to the saddle between Fifi and the main part of the range. We could now see that the couloir divided the mountain into two peaks. After a few minutes rest we retraced our steps a short distance, and descended some 300 feet to the scree slope which here fills the main couloir.

After a light lunch we commenced the real climb at 9.50. We left our ice axes and put on the rope. The way not appearing overly difficult we still retained our nailed boots. From this point to the saddle it was rendered somewhat hazardous owing to the falling of small stones from the cliffs above. We found the rocks became very rotten near the top of the couloir and great care had to be exercised in finding hand and foot holds, one man only moved at a time, the other two seeking protection as best they could on some small shelf or under some conveniently overhanging rock. It was an education to watch Feuz pick out the line of ascent and surmount difficulties which would baffle the amateur. We reached the notch or saddle in about forty minutes.

Not until we reached this point did we realize how nearly the couloir we had just ascended comes to separating the two peaks to a much greater depth. The saddle itself is a knife edge only a few inches thick, and to sit astride it, with the great chasm of the almost vertical couloir several hundred feet to the bottom on one hand and the 1,500 foot sheer drop of the north face on the other, was sufficient to give us all a thrill which can better be imagined than described.

It was impossible to determine with certainty from the notch which was the higher of the two peaks. The day being young, however, and everything having gone successfully so far, we decided to leave the trace of human endeavour on both. The weather was now anything but agreeable, at times the clouds preventing us from observing any terra firma other than Fifi itself. Feuz essayed the easterly peak first and only two difficult corners varied the climb from the ordinary. A few minutes were spent erecting a stone man, and in allowing me to take a few pictures, when the clouds were obliging enough to break. The view of Louis was splendid and a fine gendarme stood out very pronounced from its north face; even the Doctor and Edouard, "old stagers" at the game that they are, could not refrain from a profusion of adjectives. We could now plainly see that the Western Tower was the higher by at least 50 feet, so we cautiously retraced our steps to the saddle and started for the real summit. The climbing was not difficult for the first 50 or 60 feet from the saddle, but the next hundred presented the only real difficulty of the day, and here it would have



North Tower Of Mt. Fifi Showing Route From Saddle. Photo, L.S. Crosby

been an advantage to have put on our rubber shoes. We did not, however, as the weather looked worse than at any time during the day, and we did not care to waste any time. It took Edouard a considerable time to negotiate a very smooth face of fifteen feet and a little later a thirty-foot rib, which the Doctor christened "Fifi's Nose."

This over, the rest was easy, and we stepped on top at 10.50 highly delighted with our climb, myself probably most of all, because it was my first ascent of a hitherto unclimbed peak. The weather now cleared a bit and we basked in the sun for half an hour before starting upon the descent. It was gratifying to learn from the Doctor that descending precarious places was as distasteful to him as to me, and there was comfort in the fact that I had a co-labourer in misery. I must admit that the only part of mountain climbing that I don't enjoy is climbing down, and I agree with an early contributor in our journal, who remarked that; "It is easy for the feet to follow the hands, but not so when the hands must follow the feet."

We managed to get to the bridge of Fifi's Nose, myself leading, the Doctor next, and Edouard always being well anchored until we came to a halt. We bunched up there in order that Edouard could come down and put a roping-off loop over the rib. The rock was very rotten, and we had no trouble in tearing a hole in the rib a foot deep into which we placed the loop and running our spare rope through the ring, which Edouard very wisely brought along, found it sufficiently long when doubled to allow us to reach the ledge below. The additional confidence which this second rope gave descending, made this part of the descent, for me at least, a real pleasure. The saddle was reached at 1.50 p.m. The descent down the couloir was somewhat tedious, and here the Doctor had the misfortune to be struck on the back with a large stone. While it sounded as if a few of his ribs might have been broken, he luckily got off with a bruise.

It took about forty minutes to reach the main couloir where we unroped and ran down over the scree into the amphitheatre and on to camp which we reached at 3.30. There we had supper, packed up, and were on our way to Banff at 5.15, arriving at 8.10.

Distant pastures do not look so green now, and I am convinced that the most ardent mountaineer who may visit Banff, can find ample opportunity to gratify his or her desire, by scrambling over the many interesting dolomites of the Sawback Range.

Traverse Of Terrapin And Magog

By F. N. Waterman.

Ambition was temporarily satisfied. The objective of years, for some of us at least, has been attained. We had climbed Mt. Assiniboine and, exceeding our fondest hopes, had made the ascent by the northerly arête, which, our reading had led us to believe, had been reserved by nature for the favored few—the super-climbers. We had, too, enjoyed the wonders of an approach to the cliffs beside the icefall in the dark shadow of Wedgwood Peak, with our mountain and the glacier at its foot bathed in the soft light of the setting moon. We had witnessed the beauties of the alpine glow as the gray rock of the mountain was tipped with the pink light of approaching day. We had seen this color brighten and creep down the rocky precipices of the eastern face and give way to gold, and the reflected light chase away the deep gloom of the valley, to usher in a never-to-be-forgotten day. Why then should there not have been a sense of ambition satisfied?

When, therefore ,on the succeeding day Mr. MacCarthy confided to Dr. Gilmour and the writer that he had a "real trip" for us, if we cared to join him on the following morning, the first

impression was a sense of shock, as of awakening from a dream, as we uncomprehendingly but gladly accepted his invitation.

What the nature of this trip might be or in what direction it was to take us we did not know, but as we speculated about it from our sleeping bags that night, we agreed that if by contrast to what we had already enjoyed this was to be a real trip, it was certainly something to be anticipated with emotion. Events proved that the only injustice our imaginations had done it was that of underestimation. We went to sleep, however, with the reflection that it had one great point in its favour—we did not have to start until six o'clock.

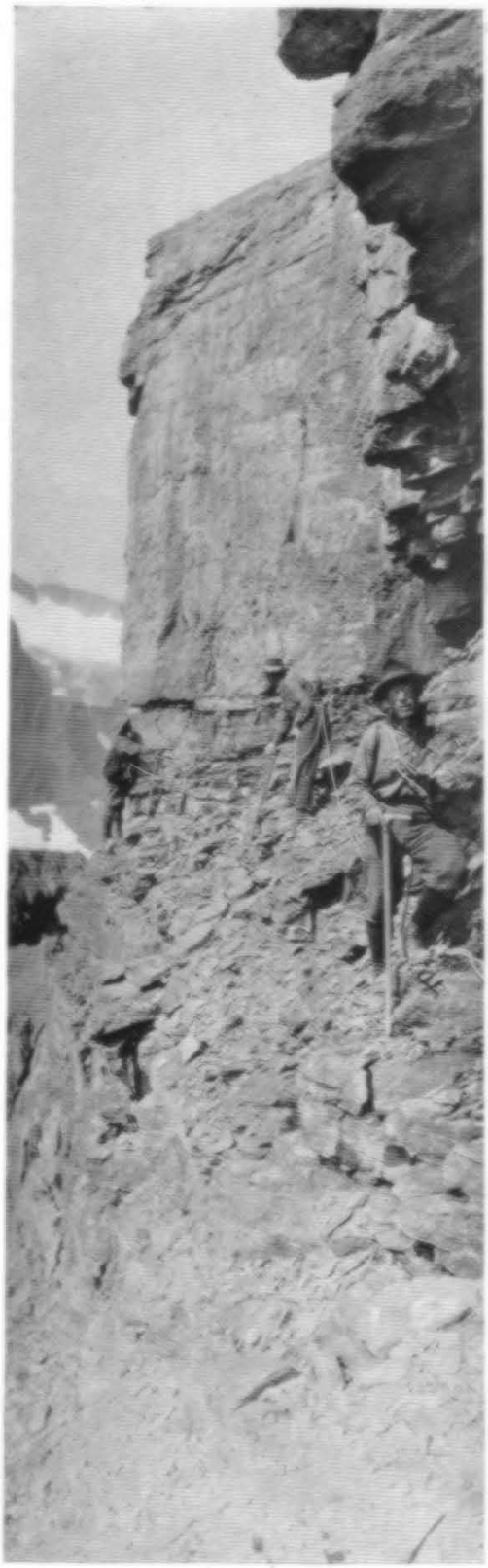
That the cook overslept and refused to get up when finally called, that there were no lunches prepared for us, and that only the foresight of Mr. MacCarthy and Dr. Wakefield in waking up ahead of time enabled us to make the trip at all, must account for the fact that it was 6:23 when our party of four, Dr. Wakefield being the welcome fourth member, began working its way up the slopes of Mt. Naiset immediately back of camp. The writer can testify for one member of the party that physical laziness, euphemistically disguised as "mountain lassitude, was in evidence, and that it was fortunate that the climbing was easy for the first thirty minutes.

Scree and rock slide then gave way to cliffs of very rotten rock, which afforded us about two hours of varied climbing before we reached the highest summit at 9:45, where we were glad of our second breakfast, particularly in view of the hurried character of the first.

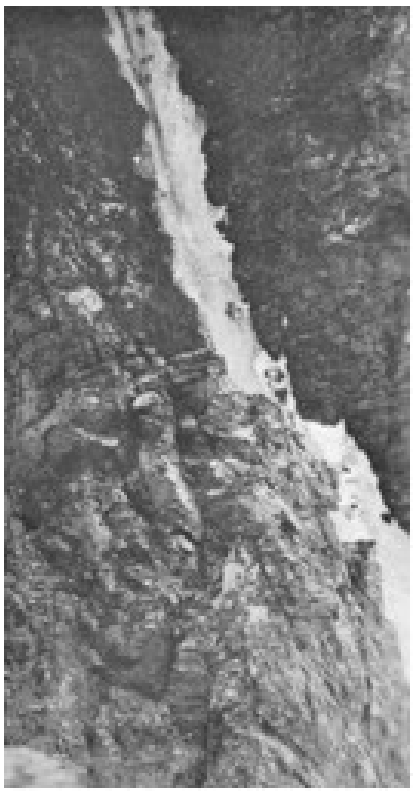
Mt. Naiset is a deceptive mountain. Far from being a single peak, as appears from casual inspection from below, it is a long and badly broken ridge intercepted by steep couloirs, with many fine vertical rock walls. Thus the traverse consumed considerable time. The turning of one corner, at the top of a deep couloir, gave us some excitement and we felt that the situation justified a photograph. Acting with haste on account of the exposed position occupied by Dr. Wakefield, one of the party laid his rucksack on a slope above the couloir. He was just reaching for it to resume the climb when the sack, apparently without cause, suddenly took life and started down the couloir in leaps of ever increasing length, only to stop some four or five hundred feet below. During the descent an aluminum drinking cup came out of the sack and the clinking sound of its contact with the rocks sent back wireless reports of its progress. It was interesting to note that the transmission was not perfect, and that, after seemingly long periods of silence, the sound would again be faintly heard, as the cup reached some spot favorable to "whispering gallery" transmission of the sound waves.

We felt that we had food enough without the lunch the sack contained—which later proved a false prophecy—but the loss of a sweater was serious. Before we had fairly divined his intent, our leader was gliding down the shale slope in another branch of the couloir followed by a shower of rocks of alarming proportions, which necessitated his seeking refuge to escape injury. We finally saw him reach the rucksack, lodged in front of a large stone, then turn to ascend and disappear behind a large cliff. We watched with interest for signs of his progress, for the struggle up the couloir was certain to be trying, but neither sound nor falling stone indicated his presence. We were beginning to be concerned for his safety, fearing that he might have been hit in the rock shower, when he suddenly appeared over the top of a cliff just above us. We agreed that in ascending the very loose and unsound cliffs, he had not dislodged a single bit of rock large enough to attract our attention.

The sweater and a part of the lunch were recovered, including some "lollypops" and maple fudge which had been donated for the trip by two of the ladies, but the cup remained to contribute to the mineral wealth of the mountain. We were all grateful, later, that the candy had



Turning Corner On Naiset Peak. Photo, F.N. Waterman



The Ice Couloir on Mt. Terrapin. Photo, D.J.M. McGeary

Cliffs Above Ice Couloir Between The Fin And Main Mass. Photo, A.H. Wakefield

Top Of Ice Couloir And Fin Of Mt. Terrapin. Photo, D.J.M. McGeary

Climbing The Golden Stairs. Photo, A.H. Wakefield

been recovered.

The remaining small peak of Naiset was soon behind us and we arrived at a long, practically level rock wall connecting Naiset with the "head" of the Terrapin, where the accompanying panoramic photo was secured. Here Mts. Terrapin and Magog were in clear view, and for the first time our route was indicated for us by our leader. We found that we were to repeat the traverse of these peaks which had been previously made by Messrs. MacCarthy, Wheeler and Lindsay, including the ascent of the seemingly vertical ice couloir, which had frequently been seen from the valley, the perpendicular cliffs above it, and the equally impossible looking east wall of Mt. Magog. Mr. McGeary on another occasion secured some excellent photographs of the ice couloir which are here reproduced, through his courtesy.

After an interesting traverse of the "head" of the Terrapin, losing on the way the party's single remaining drinking cup, we descended the rock slope leading to the "fin", an impressive double spired gendarme forming the easterly wall of the ice couloir.

A study of the couloir as we approached it, showed clearly that the only route to the top of the "body" or main massif of the mountain lay up the ice, as the rock walls on both sides were obviously impossible. The ice, which is evidently permanent, extends from the cleft between the fin and body in a gradually widening stream clear to the glacier below, a distance of perhaps 800 to 1000 feet. At the level which we first reached, it was some twelve or fourteen feet in width, tapering to four or five feet at the top. The angle was estimated, as accurately as possible, at 60° to 70°, or about the possible limit for negotiation without cutting hand holds in addition to steps, and indeed in one place the writer found it necessary to cut holds as well as to utilize rocks projecting through the ice accepted with some misgivings.

By ascending about forty feet on the fin and rounding a particularly awkward bulge, that much step cutting was avoided and a reasonably favourable approach to the ice was secured. The height, estimated by Mr. MacCarthy as 300 feet, required that at intervals all of us should be on the ice simultaneously for considerable periods of time, and the descent during one of these of a stone large enough to have caused serious results had it happened to hit one of us, did not add to our peace of mind. Two protruding rocks were utilized for foot holds, notwithstanding traditions to the contrary, and a single narrow ledge opportunely projecting from the cliff on the far side permitted an anchorage to be secured at the worst point.

The ice ended somewhat abruptly, and at the top a number of large rock fragments were found resting upon the ice or in the rock cleft. These were so located as to presumably tend to fall to the south if released, but this would depend upon the inclination of the top surface of the ice. In making this climb the top should be inspected as carefully as possible before ascending. If there should happen to be snow on the ice at the top or rock fragments seeming to overhang the edge of the ice, it would seem likely to be dangerous to undertake the climb.

The ascent occupied an hour and twenty minutes; the ice was hard and thoroughly sound, and to the usual pleasure afforded by flying ice chips was added the almost hypnotic fascination of watching them slide and leap down the steep rock-bounded ice chute on their speedy journey to the glacier—a diversion, however, which the writer soon found it unsafe to indulge in, when every nerve and muscle were imperatively demanded in maintaining a safe balance.

The cleft between the fin and the body is narrow, and the cliffs above steep, as may be judged from Dr. Wakefield's photograph. Perhaps their difficulty, as well as that of the horizontal traverse of 50 feet to the right along the upper cliffs was enhanced by the mental hazard of that fascinating chute of ice always in sight directly below. When the traverse ended in a corner which

had to be turned around an overhanging rock not designed to accommodate six feet of height, the writer involuntarily estimated how long it would take gravitation to bring him to the glacier. The sigh of relief which followed the discovery of a good safe ledge on the other side was spontaneous and genuine.

The actual top of the mountain, now only a little above us, was a mere shale pile, so we decided to forego the credit of an actual traverse of the ridge in favor of the much more interesting route along the ledges, which was practicable. We negotiated these as rapidly as possible, but it was 4:30 p.m. before we sat down on the lower slope of the ridge to study with our glasses the forbidding vertical and overhanging walls of Mt. Magog, before descending to the col.

On the north side of the col the walls everywhere overhung. On the south side they appeared either to overhang or be vertical, and although the total height was much less, they seemed equally impossible. The longer we studied these, the more evident it became that this was the real pièce de résistance of the trip.

Our leader finally pointed out, on the south side of the col, what at that distance appeared to be a horizontally streaked light colored stain on the gray rock, like narrow white treads and yellow risers—as though nature, in raillery, had painted a flight of steps, for our glasses told us that the cliff was substantially smooth. This appearance at once prompted Dr. Gilmour to suggest that we had truly come to the "Golden Stairs". We were told that this indeed marked our route and that, while possible, it was difficult, but that there appeared to be no other.

To reach this part of the rock face it was necessary to descend some distance below the col on the south side and traverse around a considerable pinnacle before reaching a narrow shelf which was to afford us our point of departure up the cliffs. At this point the overhanging cliffs of gray rock, constituting the predominant rock of the eastern face, terminate in a wall overhanging to the south, and a relatively narrow slab of yellow rock adjoins, which is not quite vertical. It was this which had appeared from the distance as a stain on the gray rock.

This yellow rock was of an entirely different texture from the main cliff, appearing to be a fragile, low grade limestone, without evidence of stratification, and devoid of adequate holds for long distances. It was separated from the gray rock by a narrow, back angle crack which, for the first twenty-five or thirty feet, barely permitted the insertion of the fingers. This crack represented the faulty junction of the two kinds of rock. It inclined slightly to the south, at an angle of about fifteen degrees from the vertical, corresponding to the southerly overhang of the gray rock.

The face of the yellow rock stood at an incline of 80°, as estimated by using the ice axe as a plumb line, this angle continuing for about twenty feet, and in this distance, nothing but light friction footholds existed. At about this level a narrow but secure foothold was found. The remaining 60 feet up to the first ledge was slightly less perpendicular, except for one short vertical wall, and it also furnished two or three foot holds, which permitted a balanced stance, and thus afforded temporary relief to the arms.

At the top of this 80 foot wall was a small shelf with an excellent anchorage and foot brace, once it was reached, so that for those who followed, there was no danger. For the leader, it presented an extremely difficult problem, not by any means devoid of danger, for, in addition to the difficulties due to steepness and absence of hold, the yellow rock terminated at the crack in an acute angle, and thus was thin as well as brittle. This made careful testing of every hold essential. In addition, it was often necessary to clear the crack of small stones before any hold at all was possible. Balanced climbing was, in general, impossible, and the fingers were called upon to carry a considerable part of the climber's weight.

Mr. MacCarthy not only made the climb, but took his ice axe with him in his hands without using a sling. His steady progress and aggressive and confident attack were striking, but not more so than his inherently cautious and safe method, and afforded to us, who watched him, the highest evidence of his skill and strength. It was a perfect example of the art of cliff climbing in its most highly developed form. While Mr. MacCarthy was ascending the cliff Dr. Wakefield climbed a short distance up the adjoining pinnacle and secured the accompanying photograph which, though necessarily very much foreshortened, gives a general idea of the situation. As shown in the photograph, Mr. MacCarthy was able, in some places, to fasten the ice axe securely in the crack above him, thus leaving both hands free for some of the more difficult places.

Above the shelf mentioned there were broken slabs for about twenty feet, which led us to a chimney, eighty feet in height, and quite irregular and broken. The entrance to this presented some difficulty, and it afforded interesting climbing throughout. From here to the ice cap was easy, so that we made good time, and there was need of haste.

Up to this time the weather had been all that could be asked, but as we came on to the large hanging glacier which occupies the crater-like basin at the top of the mountain, like a white filling in a huge rock tooth, we noticed that the sky to the north was very black, and as we crossed the ice, rain was encountered, followed by snow.

In spite of haste, it was seven o'clock before we reached a little notch in the top ridge of Mt. Magog, and we realized that we should be compelled to abandon the thought of descending by the very interesting southerly arête followed by the former party.

We sat down in the notch to refresh ourselves with the remains of our lunches, and give the snow squall, which had enveloped us, an opportunity to pass. The wind was high and the cold penetrating on the mountain top, but the valley below us was experiencing a heavy thunder shower, and at one time as we ascended the ridge, our ice axes hissed and we feared the lightning was coming our way.

As the snow squall passed, we saw lightning strike in the valley a few miles away near Assiniboine Pass, and within three or four minutes, flames were rising from the spot. Before we reached so low an elevation that our view was cut off, a considerable area was in flames. We recalled the fact that the first of the season's fires, in that region, had been witnessed in its early stages by a Club party on Wonder Peak, and that it had been noted that it was in a region south of the Royal Group and southwest of the French Military Group, where it was regarded as extremely unlikely that any human being had been, particularly in view of the abnormal difficulties of travel, both of the season and the region. Thus evidence was added to that afforded by the starting of a fire by lightning-near Yoho Pass Camp in 1919, to indicate that perhaps forest fires are not so universally started by human agencies as has been supposed. It was probably this fire that we saw started which later imperiled the Assiniboine Camp.

The squall having passed, we lost no time in making our way down and succeeded in getting onto the snow at the foot of the final cliffs beside the icefall of the Assiniboine glacier just before darkness rendered their negotiation impossible. We thus, fortunately, escaped the fate of Mr. Fynn and Rudolph, who, a year before, had been compelled by darkness to bivouac in uncomfortably narrow quarters on these final cliffs within plain sight of their own camp fire.

Camp was reached at 10:10. The trip was one of sustained interest and afforded two unusual climbing features. It is certain that no member of the party will soon forget the ice couloir or those "Golden Stairs".

Mt. "Edmonton"[14]

By C. G. Wates

On Monday, July 26th, 1920, Dr. H. E. Bulyea, chairman of the Edmonton Section of the Alpine Club of Canada, invited me to share with him in an attack upon a yet unclimbed peak south of the Golden Valley Camp, where we were both staying en route to Mt. Assiniboine. My dunnage was already packed for leaving, but the prospect of a first ascent was too attractive to resist, so I gladly unrolled my blankets again and entered into a hurried discussion of plans with the Doctor.

The mountain we were about to tackle rises on the south side of the Simpson River Valley in the form of a long, snow-crested ridge, rather reminiscent of Mt. Victoria, although a thousand feet less in height. At the centre of the north face a steep, rugged arête juts out at right angles to the body of the mountain, dividing it into two amphitheatres, the more westerly of which contains a glacier fed by an exceptionally beautiful névé which runs up unbroken to the crest of the ridge, where it is corniced towards the north.

The most obvious route lay up a shoulder which rises just south of the camp, but a consideration of the formation common to the district led us to the belief that we should find this shoulder separated from the ridge by a deep notch. This objection, which was subsequently proved to be well founded, and the fact that progress on the shoulder would be greatly hampered by heavy brulé, resulted in an unanimous rejection of this route. The interior of the two cirques was invisible from the camp, but the cliffs above them appeared precipitous. The arête between them, however, we could see from base to summit and although steep seemed to offer no unsurmountable difficulties, with the possible exception of a tower some distance below the main ridge. But it is a well established mountaineering principle that difficulties commonly decrease as you approach them, so we chose the arête, and hoped that the tower might prove less formidable than it appeared.

Our party of four left Golden Valley Camp at 10:15, a late hour to commence a long climb. It included beside Dr. Bulyea and the writer, Miss M. Gold and Miss H. Clyde, both active members of the Edmonton Section. For an hour we followed the downward course of the Simpson River through dense forest and then, after crossing the torrent descending from the eastern cirque, we struck up the shoulder leading to the north arête. It was slow work fighting the way through the thick under¬brush and the temper, at least of one member of the party, was not materially improved by the loss of a valuable aneroid.

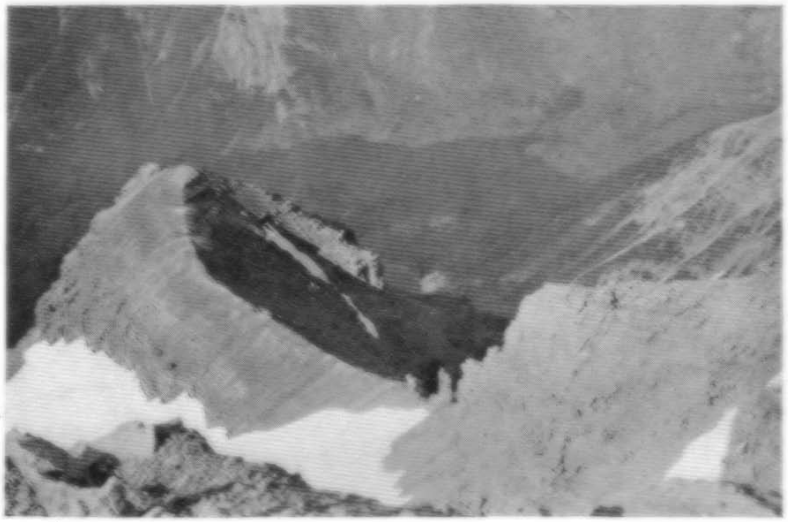
Tree line was reached at one o'clock and we lunched at the foot of the first rocks. Here, for the first time, we were able to look into the two great cirques. The one .to the east contained some snow, but the upper part terminated in smooth, vertical cliffs. In the western cirque lies the fine glacier, previously referred to, with its spotless snowfields, on the further side of which frowned sheer, black ramparts, forming a background in strong contrast to white, glistening tufts of spray from numerous waterfalls fed from the snows far above.

After lunch we roped and attacked the arête, which was good climbing, being narrow but solid. Two hours steady progress brought us to the foot of the great tower which rose like a donjon keep, about four hundred feet above our heads, completely barring the way, for to the right and left the cliffs fell sheer to the snowfields.

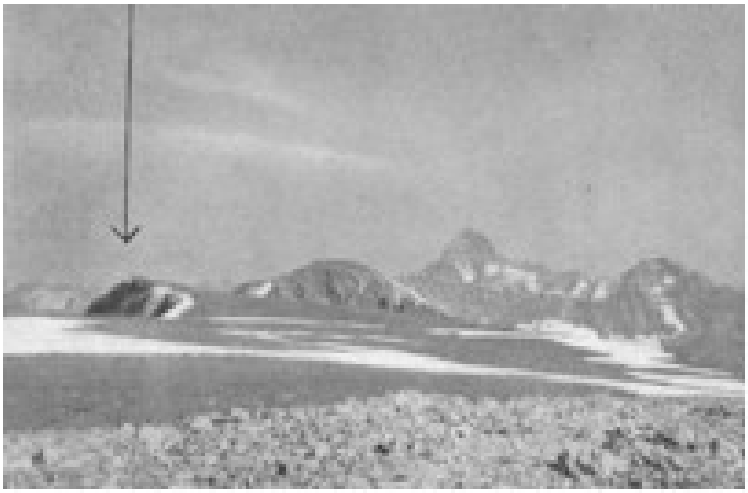
A direct attack on the face of the tower resulted in advance to the extent of a couple of rope-lengths and then smooth, overhanging slabs made further progress impossible. After reconnoitering

14 This name has not been accepted by the Geographic Board.

Mt. Edmonton - Cliffs of West Cirque.



Mt. Edmonton - North Arete From Above.



Mt. Edmonton - Summit Seen Along Ridge. Photos, C.G. Wates

a traverse was made to the east followed by some gain in height, only to be faced once more by smooth slabs necessitating retreat and another traverse. We were now well out on the face above the eastern cirque, whence we obtained a bird's-eye view of some very unattractive rocks waiting to receive us in case of a slip. Luckily, the same agency that constructed the smooth slabs also provided ample solidity to the foot and hand holds so that, ultimately, after two hours' hard work, during which our movements were strictly on the "one at a time" principle, we stood upon the flat top of the tower.

A remarkable concave ridge of bright red limestone joined the tower to the last section of the arête. But it was after six o'clock, and there remained at least an hour's climbing. We might reach the summit before dark, but it was quite certain that we should not make it back to tree line, so we chose a retreat. Descending to the red ridge we found, after some difficulty, a way down to the snow in the east cirque and after a little glissading, a lot of tramping and wading the Simpson River twice by mistake, we reached camp at 9:30.

The following morning Dr. Bulyea, Miss Gold and the writer left camp at 6:30 and, following the route of our descent of the previous evening, reached the red limestone ridge at about 2:30. We were now faced with a choice between two routes. We could take to the névé above the glacier in the western cirque, ascend a rather steep slope, cross a bridge above a wicked looking bergschrund and run a chance of being able to cut through the cornice to the final ridge; or we could continue up the arête. We chose the latter.

At this point the character of the rock changes entirely. Instead of solid slabs, we had to negotiate rock in the last stage of rottenness. Skirting two tipsy looking gendarmes, we started up a series of ledges and chimneys. Extreme care was necessary to eliminate every loose hold. At one point not a single projection long enough to give support was to be found and, after many fruitless attempts, the leader called the lady of the party to the front and by dint of a little boosting, aided by much natural agility, she reached a place of safety where she was able to belay the rope and assist the two men over the difficulty.

Presently we reached an ice-filled couloir where the cutting of a few steps gave a sense of security which was a great relief after over an hour during which we could never be sure if the ledge upon which we were standing was about to take its departure into space.

At five o'clock that lady was again called to the front to step upon the summit amid cheers from her two male companions.

The summit ridge is long and level, rising to the true summit at the east end, where we built a cairn and left our records, christening the mountain after our home city: "Mt. Edmonton". An hour was spent in admiring the magnificent view, which included scores of unclimbed peaks, and culminated in the great cone of Mt.Assiniboine. Then we prepared to descend.

East of Mt. "Edmonton" there is another peak of about equal height and between the two is a small glacier flowing to the north. Going down to the col, we traversed the névé above this glacier and took to the rocks on the left to avoid the bergschrund. Much cautious work on slippery ledges was followed by a race down shale to a little lake, one of the sources of the Simpson River. This we followed through dense forests, over marshy flats where we startled a browsing moose and, picking our way over and under a tangle of logs in the valley, we reached camp at ten o'clock, having made a traverse of the mountain in a little over fifteen hours.

Mt. "Edmonton" is not spectacular in form, but in so far as we could judge, its ascent would involve difficulty by any route. The glacier in the west cirque terminates in a much crevassed icefall between steep rocks. The south face is almost as steep as the north face. The north arête, up

which our ascent was made, is good climbing through¬out, and the big tower affords some really magnificent rock work. The east cirque should be avoided, as the snow is under constant fire from the very rotten cliffs above.

The Asulkan-Abbott Traverse

By J. Monroe Thorington

Someone has said that the climber who derives greatest pleasure from things alpine is "he who remains in sympathy with little peaks". The small peak is known, as a rule, as a view-point; the panorama from the Riffelhorn is considered finer than that from Mont Blanc, mainly because of the form and outline which delimit it, and because there is still something to look up to. The vastness of the Mont Blanc outlook and the lack of definite fixation points confuse and fail to impress all but the trained observer. This is equally true of other alpine regions; recall in your own mind the panorama from Mt. Temple and compare it with the day you spent on Mt. Fairview.

In a new region, it is the smaller peaks which fall first; they belong to the explorer rather than to the alpinist, whose chief delights are altitude and difficulty. Yet there will be some who come after whose mind is that of the explorer, finding beauty in the high peaks which the climber of record-breaking propensities can never know; they will revisit their little peaks in sunshine and in storm, and make friends of them.

It should be remembered that in addition to scenic excellence, the lesser elevations often possess historic interest as marking the beginning of climbing activity in a new region; that as first ascents they may have been difficult, and may still be troublesome under unfavorable conditions. Such a group, in the Selkirks, consists of the summits lying between Asulkan Pass and the Abbott ridge, and includes the three summits of Mt. Jove, namely Leda, Castor and Pollux, with the additional peaks of Dome, Rampart, Afton and Abbott.

While Selkirk mountaineering may be said to have begun with the survey by Rev. W. S. Green in 1888, followed in 1890 by the parties of Topham and Forster of the English Alpine Club and of Huber and Sulzer rep¬resenting the Swiss Alpine Club, not a little of their subsequent work must be credited to climbers from the United States, of whom Professor Charles E. Fay was the pioneer.

Mt. Afton was ascended (the second ascent) by Fay in 1894, and was again reached the following year by Abbot, Fay and Thompson. This party also made the first ascents of Rampart and of Castor, avoiding Dome by descending to the Lily neve. In 1897 first ascents of Dome and of Pollux were made by H. B. Dixon, A. Michael, C. E. Fay, G. P. Baker, J. R. Van Derlip and the guide Peter Sarbach.

As the writer, with Ernest Feuz, had the good fortune to traverse this entire group on the twenty-fifth anni¬versary of Fay's ascent of Mt. Afton, a description of this "high level route" may not be out of place.

We spent July 4th, 1919, in the Rogers hut and on the summit of Rogers peak were enveloped in a blizzard which froze our fingers and made all climbing in the neighborhood impossible. Driven back to the hut, for two unhappy days we existed on a floor space in which no amount of human ingenuity could arrange a bed which successfully avoided the devilish drippings of a leaky roof. On the third day of our amphibious existence we gave it up as hopeless and ran down to Glacier House, filling the intervening air with curses in all languages, including the Scandinavian, directed at those who refuse to see the advantages of supplying the Canadian Alps with suitable shelters.

In this connection, we will give three cheers when there is a hut in Prospectors valley, the Yoho valley and on Abbot Pass for the Rockies, with repair of Rogers and a hut in Fish Creek or Glacier Circle for the Selkirks.

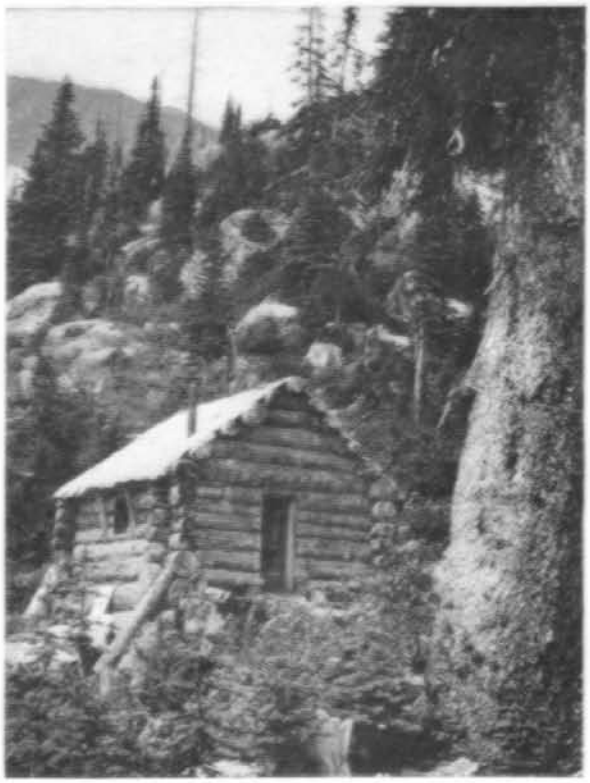
Yet this will be only a beginning, and in the faraway days when these affairs have been satisfactorily arranged, the guide Christian Häsler and the writer are desirous of your patronage at the tea-house which they intend to open of the Illecillewaet neve, with winter sports in summer, thus making the great glacier the Canadian rival of the Jungfrau-joch.

We arrived home drenched to the skin after our ignominious retreat from Rogers, and Christian laughed at our misfortunes. Then the weather began to clear, and next morning at five a.m. we were far up the Asulkan trail. Our previous visits to the Asulkan Pass had been numerous, so for a change we crossed the brook below the glacial snout and started up the snowfields toward a conspicuous rocky point below the south arête of Leda. Our route was at this time a mistake because, as we progressed higher we ran into drifts of the recent snowfall, in places four feet deep and of a powdery consistency which made progress very slow.

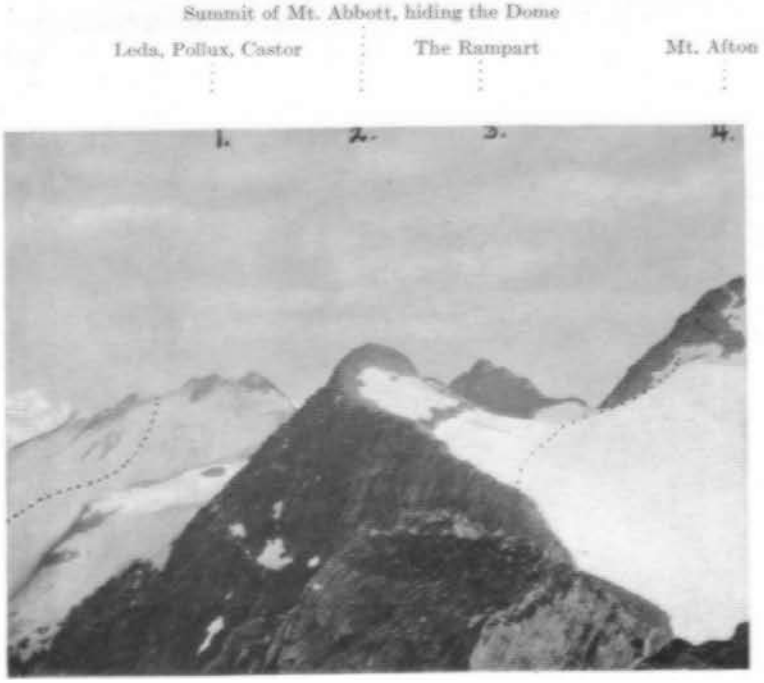
The scenery of the upper Asulkan icefields is of the grandest type, and one misses much of it in the usual route to the Asulkan Pass. It was early in July, but the new snow, powdered heavily on the ranges to the south, gave a wintery aspect to the landscape. Across the valley, avalanches were slithering off the shoulders of Sir Donald while northward the wind trailed long snow banners from the peaks of the Rogers group. Ahead of us gigantic toppling séracs were outlined against a blue-black sky, while we tackled slope after slope of dry and shifting snow, waist deep and sometimes requiring ten strides for an advance of six feet. The old climber of the Selkirks will laugh at our admission that it took five hours of the hardest grinding to reach the wind-blown snow ridge which separates Leda from the Asulkan Pass, and that cutting the steps to the summit seemed not much less difficult at this time than the Grande Bosse of Mont Blanc. How much one's impression of a climb depends upon the weather conditions!

We had lunch by the stone-man half buried in snow and quenched our thirst by melting snow on an angulated rock and catching the drippings in a hat brim. The day was cloudless and Sir Sandford in the north stood out as sharply as did Mt. Purity across the vast snowfields to the south. Far across the Great Glacier and the Prairie Hills the Rockies were visible; below us we saw our foot-prints trailing out and disappearing in the snow. We slid into the little hollow beyond us and scrambled up the ice-glazed rocks to Pollux and on to Castor; then down a knife-edge of corniced snow and a great swooping glissade into the Sapphire Col with its little frozen lake like a jewel in the glacial world for a setting. Then we battered a hole in the surface with an ice-axe, because water at the time seemed infinitely more valuable than jewellery.

Some real climbing exists on the Dome, which lay ahead of us. It is a long sharp ridge formed of great slabs set on edge with a slight angle, bringing the outcrop onto the west face, which descends steeply to the snow saddle of Lily Col between the Dome and Mt. Swanzy. On the eastern side the great blocks form a smooth wall which falls off sheerly to the upper Asulkan neve. We traversed Dome from south to north, finding the ledges high up on the eastern face satisfactory as a means of circumventing the miniature gendarmes which guard the ridge. A direct ascent of the Dome via the east face looks feasible and would doubtless be spectacular. As it was, our own route gave us splendid scrambling and brought us over the summit to the steep snow slope by which we glissaded into the hollow, south of Rampart. From this point, where we had a short rest, the Lily Col with Dome on one side and Mt. Swanzy on the other framed the distant southerly snowfields, with symmetrical Mt. Purity rising above them and glittering in the afternoon sunlight. Adjoining

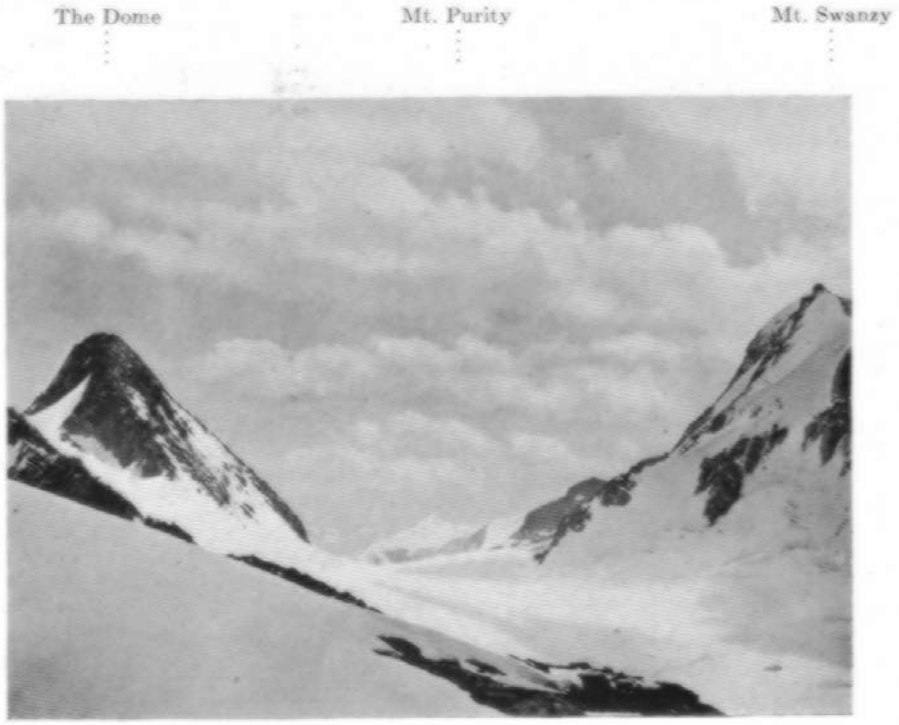


The Hermit Hut, Above Rogers Pass. Photo, D.J.M. McGeary



View South From Mt. Abbott. Photo, J.M. Thorington

The Dome From the Base of Rampart. Photo J.M. Thorington



Lily Pass. Photo J.M. Thorington

Mt. Swanzy, the magnificent north face of Mt. Bonney resembles in miniature the Grindelwald face of the Fiescherhorn.

Our next peak, Rampart, was tiresome with its huge boulders resembling a moraine and possessing many of the undesirable features of the latter. Yet, from the top, the views extending to Iconoclast, Sir Sandford and the giants beyond the Illecillewaet north fork are indeed repaying. The little lake usually found in the col beyond was completely hidden by snow and we hurried on over Afton, which is easier and altogether more pleasant than Rampart. We reached the Abbott ridge and walked along to the old trail, completely snowed in, enabling us to enjoy a long glissade to the timber line.

We reached Glacier House after being out nearly fourteen hours, hardly stopping on the way. Our traverse was made under most adverse snow conditions, such as one might expect much earlier in the year. Ordinarily the time consumed should be much less than we took. It is an easy excursion, but exceptionally repaying both in variety of climbing and in the widespread magnificence of its views. Rarely is one able to reach such extensive snowfields at such a low level and with so little effort. The route may be discontinued at almost any point and will rejoice the climber's heart when weather makes many another Selkirk summit inaccessible. Follow it some day and you will never again neglect a peak because it is tiny.

The Ascent Of Mt. Uto

By W. E. Stone.

Overshadowed in prestige by their lordly associate, Sir Donald, the three peaks, Uto, Eagle, and Avalanche, are, nevertheless, interesting from a climbing as well as a scenic standpoint, and offer to the amateur the most attractive excursions in the vicinity of Glacier. Of the three, Uto (altitude, 9,610 ft), is slightly the highest. It is, however, less frequently climbed; probably because it is more remote and somewhat more difficult than the others. The Swiss guides have often commended it to me for a guideless climb, but not until the summer of 1920 did a fair opportunity arise to test its merits.

Making an early start from Glacier House, Mrs. Stone and I spent about four hours in a leisurely ascent by the usual route to the interesting col from which the ascent of Sir Donald by the northwest arête is usually begun. From this point of view the great ridge presents a most formidable appearance and while breakfasting we recalled the incidents of our ascent in 1916. On the other end of the col, the flank of Uto is almost a duplication of that of Sir Donald, less lofty and consequently less impressive, yet resembling that of Sir Donald in structure. In fact, the peak differs from its neighbour mainly in degree. The rock formation is similar, much broken, but firm and de¬pendable, and at the beginning the arête seems equally bold and difficult. The route of ascent is closely confined to the sharp ridge, with now and then a brief traverse to the side in order to surmount the more difficult pitches. As one nears the summit, the route is more open and free. The rope is advisable and indeed necessary in one or two places.

After two hours and fifty minutes of steady climbing from the saddle, we reached the cairn at the summit and were delighted to realize the commanding nature of the situation as a point of view over the surrounding region. Opposite us, seemingly within a stone's throw, rose the tremendous north face of Sir Donald, while every detail of the northwest arête stood out clearly in profile against the sky. On the east we looked straight down upon the piedmont glacier, extending along the entire range with one or two curious little lakes lying like jewels in the ice, while beyond lay the sombre depths of Beaver valley.

1. Eagle Pk., Uto Pk., Mt. Sir Donald.

2. Mt. Sir Donald From Uto Pk.

3. Uto Pk. And N.W. Ridge Of Mt. Sir Donald. (Clouds Forming) Photos, W.E. Stone

To the northeast, Eagle, Avalanche and Macdonald arose in a succession of bold outposts, falling away to the east in great sheer precipices. To the south, the Illecillewaet névé shone dazzlingly; the eye wandered on to the majestic heights beyond the Asulkan Pass, rested with delight on the Asulkan range and so on around to the west and northwest over a wonderful variety of the grandest mountain scenery.

The prevalent smoke from the mountain forest fires dimmed the details of this wonderful scene, but could not disguise the unique character of our point of view. Few other places in this region of wonderful outlooks equal the summit of Uto for a comprehensive view.

We had planned to follow the Uto ridge toward the north to its junction with Eagle and then find our way across the southwest slopes of the latter and down to the Cascade trail, directly to Glacier House. But, somehow, we failed to realize the significance of Ernst's injunction not to leave the ridge until we had crossed the saddle and were well on to Eagle. From this saddle a deep gully ascends to the southwest which we thought to cross lower down and thus save some distance in gaining the slopes of Eagle, but, too late, we found the crossing to be impossible. The alternative remaining was to go down to the small snowfield which lies at the base of Uto and Eagle but from this we again found we were cut off by the almost perpendicular rock of the base of Uto. Progress in the desired direction being thus blocked, we traversed back along the lower slopes of Uto, searching an oppor¬tunity to descend, which we did not find until we had nearly reached the starting point of the morning at the col. When finally we had gotten off the mountain, there remained no choice but to retrace our route down the valley to the hotel, which we did in about two hours. We had thus made a complete traverse of the peak returning across its base.

In "The Selkirk Range" by A. O. Wheeler, there is found a brief but interesting account of the first ascent of Uto in 1890 by Sulzer and Huber, who found their way up from the valley through the timber to the foot of Eagle, where they camped, and reached the summit of Uto along the north ridge on the following day. In 1894, Professor Fay, in a similar attempt, which was begun too late in the day, was obliged to spend the night on the mountain. He had an interesting experience getting down to the valley the next day by an improvised route down the deep gully which drains the snowfield on the south slope of Eagle. Some years ago, the writer also experienced a strenuous descent by this same course and considers it his duty to warn others against being deceived by the apparent ease of this route.

The ascent of Uto is most interesting and can be accomplished by anyone capable of a good hard day's scramble and with some experience in rock climbing. The approach is best made as described at the beginning of this note and the day should properly finish with the traverse across the Eagle-Uto ridge and down over the southwest face of Eagle to the Cascade trail. Such an ascent without professional guides presents enough difficulties to be interesting; enriches one's experiences; adds to one's knowledge of the region, and establishes a memory of one more fine day on the heights.

NOTE—The foregoing account of a climb of Uto Peak by the late Dr. Stone and Mrs. Stone was written for the JOURNAL on June 24th, 1921, shortly before his last visit to the Canadian Rockies. It is characteristic of the Dr., who always made it his endeavor to convey a bit of helpful advice born of his own experience. Dr. and Mrs. Stone had an abounding love of the Great Hills of Canada and particularly so of the Selkirks summit range in the vicinity of Glacier House. Of all the many climbs the Dr. always dwelt with the keenest satisfaction upon the ascent of Mt. Sir Donald by the northwest ridge, made by himself and Mrs. Stone in 1916. He considered it one of his best achievements, and classified it among the finest rock climbs he knew.

A. O. W.

The First Attempt To Climb Mt. Eon.

By L. H. Lindsay And A. W. Wakefield.

The attempt to climb Mt. Eon was prompted by a desire to explore that amazing country of lakes, valleys and mountains that lay so beautifully before the wanderer from the Assiniboine Camp to Wonder Pass and Wonder Mountain. It was not until the last day or so of Camp and after a pretty general exodus of climbers that Dr. Wakefield, H. J. Graves and myself started out with the good wishes and much help in the way of provisions, and a silk fly from Mr. Wheeler. We were limited to two days, and carried food for that length of time, blankets, the silk fly, and other usual impedimenta.

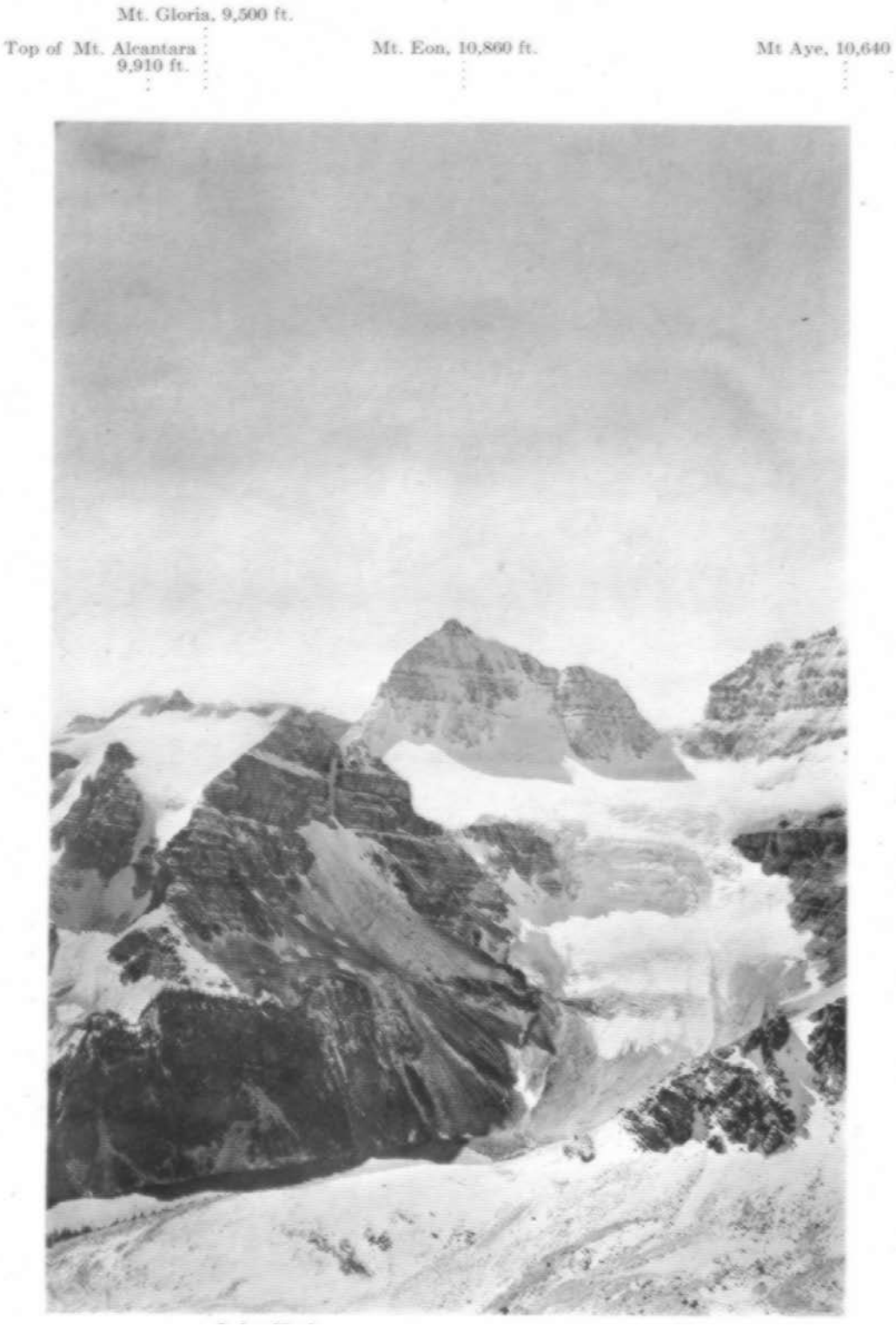
Leaving the Assiniboine Camp after lunch on August 6th, a perfect day but with the air getting very hazy from the smoke of fires, we planned to make our bivouac that night in Marvel Pass Valley, below Mt. Gloria, by one of the many lakes that could be seen to dot the country.

Going over Wonder Pass we dropped sharply down to Marvel Lake, making a good part of the way over the tree trunks which lay end to end, swept there by snow avalanches, remains of which were still in existence, affording easy going in spots. As the pass flattened out near Marvel Lake there was a short distance through the heavy woods which grow to the very water's edge. Around the lake at this point appears a faint, overgrown trail, made by the trappers of other days, perhaps. This appeared at intervals along the south shore of Lake Terrapin, and all the way up Marvel Valley. The best going is along the water's edge, though the forest growth is so close that it necessitates a step into the water now and then.

Wonder Pass comes down to near the head of the lake where the waters of Terrapin enter, a swift stream (for Terrapin Lake lies two hundred feet above Marvel Lake) and too broad to be made even in two jumps, but we crossed by means of a big tree which spanned the stream about half way up—a lucky find, for the rush of water is cold and strong, as this man found out when he fell off on the return trip. Terrapin flows out toward Marvel in a wide, somewhat marshy stream until it comes to a gorge, through which the stream tumbles uproariously over a magnificent fall, to toss and twist and turn in a white thread which the eye can follow through the green forest clear to the lake below, stretching as far as one can see, and completely filling the valley between the enclosing mountains.

From about the centre of the south side of Terrapin Lake the ascent is easy above a dry water course, then becomes quite steep for a while, as you find your way up between two streams that tumble in innumerable falls over ledges and through deep gorges until you come to the meadows and a gentle rise up Marvel Valley, at the head of which lie the lakes. Avalanche lilies and other early flowers indicated that the snow had not long been gone. A half hour's walk brought us to near the head of a long lake that lies just below the snow-filled col joining Mt. Gloria with an unnamed peak to the south. This lake lies just at the summit of the pass. Here we arrived about 7p.m., and on the southwest shore, near the head of the lake, and about on the line of the Great Divide (aneroid reading, 6850 feet) we decided to bivouac. The first suggestion naturally in any party containing Dr. Wakefield was that we have a bathe, and 'twas done; then a fire and smudge, bacon, jam, toast and buckets of, tea; next, the finding of a spot where the ground was inviting to repose, and sheltered. There is little growth except for a clump of stunted fir here and there, but such a clump and a ledge furnished a place to tie up the fly and build a fire for the night. Fuel is plentiful, for a forest fire has left lots of dry wood.

It was now getting dark, and we had to scout around and make a hurried survey for the



Mt. Eon From The N.E. (Wonder Pk.) Photo, A.O. Wheeler

morning start which we had planned to make over the south slope of Mt. Gloria; unfortunately by this time it was too dark to do this efficiently. South of Mt. Gloria lies a nameless mountain mass. Separating- the two, a little to the south of the line of the Great Divide, is a col, which we chose as our line of attack for the morrow's attempt. But stretching southwards from Mt. Gloria, between us and our col, and extending almost continuously to the southern end of the nameless mass, at quite a low altitude, is a great rock wall. To circumvent this to the south meant a long detour. To circumvent it to the north meant a traverse back to the col between the top of the rock wall and the higher crags of Mt. Gloria, and in the dim light this traverse appeared likely to prove impossible. However, almost immediately below the col the rock wall was lower than elsewhere and seemed less steep and more broken up, so we decided to attempt a direct attack by this route on the morrow.

We got under way next morning at 4:50 through patches of spruce, grass, rock and scrub to the big scree below the rock wall, where we stayed from 5:05 to 5:20. Dr. Wakefield led over a little snow to the foot of the lowest buttress. We then traversed north on ledges to avoid scree and took to the buttress south of the small vertical gully with a prominent rock needle crowning the buttress on its right. We started up the buttress at 6:20 and 120 feet of rope ran out with no possibility of belay (foot of buttress 7480 ft.). There was a good belay near the top of the wall (7600 ft, 6:45 a.m.). Graves came up, then the kit followed, and then Lindsay. We prospected the traverse north between the top of the rock wall and the higher crags on Mt. Gloria. We found it quite easy and noted it as a good route for the return. At 7:45 we started on to the col between the unnamed mass to the south and Mt. Gloria to the right. We soon struck the north edge of the snow lying on this col and then, to avoid steep ice and snow, we kept a little to the north and topped the shoulder of Mt. Gloria well above the lowest point of the col at 8:05. (8,500 ft). We had a superb view of Eon and the Eon-Gloria col and stopped for our second breakfast, that choice moment in mountain climbing.

The face of Eon directly towards us was so broken that it was difficult to tell what lay behind the masses of big rock that jutted out. The south arête looked feasible but was a long distance away so we decided to tackle the nearer route. We started again at 8:40 and traversed all around the head of the valley between us and Eon on alternating loose rock, snow and scree at about the 8,500 ft. line. We reached the Gloria-Eon col at 9:45 (8,700 ft.) and started up the arête on Eon at 10:10, finding the climbing easy on rock and scree slightly to the south side of the arête.

We lunched at 11:40 at probably the last water (9,300 ft.) and started on again at 12:05, travelling very slowly. We were opposed by a huge cliff that stands as a guard across the pathway up. We traversed to the left (south) for some distance at about the 9,300 ft. line till we came to the foot of a huge snow and ice couloir running very steeply up to our right and apparently likely to afford a good route back to the crest of the ridge. We began a slow ascent, kicking steps in the snow near the bottom, but finally had to cut them. Near the top we had to get such hold as we could on thin, melting, rotten looking ice, threatening to break away from the underlying rock. On reaching the crest there was scarcely room to place a foot (9,730 ft.) and looking over the top a still steeper couloir shot down to the big snowfield north of Eon. We were on a literal knife edge with nearly vertical rock faces to the left and right. That on the left, cutting us off from the higher part of our ridge, was obviously impossible unless a small and very steep chimney overhanging the couloir on the north would go. This looked very difficult, if not impossible. It was now 2:45 and very cold, with a strong wind and clouds blowing up from the north. Bad weather seemed imminent, especially after the great heat of the earlier part of the day, so we decided to return. We reached the

foot of the couloir at 4:30. Thence, instead of traversing around, we made almost straight across the valley to the col between Gloria and the nameless mass, which we reached, moving very slowly, at 8 p.m. We circumvented the rock wall to the north, following an easy traverse, and got back to camp at 9:15, tired enough not to notice the rocks and lumps in our beds.

The arête to the south looked quite promising, and it appeared to us that any one traversing around south of the nameless mass at about the 7,000-foot line and attacking Mt. Eon by the south-east arête would have good prospect of success. I attribute our failure largely to lack of sufficient scouting.

Next morning there was a swim, a lazy breakfast, packing up, and a return to Camp Assiniboine, stopping for a fine lunch and another swim in Marvel Lake.

It is a country full of delights. Whoever goes over the Walking Tour to Assiniboine Camp with a day or two at his disposal, should leave the beaten path and plunge over the edge of Wonder Pass to the Wonderland beyond.

MISCELLANEOUS SECTION

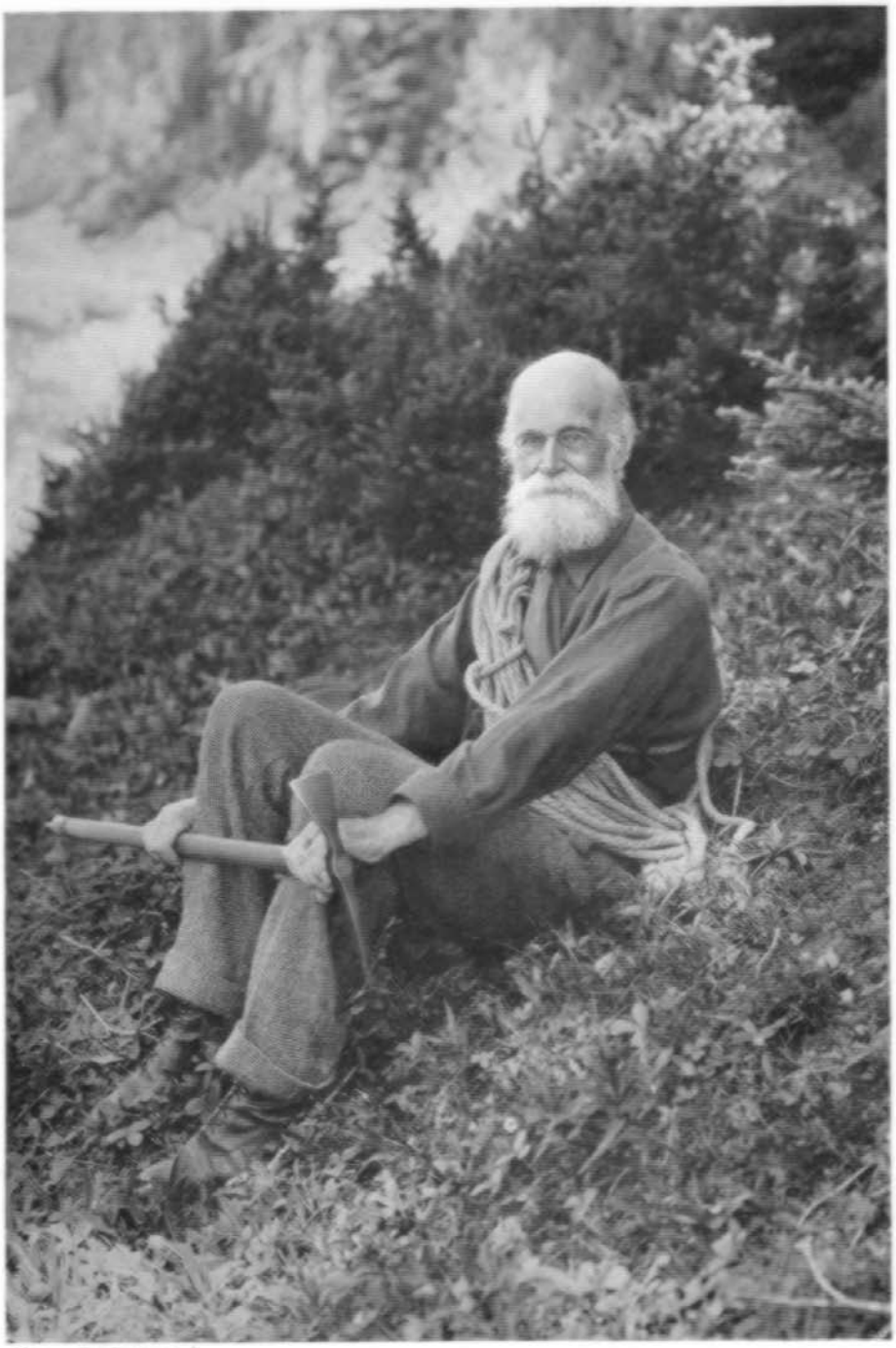
Old Times In The Canadian Alps

By Charles E. Fay

The Director has kindly invited me to write an article for the JOURNAL on the old times of mountaineering in the Selkirks and Rocky Mountains. While chronological periods are wont to be of a vague and more or less conventional character, there is usually some convenient event that is regarded as epoch-making, which forms a dividing line between a past and a present. For our purpose the founding of the Alpine Club of Canada furnishes the notable event and the old times here to be treated will antedate its formation in 1906.

Fifteen years does not seem a very long period to traverse, yet so much has happened in those just passed that they seem a lifetime. The phenomenal growth of the Club is another reason why the old times seem so long ago. Previous to 1906 the interest of Canadians in their splendid alpine heritage, if anywhere existent, had failed to manifest itself. It is hardly probable that a dozen men could have been assembled in the entire Dominion who would have been eligible for membership in the Alpine Club of Canada as it exists today, and perhaps not one for that of the mother club in London. Possibly half a dozen might have been enrolled in the Club across the International Boundary, had the early plan for a Canadian Section of that organization been carried into effect. The thanks of all everywhere interested in alpinism are due to the patriotic protest and energetic initiative, in response to which an independent organization was called into being. As a near-by observer of the extraordinary exhibit made by the Club at the International Congress at Monaco, and of the high place it won in the estimation of all the delegates, the vigorous life of the Alpine Club of Canada was to no one a source of more sincere pleasure than to myself. It is a joy to have been permitted to watch its growth from the begin¬ning, and another to have known the superb region that was to call it into life for a period as long preceding its formation as the time that has elapsed since.

For my first visit was made in 1890, on my way home from Southern California, where I had been with a long-tried friend of the Appalachian Mountain Club on a mission to select, if possible, a mountain top as a site for a station of the astronomical observatory of Harvard University. This



A World Known Veteran. Photo, H. Pollard

was, of course, in the very first days of mountaineering here. The C. P. R. had been open for traffic only three years. It was but two years since the Rev. W. S. Green had made a beginning with ascent of Mt. Bonney, and had only just published his "Among the Selkirk Glaciers". That very year, and only a few weeks previous to our arrival at Glacier House, Huber and Sulzer had made the first ascent of Sir Donald. Indeed, we had unconsciously passed our Swiss friends headed westward, as our train, eastbound, crossed theirs at Westminster Junction!

Things at Glacier were then very primitive, with only the little hotel of the original pattern adopted for the several dining stations of the railway; but, under the genial management of Mr. Perley, whose mantle of whole-souled hospitality was to descend upon a line of equally admirable successors, it had already begun to be the delightful place of sojourn for lovers of the grand and beautiful that it has increasingly remained. Of improvements only the excellent foot paths to Marion Lake and to the Illecillewaet glacier, and perhaps a casually indicated trail up the Asulkan Valley, so far as I recall, as yet existed. Several of the neighboring peaks were still unnamed, and the majority of course unclimbed; among them Rogers, Dawson, Donkin, Castor and Pollux, and the lesser ones of the Asulkan ridge.

Edmands and I had not come to climb, but merely to see and to admire, and our stay here was limited to a single day. Less than my own was my companion's normal aspiration for the high places stirred by the inspiring scenery. Consequently I had to make alone my forenoon's climb to the top of the screes at the base of the sheer rise of Sir Donald previous to continuing our journey. The unforgettable impressions of Glacier House, however, and of that initial scramble found expression some three years later in an article in APPALACHIA, entitled, "Up to the Crags of Sir Donald" called out by the first article on the Canadian Alps that ever appeared in that magazine: "Back Ranges of the Selkirks" by the Rev. H. P. Nichols, an account of the second ascent of Mt. Fox.

Four years later, (1894) I repeated that long, round about journey, this time with another friend in the Appalachian Mountain Club, Mr. R. F. Curtis, with whom it was my good fortune to make several subsequent trips to this region. Not this time either had we had serious climbing in view, nor were we in any way properly equipped for it. Nevertheless we did not confine ourselves to mere gazing and wishing, but ventured forth to test our powers in a limited way. Taking in Mt. Abbott, I was tempted farther to the summit of what now bears the name of Afton—and to a sitting glissade down its steep northern slope. The next morning we set forth—of course with no expectation of being the second party on Sir Donald—and advanced by Huber and Sulzer's line of approach to a point some distance beyond my turning point of 1890. Deterred from further progress in that direction by the crevassed glacier, we turned about in the hope of at least making a traverse of Eagle Peak. The story of our failure to reach that summit, of our being overtaken by night high up on its steep eastern face, of our long watch until daylight on a narrow ledge and our hour's long search for the elusive way of escape, of the beauty of the moonlit alpine landscape and the glory of the sunrise, is narrated in APPALACHIA under the title "Our Bivouac on Eagle Peak." All the experience of that remarkable day, particularly certain of the more perilous ones, were not there rehearsed in full. Even now I do not recall them without being reminded of Sir James Outram's comment in his "Heart of the Canadian Rockies," After his generous praise of the pioneers, he says: "In perusing the records of the earlier climbers one is struck by the very special Providence that has watched over their initial efforts."

Little or no change had taken place in the surroundings of Glacier House since my previous visit. Perhaps the zig-zag path up the cascades in front of the hotel had been constructed meanwhile.

Mr. Perley was still in charge and the hospitable traditions of the place were growing. On our way east we stopped a day at Field and climbed high up on Mount Stephen; but the complete ascent was deferred for a year. At Laggan we paused only long enough to make the trip to the little chalet, then just finished to take the place of the short-lived original one destroyed by fire; but it was our good fortune to meet there the party of Messrs. Wilcox and Allen , just coming in from the first ascent of Mt. Temple. The latter was still fresh enough to join me for a row on the lake, during which he proposed that I should delay my journey long enough to try conclusions with Mt. Victoria. An inelastic itinerary forbade acceptance, even had I felt competent to what at the time seemed to me a most hazardous undertaking. I little realized that the pleasure of its first ascent was in store for me.

With this year 1894 there began for me a series of annual visits which continued, with a single interruption, until 1908, when I had the pleasure of attending with my son the Club Camp at Rogers Pass. That omission, (in 1900) was in a way compensated by two visits in the summer of 1903.

In 1895 Mr. Curtis and I, whose visit of the previous year had this possibility in view, brought out with us a party of twenty members of the Appalachian Mountain Club, the majority of whom were ladies. Among the men were two whose names were destined to become fatefully linked with the region, the alpine glories of which were now for the first time revealed to them—Abbot and Thompson. The former was undoubtedly the most experienced alpinist among American lovers of the sport, he having had experience not only in Mexico and California, but as a close student of the methods in the Swiss Alps. For Thompson it was, I believe, his first introduction. Both became at once enthusiastic lovers of the Alps of Canada.

Making a brief stay at Banff, we hastened on to Lake Louise, and took complete possession of the Chalet. It is interesting to compare the Chalet of 1895 with the grandiose Chateau of the present day; still more to have watched its development. In its initial stage the little structure—a single storey with a hip roof—contained in all only eight rooms including the principal one, whose plate glass windows looked out on Mt. Victoria, not as yet named, and the changeful lake. It served as office, dining room, drawing room and even bar, and on this occasion one of its corners furnished my sleeping quarters; for our party of twenty quite exceeded the Chalet's capacity, several being relegated to tents. Remaining in possession for several days, it is hardly too much to infer that for the general C.P.R. tourists of that year we were most unpopular.

While the rest of the party were enjoying the minor climbs about Lake Louise, Abbot, Thompson and I, accompanied by Tom Wilson as far as a bivouac by Hector Lake, made our first virgin ascent, accomplishing the easy conquest of Mount Hector. A few days later from Field we were the first party to follow McArthur's two ascents to the top of Mt. Stephen, which he had occupied as a topographical station. With Glacier House as a base our whole party was quite active. The C. P. R. having detailed two men for a day's service, I employed them in cutting out the steep original trail up Glacier Crest from the first bridge over Asulkan creek. My "day" proved longer than theirs, and with a few hours' overtime labour, I succeeded in locating the upper portion nearly to the edge of the timber. The passage of some fifteen persons over it on the following day proved all that was needed to complete a very clearly marked line of approach to this unusually fine view point. The party signalized the occasion by following over the crest and descending with an exhilarating glissade from its western end to Illecillewaet glacier, by the left moraine of which the return was made to the hotel.

It was on this occasion that names were bestowed on several of the near-by peaks: Glacier

Crest Overlook, Uto, Afton, The Rampart, The Dome, Castor and Pollux. One glorious day's climb, begun as late as nine o'clock and with no intention of attempting anything beyond the usual trip to Mt. Abbott, brought Abbot, Thompson and myself successively over Afton and the intervening summits of the Asulkan ridge and culminated in the first ascent of Castor. Thompson charmingly tells the story of that day, and of our descent of the then practically pathless Asulkan valley in the darkness of the night, in the same issue of APPALACHIA that contains Abbot's article on Mount Hector. Success did not attend our party's attempt on Mt. Rogers, the weather turning bad just as we reached the real climbing. Better fortune was in store for the attempt of the following year. A novel feature of the day of our failure, and one which made it seem the more deplorable, was the fact that we had laboured long and hard at the cranks of a hand-car in transporting ourselves and our belongings up the heavy grade of the railway and beyond the watershed to the point from which we took to the timber.

In some respects this would count as the most memorable of my early visits. Those of the next two years, however, were hardly less so, one for its tragedy, the other for its international interest.

On one of the afternoons while our party of 1895 was tarrying at Lake Louise, our more ambitious trio advanced up the glacier as far as the so-called "Death Trap", our object being a reconnaissance of Mt. Lefroy, with a view to a possible attempt upon-it. The large snow couloir visible from the Chalet, broad at the base and tapering upward almost to a point, was so alluring to intimate inspection that, late in the day as it now was, we could not forbear to ascend to the little schrund that cuts off a fragment of its upper end. The chimney beyond seemed inviting, and we returned to the Chalet with minds made up to try Lefroy on the morrow. The day dawned none too propitiously, but it was our only chance. The clouds hung ominously low when we reached the base of the couloir and the snow was softening, for which reason we left it high up for a promising lead on the rocks to our right. By this time it had actually begun to rain and miniature cascades were soon drenching us from the overhanging upper edge of our chimney. Evidently the Fates were against us, and we withdrew, with a feeling that Lefroy was our debtor.

To secure the cancellation of that debt was the prime object of our return to the Rockies the following year, our trio being increased by the addition of Professor G. T. Little of Bowdoin College. A slight abrasion below my right knee, received on the summit of Mt. Chocorua, which developed a mild case of blood poisoning, made my own attendance somewhat doubtful; but as the cure seemed likely to progress as favourably on the train as in regretful restlessness at home, I set out on my only westward journey in which pain overmastered pleasure. We proceeded at once to Glacier, to allow me more time for recovery and the opportunity for practice climbs for the others. It was in one of these that the first ascent of Mt. Rogers was secured, with Little in my usual place on the rope. From here we returned to Lake Louise and the renewed attempt on Lefroy was my first alpine climb of the season. The sad outcome of that third day of August is told in detail in APPALACHIA , and need not here be rehearsed. Thus ended the brief expedition of 1896.

That of the following year had a brighter sequel, and a stone-man on Lefroy was set up as a memorial to our lost companion on the anniversary of the tragedy. It had been Abbot's Hope that his friend, Professor Dixon of the Alpine Club, with whom he had climbed in Switzerland, would join us for the attack on Lefroy and what other climbs might follow it, but the conjunction did not prove feasible for that season. This year, however, moved in part by the knowledge that Mr. Abbot, senior, was interested in having the feasibility of the climb proved, Professor Dixon made arrangements not only to come himself, but to bring with him not only Dr. Collie and Mr. G.

Mt. Lefroy From Lake O'Hara. Photo, H. Pollard

P. Baker of the Alpine Club, but also Peter Sarbach, of Sankt Niklaus, the guide that he and Abbot had employed in Switzerland, who thus became the first professional guide to visit the Canadian Alps. The party was further increased by three others from the United States: Messrs. Michael, Noyes and Vanderlip. Such was the composition of our notable Anglo-American party of 1897. Its alpine experience was rather extraordinary. Nearly all were more or less familiar with the Swiss Alps. Baker had visited also the snow peaks of Norway, while Collie had ranged as far as the Western Himalayas. It was therefore with no slight pleasure that we witnessed their undisguised enthusiasm over this region, that had so completely captivated us.

Dixon was first to arrive, accompanied by Sarbach. Collie came a few days later. joining us at Glacier, which we had again chosen for our training climbs. A delightful week was spent here, to the alpinistic and social features of which full justice is accorded by Professor Dixon in a paper read before the Alpine Club, and later printed in the Alpine Journal. We celebrated Sarbach's fiftieth birthday on Glacier Crest. We made the interesting ascent of The Dome on its east side by a snow arête ending at a notch, above which were a few feet of rock-work declared to be "more difficult than anything on the Matterhorn". Our long return on the western side of the ridge and over Mt. Abbott made it 10:30 p.m. when we entered the hotel. Miss Mollison met us with an assumed austerity, which banished all hope of the warm supper which for some hours we had been enjoying in anticipation; yet a few moments later we were revelling in a repast surpassing our fondest imagination. On another day we traversed Castor and Pollux, thus making a first ascent of the latter. The air was very clear and from these summits we caught sight of an unusually fine peak in the north, to which provisionally we accorded the name "Mt. Victoria". Doubtless it was Sir Sandford of present nomenclature.

My brief notes show that we left Glacier for Field, August 1st. They read: "Left on No. 2 Locomotive with Collie and Dixon". On the 2nd: "From Field to Laggan. Freight to Hector, handcar balance. Walked to Chalet. Met Mr. Niblock on the way". These items chronicle a form of travel quite in vogue with us of the "old times", when infrequent trains and slower schedules made it most convenient and agreeable to accept the hospitalities offered by the sympathetic management of the C. P. R. Mr. Niblock's name properly finds record here, as the representative of that management on the 'mountain division. The entry for the 3rd comprises two words: "Ascended Lefroy". That for the 5th reads merely: "Ascent of Mt. Green". This is the name under which for a short time the glorious peak that closes the vista at Lake Louise was known, given in honour of the author of "Among the Selkirk Glaciers", in which is reproduced a sketch of the mountain over the title "Mt. Lefroy". As a memorial of its first ascent in the Queen's Jubilee year, we substituted the name which had a few days previously been proposed for Sir Sandford. We also did our part in stabilizing the name Lefroy, which had been quite peripatetic since first bestowed by Hector, in all prob¬ability on Number One of the Ten Peaks.

The story of these two glorious days has been so fully recorded elsewhere as to call for no further mention here. A few days later, Mr. Baker having now joined us, we set out for the proposed ascent of Mt. Balfour. We straggled into the camp at Hector Lake, that "Bill" Peyto had prepared to receive us, at a late hour of the night, our British friends getting under these most unfav¬orable conditions their first experience of muskegs. This expedition was undertaken at the suggestion of Thompson and myself. Balfour had seemed to us the year before, as our trio saw it from the summit of Hector, a very inviting summit. Indeed, we had actually started for its ascent on the following day from our bivouac at the lake; but the broad, rushing stream had proved an insuperable obstacle. On this occasion we subordinated, perhaps unduly, our completer knowledge

of the topo¬graphy, which naturally calls for an approach from the head of the lower lake, to the greater general mountain¬eering experience of our new companions, and changed our camp to the upper lake to make the attack from there. It gave us a very interesting introduction to territory new to us, and an exciting day in our quest for Balfour. It added to the list of virgin climbs that of the peak we christened "Mt. Gordon", from the summit of which we saw Mt. Balfour rising some miles to the south, and quite beyond our reach for that season. The most exciting episode of the day was not Collie's leading the unmarried men of the party down into and across one of the large crevasses of the glacier by which we ascended from above the lake, but when, proceeding unroped along the dry glacier that here forms the backbone of the continent, Thompson broke through a seemingly safe snow bridge and, notwithstanding a fall of fully sixty feet to where the crevasse narrowed, miraculously escaped practically uninjured. Another incident of the day was the sight of the famous Twin Fall of the Yoho Valley that, although fully five miles distant, fairly forced itself upon the view immediately on our reaching the summit. Habel had visited it only a few days previously, and to him its introduction to the public is due, though Tom Wilson is said to have made its earlier acquaintance. From here we returned to Lake Louise and our delightful party was broken up. Collie and Baker, however, retaining Sarbach, made another trip to the north, in quest of a fine peak that we had seen and supposed was Mt. Murchison, but which proved to be Mt. Forbes. So far as this mountain is concerned, their trip was a disappointment; but it proved the lure that brought Collie back to a success the year following, and so began that notable series of expeditions which connects his name indissolubly with the Rocky Mountains of Canada.

A similar sentiment regarding Mt. Balfour was what brought me back with my friend Curtis the next year. Attaching to ourselves, as general helper in camp and as a third on the rope, a young schoolmaster of Banff, we attacked it by the way of the Sherbrooke Valley, at that time apparently unexplored, though the surveyor-general later sent me the contour map of it which illustrates his work on "Photographic Surveying". A morning thunder storm delayed our departure from our far-viewing camp on the day optimistically planned for our conquest. Once under way, we plodded hopefully on over the miles of névé along the Divide. At length the snow became so soft that my stout companion was sinking almost to his waist. Declaring himself out of it, he urged Campbell and myself to keep on for the now imminent prize. We two were soon on the northern arête and were crossing a well marked notch, when in climbing its farther wall, my ice-axe slipped from my hold and fell a few yards, yet was easily recovered. At this moment "Bob", (for it was this well known "old inhabitant" of nowadays, then making his first trip on the snows) called my serious attention to the fact that he had a wife and children at Banff. I looked at my watch. It was 5:30, the very hour, and the day was August 3rd.

Quel giorno più non vi andammo avante.

Our trip was not, however, entirely fruitless, for, during our brief stay in that secluded valley, we captured the peak to which we gave the name of Mt. Niles. A few days later we made the first traverse over Abbot Pass. For the third on the rope on this occasion we had a lively boy of perhaps fifteen years, whom we called "Jim"-Today you read his name almost everywhere in Banff, on stages, garages, stores and I know not what not. A little later another party consisting of Messrs. Thompson, Nichols, Weed and Noyes, who had come out seeking adventures up the Pipestone and down the Siffleur, from the old camp at Hector Lake, succeeded in winning the, prize of Mt. Balfour.

But my lengthening article warns me that I must be briefer with my reminiscences. The following year, 1899, was notable for the coming of the first Swiss guides, brought over by the

C. P. R. Their first climb of a virgin peak on this continent was made, accompanying Parker and myself on a two days' trip, to the top of Mt. Dawson. In commemoration of this event the names of Häsler and Feuz were bestowed on the two minor peaks that combine to form that summit. 1900 was the year I missed, but it brought into the game Outram and Scatter-good, with whom in 1901 I enjoyed a delightful week of exploration about the Ice River Valley, which we entered from that of the Ottertail, taking in Mt. Vaux on the way. By a niggardly hundred feet or so we failed of making the south tower of Goodsir. We climbed out of the valley by ascending the fine many-peaked ridge that parts it from the Beaverfoot. Three of these we traversed, but were foiled in our attempt to close the series that same day with the Chancellor. A week later this peak was captured by my two companions, accompanied by Mr. G. M. Weed, who owed that opportunity to the disabling accident that meanwhile befell me in a reconnaissance our trio was making for the capture of Mt. Biddle.

This was the year of the first visit of Mr. Whymper with his retinue of four Swiss guides, and of the advent here of the man destined to surpass all others in his contribution to our knowledge of the topography of the Selkirks and Rockies, to say nothing here of what his later life-work has meant for mountaineering in the Canadian Alps. I think, however, it was not until my next year's visit to Glacier House (1902) that I first had the pleasure of meeting Mr. Wheeler, with whom the casual acquaintance was in the next years to ripen into a cordial friendship. In 1903 Parker and I with Häsler and Chr. Kaufmann entered the Ice River Valley by the usual route and succeeded in completing the first ascent of Mt. Goodsir. A few days later Parker with the Kaufmanns made the first ascent of Hungabee and, joined by Dr. Eggers, with the same guides, successfully attacked Deltaform and Biddle. Meanwhile, with two new-comers to the region and with Häsler and Bohren, I satisfied a long-felt curiosity by ascending Mt. Daly from the Sherbrooke Valley, descending over the Takakkaw glacier and by a somewhat sensational negotiation of the cliff on the left (south) side of the great cascade.

My more recent visits were so brief as rather to deserve the name of calls. Indeed, as compared with more modern expeditions, or even with several of the contemporary ones, nearly all in which I participated were limited in time, and seldom beyond the utmost reach of the whistle of the locomotive. But the old times furnished grand opportunities for first class ascents at short range from the hotels, and, so far as the peaks themselves are concerned, what ones of the remoter giants have afforded richer sport to their victors than Lefroy and Victoria, Deltaform and Hungabee, Goodsir and The Chancellor, Rogers and Dawson, to the pioneers of the elder day?

A Visit To The Canadian Rockies

By J. A. Osler

"There is a tide in the affairs of men Which taken at the flood leads on to fortune."

When I first heard from the Alpine Club of the invitation that had been received from the Alpine Club of Canada to visit their summer camp, with a mind hide-bound by an English business life, I sighed and remarked to my wife, "How glorious and delightful it sounds—I wish I could spare the time."

I had laid down the notice, having said all there was to be said about it, and was about to return to my newspaper, when—the woman tempted me. Moreover, I must do her the justice to say that the possibility of her going as well did not occur for a long time afterwards.

The burden of her remarks was that I should never be younger than I was then and that "Youth's an age will not endure;" so, in a noncommittal way I consented to write for further particulars.

I had rather expected that in view of rumours of travel difficulties and food shortage on the Continent of Europe, many A. C. members would prefer to go westwards this summer, and that there might be some competition for places among the twenty invited guests. But, whatever may have been the reason, for some time Mr. Mumm and I were the only candidates, and the party that eventually foregathered on the "Megantic" at Liverpool consisted of Mr. Freshfield, Mr. Mumm, his guide Moritz Inderbinen, who has accompanied him to Canada several times before, my wife and myself.

We had been obliged to book our passages well in advance before we had definite intelligence of the date on which the camp was to start, and had intended to allow ourselves a week or so to get into training somewhere in the mountains, before presenting ourselves at Banff. But first of all our sailing date was postponed a week, then the camp was arranged to start four or five days earlier than we had expected. Dense fogs encountered on the Banks made us two days late in our arrival at Montreal, and, finally, we found the Trans-Canada Limited, the fastest train, full up, and were compelled to take the Imperial which took some fifteen hours longer.

So we had reconciled ourselves with regret to the prospect of finding the camp nearly over. But fortunately for us, "Man proposes and God disposes;" bad weather and unexpected difficulties as to pack animals had caused trouble and delay for Mr. Wheeler and his able pioneers, and when we at last arrived at Banff on July 24, we were delighted to learn from Mr. Mitchell, the Secretary-Treasurer, who met us at the station that, owing to these delays, things were only just starting.

The ill wind that had caused such disappointment to Mr. Wheeler was, at any rate, a good friend to the English party.

The Club House of the A. C. C. built in the midst of a pine forest, on the steep slope of Sulphur Mountain overlooking the town of Banff and the beautiful valley of the Bow River, was a delightful harbourage in which to cast anchor, and the sleeping tents dotted about upon the steep hillside, with the floors three feet or so off the ground, were different to anything we had ever seen before, and sent us into the realms of Peter Pan for a comparison.

It was very delightful to arrive at the Club House, where we were warmly welcomed by Mrs. Wheeler and many members, and to rest after the long railway journey feasting our eyes upon the mountain scenery which we had yearned for in vain for so many years. After lunch we were introduced to one of the greatest attractions of Banff, in the Hot Sulphur Springs, and certainly no pleasanter place could be found to wash off the stains of travel than the open air hot water swimming bath, where we spent the afternoon.

Owing to the difficulties I have already alluded to and the impossibility of allowing the members to proceed to the camp except in small driblets, the accommodation of the Club House was strained during these days to the utmost, but Mrs. Wheeler and her willing helpers proved themselves fully equal to coping with the formidable task though it can scarcely have been much of a holiday for them.

A party of twelve left for the Camp on Sunday, the 25th. We were to be in the next contingent, and were all packed up and ready to start on Monday morning when a message was received that no more must start until Wednesday or Thursday.

I joined a party next day in an attempt on Mt. Edith, six miles up the Bow River, where I learned something about the loose character of the rocks of that district, and a valuable lesson in

the inadvisability of leaving one's food at the bottom on the expectation of an early return.

We did not reach the top, but at any rate I achieved there the ambition that I had cherished from the beginning of our trip, of going where no man had ever been before, for I am quite certain that on our descent at any rate, we were making an entirely new route.

On my return late that evening, in a very tired condition, I found that the embargo had been removed and we were to be off to camp in the morning, but owing to the delay that had occurred, Mr. Freshfield had decided not to visit the camp, but to continue forthwith on his travels to the western coast. The journey to the camp started with a run up the Bow River by motor boat, about six miles to a landing opposite Mount Edith and there the novices got their first sight of a pack train.

An hour's plod through the low lying river scrub brought us to the mouth of the side valley where Healy Creek brings down a stream of marvelous, clear blue water in great contrast to the thick, turbid flow of the Bow River.

The Canadian members as a whole were very quick goers, both in walking and climbing. We, of course, were in no sort of training after our long voyage and train journey, with little exercise and large meals, and we found that we must let them "gang their ain gait" and go ahead of us.

We lunched beside Healy Creek and then set off up the valley towards Simpson Pass, a hot trail in the afternoon sun, but a well watered one we were glad to find.

When we were thinking that we must be very near to the first Camp, we met Mr. Wheeler coming down, and he told us that we still had three miles to go and these the hardest of the day. Irish miles are proverbi¬ally long ones, but these three Canadian miles were the worst I ever came across, taking about two hours.

After crossing the stream we diverged to a side valley, and a stiff pull up through the forest brought us to a lovely grass meadow covered with the yellow sulphur anemones and the orange and red Indian paint brush. Above this, just below a rampart of dark cliffs, we emerged into a glorious hollow and found Sunshine Camp, nestled in among the woods, 7,500 feet above sea level.

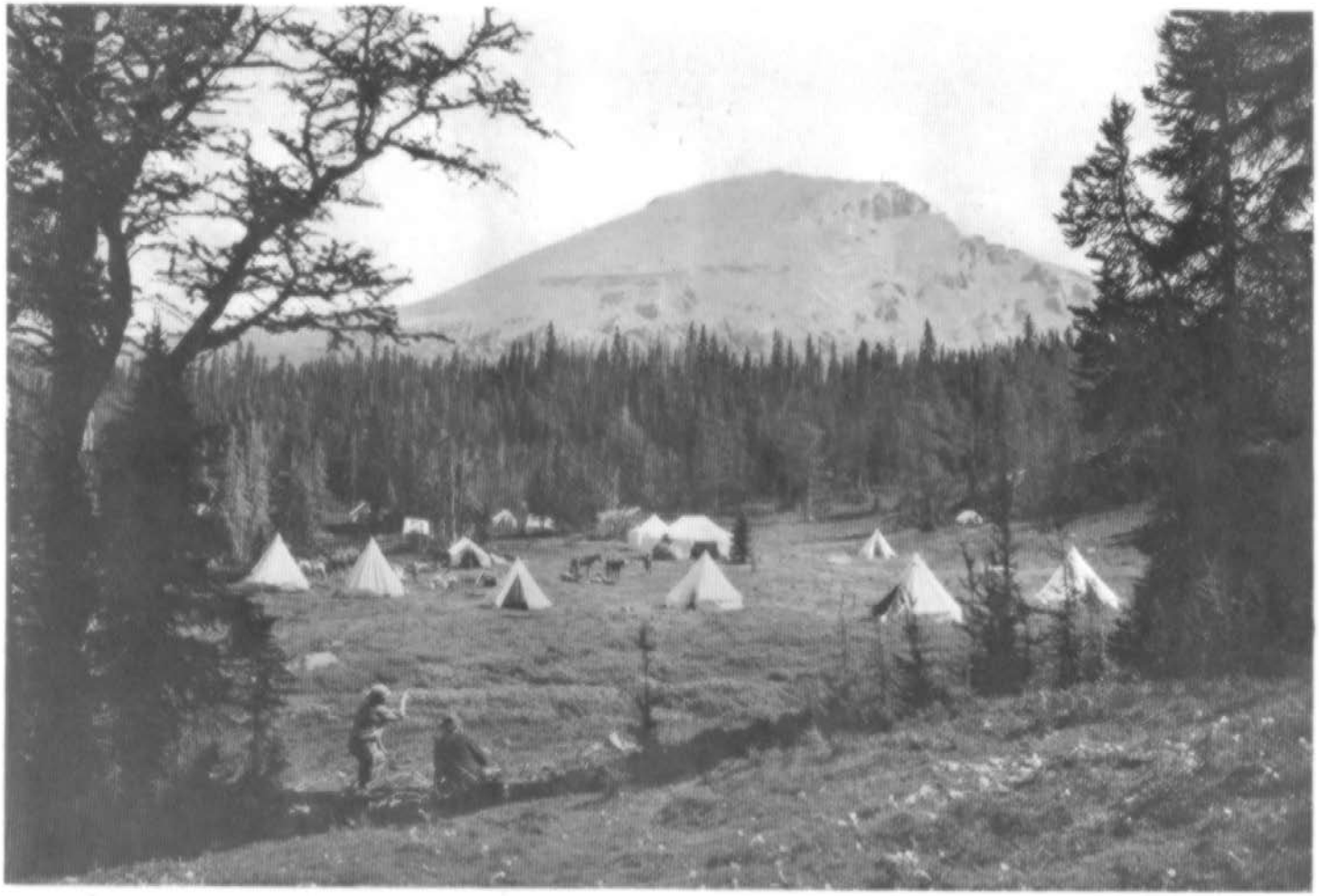
Supper was proceeding and we hurried to join the hungry throng with an appetite one only achieves among the mountains. After supper we gathered round a roaring camp fire and watched the full moon rise above the rocky rampart behind the camp flooding the hollow with silver light, and intensifying the black¬ness of the woods around us.

The route followed throughout the three days' march to the Assiniboine Camp is that described by Sir James Outram in his book "In the Heart of the Canadian Rockies," when he made his successful First Ascent of Assiniboine in 1901.

The second day was an easier march on the high uplands, crossing and recrossing the great Continental Divide, and here we got our first views of the eternal snows. From the top of Citadel Pass we got our first sight of Assiniboine, easily recognisable as the Matterhorn of the Rockies.

The most striking part of the day was the steep descent through burnt forest to Golden Valley Camp. A storm was coming up the further side of the valley and the piled masses of black cloud emphasized the steely blue colour of the glacier on the top of the terrific cliffs that guarded the other side of the valley. The trail dropped very steeply, with nothing but burnt trunks covering the sides of the gorge to right and left, beginning to shiver and creak in the still air, scenting as it were the approaching storm. The enthusiasm of the photographer for a magnificent subject for a colour photo, and the desire of civilized man for a dry skin were at war within us, but the latter won, and we just succeeded in making camp before the storm came.

And the third day brought us to the Assiniboine Camp. The trail led us up Golden Valley,



Sunshine Camp. Photo, H. Pollard

the valley being barred with several ridges which, we were told, were the work of beavers, forming hollows with lakes at the bottom with no visible outlet. The largest hollow which presented quite a large lake on our upward journey, I observed was quite dry when we returned a week later, so it is obvious that these form part of the bed of the Simpson River, and they have subterranean outlets.

Climbing the last of these barriers by a steep zigzag, we found ourselves in a waterless and desolate valley of rocks and stunted pines, which led us, after an hour and a half, to a col where we saw below us the waters of the small lake of Og, then open green pastures, and beyond the mass of the Assiniboine range.

Beneath "the shadow of a great rock in a thirsty land" we sat down to lunch.

At Golden Valley we had found Mr. Patterson, the President of the Club, and he accompanied us on the final march, and we learned from him the inestimable value of a billy and the quickest method of making a fire. The waterless trail through the rocks made the waters of Og look very tempting and while the billy was boiling several of us indulged in a bathe.

To those who have only known the Alps, there is upon the high pastures of the Rockies a sense of waste, in that the lush grass and lovely flowers do not afford food to any cattle or goats. For just the months of July and August there would be acres of superb pasture, but it is easy to understand that it is at present impossible to take any advantage of it; and when, if ever, the harvests of remote valleys are gathered in, and chalets or villages are found in these now lonely places, I fear the playground will have lost something of its charm.

The mountains are no better than those of Switzerland, the beautiful flowers have their equals in the Alps, the lakes are indeed beautiful, and surpass in their colouring those of Lucerne or Geneva, but what appealed to me as something different to any previous experience was the sense of untroddeness.

Wherever I have been before, I have never got so far away from the haunts of men and the signs of civilization, but during the whole march to and from the camp we never saw a soul who was not a member of the Club or of the pack train engaged in ministering to our wants.

Our stay in the camp was an experience that we shall always remember with delight, and our warmest thanks are due to every member of the Club for their kindness to us. We were not merely official guests, but every member there did his or her utmost to make us feel at home and enjoy our time. The five days we spent there went all too rapidly.

The Canadian Rockies have one drawback, but that is a very considerable one. I refer to the mosquitoes and other insects, such as those pestilential "bull-dogs."

To us, untrained and in soft condition, virgin ground so to speak, they offered an effusive welcome and settled around us in myriads. I should often have liked to lie down on those upland meadows and let "the silence that is among the lonely hills" sink into my soul for a few moments, but invariably so many things sank into my skin before my soul had acquired a receptive condition that I was driven on my restless course again, like the mythical Io driven by the gadfly. I bear the insects a great grudge for this.

Even when in the camp I sat down to write letters home to say how much we were revelling in our holiday, the mosquitoes induced quite a petulant and tired spirit by the time one got to the second sheet of paper. The Dolceness of the Far Niente was considerably spoilt.

I have heard a prominent climber speak derogatorily of "Luxurious picnic camps" when mentioning the feats of early pioneers of exploration in the Rockies, but to me the Assiniboine Camp struck the desirable mean; there was enough of the feeling that one was "roughing it" without finding luxury that would be out of place in such a locality. That it was as comfortable as it was

only due to the magnificent and untiring labour of Mr. Wheeler and his coadjutors.

All the food, all the tents, table utensils and the whole outfit were brought on pack animals three days journey over rough mountain trails, a distance of nearly thirty miles as the crow flies, and 3,000 feet above Banff, to say nothing of intermediate ups and downs. There were, I suppose, a hundred people in the camp at one time.

Packages jettisoned by the way were visible at many points of the route, and spoke of the difficulties that the organizers had had to combat. Small wonder that minor discomforts were suffered such as the absence of bread for two days, but the ladies promptly turned to and baked scones for us. I only mention these things lest one might think that too much luxury was carried into the wilds, where no true mountaineer would desire to see it.

My wife and I were allotted a tent in the married quarters, secluded in the forest with the most perfect view to meet one's eyes on waking of trees, flowers, lake and mountain.

Out of the days in the camp, my pleasantest recollections are not of the one big climb, Mt. Assiniboine, but of the moments which we passed in and around the camp. It was glorious to wake and look through the opening of the tent, through a vista of pines at Mt. Wedgwood, to stroll down to the stream and bathe, then back to breakfast; and to light one's first pipe, watch the various parties starting out on their climbs, and then perhaps to saunter off with a camera.

It is really difficult at this late date to say how we did fill the days, but they certainly did not want any filling. And then in the evenings we gathered around the camp fire, the background of mountains growing dimmer, the flickering flames growing brighter, while the little concourse of humans in the midst of nature's vast handiwork, talked, spun yarns, and raised voices in song, as men will do all the world over when two or three are gathered together.

From the mountaineer's point of view, Mt. Assiniboine stood easily first, but owing to the amount of loose stone, which one cannot help displacing, it was deemed advisable to control the number of aspirants and only allow one party upon it each day; it was assigned to Mr. Mumm, Inderbinen and myself on Monday, August 2nd.

We started at 4 a. m., and our way lay for an hour along the dark and silent waters of the lake, and then in growing daylight, we had a climb upon the cliff that was as hard as any of the climbing involved during the day. We were led by two other parties who were going for first ascents of the two neighbouring peaks, (both of which, I may say, were successful), and this probably saved us some time in finding the quickest way up the rocks.

On arriving on the glacier we parted from the others and struck up the snow to the foot of the rocks.

The words of Outram would perhaps best describe the problem that lay before us.

"Between the two jagged arêtes lies a formidable northern face, set at a fearsome angle and banded with almost horizontal strata which form an impressive alternation of perpendicular cliff belts and glassy slopes of ice. The lowest band is especially remarkable—a spectacular striated wall of brilliant red and yellow rock, running apparently entirely around the mountain, and particularly striking where the erosion and disintegration of the ridges leave a succession of coloured spires and pinnacles radiant in the glowing sunshine,"

We climbed at first on the face, the rock being exceedingly rotten, and every "prise" had to be carefully tested. After getting onto the arête for a short time we came to the lower band and had to traverse a narrow ledge upon the north face beneath it, till we came to a practicable chimney. Having ascended the chimney we traversed back to the arête and kept it almost the whole of the rest of the ascent, the character of the rock improving as we mounted.

The arête raises at a very steep angle; on one's left the east face of the mountain drops almost sheer for 5,000 feet, and the northern face, though not sheer, presents a sufficiently precipitous appearance. On the descent particularly I judged it wise not to let my eyes wander too much into the realms of space before me and on either hand, but to watch my footholds with concentrated attention.

The highest summit is hardly seen from the Camp, but when the summit of the rock arête was reached, it was only a matter of ten minutes over easy snow-to the highest point where a great snow cornice overhung the eastern precipice. We reached the top at 12. The view was disappointing. The atmosphere was not clear enough to give us much in the way of distance and we stood so far above the neighbouring peaks that they were flattened out and lost their forms.

We left at 1.30 to try and find the route that had been described to us by which we could go down the southwest side, but after descending some hundreds of feet over snow and shale, we were unable to identify the way, and rather than run the risk of being benighted we turned and retraced our steps to the summit, which we left for the second time at 2.30.

The descent was necessarily slow. I observe that Outram chronicles 3/4 hours for his party to descend 1,800 feet. Slow and careful progress was necessary the whole way, and it was hours before we found ourselves getting down to the level of the other peaks around us. Our time for the return was not very much less than for the ascent.

Of our other expeditions, Wonder Peak gave a glorious reward for a hot, though not lengthy grind in the afternoon sun. There was a wonderful sea of peaks stretching away to the Royal Group in the south; Mt. Eon, Mt. Aye and Mt. Assiniboine filled the near distance to the southwest and west, while far below ran the wooded valley with a chain of three lakes with wonderful hues.

The outstanding feature of the Rockies to the European visitor is the vividness and variety of colouring of the many lakes. Every shade of blue and green is noted with an intensity of colour only paralleled in a very few small lakes in the Alps, such as the little Lac Bleu at Kandersteg.

Cerulean Lake which we visited on a subsequent afternoon was another exquisite sheet of water, with the crags of Wedgwood Peak rising steeply from the very margin of the lake.

The Annual Meeting held on the morning of August the 4th, with the camp bravely decorated with an extra show of bunting, made as it were a climax to the visit. Would that all the annual meetings that I am fated to attend could be held in such surroundings and be attended by as pleasant, happy and harmonious shareholders! They were there to thank the directors for a dividend already received and spent.

The Camp was already beginning to empty; the delay at the opening had left members whose holiday was limited rather less time in the Camp than they had planned and hoped for and on the following morning we started back towards civilization.

If the return trail presented no new features I was able to enjoy it more, being in much better condition. We reached Banff again on the afternoon of August 7th, and wound up with a farewell dinner at the invitation of Mr. Patterson on the fleshpots of the C. P. R. hotel.

In a few months time your members will gather again at Lake O'Hara, one of the most lovely spots in a country that abounds in exquisite scenery. Our later travels took us there for a night, and we shall be able to picture the gathering in our minds, and hear the intense solitude that we found broken by the soft strains of "Goodnight, Ladies."

Whether time and place will ever permit of a second visit to the Rockies is upon the knees of the gods, but the thoughts of all who have been privileged to attend past camps will stand around in the shadow of the pines beyond the radius of the leaping flames of the camp fire.

The Camp At Mt. Assiniboine. Photo, H. Pollard

And when thyself with shining foot shall pass Among the guests star-scattered on the grass,
And in thy joyous errand, reach the spot Where I made one, turn down an empty glass.

On Foot In The Rockies

By A. S. Sibbald

Alpinists will agree in regarding the pack-pony and its old world prototype, the donkey, with which Robert Louis Stevenson has familiarized us in the person of the immortal Modestine, as meritorious beasts and may even on occasion use them. But the one-day trip on man's own two feet brings freedom to wander away from overbeaten paths and to learn to know those lonelier and loftier and it may be lovelier places where ponies for evident reasons do not visit.

It was with a view to discovering by experiment and experience whether the pony's help could be dispensed with on longer trips that the journey here recorded was attempted. The original plan was that of travelling on foot from Lake Louise to the 1920 Camp of the Alpine Club of Canada at the foot of Mt. Assiniboine. Circumstances later made necessary the abandonment of that part of the trip which lay between Sunshine Camp, east of Simpson Pass, and Mt. Assiniboine itself; and the journey as actually undertaken substituted Banff as its terminal point. The route lay for the most part closely along the northeast base of the peaks and ranges which constitute the Great Divide in that territory. The country traversed is amongst the finest in Canada in respect of alpine scenery. It included at least six districts each of which, when visited at all, is usually treated as a separate and sufficient objective for a trip : the country about Consolation Pass, the sources of the Vermilion River on the southern side of Boom Pass, Twin Lakes and the northern precipices of Storm Mountain, Shadow Lake with its incomparable view of Mt. Ball, the Pharaoh Peaks and Egypt, Scarab and Mummy Lakes and, lastly, the fine alpland country about Simpson Pass. The usual method of reaching each of these is to choose a suitable point of departure on the line of the Canadian Pacific Railway as a base for a trip inland to the objective point. The reader will be better able to follow the place references in this article if he or she will refer to sheets 15, 14 and 13, in the order named, of the Atlas accompanying Part 1 of the Report of the Alberta-British Columbia Boundary Survey Commission. It is evident from a study of the three sheets in question, or of any good map, that the six districts named above lie in a continuous line southeast of and roughly parallel to the railway. The plan here in view was that of ascertaining whether the various districts could be visited in the course of one continuous trip on foot without egress to the railway and without supplies other than those which could be carried in a comfortable shoulder pack.

At one point, just east of Vermilion Pass, the route selected approached within seven or eight miles of the railway. The fact that this point was about half way along the course suggested a means of lightening the pack upon the first part of the continuous trip. If a preliminary excursion were made from Castle Mountain Station to the point in question food for the second half of the later and much longer trip could be cached and subsequently picked up on the way.

After allowing for such assistance with dunnage as might be obtained from carriage service at Lake Louise and from the Alpine Pack Train at Sunshine Camp, there remained between these two terminal districts, by the route travelled, about fifty-three miles of mountain country almost entirely without trails and over which everything had to be packed upon one's back. The entire mileage from Lake Louise to Banff by the way taken was in excess of eighty, but the real test of the practicability of such travelling was met with within the fifty-three miles in question.

As companion and helper for the trip my wife, then spending her first summer in the mountains, was to accompany me. The beauty of the scenery at Banff had with her, as with myself some years before, awakened a wish to go back behind the encircling mountain walls and learn to know all that the magic in such names as Shadow Lake, Redearth Creek, Boom Lake, Vermilion River and Whistling Valley seemed to tell might be found in the country to which they belonged.

It was evident from the earliest consideration of the plan that proper equipment was of the first importance, —a principle not new or strange to mountaineers. Even with the greatest care in selection the packs of food, bedding, tent, cooking utensils and necessary personal requirements would be bulky and quite weighty. They might very well prove impossible on such parts of the journey as the steep northerly slopes of Consolation Pass and the dense untracked woods about Shadow Lake. The tent selected was for use primarily for a night shelter. It was of sail silk with a light canvas ground cloth, inner mosquito netting front and two bobbinet windows. The type selected as giving most room with least bulk and weight was that with an "A" front and a roof which sloped from the top of the "A" to the ground at the rear as well as at the sides. The sole support was a light rope from the peak at the front to a tree trunk or branch. The enclosed ground space was a quadrilateral with sides about 7 1/2 ft., 2 ft., 7 1/2 ft. and 5 ft. respectively, and provided sleeping room for two persons as well as shelter for all dunnage and food. The weight was five and a half pounds. The weight of the bedding was also very light. The material used was kapok covered with mercerized cotton inside and out. A thickness of a little over one-half of an inch sewed up in bag form, proved ample without other covering on the coldest summer nights in the mountains at altitudes of 6,000 and 7,000 feet above sea level.

As late as the first week in July it seemed likely that all plans would have to be abandoned. The extreme tardiness of the summer season in 1920 in mountain valleys and passes made it probable that much of such a trip in July would consist of plodding through soft snow. Not only would this be laborious but the journey would, under these conditions, include but little of the beauty of plants and flowers, the accompaniment of running water and green leaves and the contrast, always dear to an alpinist, between summer in the valleys below and continual winter on the peaks above.

The final decision to make the trip was arrived at while at Field on a warm day in early July. The long lying snows were at last melting in earnest all through the mountain country. We hurriedly visited the little general store at Field and purchased supplies for a four-day cache of food and for the preliminary one-day trip referred to above. With this stowed in light shoulder packs we took the eastbound train that evening to Castle Mountain station. The only accommodation at this last named place proved to be the warden's cabin, Elkhorn Lodge. It was at the time quite untenanted, but we spread our sleeping bags on the floor and rested not uncomfortably until early dawn.

The clear sunshine of the preceding morning promised a glorious day, and long ere the fine cool air of the early hours had given place to the heat of the forenoon, we were on our way. The route lay at first for a mile westward along the railway right of way, then for another mile or so by the Banff-Windermere motor road, then by a lumber road, and finally by the Twin Lakes trail towards the base of Storm Mountain whose rocky skyline rose before us high over the wooded hills between it and the Bow Valley proper. Easy walking brought us a little before eleven o'clock to what seemed a suitable point just a little short of where the well marked part of Twin Lakes trail ends. A flat rock surface was selected in a sheltered spot and on it we made our cache, placing all food not already in tins in a square tin biscuit box. Such tinned foods as could not be placed inside were placed about the box and over all was built a small mound of boulders. With acute realization

of the importance to us of this treasure at a later date, we took the bearings of its location in relation to surrounding peaks and hills and then made a quick trip to each of the Twin Lakes. The valley itself was quite clear of snow, even in its upper part, but the lakes were still ice-bound on the fourth of July. Evening brought us back to Castle Mountain station where we rested a second night on the floor of Elkhorn Lodge after trying to convince the railway station man that we had not been out on a fishing trip, an idea to which he was firmly committed. In the morning we returned by train to Banff to prepare our packs for the trip overland.

The snows continued to disappear rapidly and two days later we assembled the packs and sufficient food for the first half of the journey to Lake Louise. A leisurely afternoon was spent about the three Lakes in the Clouds. In the hotel rotunda we met the Swiss Guides Edward Feuz and Rudolph Aemmer. They expressed the view that much snow would be met with, particularly in Consolation Pass. This last proved to be very true, but Edward's further statement: "There is nothing, nothing at all to see, except Mt. Ball." was so mistaken as to suggest that the scenic beauties of the route are still incompletely known.

Two disasters were discovered in the course of the evening. The lid had come out of a syrup tin in the pack, and all the other tins were dripping with the contents of their emptied fellow. Hasty experiment proved that syrup dissolves in hot water and a very few minutes restored the tins to their pristine cleanliness. The pack itself was not so easily dealt with, but after a thorough scrubbing and a night's drying on hot water pipes, it proved ready for duty the following morning. Half our sweet food for the first part of the trip was, however, a memory and nothing more. The other misfortune boded ill. A small hand mirror in the pack was broken and, if we had been superstitious, we would have feared for what the next ten days might bring forth. In the result no greater ill effects were experienced than the difficulty of shaving for a week and a half with only a square inch of glass of very irregular outline and only indifferent reflecting qualities.

Thursday, July 8th, we rose early and left the hotel a few minutes after six. The sun was bright, and the whole way to Simpson Pass, sixty or seventy miles away, lay before us. Our packs were to go with the motor to Moraine Lake. We breakfasted about half an hour's journey along the trail and then, with a pleasurable sense of adventure in the days ahead, pushed rapidly forward into Paradise Valley. The trail to the Giant Steps and over Sentinel Pass is well known. A long, delightful day along its course with the brightest of sunshine brought us as evening fell to the little chalet at Moraine Lake. The packs had preceded us and had warned Miss Banks, our hostess, that some one was on the way. She repaired our losses in the matter of the syrup of golden memory by producing a tin of sweet fruit and provided so hospitably and efficiently for our comfort as to cause us in the morning to regret leaving with so short a stay at one of the most beautiful and comfortable of permanent mountain camps.

But strenuous days, the realization of many weeks' planning, lay before us and forbade dallying longer even in this outpost of civilized ways and conditions. We bade adieu and at last with shoulder-packs in place and the unknown way before us, rounded the moraine from which the lake takes its name and close under the Tower of Babel, followed the short remaining trail up Babel Creek to Consolation Lakes.

Let not him who has flitted pack free whither he would along the trail or up the mountain side imagine that he would travel in similar manner with all the necessities of life upon his shoulder. Let such an one open for a moment the pages of Crockett's "Adventures in Spain" and there, where midnight smuggling from France to Spain on foot is told of, read how "In spite of my light load, not more than a fifth of what others were carrying, I found the pace quite fast enough. I could hear

Ready For The March.

Tent Carried Front.

Tent Carried - Back. Photos, A.S. Sibbald

the heavy and even painful breathing of the men as they followed each other up the steep slopes. Every five minutes at the worst parts, less frequently elsewhere, the leader would give a sort of guttural 'Humph!' Then the exhausted men would lean their loads and themselves against the wall of rock. Assuredly this smuggling is no child's play." Nay, let them come nearer home and ask the topographical surveyors who have carried their instruments to so many camera stations on peaks in the Canadian Rockies whether travelling with and without equipment are one and the same, or permit of similar methods.

But do not let me moderate the eager enthusiasm of any who have caught the spirit of the plan outlined above and who would essay a similar trip on foot alone into the wilds! Perhaps a light camping kit weighs less than smuggled goods or surveyors' instruments. Perhaps our consciences were lighter than those of the smugglers and our responsibilities less than those of the others. At any rate, we fared along neither exceeding fast nor exceeding slow. Rests were frequent. Every ten minutes or so on the first day, while food in quantities was carried, we threw ourselves down and rested a while in the fragrant air and warm light of the sun. Such rests were not lost time. We had opportunity to see about and learn the beauties of the valley we were entering and the character of the country we were approaching.

Our first day was a short one. We pitched camp close to the south end of the first Consolation Lake, cut boughs for bedding and made our first inroad upon the food which had weighed so heavily on our shoulders earlier in the day. We were close now to the end of the built trail and the more serious part of the journey was well begun. The afternoon was marked by two of those myriad interesting happenings of Nature in the mountains. The one was the result of the seasonal conditions having accentuated the tendency of snow to avalanche from the higher peaks. The hours were filled with the recurrent roar of snowslides on Mt. Temple answered ever and anon by the sharper, nearer thunder of cracking ice on Mt. Quadra at the head of the lake. I do not recollect any grander display of the mountain artillery. The other experience was of a different kind. Marmots persisted in attempting to enter our tent and investigate the packs.

On Saturday, the 10th, we were away with every¬thing packed and breakfast over at six in the morning. Consolation Pass lay ahead buried in snow. Conditions were very uncertain and no one had visited it earlier in the year. The clear air of the early morning disclosed a possible serious obstacle as we traversed the boulders between the two lakes. Even at some miles distance the crest of the pass could be seen to be heavily corniced with the overhang toward us. This was so much the case on the summit of the lowest part of the pass that we looked for a way over it, if at all, by climbing to the higher part of the crest which lies to the left. With some doubt in our minds we rounded the second lake and came to the foot of the low wall of gravel and ice made by the moraine at the very edge of the farther shore. Here we were interested and surprised, just as we imagined ourselves to have left human kind behind for a time, to find ourselves hailed by an equally surprised pair of climbers from a pup-tent pitched in the bush within twenty feet of the wall of the moraine. Mr. A. A. McCoubrey of the Alpine Club of Canada and a friend had come over the pass the day before from Boom Lake end and, somewhat wearied from a long day in the snows, had camped the moment they reached the lake. The sun was not yet shining over the rock wall east of Consolation Pass and the four of us felt the encounter there in the wilderness somewhat strange both as to time and place. Mr. McCoubrey confirmed our views as to the cornice and stated that he and his companion had reached the snow slopes below it by clambering down about eighteen feet where rocks drop perpendicularly for the first part of the descent.

Drifted snow filled the remaining miles of glacier-worn country which forms the upper

end of Consolation Valley. It was firm under foot in the early hours of morning but frequent traces showed where our friends had floundered deeply in it in the heat of the previous day. As we progressed into the pocket at the head of the valley we bore a little to the left to avoid the more heavily corniced part of the crest and started up what seemed interminable slopes of snow. The trail at Moraine Lake had on the previous day taught us the burdensomeness of heavy packs. The face of Consolation Pass and particularly the abrupt snow pitches at the top were to prove no child's play while we were similarly weighted.

The ascent was at first a continuous series of tackings back and forth across the surface of the slopes. Occasionally a series of rock ledges outcropped a little higher up, while further still a sheer white snow curtain rolled upward to skyline. The ledges were sufficiently well defined at their level of the ascent to warrant . leaving the snow and clambering up from one to another. They proved so companionable as to suggest traversing a little to the right when we left them below and seeking the foot of the cliffs which came down from the summit and divided the upper snow-slopes into a higher left-hand portion and a smaller, lower right-hand one. We accordingly made the traverse across the snow to the cliffs, but found the snow face at their foot exceedingly steep and commencing to take on in the increasing heat of the day that dangerous condition in which snow slides off the sloping roof of a house. We dug in and traversed back again to the centre of the snowfield sweeping up on the left. By this time we were tired and our early breakfast both seemed and was a substantial number of hours away. We perched on the last outcrop of rock under the snow-curtain and ate some bread and a tinful of tomatoes. The writer scanned the steeper pitches above and spoke tentatively of a retreat. But the other partner in the trip would not hear of it. By and by we started again, digging in with toe and axe-shaft step by step. By this time the sun was earnestly at work and a fragment or two of the cornice came past us on a lightning trip to the valley bottom. Happily the overhang seemed to lessen to inconsiderable proportions just above us. Forty minutes from the lunching rock brought us immediately under the crest. A second experiment found a suitable place a few feet to the right of where a first one failed and we carefully dug our way up and over.

The element of depression felt three quarters of an hour before was now completely gone. Probably the most difficult mountaineering task on the trip lay behind us and, although by far the greater length of the journey was still ahead, the only serious remaining problem would be that of identifying the proper route.

For half an hour or more we rested on the top of the pass and enjoyed what, in now looking back, seems one of the best pleasures of the whole experience,— the arrival at the top of a new divide and the first view of the new country lying ahead. Again and again this was to be our experience in the following week and the moment thereof always brought its thrill of peculiar pleasure.

A short, easy descent lay before us into a hanging-valley which would evidently be very beautiful a little later in the season. To the right a broad, flat glacier swept around the base of Chimney Peak and extended to the foot of Boom Pass. Beyond the latter rose Boom Mountain with, to right and left of it, glimpses of the farther distant masses of Storm Mountain and the British Columbia side of the Mt. Ball group. On the left of the hanging valley itself there was a continuation of the rocky ridge which separates Consolation Valley from the Bow Valley. The basin of the hanging valley dipped precipitously a mile or so farther south down to the level of Boom Lake. The upper hanging portion reminded us of Larch Valley both in respect of surface conditions and vegetation, while the glacier gave it an added alpine attractiveness. Were it more

accessible for supplies it would be a delightful site for a Camp of the Alpine Club of Canada.

We securely strapped the pack containing the soft dunnage and sent it careering down the snow slope to gentler levels and slid down ourselves at a very different rate from that at which we had a short time before been ascending. Within an hour a sheltered dell was reached with running water, brush and all the requisites of a camp. We slept soundly and well with Consolation Pass and heavy packs respectively off minds and shoulders.

The following day was Sunday and indulgence was given to our inclination for a day's quiet rest in camp. One excursion was made a little way up the ridge on the left to obtain a view of the levels across the valley and to select a route across them to the foot of Boom Pass.

On Monday morning the benefit of the reconnaissance was reaped and with an early start the top of Boom Pass was reached at 8 a. m. On the way a porcupine was disturbed, drowsing at that early hour on a small bank of snow. The valley levels were carpeted with deep beds of last year's heath. The Alberta side of the pass was snow bound but the slopes were very easy and comparatively short. The top of the pass evidenced a complete contrast in conditions. The snow of the northerly Alberta side gave way at the very summit to vegetation, running water, earth slopes clear of any mantle of snow and to such a tangle of small jackpine as for once to make the descent more laborious than the climb.

Below us lay the valley in which one branch of the Vermilion River has its source. Opposite and a little to the left was Mt. Whymper. The whole south side of the valley was of very interesting formation, being a series of precipices alternating with small pocket glaciers which form the source of supply for this part of the river. The valley bottom was clear of forest debris and permitted easy travel after the tangle through which we had descended. The route lay down the stream and then back down through Vermilion Pass to the Alberta side of the Divide. We followed round the base of Boom Mountain and camped where the little Vermilion (Altrude Creek) crosses the Banff-Windermere motor road.

The food cache previously made near Twin Lakes was now only one day's journey away. The time already spent had established the practicability of such travelling even under somewhat severe conditions. The longer part of the trip still lay ahead but we felt reasonably sure of reaching Sunshine Camp by our original time-table on July 17th.

Early on the 13th the route was continued to the right of the Little Vermilion down into the very dense vegetation of the deep-lying valley which drains Vista Lake. This and other streams on the trip, half a dozen or more in number, were waded barefoot in order to keep our single pairs of boots reasonably dry from day to day. The crossing of the creek was followed by a somewhat steep climb out of the valley through a fine forest which later gave way to two miles or more of burnt over timber land. The slope grew much easier, however, and we now drew gradually to the left to avoid crossing at its highest point a rounded ridge which here runs out from the base of Storm Mountain a little way towards the Bow Valley. The going was slow amongst the fallen timber but conditions were by no means as bad as often exist on burnt over lands. By eleven o'clock the edge of the standing forest was again reached and we lunched in the shade by the bank of an opportune stream. Two hours travel in the afternoon brought us through a beautifully treed country to the stream which drains Twin Lakes. It was reached at a point almost identical with the location of the cache. The latter was found to be quite undisturbed. With new supplies there followed a luxurious camp meal and we set up the tent a little way below the precipices of Storm Mountain at peace with all the world and joyous in our undertaking.

The way on the 14th lay along the easterly shore of the larger of the two Twin Lakes and

then by an easy ascent from the farther end of the lake up a fine little valley on to the high alplands lying between Storm Mountain and Copper Mountain. Here again snow conditions were met with by way of contrast to the more summerlike ones in the lower lying forests in which we had lived since leaving Boom Pass. The line of the Divide ran grandly along on the right while to the left a series of hills and the peaks of the Massive range separated our view point from the Bow. Away ahead the Pharaoh Peaks stood up sharply on the left of Whistling Valley. Beyond and above them in the distance stood Mt. Assiniboine.

We swung around to the left close under the end of the nearest ridge of the Storm massif and entered a region lightly clad with such trees as Lyall's Larch. The ground dipped at first gently and then more sharply through denser forests to the outlet of Shadow Lake. Here there opened very suddenly before us the really magnificent view lengthwise along the lake to the sheer cliffs, massive base and majestic ice-clad summit of Mt. Ball, rising in due proportion nearly five thousand feet above. It is without question one of the best views in the Rockies and not nearly so well known as is merited alike by its grandeur and accessibility.

We had been travelling with heavy packs for three successive days and the present location was so well worthy of a longer stay that it was decided to camp until the morning of the 16th.

In the hope of avoiding the distance along the north shore of the lake and around its westerly end an effort was made on the 15th to find a practicable ford across Redearth Creek at the outlet of the lake. The stream is broad and only knee-deep for the greater part of the way across; but near the south bank lies an older, deeper stream bed and in this part of the crossing under high water conditions fording was out of the question. There is said to be a ford farther down stream, but search for it was not attempted as the stream led away from our course. The next resort was an effort to build a raft but this too was abandoned for lack of sufficient rope to tether the poles. It was, therefore, necessary to go round the lake, although doing so the following morning would clearly mean two hours extra travelling.

Six a. m. was not too early for a start after more than a day's rest. In fact we found it easier throughout to travel earlier in the day, before the sun reached its greatest heat. The extra distance around the shore was worth the extra time and effort. The lake in the calm of that early hour justified its name and reflected entrancing settings of tree-clad slopes, grey cliffs and lofty beds of ice and snow with skyline high above, clear cut where sky and mountain met.

A turbulent glacier stream was crossed and we approached the outcrop of cliffs which run down to below water level from the base of Mt. Ball at the very end of the lake. Directly at the point where the cliffs ran down into the water a heavy bank of ice and snow frozen to the cliff face projected out a yard or more over the lake. It was frozen solidly in position and made a safe bridge to a crack running up a dozen feet or more in the cliff face. The crack in turn led to a level ledge a foot or fifteen inches wide running about five rods along the face of the rock wall and gradually leading to safer ground. Rock handholds and occasional stunted shrubs growing in the interstices of the cliff gave sufficient support and, with faces to the rock and packs projecting out behind over the ledge and the water we edged our way to footing better suited to wingless creatures. Without packs the conditions would have been pleasant, but a bundle of any size on the back so alters the balance as to create an entirely new problem while climbing upon rocks.

Five hours of somewhat slow travel through tangled forest brought us to clearer country at the upper end of Haiduk Lake and here again the fine scenic qualities of the district constrained us to pitch our tent and rest awhile. Camp was made on a very small open meadow beside the shore close under Haiduk Peak. The view down the lake toward the Ball and Storm Mountain groups was

scarcely less impressive than at Shadow Lake. The meadow about us was carpeted with anemones and avalanche lilies—so much so as to make us hesitate to destroy any of them by setting up Camp and lighting a fire.

We had looked forward to the 16th as a big day. It proved to be so, although not quite in the sense anticipated. Our expectations were that we should reach Sunshine Camp, exchange dilapidated clothes for fresh ones, meet old friends and in general bring to an ending that part of the summer's outing with which this tale has particularly to do. Dis aliter visum. The following morning brought us with much enjoyment and high hopes through Whistling Valley, which is really an alpine pass of 7,500 ft. elevation, and thence, by keeping close to the Pharaoh Peaks on the left, down the broken rock face to the shores of Egypt Lake. The latter was crossed at the outlet on a log dam and a few minutes walk carried us to the upper end of the South Branch of Redearth Creek a little north and west of Redearth Pass. Returning instincts of civilized and custom ridden man prompted a careful shave and a general tidying of outward appearance. It had better be explained that we had in some way understood that the first of the three Alpine Camps was to be located at Simpson Pass. This was true as to general locality only, as we later discovered. The precise location was some miles further eastward and quite out of sight from Simpson Pass by reason of the intervention of a low intervening ridge of alplands and occasional outcroppings of rock. However, of this we knew nothing and, relying upon the fancied nearness of the camp, carried our preparations so far as to leave behind our last package of pancake flour. No doubt marmots, bears and other wild things rose up to call us blessed. The tramp up the grassy slopes to the crest of the low ridge which runs northwesterly from Monarch Mountain was begun. Beyond, as we fondly imagined, lay tents and friends and many good things. We had all the sensations of the sailor nearly home from distant seas or of any poor wanderers returning to the dear, familiar things from which they had previously parted themselves. The hills were carpeted for miles to right and left with flowers,—a repetition on a much more extensive scale of what had been seen in the meadow the day before.

The crest was crossed just north of the line of the Divide and we took a course nearly straight for the summit of Simpson Pass. The latter when reached showed no sign of pack train, pony or person. After half an hour's search back and forth without result, there was held a council of war. The location of the camp was unknown. We were twenty miles from Banff. Our food supply had been planned to last only until that evening and consisted of a little oatmeal, some cocoa, a few soup cubes and one oxo cube. On these we dined. The oxo cube was sliced and its precious fragments formed the meat course. Then, in order that no risk be run of wandering foodless in the wilds, a start was made down Healy Creek towards Banff. It seemed likely that the camp lay up the most, easterly of the final three constituent streams of the creek, and if this were true we would see the tracks of the pack train at the confluence of the streams three or four miles down the trail.

Events turned out in that way. The tracks were unmistakable and we even had the good luck to meet a packer at the junction of the trails. We swung up hill again up the easterly trail, and as darkness fell pitched camp a full thirteen miles from the morning starting point at Haiduk Lake. It had indeed been a big day.

Next morning, feeling sadly the restrictions of a diet of soup and porridge as a basis for mountaineering, we walked up the two remaining miles of trail to Sunshine Camp and arrived very hungry in time for breakfast.

There remains very little of narrative but possibly a very brief comment. The trip from Sunshine Camp to Banff was made some days later under the usual 1920 conditions,—a walk of a

1. Consolation Pass.
2. Looking S.E. To Boom Pass.
3. Summit Boom Pass, Alberta Side. Photos, A.S. Sibbald

1. Mt Ball From Outlet Of Shadow Lake.
2. Haiduk Lake, Mt. Ball , Storm Mt.
3. Haiduk Pk. From North. Photos, A.S. Sibbald

dozen miles down Healy Creek and thence by motor boat down the Bow River to Banff. Our camp kit was packed no longer on our own shoulders but on the more capable ones of a pony. We had returned to normal mountain methods and were clothed and in our right mind.

There remaineth the comment. Such travel is too arduous to be undertaken unless in first class physical condition. Equipment must be exactly adapted to the party so as to maintain that physical condition without including an extra ounce of weight. The person in charge should know the general topography of the country and have something of the capacity to find one's way by salient peaks and watercourses. There must be a readiness at times to experience real fatigue. But, granted these things and a willingness to prepare thoroughly and, if need be, to endure greatly, I know of no better way to see the Rockies than to go as a pilgrim with staff in hand and bundle on shoulder. It is so, and probably only so, that one can learn to know intimately their greatness and beauty, their power and their peace.

Note.—Mr. Sibbald's article is excellent; his example and precept are excellent; and the only logical comment that can be made is, "Go thou and do likewise."—Ed.

Gossip About A Few Mountaineering Classics

By Elizabeth Parker

We may use the word more loosely than our forebears and their forebears used it, but though its import may be wider now the essential qualities of the "classic" remain the same. Certainly familiarity makes them more precious. Concerning certain books in the increasing body of mountaineering literature and concerning the true mountaineer, whether novice or veteran, it is so. I propose to gossip a little about a few of these and the men who produced them. Except the devout author of "The Matterhorn" and "Peaks, and Precipices," they are all by English speaking climbers. There is now in our language an extensive bibliography, excellent books altogether in spite of a goodly proportion of "pot boilers."

Although mountains in the Alps and Pyrenees were climbed as early as the 14th Century, the first real snow peak was not conquered until 1744, and it was forty-two years later that Mont Blanc fell to Dr. Paccard and the peasant, Balmat, De Saussure following the next year. (The biography of this famous scientist, mountaineer and man of letters, written by Mr. Douglas Freshfield, is one of the latest important books published.) After De Saussure's ascent of Mont Blanc, tourists began to climb, and a new craft, that of professional guides, came into being. But it was not until 1854 when Sir Alfred Wills made the first ascent of the Wetterhorn, that mountaineering began to be an English sport; and in 1857, the Alpine Club was organized in London. Its jubilee was celebrated when the Alpine Club of Canada was a sturdy infant scarcely a year old, Mr. Wheeler, the first president, being a guest among many representing mountaineering clubs throughout the world.

The first Alpine Club was not long in existence before pens were busy, an important series appearing in "Peaks, Passes and Glaciers," edited by John Ball. The most eminent climber of that period was Edward Whymper, first-foot on the peak of the Matterhorn. The feat was accomplished after seven determined but futile attempts on the Italian side, the eighth and successful attempt being a race with a party of guides who climbed by the Italian route. Whymper and his party tried, for the first time, the Zermatt side and beat them by 1,250 feet. They remained on the summit for one crowded hour of triumph. It was on the descent that the tragedy occurred, and Lord Francis Douglas, Rev. Charles Hudson, a lad of nineteen named Hadow, and Croz, a noted Guide, perished,

falling 4,000 feet from precipice to precipice. The whole story is minutely told in simple but graphic terms in Whymper's book, "Scrambles Among the Alps," published in 1871 by John Murray, London, and going into edition after edition. These late years it can be got in Nelson's little blue library for a nominal price but without those original fine wood engravings, the author's own work. As a matter of fact, Edward Whymper was the last of the great engravers for book illustrations. He was an engraver and water-colour artist before he was ever an alpine climber. It was owing to a commission from Longman, the publisher, to sketch in the little known Dauphine Range for illustrations to the second series of Ball's "Peaks, Passes and Glaciers"—it was owing to this sketching tour that Whymper turned to the Alps with all his heart and mind and strength. Whymper himself in later years published two guide books, one for Zermatt and the Matterhorn region, the other for Chamonix and Mont Blanc region, both fully illustrated and revised at intervals until his death. He won world-wide fame by his associations with the Matterhorn. He investi¬gated the glaciers of Greenland, and in 1880 went to 'the Andes to experiment with the effect of low atmospheric pressure on human life. His reports on that complicated subject are approved by such experts as Dr. Longstaff and the Duke of the Abruzzi. While in the Andes, he climbed seven virgin peaks ranging from 15,000 to 20,000 ft. He spent a night on the summit of Cotopaxi, examining the crater, and shortly after from the top of Chimborazo saw it burst into eruption. He made scientific surveys, studied flora and fauna, and brought back to England many specimens, zoological, entomo¬logical and geographical, from high altitudes. His book on the "Great Andes of Ecuador" is now also in Nelson's little library, and a book of intense interest it is; but "Scrambles Amongst the Alps" is his master¬piece, containing the record of his climbs in the Alps between 1860 and 1869, six of its twenty-two chapters telling of the attempts on the Matterhorn. "Scrambles" is a modest word to apply to these tremendous climbs and traverses of glaciers and passes, and ascents of summit peaks. He was undoubtedly one of the greatest climbers of the sixties and seventies. For more reasons than one, he was passé when he first came to the Rockies, at the request of the C. P. R. to climb our Matterhorn, which he did not visit even. In the very first chapter of "Scrambles" he shows himself a close observer of mountain phenomena. Nothing escaped him as he reconnoitered from this valley or that pass, perhaps sketching as he climbed, always gaining experience of mountains and men. He had an eye for humanity, and humanity enters into his vivid story. While on his way to a strategic point for sketching Mont Pelvoux in order to illustrate a partial ascent by a party, one of whom was Dr. T. G. Bonney, he reached a summit from which he looked into Italy. And the Alps had conquered the heart and mind of Edward Whymper. The following summer he conquered Mont Pelvoux. The account of this expedition, a minute one, humorous and descriptive and informing, fills the second chapter in "Scrambles." The engravings are very fine and make the reader regret the vanished art. It is minute narrative such as the born mountain-climber loves to read, his inward eye seeing every step of the upward route, every fault and every undoing with all the toil of it, and the glory of the unimaginable mountain landscape widening as they climbed. On reaching the summit, Whymper and his comrade, a Scotsman, Macdonald, shook hands solemnly. An involuntary ceremony on virgin summits. It was heavenly weather. "Countless peaks burst into sight. Mighty Mont Blanc, seventy miles away, first caught our eyes, then farther off, the Monte Rosa group; while rolling away to the east, one unknown range after another succeeded in unveiled splendour; fainter and fainter in tone, but still perfectly defined, till at last the eye was unable to distinguish sky from mountain, and they died away in the far off horizon." This is a bit taken out of the panorama, just a bit, seen by the climbers who, with difficulty, "wrenched their eyes" from the distant mountains to those nearer.

Whymper died suddenly during his last visit to Chamonix in September, 1911. Three days before his death he said: "I am 72, and I am finished. Every night, do you understand, I see my comrades of the Matterhorn disaster slipping on their backs, their arms out-stretched, one after the other, in perfect order at equal distances—Croz, the guide, first: then Hadow, then Hudson, and lastly Douglas. Yes, I shall always see them slipping in order on their backs with their hands turned back, and I shall never see Zermatt again, where I spent my most ardent hours, nor my Matterhorn."

In his great book on "The Matterhorn" Guido Rey tells about his first sight of Whymper. It was on a high mountain-road, and the veteran was watching the mountain of his love. The Italian did not know who it was until he had passed, and then he turned to look with veneration.

Guido Rey has been a mighty climber. With him the mountains are closely akin to the supernatural. He writes with profound emotion, always in a beautiful spirit, and his narratives are intensely personal. But there is no egotism and no really flowery sentimentalism. His second book, "Peaks and Precipices" is the most devotional alpine book I have ever read. The breath of the mountains tempers his limbs and purifies his spirit. After strenuous days on the heights, he reads their history in his hands: a large scar from the Grepon: smaller scars of a violet hue from the Charmoz; a scarlet one still smarting, from the Requin.

He invokes these bruised hands which have helped him climb so high. The faces of his companions, like his own, are as we had often seen them after hard climbing. Ah! but to him there is the ecstatic expression, and he recalls certain paintings of "vigorous saints" in the joy of martyrdom with transfigured faces, tattered garments and bleeding limbs. He gives us their photographs, looking like bandits. But try them, he says, and you will find them not saints, but good men and true. What a noble companion Guido Rey is on a hard and beautiful mountain! How intently he listens in the silences when perfect lines and colours unite in a harmony like music, and his heart uncon¬sciously sends up a hymn of faith. So does sunset on Mont Blanc move him. Always he feels deeply the impression of mountain beauty. On the heights earth touches heaven. His climbing days are now past, he has given to the mountains "the best part of his enthusiasm." He adds, "I have had from them in return compensations such as no other earthly thing could give me." Not many mountaineers have ex¬perienced such spiritual exaltations. The very last words in the book are those spoken to a friend on the summit of San Martino: "Let us stop here a little longer! It is good to rest on the summit, and to dream amongst the clouds in a few short moments in one's life."

Both "The Matterhorn" and "Peaks and Precipices" were rendered into English by Mr. J. E. C. Eaton, who is a member of the Alpine Club of Canada.

A. F. Mummery, for whom an ice clad mountain in the Rockies is named, who lost his life on Nanga Parbat in the Himalaya, was a genius on rock and ice, a passionate lover of high mountains and a man beloved of his fellows. His book "My Climbs in the Alps and Caucasus" has gone into the little Nelson Library. It was originally published for the information and enter¬tainment of his friends, but the first edition soon sold out, a second was issued, and at once it took rank as a good mountaineering book. Only a week after it first appeared, Mr. Mummery with Dr. Norman Collie and Mr. Geoffrey Hastings, both members later of our Club, left for the Himalaya, to attempt one of its highest peaks, Nanga Parbat. Members who were at the O'Hara Camp in 1909 will recall the description of that sacred mountain by Mr. Hastings one night at camp fire and how difficult it was for him to speak. In the introduction to the reprint, Mrs. Mummery gives extracts from her husband's letters. The last one tells about carrying provisions to a cache at 17,000 feet and how

they mean to get them to 23,000 feet at the base of the final peak. "Collie is not keen on it and old Hastings has got a chill, so I am left with the Ghurkas." Further on he says, "To-morrow, I cross a high pass with the Ghurkas. Hastings and Collie go round with the coolies and stores. If the N. W. side of Nanga is easy we may pull it off, but you will have a wire before this reaches you." Against the judgment of his companions he started with the two Ghurkas, and they were never seen again. Like John Muir, he would prefer death on a glacier rather than from some shabby lowland accident. The last chapter in his book is entitled "Pleasures and Penalties of Mountaineering," and ends on that very note. "High proficiency in the sport is only attainable when a natural aptitude is combined with long years of practice, and not without some, perhaps much danger to life and limb. But the climber 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 stirring energies of youth, gains for which no price, perhaps, is too high. It is true that the great ridges sometimes demand their sacrifice, but the mountaineer would hardly forego his worship though he knew himself to be the destined victim. But happily to most of us the great brown slabs bending over into immeasurable space, the lines and curves of the wind-moulded cornice, the delicate undulations of the fissured snow, are old and trusted friends, ever luring us to health and fun and laughter, and enabling us to bid a sturdy defiance to all the ills that time and life oppose." Most of the chapters describe climbs on the more difficult peaks of the Alps, such as the Grepon. There are two on the Matterhorn, but by Mummery's day, that mountain had been climbed by ladies. In Switzerland, the term "a lady's mountain" is synonymous with "an easy climb." Mummery's modest and artless descriptions of perilous ascents never emphasize the peril nor so much as indicate it. This bold and absolutely unafraid climber, with the passion for rock-pinnacles and eternal snows, had the light touch, abhorring rhetoric. And such charm and simplicity has his writing that Guido Rey calls him the poet of the Grepon.

Perhaps the most widely known mountaineering-classic, in our language at least, is Sir Leslie Stephen's "Playground of Europe," consisting of essays contributed to Cornhill, the Alpine Journal, and Fraser's Magazine. The phrase coined by him for his title has gone round the world, and the book is a treasure to many who have never set foot upon a mountain. Mr. Douglas Freshfield, who was a close mountaineering friend, has said that "the Alps were to Stephen a play-ground. but they were also a cathedral." And that is true, as we gather from his biography, but he covered up his finer emotions—often with persiflage,—such a horror did he have of anything approaching sentimentalism. He was an intrepid climber. His friends were wont to say that he strode from peak to peak on a pair of compasses, so long were his legs. One beautiful essay, "A By-Day in the Alps" was not included by Stephen, even in the revised edition of "The Playground of Europe," but Mr. Arnold Lunn has reprinted it in his Alpine Anthology. Stephen placed last in his book the essay, "Regrets of a Mountaineer," an essay which moves the unknowing reader to sympathetic regret that this happy and ardent philosophical climber will climb no more. As a matter of fact he had just married Thackeray's daughter who would not consent to any further hazards in high and perilous places. And the honeymoon was spent in the Alps where he watched through a telescope the small black dots creeping up the high flanks of Mont Blanc or Monte Rosa. After several visits to the Alps with her husband, the timid wife found that he was as safe on a glacier a sin a London street. And in 1869 he began to climb again with all the old passion. Whymper declared him "the fleetest of foot of all the alpine brotherhood." His alpine essays are among the precious things in our wonderful English Literature. I should like to see them in a half-a-dozen reprints. He is always perfectly sane, and he has a right sense of aesthetic values. No writer yet has matched his incomparable essay on the Alps in Winter. One quotation, and then we leave him. He has been

The Conqueror Of The Matterhorn.

speaking of the beauty of the Wengern Alp in winter. That Alp is to him a "holy of holies in the mountain sanctuary, and the emotions produced when no desecrating influence is present and old memories rise up, softened by the sweet sadness of the scenery, belong to that innermost region of feeling which I would not, if I could, lay bare. Byron's exploitation of the scenery becomes a mere impertinence; Scott's simplicity would not have been exalted enough; Wordsworth would have seen in this much of his own image; and Shelley, though he could have caught some of the finer sentiments, would have half spoiled it by some metaphysical rant." It is enough for Stephen to "pass by with a simple confession of wonder and awe," This essay was written in 1877 after his wife had died. The "Regrets of a Mountaineer" was written ten years earlier.

I cannot help adding a note to Mr. Mumm's "Five Months in the Himalaya," a stout volume most sumpt¬uously illustrated in photogravure entirely, with maps at the end. Even the illustrations in the text are photogravures, pasted on the page. There are panoramas and full page illustrations, about eighty in all. Letter¬press and pictures, it is a veritable edition de luxe, and the narrative is one to enthrall climbers and all readers who love the distant but cannot travel, to whom India is as Carcassonne to the longing peasant. The expedition was an important one planned to explore Mount Everest, but the Secretary of State for India would not give permission to cross the Tibetan border and the objective was changed to the range of Garhwal and Kashmir. The leader was Major the Hon. C. G. Bruce, now a General and the leader of the second expedition to Everest, Dr. Longstaff, and Mr. Mumm who took the faithful Inderbinen with him. Inderbinen was speech¬less with awe when he got on a mountain well into the Himalaya. After a long pause, he said slowly, "I did not know there were so many mountains in the world." Dr. Longstaff made the virgin summit of Mt. Trisul, 23,406 feet, an accident to Major Bruce and mountain sickness with Mr. Mumm preventing their achieving the last part of the ascent. This is a book of Himalayan narrative that easily takes its place among the great books written on the highest and most inaccessible mountain system on the earth. And its author is a lover of our Canadian Mountains and honoured by our Club of which he is a member.

I have not said a word about Tyndall's books which are accessible in various popular reprints, nor about Sir Alfred Wills' "Wanderings in the High Alps," which appeared, I think, before 1857. An article might be written about the books dealing with the Rockies and Selkirks: Spotswood Green's rare volume, "Among the Selkirk Glaciers," a record of a season's climbing and surveying in 1888; Dr. Coleman's "The Canadian Rockies: New and Old Trails," covering-time from 1884 to 1908; Mr. Wheeler's "The Selkirk Range;" Mr. Wilcox's beautifully illustrated "The Rockies of Canada;" Collie and Stutfield's "Climbs and Explora¬tions in the Canadian Rockies;" Sir James Outram's "In the Heart of the Canadian Rockies;" Howard Palmer's "Mountaineering and Exploration in the Selkirks." These books, written by experienced climbers and explorers, are indispensable to an alpine library. They will increase in value as mountaineering increases. For, let no one think that flying will ever rival the noblest sport on earth.

Reveries Of A Disappointed Camper

A. C. Galt.

Even prior to the signing of the Armistice, Mr. Wheeler had begun to direct his attention towards fixing a suitable site and date for a "Welcome Home Camp," where the Club could extend its heartiest congratulations to all its members returned from the war, and could record its undying gratitude to those whose proud privilege it was never to return.

Owing to the delays incident to demobilization, it was found impossible to hold the Camp in 1919, so at length it was decided that July 20th, 1920, should be the date, and that Mt. Assiniboine, the majestic giant of the southern Rockies, should be the site.

As a matter of course members of the A. C. C. were all eager to attend if they could.

Having commenced my mountaineering activities many years too late I felt somewhat at a disadvantage as a contributor to the sport. But at length a happy thought suggested itself to me. I recalled that when that fine mountaineer, Dr. Longstaff, made his ascent of Mt. Assiniboine ten years ago, he found excellent trout fishing in a lake on the way to the mountain, and caught a number of speckled beauties with artificial minnows which he fashioned for himself out of a discarded tobacco tin. Here was my opportunity. I would smuggle a small rod and all appliances into Camp, and would win enthusiastic plaudits day after day by supplying the Camp with delicious fresh trout. And, in view of that recent increases allowed by Parliament to the Judges, there was no necessity to be niggardly in my preparations.

It is well understood by mountaineers that the services of a guide should always be obtained when possible.

For the past thirty years Mr. A. L. Mumm has taken Moritz Inderbinen with him as a guide on mountaineering trips in all parts of the world. Mr. MacCarthy has for many years had the assistance of Conrad Kain; and Dr. Hickson has always climbed with a couple of guides from the C. P. R. huts. Mine was a different proposition. A lucky event, however, helped me out.

I learned that a famous fishing guide from England, named Izaak Walton, had recently come to Winnipeg and was engaged on a temporary job, decorating the book-shelves of Russell, Lang & Company's store on Portage Avenue.

I hastened down to meet him. Mr. Lang kindly introduced him to me, and I took a fancy to him at once. I briefly explained the object I had in view, and the pleasure it would give me to have his services. The old fisherman did not at once agree, but conferred for a few minutes with Mr. Lang, and then he said quietly; "I will go with thee and be thy guide, and in thy most need to go by thy side."

In fixing Izaak's wages, the matter was naturally left to his friend, Mr. Lang to settle, as he knew the rates properly chargeable in this country.

The amount so fixed was most reasonable, and I arranged with Izaak to start for Banff the following Monday.

On the journey to Banff, Izaak entertained me with many of his experiences in England, especially a five days' fishing excursion on which he undertook to teach a huntsman and a falconer how greatly fishing exceeded hunting, either with hounds or hawks as a mode of sport.

At first, the huntsman was incredulous, for he had always regarded anglers as merely patient, simple-minded creatures. But Izaak soon made him sit up by the following remark: "And for you that have heard many grave, serious men pity anglers; let me tell you, Sir, there be many men that are by others taken to be serious and grave men, whom we contemn and pity. Men that are taken to be grave, because nature hath made them of a sour complexion; money-getting men, men that spend all their time, first in getting, and next in anxious care to keep it; men that are condemned to be rich, and then are always busy or discontented; for these poor-rich men, we anglers pity them perfectly, and stand in no need to borrow their thoughts to think ourselves so happy."

One of his stories about the despised Chub reminded me of the Kenora jack-fish, and may be usefully repeated here.

Izaak had just promised the hunter that he would catch him a Chub, when the following

conversation ensued:

HUNTER: "Oh, Sir! A Chub is the worst fish that swims; I hoped for a Trout to my dinner."

IZAAK: "Trust me, Sir, there is not a likely place for a Trout hereabout; and we staid so long to take our leave of your friends this morning that the sun has got so high and shines so clear, that I will not undertake the catching of a Trout till evening. And though a Chub be by you and many others reckoned the worst of fish, yet, you shall see I'll make it a good fish by dressing it."

HUNTER: "Why, how will you dress him?"

IZAAK: "I'll tell you by-and-by, when I have caught him. Look you here, Sir, do you see? But you must stand very close. There lie upon the top of the water, in this very hole, twenty Chubs. I'll catch only one, and that shall be the biggest of them all; and that I will do so I'll hold you twenty to one, and you shall see it done."

HUNTER: "Ay, marry! Sir, but now you talk like an artist; and I'll say you are one, when I see you perform what you say you can do; but I yet doubt it,

IZAAK: "You shall not doubt it long; for you shall see me do it presently. Look! the biggest of these Chubs has had some accident; and that looks like a white spot. That very Chub I mean to put into your hands presently; sit you but down in the shade, and stay but a little while; and I'll warrant you, I'll bring him to you."

HUNTER: "I'll sit down; and hope well, because you seem to be so confident."

IZAAK: "Look you, Sir, there is a trial of my skill; there he is; that very Chub, that I showed you, with the white spot on his tail. And I'll be as certain to make him a good dish of meat as I was to catch him. I'll now lead you to an honest alehouse, where we shall find a cleanly room, lavender in the windows, and twenty ballads stuck about the wall. There my hostess, which I may tell you is both handsome and civil, hath dressed many a one for me; and shall now dress it after my fashion, and I warrant it good meat."

HUNTER: "Come, Sir, with all my heart, for 1 begin to be hungry and long to be at it, and indeed to rest myself, too; for though I have walked but four miles this morning, yet I begin to be weary; yesterday's hunting still hangs upon me."

IZAAK: "Well, Sir, and you shall quickly be at rest, for yonder is the house I mean to bring you to."

"Come, Hostess, how do you do? Will you first give us a cup of your best drink, and then dress this Chub, as you dressed my last when I and my friend were here about eight or ten days ago? But you must do me one courtesy, it must be done instantly."

HOSTESS: "I will do it, Mr. Walton, and with all the speed I can."

IZAAK: "Now, Sir, has not my hostess made haste r And does not the fish look lovely?"

HUNTSMAN: "Both, upon my word, Sir; and therefore let's say grace and fall to eating of it."

IZAAK: "Well, Sir, how do you like it?"

HUNTSMAN: "Trust me, 'tis as good meat as ever I tasted. Now let me thank you for it, drink to you and beg a courtesy of you; but it must not be denied me."

IZAAK: "What it it, I pray, Sir? You are so modest that methinks I may promise to grant it before it is asked."

HUNTSMAN: "Why, Sir, it is that from hence¬forth you would allow me to call you 'Master' and that really I may be your scholar; for you are such a. companion and have so quickly caught and so excellently cooked this fish, as makes me ambitious to be your scholar."

IZAAK: "Give me your hand; from this time forward I will be your Master, and teach you as much of this art as I am able; and will, as you desire me, tell you somewhat of the nature of most of the fish that we are to angle for, and I am sure I both can and will tell you more than any common angler yet knows."

Later on, Izaak gave me a detailed explanation of how he was able to catch the very fish he wanted, and full instructions of his method of cooking such fish.

The scholar was lucky enough to land some fine Chub himself that day.

Towards evening, as Izaak said, he took his scholar to a Trout stream and succeeded in landing several. He then said to his scholar: "Look! Under that broad beech tree I sat down when I was last this way a-fishing; and the birds in the adjoining grove seemed to have a friendly contention with an echo, whose dead voice seemed to live in a hollow tree near to the brow of that primrose-hill. There I sat viewing the silver streams glide silently towards their centre, the tempest¬uous sea; yet, sometimes opposed by rugged roots and pebble stones, which broke their waves and turned them into foam; and sometimes I beguiled time by viewing the harmless lambs; some leaping securely in the cool shade, while others sported themselves in the cheerful sun.

"As I left this place and entered into the next field, a second pleasure entertained me. It was a handsome milkmaid that had not as yet attained so much age and wisdom as to load her mind with any fears of many things that will never be; as too many men often do; but she cast away all care and sung like a nightingale. Her voice was good and the ditty fitted for it. It was that smooth song that was made by Kit Marlow, and the milkmaid's mother sang an answer to it, which was made by Sir Walter Raleigh in his younger days. They were old fashioned poetry, but choicely good; I think much better than the strong lines that are now in fashion in this critical age. Look yonder! On my word, yonder they both be a-milking again. I will give her the Chub and persuade them to sing those two songs to us.

"God speed you, good woman! I have been a-fishing; and am going to Bleak Hall to my bed; and having caught more fish than will sup myself and my friend, I will bestow this upon you and your daughter, for I use to sell none."

MILKWOMAN: "Marry! God requite you, Sir, and we'll eat it cheerfully. And if you come this way a-fishing two months hence, a grace of God! I'll give you a cup of syllabub, in a new made hay-cock for it and my Maudlin shall sing to you one of her best ballads; for she and I both love all anglers; they be such honest, civil, quiet men. In the meantime, will you drink a draught of red cow's milk? You shall have it freely."

IZAAK: "No, I thank you; but, I pray, do us a courtesy that shall stand you and your daughter in nothing, and yet we will think ourselves still something in your debt; it is but to sing us a song that was sung by your daughter when I last passed over this meadow, about eight or nine days since."

MILKWOMAN: "What song was it, I pray? Was it 'Come Shepherds, Deck Your Herds,' or 'As at Noon Dulcina Rested.' or Thillida Flouts Me,' or 'Chevy Chase' or 'Johnny Armstrong' or 'Troy Town'?

IZAAK: "No, it is none of those; it is a song that your daughter sung the first part, and you sung the answer to it."

MILKWOMAN: "Oh, I know it, now. I learned the first part in my golden age, when I was about the age of my poor daughter; and the latter part, which indeed fits me best now, but two or three years ago, when the cares of the world began to take hold of me; but you shall, God willing, hear them both; and sung as well as we can, for we both love anglers. Come, Maudlin, sing the first

part to the gentlemen, with a merry heart; and I'll sing the second when you have done."

Thereupon Maudlin sang the milkmaid's song, commencing:

"Come live with me and be my love,
And we will all the pleasures prove,
That valleys, groves, or hills or field,
Or woods and steepy mountains yield."
Her mother then sung the answer, commencing:

"If all the world and love were young,
And truth in every Shepherd's tongue,
These pretty pleasures might me move
To live with thee and be thy love."

I find it impossible to remember all the pretty catches with which Izaak beguiled the time as we sat alone in the smoking compartment, but a stanza here and there could not well be forgotten. For instance, this, from "An Angler's Song:"

"But yet, though while I fish, I fast,
I make good fortune my repast,
And thereunto my friend invite, I
n whom I more than that delight,
Who is more welcome to my dish,
Than to my angle was my fish."
And also a funny little ditty about Beggars:

"The world is ours and ours alone,
For we alone have world at will;
We purchase not; all is our own;
Both fields and streets we Beggars fill.
Nor care to get, nor fear to keep,
Did ever break a Beggar's sleep.
Play, Beggars, play; play, Beggars, play;
Here's scraps enough to serve today."

Shortly after leaving Calgary, we entered the foot¬hills, and I told Izaak our long journey was nearly over. He said to me : "Well, Sir, it has been a very pleasant journey to me, I do not doubt we shall enjoy our fishing tour immensely. I begin, already, to notice the keen freshness of the mountain air. It reminds me of a beautiful song, composed by my old friend, George Herbert, commencing:

"Sweet day, so cool, so calm, so bright,
The bridal of the earth and sky,
Sweet dews shall weep thy fall to-night,
For thou must die."

"Yes," said I, "That is an old favorite of mine, but I trust its foreboding note does not presage any untoward ending to our trip."

"Never fear, Sir," said Izaak, "although it is true each day must die, yet we may always be sure that there will be a tomorrow."

Upon reaching Banff, we found the Alpine Club House filled with an enthusiastic crowd of members and guests on the eve of departure for Mt. Assiniboine. Their start had been postponed by a heavy fall of snow, which for some days rendered the trail impassable for the pack horses.

Among those present were Mr. A. L. Mumm, Mr. Douglas Freshfield, Professor Coleman and other notabilities in scientific mountaineering. But the closure had at last been lifted and parties of twenty persons were allowed to start daily.

My turn had just about come, when I had the misfortune to take a severe cold and, to ensure rapid recovery, I went to the Brett Hospital for a day or two. Owing to a rather high temperature I was sent to bed, but as I had my interesting guide in frequent attendance, I was fairly well off.

Next morning I determined to settle our plan of campaign at Camp, so I sent for my guide. "Now, Izaak, let me show you the spot where the scene of our exploits is to be. Here is a small picture showing the magnificent peak we are to visit; and here is the lake where the trout is to be caught. The mountain is beautifully reflected in the lake, and the place where Dr. Longstaff met with such success is just across the lake where the base of the mountain is shown in the reflection. There is a much larger picture than this at Byron Harmon's Gallery down town, which I wish you would examine carefully and give me your idea tonight as to the best points for trout fishing."

In the evening my trusty guide returned, and said he had examined the larger picture with great care, and had selected the most promising spots for fishing. "But," he said, "you know, Sir, I have had no great experience with mountains, and the more I look at that wonderful picture, the more difficult I find it to decide which is the real mountain, and which is what you call the reflection. The one in the lake looks to me the more substantial of the two. Now, what I propose is that we construct a small raft on the shore, just opposite the top of the mountain in the water. We will then push out, and try our first cast at the peak. 1 will take an extra long rope, with a grappling iron, and make fast to the cairn on the top. Then we can let our raft gradually down the mountain, stopping to fish at any likely points as we descend until we reach the base, where we can rely upon having at least as good luck as Dr. Longstaff had."

I found it difficult to repress my merriment at the idea of grappling our raft to a shadow, and of making the descent of a mountain without first climbing it. But my good friend Izaak was so thoroughly in earnest that I could not think of trying to disillusionize him.

I then enquired what points he thought promising at which to try our luck. "Well," said Izaak, "I doubt if we will get much sport at the summit, on account of the reeds extending out from the shore at this side, as shown on the large map. But down here," pointing to the small picture on which I had carefully noted the outstanding features of the mountain, "by the arête, as you call it, the prospects look good."

"Then farther down by the glacier here, the water looks deep and clear, and I shall be surprised if you, with your fly, I with my live bait, do not land a dozen or two large fish. The best spot of all seems to me to be where this bergschrund with its dark and gloomy frown just touches the lake. I fear me we shall have trouble here to anchor the raft, as the side of the mountain is so precipitous. Still, as my lord the Marquis of Montrose says in one of his pretty lyrics:

'He either fears his fate too much,

Or his deserts are small,
That dares not put it to the touch,
To gain or lose it all.'"

"Of course, Sir, you know we have no mountains like Assiniboine in England, and I was never able until now to appreciate that wonderful description of Mt. Atlas which Virgil gives us. You doubtless remember the incident when Jupiter despatched Hermes to warn Aeneas against flirting any longer with Queen Dido at Carthage, and commanding him to proceed with the founding of Rome:

'Hermes obeys.
With golden pinions binds
His flying feet and mounts the western winds.
He sees the tops of Atlas, as he flies,
Whose brawny back supports the starry skies.
Atlas, whose heights with piny forests crowned,
Are beaten by the winds, with foggy vapors bound;
Snows hide his shoulders, from beneath his chin,
The founts of rolling streams their race begin;
A beard of ice on his large breast depends;
Here poised upon his wings the god descends.' "

By this time the prospects of our success seem so good to me, and so sure the joyful reception we should receive in Camp on our return, laden with trout, that I said, "Now, Izaak, the one of us who gets the largest number of fish shall be entitled to be photographed with all the fish strung out before him at the Camp, and to be known henceforth as 'Fisherman in Chief of the A. C. C.'"

"It is a match, Sir," said Izaak, and shortly after he said "Good-night.".

The excitement of all these preparations must have been a little too much for my well being, for next day, the nurse would give me nothing all day but a bowl of weak broth. How long this treatment lasted I do not know, but the only occupation I had was brushing mosquitoes off my face and arms.

However, at length the welcome news came that my temperature had been normal all night, and I could have a good solid breakfast. What a joyful change it was! I sent at once for my guide, and said:

"Hurrah, Izaak, I am all right now, so get things ready and we will hit the trail tomorrow."

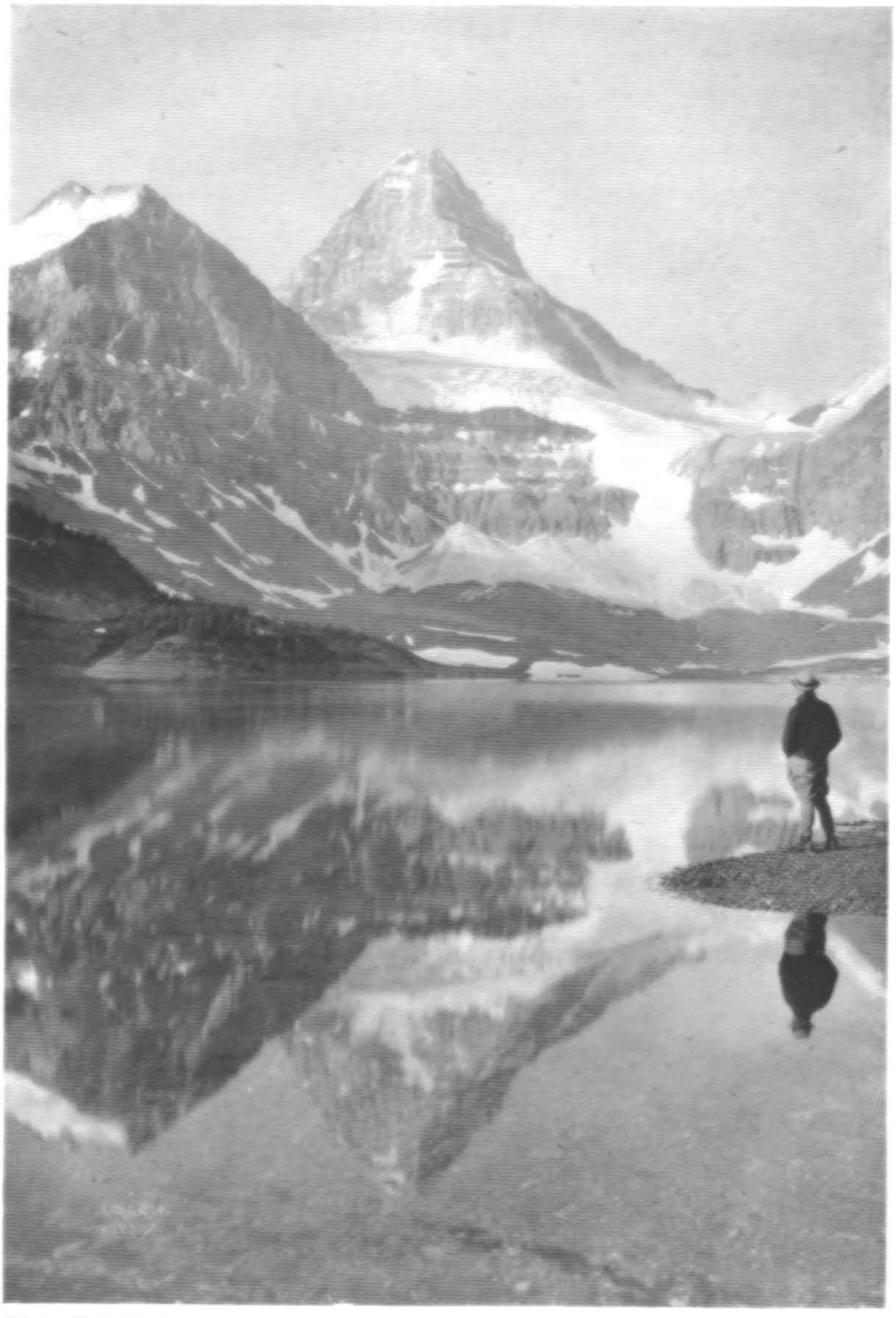
"Alas, Sir, I fear it is too late as the Camp is nearly over."

"Dear, me, Izaak, you must be wrong. I have only been here a short time."

"No, Sir, you have been here nearly ten days; the Annual Meeting was held last Wednesday at the Camp, and some are already back at the Club House."

What a collapse of my holiday! I felt inclined to sympathize heartily with good old Job when even his patience could not repress some lurid language at the hardships of his lot.

"But, Izaak, come what will, you must pledge your word to come here next year and give me the benefit of your services for a fortnight at least, for I am bent on taking advantage of all you have taught me of your wonderful art."



The Mountain Beautifully Reflected In The Lake. Photo, H. Pollard

"It's a match, Sir," said he. "I love Canada immensely and will be sure to come."

The next day we started for Winnipeg. My only memento of the Camp was a sheaf of disappointed hopes. But it was bound by a cord of happy memories furnished by my kindly guide.

SCIENTIFIC SECTION

Characteristics Of Passes In The Canadian Rockies

By R. W. Cautley

As most of the readers of the Journal are aware, a mountain "pass" is any practicable route of travel through a range of mountains from one watershed area into another, of which the highest point, whence the respective watershed areas take their source, is the summit of the pass. It follows that the term "pass" in mountaineering applies to all that portion of any route through mountains which lies between points near the foot of the mountains to be traversed, or points along the route between which the pass is so constricted as to afford only one practicable route of travel; thus the Khyber Pass from the Punjab into Afghanistan, which is world famous as a transmontane route of military and commercial importance, is written of as being 33 miles long. In the minds of a great many people who are not particularly interested in mountain lore the term "pass" merely applies to the summit of a pass, but this is, of course, a misconception.

Since one of the objects in publishing the Journal is to interest outsiders in mountaineering, it may be explained that there are a great number of passes through the Rockies, whereas the ordinarily well-informed person very generally only recognizes the existence of such passes as have been adopted, or suggested as railway routes. To those who have any personal knowledge of the mountains at all, the conception of the Rockies as a continuous wall of rock extending for a thousand miles with only five of six gaps through it must seem inconceivably stupid, but as the writer held some such ill-defined view before entering on mountain work,[15] and as he is naturally loath to assume that he has a monopoly of stupidity, it may be stated that not only is there a great variety of big and little passes through the Rockies, but there are at least four passes of considerably lower altitude than Kicking Horse Pass, which was the first to be adopted as a railway pass in Canada and to receive world-wide recognition.

Mountain passes occur wherever the upheaval of the earth's crust resulted in leaving a continuous passage way through a range to areas of lower altitude on either side.

The streams which lead away from the summit of any major pass are important features of pass scenery and have so evidently had a great effect on the present appearance of the pass that the traveller is apt to think of them as causal, which is only partly true. Primarily of course, the existence of streams in passes is due to the effects of the original upheaval which created the pass itself. As agents of erosion and distribution of eroded material, however, streams play an immensely important part in the gradual development of passes.

The general appearance of nearly all passes through the Rocky Mountains is that of a

15 Mr. R. W. Cautley is the Interprovincial Boundary Commissioner, representing the Dominion Government and the Government of Alberta upon the survey of the boundary between the Province of Alberta and British Columbia. British Columbia is represented by Mr. A. O. Wheeler as Commissioner. The continental watershed as far as the 120th meridian of longitude is the boundary, and crosses all passes over the divide.—EDITOR.

U-shaped trough, with more or less steep rock walls on either side and a varying width of valley floor. Many of these valleys are curiously symmetrical in their cross-sections; rock slopes form the sides of the U, a narrow valley floor forms the bottom, while the curving outlines are formed by the scree slopes, lying at an angle of rest immediately below the rock slopes and flattening out to meet the valley floor toward the foot where the momentum of the falling debris is sufficient to carry it beyond the natural angle of rest.

All the more important passes of the Rocky Mountains are timbered. Above an altitude of 4,500 feet above sea level, the species of timber to be found are few, and restricted to the hardiest varieties, comprising White Spruce (Picea Canadensis), Engelmann's Spruce (Picea Engelmannii), Jackpine (Pinus Murrayana), Balsam Fir (Abies subalpina) and Tamarac or Larch (Larix Lyallii).

Mountain timber varies tremendously in its growth development, owing to the exaggerated conditions of sun and wind exposure, and soil. For instance, in Howse and Fortress Passes there is a magnificent stand of tall, clean spruce, up to 30 inches in diameter, whereas small, stunted, scraggy spruce, with twisted limbs outstretched from the prevailing winds, can be found anywhere on timber line, and there is no reason to doubt that the species is identical. The above dwarf trees are of very slow growth and the writer has counted over 150 annular rings in a spruce standing about five feet above the ground and having a diameter of not more than three inches. It is a common experience to find the same evidences of extraordinarily slow timber growth throughout the frozen tundras of the Yukon Territory.

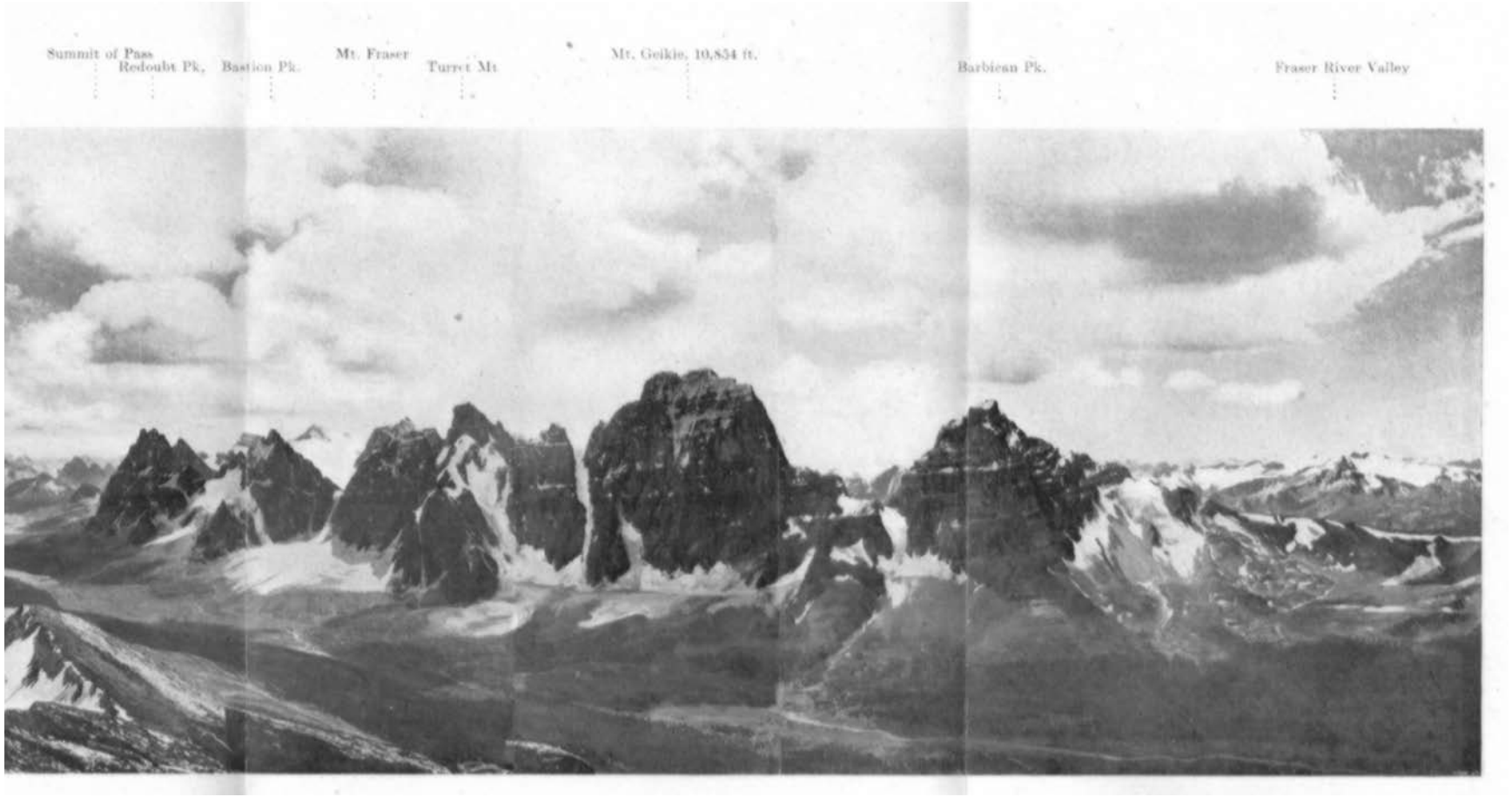
One of the curiosities of timber line scrub is the way in which it sometimes grows parallel to the face of the hillside, presenting a perfectly flat surface of green brush as carefully trimmed as the shrubs in an Italian garden. It would appear likely that this effect is due to the protection offered by one of those snowbanks which can only drift to a certain height, owing to surface conformation and wind exposure, but, whatever the cause, the effect is very odd.

In Kicking Horse Pass, and all passes to the south of it, tamarac was found on the extreme upper edge of timber line, as the last and most adventurous outpost of the timber kind, but its presence has not been noted in any of the passes to the north of Kicking Horse. Even in Kicking Horse Pass the foliage period of timber-line tamarac is so short that it is a wonder how it survives; in 1913 the first delicate green of the tamaracs was noted on the 17th July, while, in the same year, in Simpson Pass, the tamarac had all turned orange-gold by the 1st of September.

One peculiar fact about timber in the passes is that perhaps 8 per cent, of all trees over eighteen inches in diameter is lightning-scarred, although generally still growing. In July, 1916, while I was camped in the pretty little meadow on the Alberta side of Whiteman Pass, a lone spruce tree twenty feet from my tent was struck by lightning, just after dark. Immediately the whole top burst into flames, brilliantly illuminating the tent, but the rain came down in sheets a few minutes afterwards and put it out. Before we left the pass no one but a very acute observer would have noticed that the tree had ever been struck. On that occasion the writer and his assistant, who were the only two occupants of the tent, experienced a tingling sensation in the lips.

The altitude of timber line in a given zone of latitude is a frequent source of argument amongst mountain people, and the truth seems to be that it varies considerably, even in the same district; for instance, at Fortress Pass, in Latitude 52° 23' 30", the timber line is about 7,000 feet above sea level, whereas at Athabaska Pass, in exactly the same latitude and only about 13 miles west of Fortress, the timber line is about 6,500 feet. In the Canadian Rockies, south from Yellow Head Pass, the altitude of timber line has been found to vary from 6,500 to 7,500 feet above sea level.

Tonquin Pass And Geikie Range. Photo, A.O. Wheeler
From The North (Vista Peak). (attaches to photo on next page)



Tonquin Pass And Geikie Range. Photo, A.O. Wheeler
From The North (Vista Peak). (attaches to photo on previous page)

The summits of mountain passes vary greatly in character of floor, width, steepness of approaches and forestation growth, and the following instances of pass summits through the main divide are given as typical of innumerable passes which exist throughout the mountain region.

It is contrary to the popular conception of the summit of the Rocky Mountains to think of it as a wet and stagnant muskeg, yet it has been necessary to make careful cross-section surveys in order to determine the position of the watershed in several passes, and, in Elk Pass, the summit itself consists of a true muskeg of considerable area.

Elk Pass, Latitude 50° 33', North Kootenay Pass, Latitude 49° 23' and Tonquin Pass, Latitude 52° 43' are three examples of twin passes, i.e. passes in which there are two distinct summits at a considerable distance from one another which, while occupying the same gap in the mountains, are separated by high ridges.

North Kananaskis Pass, Latitude 50° 42', is 7,682 feet above sea level and, therefore, above timber line. It is a bleak, rocky saddle-back only 300 to 400 feet in width and there is a little lake on the Alberta side which is less than one hundred feet from the summit, and only about twelve feet below it. The writer visited this pass on the 4th of July, 1916, the last six miles having been travelled on snowshoes over snow estimated to be from three to fifteen feet deep. The lake was still frozen, but there was an open hole about twelve feet in diameter near the centre which was occupied by a small and solitary duck. As an example of the speed with which a delayed "run-off" will sometimes occur, it may be noted that one of the Geologic Survey parties was able to get across the pass with pack horses on July 21st—only seventeen days afterwards.

Phillips Pass is a small pass, one mile north of Crowsnest Pass, which has two summits of almost equal altitude, the difference having been carefully established by level as 1.70 feet. These two summits are about a mile apart and between them lies a lake whose surface is eighty feet below either of the summits-and which drains subterraneously, thus presenting a curious problem in watershed determination.

Tornado Pass, Latitude 49° 58', is an imposing portal between two parallel ranges of the Rockies, across which the line of watershed passes from one to the other, while both ranges continue on past the pass on either side.

Athabaska Pass, Latitude 52° 23', has a lake named the "Punch Bowl" on its summit, from which water flows both towards the Arctic and Pacific Oceans. It is a beautiful pass at the head of the Whirlpool River— one of the main tributaries of the Athabaska—and is historically interesting because, when the Piegan Indians, in 1810, refused to allow David Thompson to continue to use Howse Pass as a trade route, for fear that the Kootenai Indians, who were their hereditary enemies, would obtain firearms, Thompson escaped northerly and made a terrible winter trip across Athabaska Pass, which thus became the main trade route of the North-West Fur Company for some years. There are curiously few traces left of the old trail over which half-breed voyageurs drove their laden pack horses 100 years ago; a few completely grown over blazes on standing stumps of trees which themselves died half a century ago, a faint indentation of the surface in which the vegetation betrays that slight difference which always manifests itself in horse trodden paths, and a few old cut logs, covered with lichen and that crumble away at a touch, are all that remain to show where the pioneers of the country have passed. In August, 1921, one of the writer's party, named Mark Platz, discovered a somewhat scattered cache of 114 deeply corroded musket balls just north of the summit of the Pass, and one wondered whether the owner had been unable to find the hiding-place again, or had failed to return. To-day, on looking up a reference in "Thompson's Narrative," I found on pages 445 to 449 Thompson's account of his crossing of the Pass, from which it is clear:

That he camped about two miles northwest of the summit on the night of 10th January, 1811; that he travelled nine miles, or seven miles across the Pass, on the llth; that he spent the 12th in camp as being "a day of snow" and, under date of the 13th January, Thompson wrote: "Sent the men to collect and bring forward the Goods left by the Way; which they brought except five pounds of Ball, which being in a leather bag was carried away by a Wolverine." As it is evident that the men made the double trip in one day, and it would have been impossible for them to go more than one day's journey back in that time, there is very little room to doubt that the "Ball" discovered in 1921 were the same which Thompson lost 110 years ago.

North Fork Pass, Latitude 49° 56', and Whirlpool[16] Pass, Latitude 52° 29', are two examples of rock-strewn passes whose summits are mere ridges of slide rock which the centuries have succeeded in clothing with timber.

Considered technically,from the point of view of watershed determination, Fortress Pass, Latitude 52° .23' 30", is the most extraordinary of all the main divide passes so far dealt with. It lies between the Chaba River, which at this point is a large stream flowing in many channels through one of those wide gravel beds so characteristic of glacial streams, and Fortress Lake, which is a fine lake six and a half miles long and hemmed in by high mountains. The summit of the. Pass consists of a timbered flat about a quarter of a mile square between confining mountains and the river and lake referred to. The flat has a constant and uniform grade from the river towards the lake equal to the grade of the river itself, the water-level of the lake being about nine feet below that of the river. As no point of the flat along the river bank is more than three and a half feet above the water-level of the river, while the flat along the lake shore is nearly nine feet below it, the situation is truly remarkable and there can be no doubt that seepage from the river to the lake actually takes place at all times of high water in the river.

In dealing with passes of the main divide there is one point which is apt to be overlooked, namely the extent to which modern travellers are dependent on the knowledge handed down to us by previous explorers. At first sight it would seem to be a simple matter to travel up a stream to its headwaters, and, having climed to the summit of the pass at its head, to identify the pass as being on the main divide, but a little reflection will prove that this is not only difficult but generally impossible, in the absence of previous knowledge or a great deal of further laborious exploration. Suppose an explorer travels into the mountains from the Alberta side; he will necessarily follow the route of one of the larger tributaries of the Saskatchewan or Athabaska Rivers ; he knows, as the result of other men's explorations probably, that the above rivers flow into Hudson's Bay or the Arctic Ocean respectively, so that he ought not to have any difficulty in identifying his position in regard to Alberta, at least until he has crossed the first definite divide; but how is he to know whether the stream on the other side of the divide he has reached flows into the Pacific, or turns back into some other tributary of the Alberta rivers, unless he knows that some other man has definitely established the fact that the small stream he is looking at is a tributary of a tributary of one of the large rivers which still some other man has long ago followed down to the Pacific Ocean?

There are vast tracts of the Canadian Rockies which have never been explored by anyone who is capable of handing on the information which he has acquired through many strenuous days, for trappers and woodsmen are not often gifted with the power of description. On the other hand there is a good deal of valuable information hidden away in obscure records, and there is perhaps

16 The name Whirlpool Pass has not been accepted by the Geographic Board.—Editor

no finer field of usefulness open to the Alpine Club of Canada and its Journal than the exploration of the one and the exploitation of the other.

The Location Of Mts. Brown And Hooker

By A. O. Wheeler.

The interest of mountain places is largely enhanced through the history of early pioneers. This axiom is particularly true of the Athabaska Pass and its association with the stalwarts of the big Fur Trading Companies, who traversed its recesses when the mountain regions that are now so familiar to us from actual knowledge and by the pen of ready writers were a mystic land, where great and worthy adventure was to be had and from whence those who essayed to penetrate their awesome interiors might never return.

Then all was unknown and wonderful beyond the power of tongue or pen. Travel was chiefly in the winter months of the region by means of snowshoe and dog train. Avalanches, sweeping all before them, thundered night and day from great heights, rockfalls crashed into the valleys below, waterfalls roared as they leaped down sheer precipices and on every hand was the crude expression of Nature's mightiness in her mountain fastnesses. Can it be wondered that the first impressions were somewhat vague and beyond the actual truth, or that the first explorers lacked power of description to visualize their experiences.

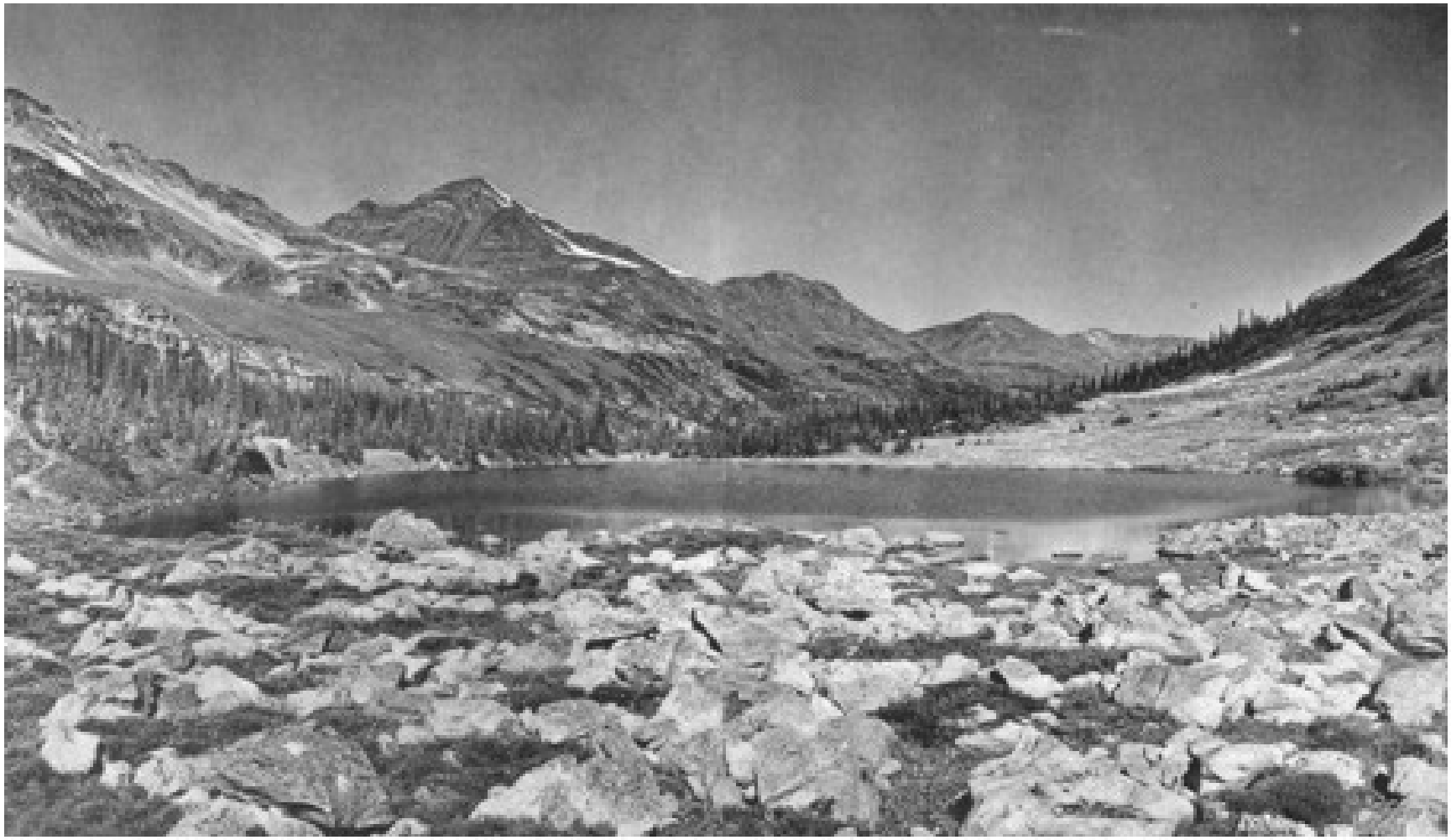
In 1827 the celebrated botanist, David Douglas, crossed the Athabaska Pass from west to east. He started, on March 20th, from Fort Vancouver with the Ermatinger Annual Express and travelled via Boat Encampment, situated at the Big Bend of the Columbia River, and up the valley of Wood River.

On April 30th the party reached where, to quote Douglas' Journal, "the river divides into two branches, the larger one flowing from the north, and the smaller from due east. We crossed at the angle between the two streams and commenced our ascent of the 'Big Hill' ..... Camped two miles up the hill . . .

.... 1st May ..... we continued our ascent and at ten had the satisfaction to reach the summit, where we made a short pause to rest ourselves, and then descended the eastern side of the 'Big Hill' to a small, round, open piece of ground, through which flowed the smaller or east feeder of the Columbia and the same stream we left yesterday at the western base of the "'Big Hill.' ..... After breakfast, being well refreshed, I set out with the view of ascending what appeared to be the highest peak on the north or left-hand side. The height from its apparent base exceeds 6,000 feet, 17,000 feet above the level of the sea."

In the 1918 issue of the Canadian Alpine Journal, Vol. IX, p. 45, appears an excellent resume by E. W. D. Holway, entitled "New Lights on Mts. Brown and Hooker" with a supplementary note by James White, which serves to cast some light upon the origin of the excessive altitude given to Mts. Brown and Hooker by Douglas, but still leaves the actual position of Mt. Hooker undefined. There has never been any doubt as to the position of Mt. Brown; Douglas' description has identified that (See Plate 1.)

The heights given to Mts. Brown and Hooker were so greatly in excess of all known peaks in the main range of the Canadian Rockies that for many years the quest for the two giant mountains was a live issue until partially settled by Dr. A. P. Coleman's expedition in 1893, at which time by means of aneroid barometer and boiling-point determinations the altitude of Athabaska Pass summit was set at 5,710 feet above sea level, and the summit of Mt. Brown at 9,050 feet. Previous



The Committee's Punch Bowl. Photo, A.O. Wheeler
At Summit Of Athabaska Pass

determinations by the well-known Canadian Pacific Railway engineer, the late Walter Moberly, had placed the summit of the pass at 6,025 feet and, by inference, the summit of Mt. Brown at 9,365 feet.

In 1920 the Interprovincial Boundary Survey between the Provinces of Alberta and British Columbia surveyed the pass and from its deductions, the result of a triangulation carried northward from the Canadian Pacific Railway, the altitude of the pass summit was placed at 5,751 feet, and the summit of Mt. Brown at 9,156 feet, or nearly halfway between Moberly and Coleman, which altitudes have been placed as official upon recent Government map publications.

Moberly and Coleman succeeded in establishing nearly true altitudes for the Pass and for Mt. Brown, but the question of "Where was Mt. Hooker?" still remained to be definitely answered. In his book "The Canadian Rockies, New and Old Trails" p. 207, Coleman says with reference to Mt. Brown: "That the right mountain was climbed is certain, since there is no other even as high within ten miles of the north-west side of the pass.

"The question of Mt. Hooker is less certain. A ridge-like mountain climbed by Stewart and Lucius rises to 8,600 feet south-east of the pass at a point where Hooker is indicated on Palliser's map; but a much higher peak rises a few miles east of the Punch Bowl, with fields of snow and a large glacier, and was estimated at about 11,000 feet."

The results of the Boundary Survey's investigations confirm Dr. Coleman's suggestion that the peak of about eleven thousand feet, above referred to, is the Mt. Hooker of Douglas. Its height has been set at 10,782 feet by the said survey, closely corroborating Coleman's estimate.

Mr. R. Douglas, Secretary of the Geographic Board of Canada, writes me: "When Franchere passed through Athabaska Pass in May, 1814, he mentions 'immense glaciers or ice-bound rocks on either side of the Committee Punch Bowl. One of these icy peaks was like a fortress of rock; it rose perpendicularly some fifteen or eighteen hundred feet above the level of the lakes, and had the summit covered with ice. Mr. J. Henry, who first discovered the pass, gave this extraordinary rock the name of M'Gillivray's Rock in honour of one of the partners of the N. W. Company.' "

There seems little doubt but that the "ridge-like mountain climbed by Stewart and Lucius" which rises to 8,600 feet south-east of the pass is the M'Gillivray's Rock of Henry, for there is no other in the immediate vicinity that will fill the description. (See Plate 4.)

In 1913 an exploration was made by A. L. Mumm and Geoffrey Howard up the Whirlpool River having partly in view the possible elucidation of the problem. The party did not succeed in arriving- at a definite solution but Mr. Mumm put forward a new theory which, while of much interest, does not seem to adequately fit in with Douglas' description as given in his Journal. (See Can. Alpine Journal Vol. VI, p. 89.)

It was the business of the Topographical Division of the Boundary Survey, of which the writer has charge, to map the Athabaska Pass and its vicinity, and incidentally to establish the positions and altitudes of the Pass summit and Mts. Brown and Hooker. A report on the subject was prepared and submitted to the Geographic Board and a synopsis of this report, showing how the conclusions, which have been adopted by the Board, were arrived at, will be in order.

Douglas Route To Athabaska Pass.

In 1827 David Douglas made the expedition with the Ermatinger Annual Express from Fort Vancouver to the summit of Athabaska Pass, via Boat Encampment at the Big Bend of the Columbia River; thence by way of Wood River. On April 30th the party reached where "the river divides into two branches, the larger one flowing from the north and the smaller from due east."

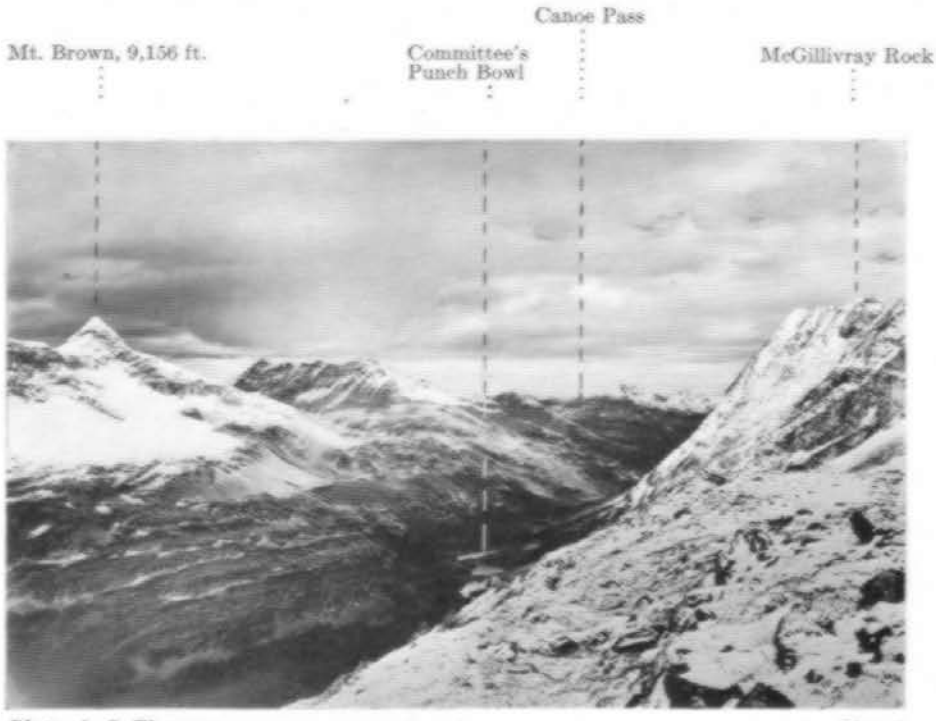


Plate 1: Summit Of Athabaska Pass. Photo, A.S. Thomson

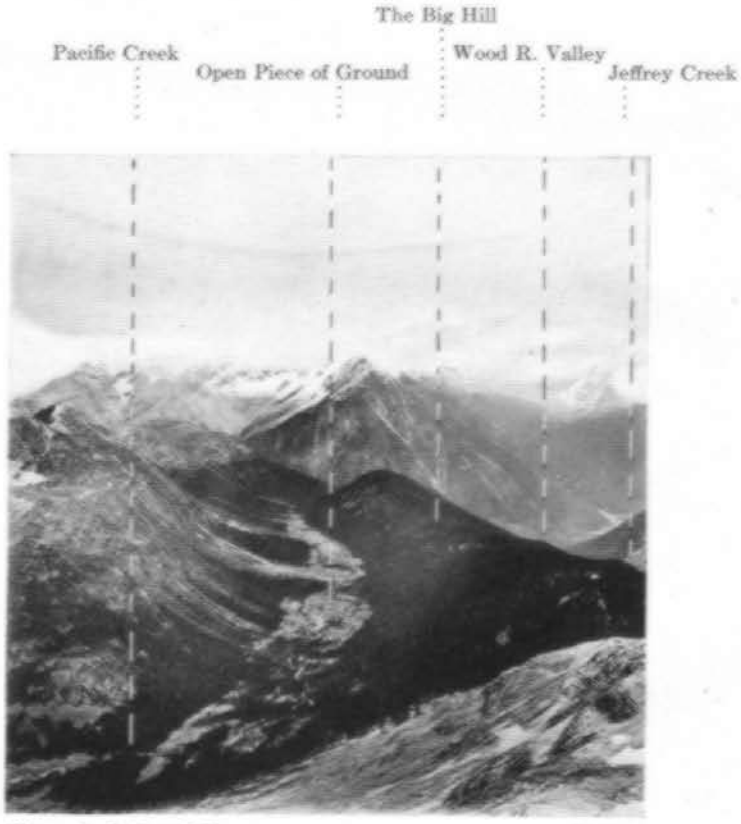


Plate 2: Pacific Side Of Athabaska Pass. Photo, A.J. Campbell

The only possible junction of the streams to fit the text of Douglas' Journal seems to be that of Jeffrey Creek with Wood River, flowing from Fortress Lake. A much smaller stream flows from the summit of Athabaska Pass and joins either Wood River or Jeffrey Creek, possibly the latter as that would better fit the text of the Journal.

The "Big Hill" referred to by Douglas is very likely the long, timbered ridge seen in the illustration (Plate 2) to lie between Jeffrey Creek and the smaller stream from the Pass. The route from the Wood River valley probably lay up and over this ridge, and from its summit descended to the "small, round, open piece of ground" referred to by Douglas (Plate 2). The main central valley on the right is that of Wood River; the valley joining it is that of Jeffrey Creek; on the left is the valley of the smaller stream from the Pass summit, which may or may not join Jeffrey Creek before reaching Wood River. The small, round, open piece of ground on the eastern side of the "Big Hill," through which flowed the smaller or east feeder of the Columbia, is likely that shown on Plate 2.

Athabaska Pass.

Athabaska Pass for the greater part of its entire length lies in a general north and south direction. At its summit are three little tarns. From the centre one the water flows both north and south—to the Arctic and to the Pacific Oceans (See Plate 3), and the tarn which is known as the Committee Punch Bowl is on the continental watershed. Plate 1 shows the summit of Athabaska Pass and the sharp peak of Mt. Brown (on extreme left) in relation to it.

The altitude of Athabaska Pass summit is 5,751 feet above sea level, as computed by the Boundary Survey. Somehow or other Douglas seems to have arrived at an elevation for it of 11,000 feet. The authority for his conclusions appears to be with either David Thompson or Sir George Simpson (See article by E. W. D. Hoi way, Can. Alpine Jl. Vol. IX. p. 48, 49). As a botanist Douglas should have known better than that, for tree line is only a few hundred feet above the summit of the Pass.

It is evidently upon this erroneous assumption that the reported heights of Mts. Brown and Hooker rest. The heights seem to have appeared for the first time on a map issued with Hooker's "Flora Boreali-Americana" in 1829 (See Holway's article referred to above). The map seems to have been supervised by Douglas and Mts. Brown and Hooker appear upon it respectively as 16,000 and 15,700 feet. If Douglas supervised the map it is likely due to him that Mt. Hooker is placed in a position which he calls "a little to the south of Mt. Brown," but in reality would be east, for he appears to have referred to the Pass summit as though the direction of the valley were east and west, not north and south as is actually the case.

Ascent Of Mt. Brown.

Evidently from the text of Douglas' Journal the mountain ascended and named Mt. Brown by him is the one rising directly on the west side of the Pass summit (See Plate 1). According to his Journal, on the assumption that the Pass summit lay at 11,000 feet, the altitude of Mt. Brown would be 16,500 feet. By the Boundary Survey computations the altitude above sea level is 9,156 feet, 3,405 feet above the summit of the Pass. There would appear to be no doubt about the location of Mt. Brown.

Location Of Mt. Hooker.

The location of Mt. Hooker is not so clear. Douglas writes in his Journal: (1) "A little to the south is one nearly the same height, rising more into a sharp point which I named Mt. Hooker." (2)

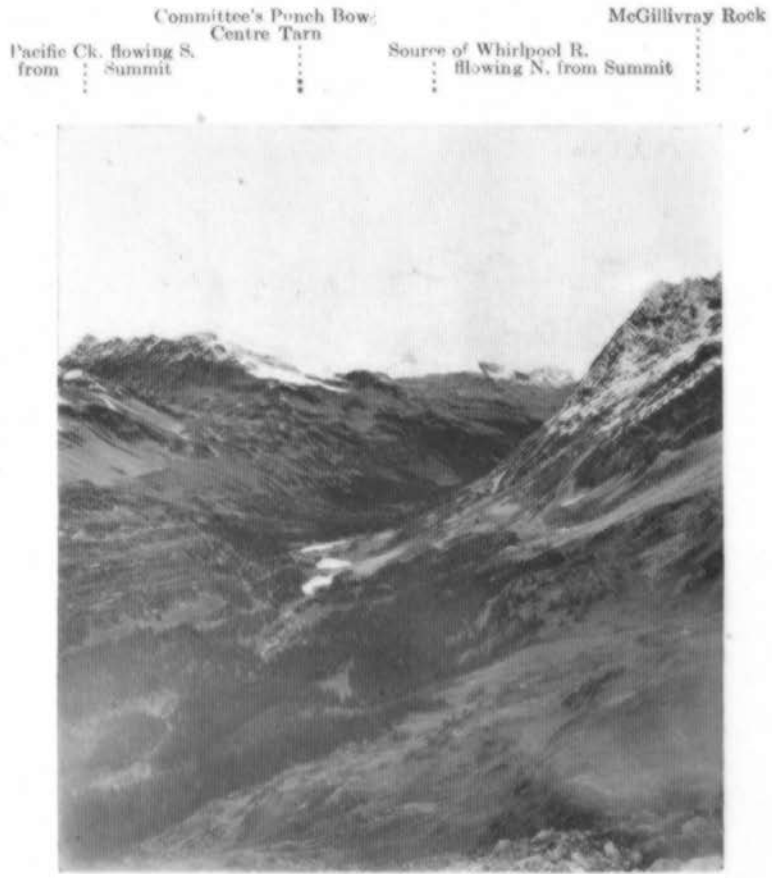


Plate 3: Summit Of Athabaska Pass Showing Three Little Tarns. Photo, A.S. Thomson

Plate 4: Showing Mt. Hooker On East Side Of Pass. Photo A.J. Campbell

"I set out with a view of ascending what appeared to be the highest peak on the north or left-hand side." Against these statements is the fact that the direction of the valley at the summit of the Pass is practically north and south and consequently Douglas' "north or left-hand side" would truly be "west or left-hand side;" so also with reference to Mt. Hooker, "a little to the south is one nearly the same height" would truly be " a little to the east is one nearly the same height." Douglas' idea of direction seems to have been as inaccurate as his idea of altitude.

On a bearing 18° north of east lies a peak, rising into a sharp point, which is distant approximately six miles from the summit of Mt. Brown and which has an altitude of 10,782 feet, or 1,626 feet more than that of Mt. Brown. It seems most likely that this is the mountain Douglas refers to as Hooker (See Plate 4).

From the vicinity of Fortress Lake this mountain peak stands up in a sharp white cone. It is not conceivable that the long, evenly crested ridge rising directly above the Punch Bowl from Athabaska Pass summit has anything to do with the question.[17] It was therefore, recommended to the Geographic Board that the 10,782 feet peak about six miles easterly from Mt. Brown be confirmed as Mt. Hooker, which has been done.

The Interprovincial Boundary Survey has now placed a line of concrete monuments across this historic pass, denning the continental watershed which is the boundary between the Provinces of Alberta and British Columbia. The Alberta Commissioner, Mr. R. W. Cautley of Edmonton, has charge of the survey of the passes and of the monumenting. While with him at the Athabaska Pass last summer a most extraordinary thing happened: One of his men brought in a large number of musket balls found by him in what appeared to have been a cache made at a date long gone by and which subsequent research by Mr. Cautley showed to very likely have been made when David Thompson crossed the Pass.

Mr. Cautley has been at this work since 1913 and has surveyed all the passes of the Great Divide of importance between the International Boundary between Canada and the United States and the National Line of Railway through the Yellowhead Pass. He is an expert on mountain passes and has been prevailed upon to write an article for this Journal entitled "Characteristics of Passes in the Canadian Rockies." In this article, which appears on page 155, the incident above referred to is narrated.

IN MEMORIAM

Winthrop Ellsworth Stone

Few men are privileged to feel such deep appreciation and enjoyment of the wonderful beauties and grandeur of the mountains as was possessed by Doctor Winthrop Ellsworth Stone who, about 6 p.m., on July 17th, 1921, lost his life on Mount Eon at the moment of achieving its first ascent.

To feel a passing pleasure in a general view of the mountains from afar is worth while, but to tramp through the forest, scramble over the moraine, work a course across the glaciers, trudge up the snowfields, traverse ice slopes, and then grapple with the cliffs, couloirs and chimneys until the summit is gained—that is the acquaintanceship with the mountains to stimulate one's respect and reverence for them, and I never have known any one who felt it more deeply than did Dr. Stone.

17 This ridge is the one referred to above as having been named M'Gillivray's Rock by J. Henry.

Once well started on the trail of his annual pilgrimage to his real paradise on earth, he completely lost all thought of things of the conventional world and, breathing deeply the fragrant scent of the forest and the invigorating air, one could almost see his transformation from a man of important and heavy responsibilities to that of a strong, vigorous boy, ready to devour the wholesome things that pleased his eye and which seemed to lift him into a new world of interest. It would be hard to say just what features of wild nature gave him the greatest pleasure, for his eye was keen for every detail of the scene before him: the flowers, the colour scheme, the wild animals, the forest growth, the quality of the snow, the character of the ice, the weird rock formations, the sea of peaks, the magnitude of the spectacle; each gave him a thrill of joy that sank deeply into his being. With him it was not a passing pleasure, but one that endured throughout the long months that he was forced to be away from his beloved mountains.

He was an expert, indefatigable photographer and always seemed to choose the right spot to get into his pictures the most striking features of a scene and one of his delights during the winter months was to examine his pictures in detail, working out again his routes on ascent or new ones ‘that seemed feasible; and to study his picture-puzzles, that of picking out his various friendly peaks when taken from an unusual point of view where the conventional features were obscure, or did not show at all.

The intensity of his love and worship for the mountains was probably due to the fact that his familiarity with them did not come until late in life, after he had had many years of responsible duties in educational work affording him little time to give vent to that side of his nature.

Born on June 12th, 1862, at Chesterfield, New Hampshire, in sight of Mount Monadnock, he first attended the Massachusetts Agricultural College at Amherst and upon graduation received the degree of B. S. in 1882 and again in 1886 upon his graduation from Boston University. In 1888 he received the degree of Ph. D. from the University of Goettingen, and in 1907 the Honorary degree of LL. D. was conferred upon him by the Michigan Agricultural College.

His notable work in chemistry began in 1884 as Assistant Chemist at the Massachusetts Agricultural Experimental Station where he stayed until 1886, then as Professor of Chemistry at the Tennessee Agricultural College during 1888 and 1889 and at Purdue University during part of 1889 and the year 1900.

While engaged in his study and teaching of chemistry he made valuable research and published extensive articles on the subject of carbohydrates and during his early years was a deep student of scientific subjects, botany especially appealing to him as it took him into the fields and the forest.

In 1892 he became Vice-President of Purdue University, and in 1900 was chosen as its President, which responsible position he held for twenty-one years, until his death, at which time he also was a member of the State Board of Education of Indiana as well as a member of many learned societies.

His great worth as an educator was strongly attested to by the Governor of the State of Indiana who stated that in Dr. Stone’s death the State had suffered a heavy loss in being deprived of his splendid ability and sound judgment.

It was not until the summer of 1906, when visiting Glacier, B. C, and meeting with the late Professor Freeborn at the foot of the Illecillewaet Glacier, that he began to take a real interest in the mountains; for it was to Freeborn that he acknowledged a deep debt of gratitude for having started him in his mountaineering career; and the simple, friendly way in which Freeborn took him in hand, revealing to him the wonder of the mountains, made Dr. Stone feel he could do no better

Winthrop Ellsworth Stone, Ph.D., Ll.D.

service to his fellow men than to help to stimulate their interest in the sport of mountaineering.

In the years that followed this meeting he became an active member in the Appalachian Mountain Club, the American Alpine Club, the Mazamas of Portland. Oregon, and the Alpine Club of Canada.

In 1911 he attended his first A.C.C. Camp at Sherbrooke Lake and climbed Mt. Daly and other near-by peaks although he had qualified for Active Membership on Mount Baker, Washington, and save for the years 1917 and 1918, when kept at Purdue University with his work of training officers for Army service in the World War, he attended every Annual Encampment until 1921, each year spending from six to eight weeks in the mountains and making many notable ascents.

In 1915 and 1916 he, accompanied by Mrs. Stone, spent five weeks in exploration work with many first ascents of major peaks in the Purcell Range, his notes and photographs taken on these expeditions up Horse Thief and Toby Creeks being used in his two excellent articles on this little known region that appeared in the A. C. C. Journal, the latter being accompanied by an excellent reconnaissance map.

It is said that the best gauge of a good companion in the mountains is whether or not you would wish to include him in a second trip, and the Doctor measured up well to this test, for after being out with him in seven different years Mrs. MacCarthy and I felt that no party was complete without him; he was an ideal comrade around the camp fire and no man could have been a more thoughtful and safe climber to be with on a rope. His excellent judgment and good poise at all times made him refuse to sanction unnecessary risks on a climb, and he had the courage to say "No" or to turn back when a stretch ahead or weather conditions did not warrant further effort.

In the 1920 Canadian Alpine Journal he contributed an excellent article on the subject of amateur climbing which clearly sets forth his creed for a good mountaineer, and no one could have attempted to follow its principles more consistently than he. Were he to speak to us once more I am sure he would willingly voice his adherence to and quote again the doctrine of the famous Mummery, that the mountaineer "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 stirring 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 forgo his worship though he knew himself to be the destined victim."

Albert H. MacCarthy

Note.—In the above tribute to a splendid man, Mr. MacCarthy has portrayed the strong points of his character as made known to him throughout many years of friendship.

As Director of the Alpine Club of Canada I have been closely in touch with Dr. Stone for the past ten years and owe him a debt of sincere gratitude for his great helpfulness to me as an adviser at times when good, sound advice and encouragement were much needed.

His fine loyalty to his membership in the Alpine Club of Canada and his great love of the scenes of its activities made him a personal friend of the best element of the Club, and it was always felt that he was one of ourselves. I know of no better expression of his character than that given by the speaker for the students of Purdue University at the memorial gathering held there after his funeral. Mr. O. E. Bugh, who spoke for the student body, said:

"Dr. Stone was a man who never entertained a grudge. He held malice towards no man. He was too big a man to foster any grievance. When asked by close friends how he could forget injuries so easily, he replied in his unassuming fashion that such things would not get any one any

place, that all he had to do was to 'run a straight course' and these other things would take care of themselves."

That was the essence of the man, and it speaks volumes. We have lost a great and dear friend and his memory will be with us long after the present generation of members has gone.

—A. O. W.

Lord Bryce, 1838—1922.

James, Viscount Bryce, to give him his more exact title, one of the Honorary Members of the Alpine Club of Canada, passed away at Sidmouth on the south coast of England on January 22nd, 1922 at the ripe age of eighty-four.

Of Scottish and Irish parentage, educated at. the Universities of Glasgow and Oxford, his work showed the thoroughness and the many-sidedness of his upbringing. One reads through the long- list of his honours and his published works with the conclusion that he will live for the majority of men as the great Ambassador to the United States and the author of "The American Commonwealth."

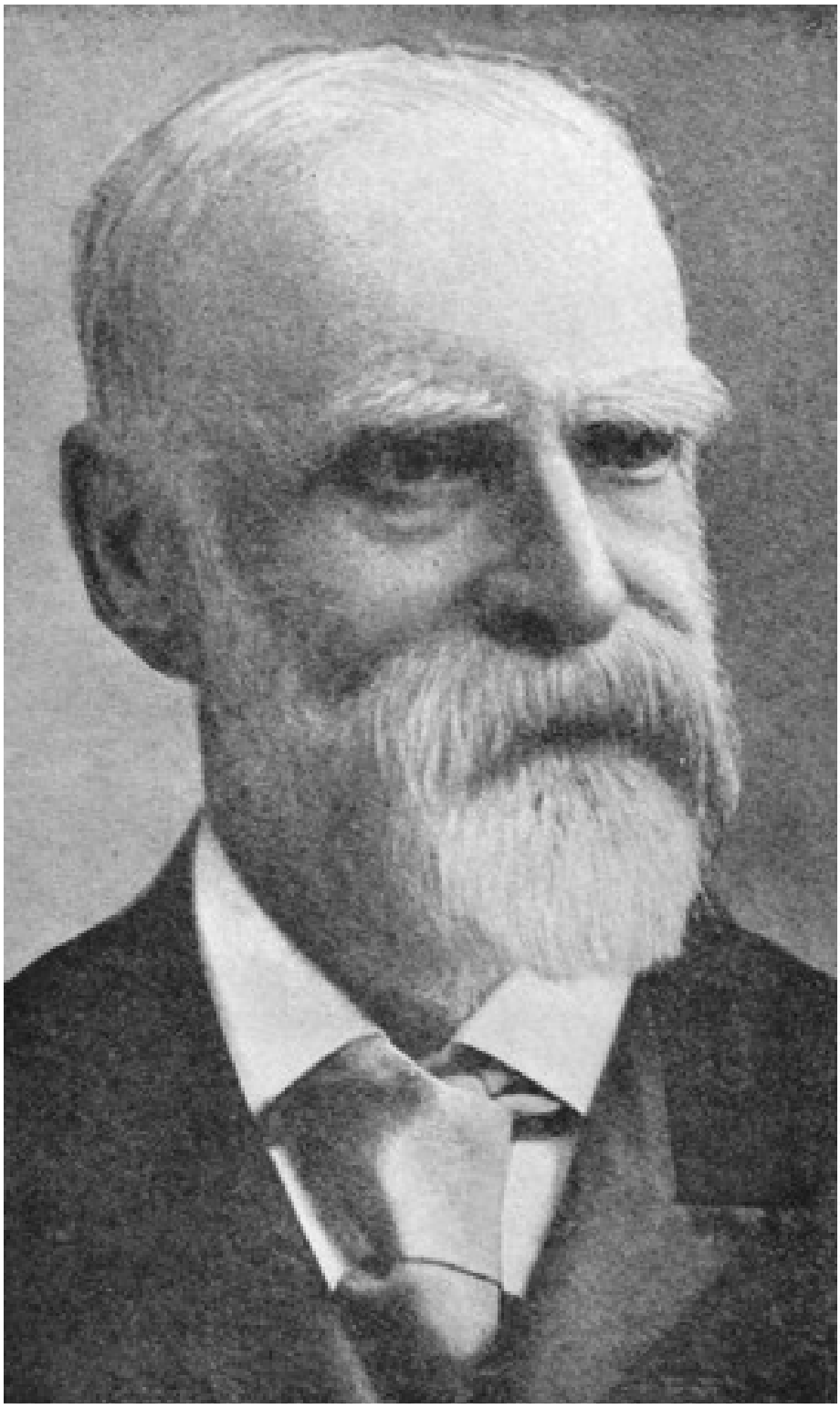
Few of the memoirs which have appeared in the newspapers mentioned that he was a distinguished mountaineer. He had climbed in the Alps and the Caucasus, conquered Mt. Ararat, travelled in the Andes. From 1899 to 1901 he was President of The Alpine Club of England, an honour conferred on no ordinary climber. In our own Rocky Mountains a fine peak is christened after him, and he took an interest in our own progressive club.

His climb of Ararat was made in 1876 and his work describing his climb and his experiences in the Caucasus was published in the following year. His trip 'to South America did not occur until late in life, but he always maintained his interest in the mountains. The spell of the great hills once cast upon a man is never broken. The charm is abiding.

We hear much—too much—of politicians, but statesmen are few and those of the calibre of Lord Bryce can ill be spared. He had 'the rare quality of distinction. Small in stature, with a fine forehead and deep set eyes he gave even strangers the impression that here was a man of profound insight and intense concentration.

The world at large is the poorer for the loss of such a man.

S. H. Mitchell.



Lord Bryce

ALPINE CLUB NOTES

The Second Ascent of Mt. Sturdee.

Mt. Sturdee (10,300 ft.) lies to the southwest of Mt. Assiniboine, and is connected to it by Sturdee Col, from which the ascent of Mt. Assiniboine by the usual route (S.W. face) is commenced. The easiest route up Mt. Sturdee is directly from this col, so that the two climbs correspond to that point.

The first ascent of the mountain was made on August 2nd, 1920, by an A. C. C. party led by Lt.-Col. W. W. Foster, D. S. O. His route was practically identical with the writer's. A traverse of the mountain was made a day or so later by a party led by A. H. MacCarthy, who went to the top via the north ridge, and down via Sturdee Col; this route makes a much more difficult climb.

On August 3rd, 1920, the writer with G. M. Smith and W. A. McAulay, left the Assiniboine Camp, at about 4:30 a.m. We skirted the north shore of Lake Magog and went up the cliffs at its western end by the steeper but more direct route close to the waterfall.

After a short halt for second breakfast at the top, we unroped, and followed moraine and dry glacier to Wedgwood Col, between Mts. Assiniboine and Wedgwood. From there, practically the whole route could be studied; but, owing to the bitter wind, we were not inclined to wait longer than was absolutely necessary.

From the col, we struck down and to the left over scree slopes with small patches of cliff, until we reached the snow at the east ledge of the glacier, between Mts. Assiniboine and Sturdee. Here we roped again and worked up the snow at a gradually steepening angle, until we reached the icefall just below the top of the "extinguisher" close to which Colonel Foster had ascended, and some distance to the east of it.

The ice presented no difficulty; we traversed to the west along the lips of snow-filled crevasses, cutting a few steps and zig-zagging up here and there, and, after crossing a safe snow ledge over a large crevasse, found ourselves on the almost level dry glacier above the extinguisher.

From there we skirted under the north face of Mt. Sturdee to Sturdee Col, where we halted half an hour for "Brunch", and from which point we watched the Assiniboine party, hurrying to the top, through a break in the clouds. The weather looked doubtful and that, combined with the cold wind, soon induced us to move on.

From the col, we struck up the ridge until under a very steep bluff, a traverse to the south and upwards close to the bluff, partly on snow and partly on the rock, followed by a scramble up a very crumbly shallow gully brought us to an icy pond lying in a hollow in the snow at the top of the bluff, and on the north face of the mountain.

One hundred feet or so of snow on the north face, and a short, steep pitch of rock, with a take-off from the snow requiring some care, brought us to the ridge again at the foot of the final peak. Thence, a scramble over loose scree, another short steep pitch, and we were on top.

The day was unpleasant, and the view poor, so we did not stop for long; after adding a few stones to Colonel Foster's cairn, we retraced our steps. The descent was easy and uneventful; the scramble up from the Glacier to Wedgwood Col, however, over large boulders and loose scree was distinctly hard work, but had the advantage of producing a splendid appetite for tea on arrival in camp.

The climb by this route is not difficult; at the same time it is not one to be undertaken by novices, for all kinds of going are encountered, and even the most experienced mountaineer will find the expedition an interesting one.

E. O. Wheeler.

Mt. Lefroy—11,220 Ft.

The usual route taken in ascending this mountain leads from Abbot's Pass up the snow over the ice slopes of the western face directly to the summit. These slopes are broken in places by very steep rocks. Sometimes, late in the season, it is preferable to traverse the face diagonally to the left or north and reach the main ridge a little to the north of the main peak. Another route, first taken by Rudolph Aemmer, some ten years ago, starts from the Victoria Glacier and in the main follows the north ridge of the mountain. This ridge forms the skyline as seen from the Chateau Hotel at the foot of Lake Louise. The lower end of this ridge breaks off sharply, falling to the Victoria Glacier in a series of impossible looking pitches. The approach to the upper slopes of the mountain from the Victoria Glacier, as well as from the wide gorge which leads to Abbot's Pass, is guarded by a practically perpendicular wall broken by a single deeply cut couloir. It is impossible to follow the bottom of this couloir all the way, for the reason that the upper quarter which is devoid of snow or ice is overhanging. I believe that the first and only party took to the rocks on the left or east side, thus gaining the snow or ice slopes above the perpendicular wall. These slopes are interrupted by steep and mostly rotten rock walls and ribs. When there is little snow the climber must struggle with scree and ice slopes which lead to the north arête at a point where the latter becomes climbable.

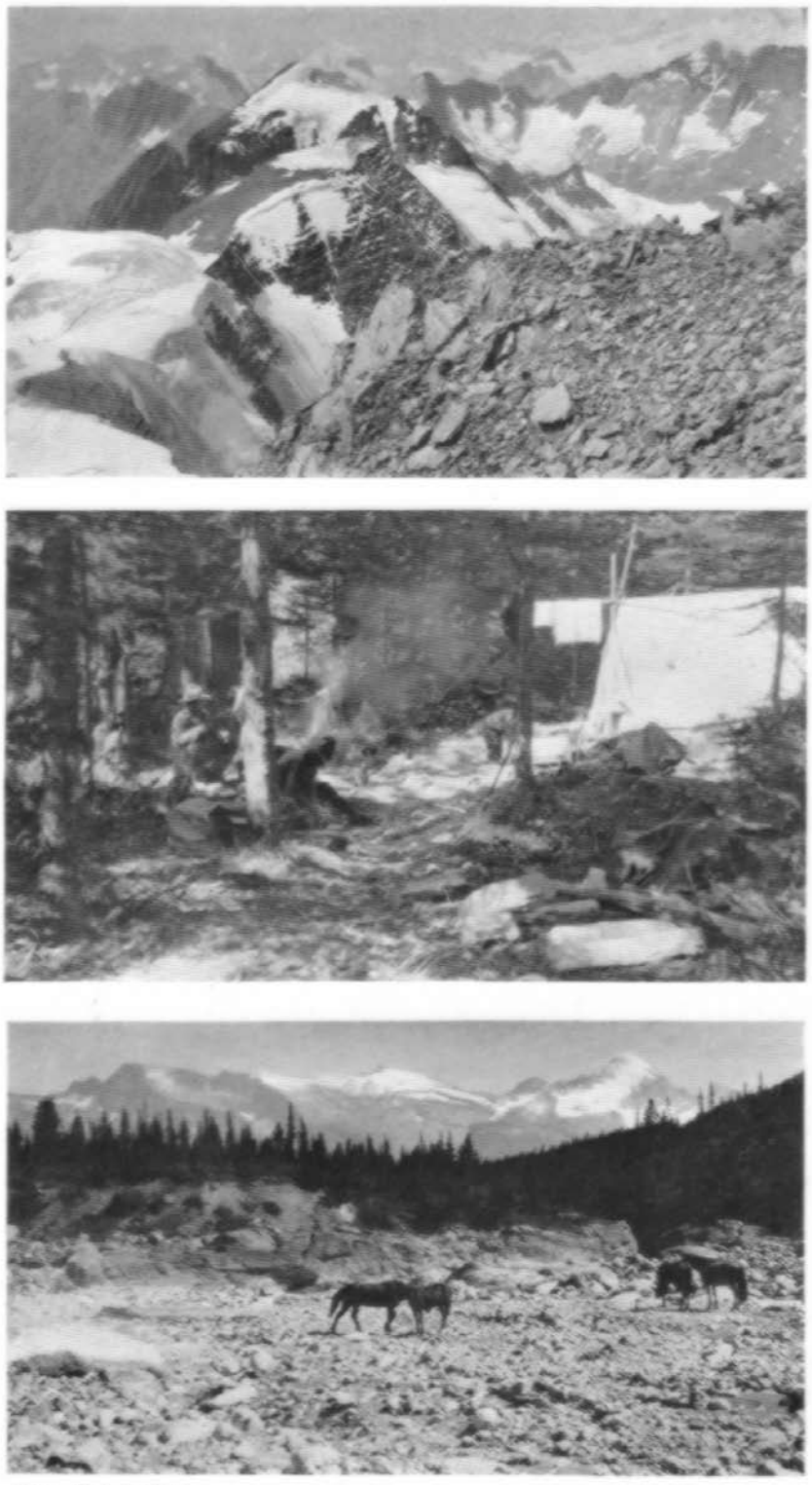
On July 31, 1920, W. C. Escher of Zurich, a member of the Section Uto of the Swiss Alpine Club, and myself, left the Chateau at 3:05, reached Victoria Glacier at 4:30 and the foot of the couloir at 5:10. This couloir is well shown on the attached photograph, taken from the south slopes of Mt. Whyte. To the right are some broken, snow-covered rocks giving easy access to the middle of the couloir. At that point the wall on the right becomes extremely steep, but a little higher it is broken by a steep chimney which was reached by utilizing the snow in the main couloir. The chimney affords plenty of holds, although all of them are worn smooth. Near the top, a tunnel leads off to the right and one emerges on the snow slopes above the perpendicular wall through a large hole. This part of the climb was trying because of the large quantities of water coming down the chimney. There is no difficulty in reaching the ridge from any point above the wall referred to, particularly when there is plenty of snow on the slopes. The snow slopes were reached at 7:05, and after twenty-five minutes' rest we set foot on the north ridge at 10:30. One hour later, twenty-five minutes was taken for luncheon and the south peak reached at 2:25 p.m. The weather was very warm but clear, and there was much ice on the ridge, requiring over two hours of step cutting. Leaving the summit at 3 p.m., we retraced our steps along the nearly horizontal part of the ridge, and crossing the west face diagonally, made Abbot's Pass at 7:20, and we were back at the hotel ? at 9:25.

Val. A. Fynn.

Mt. Quadra—10,400 Ft.

The same party left the Chalet at Moraine Lake at 2:45 a.m. on August 5th, took the trail into Consolation Valley and continued past the lake up to Consolation Pass (8399 ft.) which was reached at 6:45. Descending as little as possible, a buttress of Mt. Bident reaching south in the direction of Boom Lake was circumvented and the glacier at the back of Mt. Quadra reached at 7:50. After thirty minutes' rest for breakfast, the glacier was crossed to a col leading over to Mt. Fay and situated on a ridge which runs south from the main summit of Quadra and joins it to Chimney Peak (9840 ft.) The west side of this col is one mass of fairly large and distressingly loose stones at a steep angle. Leaving the col at 11:00, the summit was reached at 2:10 (second ascent) after an interesting scramble over the very rotten ridge. The weather was perfect a splendid view was enjoyed. Leaving at 2:45, the col was reached at 5, the breakfast place at 5:55 and after

1. Mt. Lefroy From S. Slopes Of Mt. Whyte, Showing Route Followed.
2. Mt. Freshfield And Freshfield Glacier From Camp At Cutbank.
3. Mts. Pilkington, Walker And Mummery From Mt. Freshfield. Photos, Val. A. Fynn



1. Mt. Dent From Mt. Freshfield.
2. Camp At Foot Of Freshfield Glacier
3. Location Of Camp Shown By Arrow. Photos, Val. A. Fynn

thirty minutes rest we made Consolation Pass at 7:10 and were back at Moraine Lake at 9:30. The amount of walking necessary to ascend Quadra, Bident, or Chimney Peak from Moraine Lake is out of all proportion to the length" or quality of climbing to be had. The same is true of some of the Ten Peaks. Any of the first six of the Ten Peaks can be reached from Moraine Lake either via Consolation Pass or by means of a steep and often treacherous couloir between No. 3 and No. 4. This last approach is also very long for fully five hours are needed to reach the top of the couloir in question and falling stones may preclude a return by this route. A hut is badly needed somewhere back of this ridge and the most central location appears to be west of the ridge joining Mt. Quadra and Chimney Peak. Nos. 7 and 8 can only be reached from Prospectors Valley while Neptuak and No. 10 are accessible from Wenkchemna Pass, 8,521 ft. about three hours walk from Moraine.

Val A. Fynn.

Mt. Freshfield—10,945 Ft.

On August 21st, A. L. Mumm, O. B. Eddy, Moritz Inderbinen, Rudolph Aemmer and the writer left a camp at the foot of Freshfield Glacier at 3.25, followed the glacier for about seven miles to the foot of the peak, crossed to the south of the northeastern ridge by way of a low ice-covered saddle and thus reached the upper snow and ice slopes facing Mt. Pilkington. These slopes were ascended to the foot of the final peak and the latter reached over easy rocks at 1.50. Leaving at 2.40 the party retraced its steps and was back in camp at 7 p.m. The weather was perfect and the view from the summit most interesting and very remarkable because of its extent. The Freshfield Glacier divides at the foot of the peak, the branch running east in the direction of the Mummery peaks being about eight miles long, the north-west branch which goes past the foot of Mt. Dent seems to be about four miles long. Mt. Pilkington is a very fine and rather difficult looking peak. The same is true of Mts. Mummery and Walker, although little of these can be seen because of Mt. Pilkington. The view into Bush Creek and out towards the Columbia is most fascinating. The Columbia ice field and the peaks surrounding it could not be seen very clearly because of smoke, but. Mt. Forties was very prominent and imposing.

Anyone who cares to explore the Freshfield Range more thoroughly will do well to make an auxiliary camp about six miles up the tongue of the Freshfield Glacier and to the north of it. There is, at that point, almost directly east 6f Mt. Dent, a beautiful camping ground, plenty of grass, water and shrubs, but no trees. Mts. Dent, Freshfield, Pilkington and Walker can all be reached from that point. Horses can be taken to within a quarter of a mile of the camp site and it may be possible to get them off the glacier on to the grass, but of this I am not sure. If not, they can be sent back to the main camp at the foot of the glacier. In the immediate neighbourhood of the main camp there is very fine feed for the horses on a slide north of the stream. In order to take the horses up the glacier they would have to be sharp shod or provided with chains and of course led. It is quite easy to follow it for the first five or six miles.

Val A. Fynn.

The Mountain West of Fortress Lake[18]

(Mt. Serenity; "Mt. Hooker" of Wilcox)

This is the mountain whose glacier-covered eastern face is in full view from the east end of Fortress Lake. It is about nine miles beyond the west end of the lake, and about 10,750 ft. high.

From a camp near its east end, Fortress lake was crossed by canoe (8 miles, 2.5 hours), and the right bank of Wood River followed down to the entrance of the lateral valley draining the great ice mass which covers the whole east face of the mountain. A camp was made up this valley, about a mile from the glacier tongue. From here, on September 1, the glacier was ascended to the pronounced col in the summit ridge, the large bergschrund being surmounted with some little difficulty. A rotten gully led to the top of the steep buttress just above the col, where the corniced snow ridge was followed to the summit, 10 hours from camp.

The peak is situated on the edge of the great glacial basin immediately southeast of Athabaska Pass, and commands a sweeping view in all directions. The glacial basin just mentioned contains a noble snow peak of the Continental Divide, probably 11,000 feet high, noted by Coleman in 1893. To the south, the Wood River group is dominated by the superb Pyramid perhaps the most alluring prize left for the mountaineer in the Canadian Rockies, thrusting its perfectly formed summit 8,000 feet above Wood River to a height of close on to 12,000 feet. The more distant view embraced the northern Selkirks, tihe Gold Range, Canoe River mountains, Fraser group, and Columbia group.

The descent to camp, by the same route, took 4.5 hours. The party included H. Palmer, W. D. Harris of Jasper, and the writer.

Allen Carpé.

The Peak at Head of Bain Brook

This mountain is the culmination of the Selkirk Range west of Fish Creek. It rises some seven miles southwest of Flat Creek Pass and an equal distance east of the Albert Peaks surrounded by large glaciers and snowfields which are seen to advantage from the summits south of Glacier. The peak is also quite conspicuous from the north, from Mt. Bonney, and from parts of Abbott Ridge. It appears to be slightly more than 10,000 ft. in altitude.

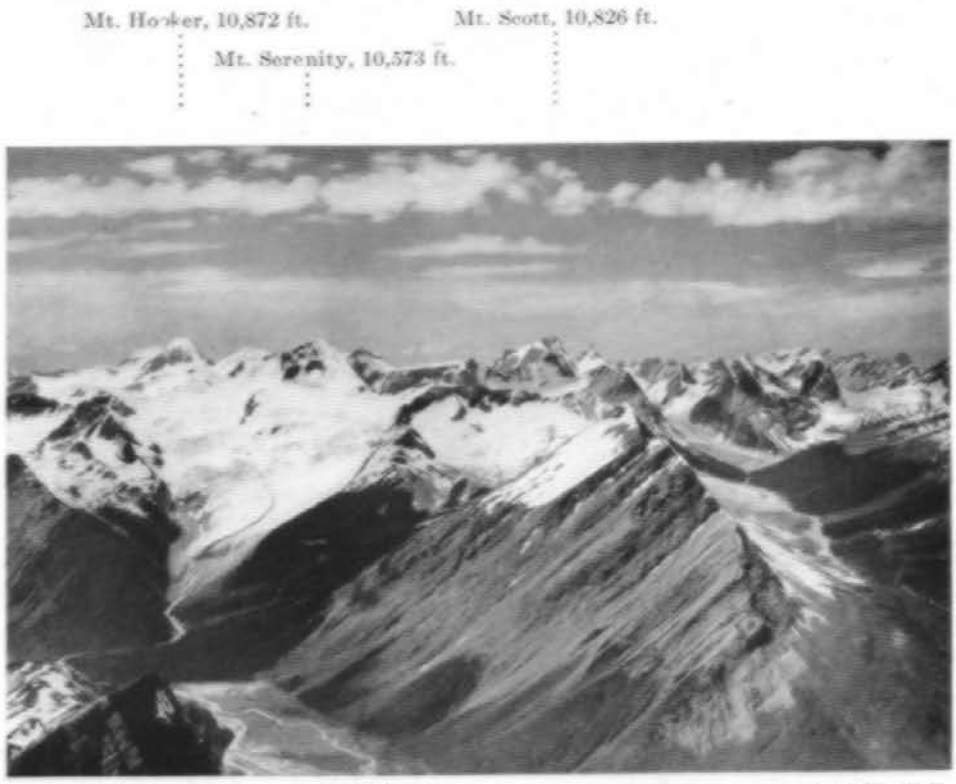
The mountain was approached by the old Flat Creek trail, now long in disuse. The first night was passed on Flat Creek Pass, near the old camp site; the second at an elevation of about 7,000 feet on the upper slopes, a few miles to the southwest. From here the summit was gained on the third day, July 27, by following the northern escarpment of Bain Brook valley, which is continuous with the northwest ridge of the peak. Technically, there were few difficulties, but the route was long and the going often slow, being partly over moderately easy but jagged rock, partly over steep and corniced snow. The ascent occupied eleven hours from camp, without halts. The view embraced the Albert Peaks and the remarkable snowfield of the same name, the main ridge of the Selkirks from the Hermit Range to beyond Kellie Creek, and of course nearer features including fine glaciers at the sources of Albert Creek East and Bain Brook. The descent was made by the latter glacier into the valley of Bain Brook, where the night was passed in a timberline bivouac, camp being regained the next morning. The return to Glacier was made in one day.

18 According to the Interprovincial Boundary surveys the summit is seven and a half miles in direct distance from the west end of Fortress Lake. The altitude is shown by the survey maps to be 10,573 feet. Fortress Lake is shown six and three-quarter miles in length. The snow peak of the Continental Divide, noted by Coleman in 1893, here referred to, is shown 'as the Mt. Hooker of Douglas, altitude 10,782 feet. The report of the said survey gives the superb pyramid to the south, Mt. Clemenceau, an altitude of 12,001 feet.—Editor.

Mt. King Edward, 11,400 Ft. (From N.). Photo, A.J. Campbell

Deep Gravel Valley Of Athabaska River Hidden By Ridge Of Mt. Warwick.

Looking Up Fortress Lake From East End. Photo, A.O. Wheeler



Looking N.W. From High Up On S. Side Of Wood River Valley. Photo, A.J. Campbell

Mt. Serenity From S.E. Photo, A.J. Campbell

The expedition was made alone. Anyone seeking to repeat the ascent will no doubt find an approach from the east branch of Albert Creek easier and shorter than that of the writer. The climb is a repaying one, for the mountain, although not high compared with those of the summit range, occupies a dominating position in a singularly attractive region.

Allen Carpé.

Mt. King Edward VII

(Mt. Manitoba)[19]

This peak, 11,400 feet high by survey, is situated on the Continental Divide immediately west" of Mt. Columbia.

On August 22 an unsuccessful attempt was made on it by H. Palmer and the writer from a valley camp at the head of the Athabaska. Leaving camp at 6.15, the better part of four hours was spent in the valley bottom and below timberline before reaching the foot of the glacier descending into the hanging valley at the west base of the mountain (Ontario Glacier). The ice was then followed to the rocks of the west face, which was ascended to a height of about 10,800 feet by 4.15 p.m. The climbing was of a peculiarly laborious and disagreeable nature, the rock being rotten and slippery, interspersed with a mushy and unstable scree and swept by water and falling stones from the melting snow above. The view was completely obscured by smoke.

The descent was accomplished in short order, the tongue of the glacier being reached at 6.30, and the gravel flats of the Athabaska an hour later. A bridge which we had constructed with much effort in the morning had been carried away by the rising water, and the gathering dusk found us wading the swollen stream, which was thigh deep and very swift. The writer was carried off his feet and went to the bottom in most ungraceful fashion, fortunately without serious results. Camp was reached at 9 p.m.

Mt. King Edward is probably the most accessible of the higher peaks of the Columbia Amphitheatre. Our experience on it illustrates the difficulty of approaching these great mountains from a valley camp. The distances on the broad gravel flats are very deceptive; one is everywhere hemmed in by deep and swift glacial streams, often impassable for an unmounted man, and steep timbered slopes several thousand feet high intervene below timber-line

King Edward could be climbed without much trouble from a suitable high camp, and the same may be true of certain of the more important peaks of the region; at least it would be idle to attempt them in any other way

Allen Carpé.

Note_ The Geographic Board has approved the name "Mt. King Edward" without the "VII".—Editor.

The Second Sister at Canmore

Few, if any sisters in Canada, have the popularity of the Three Sisters of Canmore. With all their popularity there seems to be very few who have become intimately acquainted with them. To date, I have not heard of any person having climbed any one of the three peaks prior to the writer climbing the middle one on August 12th, 1921, though several parties have attempted it at various times in the near past.

19 Names in brackets are those given by J. Habel on his expedition of 1901.

The three peaks stand closely connected in a row aligning nearly east and west, and for convenience of designation let us call the most easterly peak the first Sister, the next peak the second Sister, and the most westerly peak the third Sister. The first is 8,840 feet high, the second one 9,285 feet high, and the third one 9,734 feet.

Messrs. T. B. Williams of Canmore, and Dr. Pollard, then of Banff, attempted to climb the first Sister in July, 1916, but after ascending to the saddle between the first and second peak, and reconnoitering around there for some time, they decided further ascent would be too difficult and returned.

In June, 1921, Messrs. R. Strachan, J. Carrol and J. Normington attempted to climb the third Sister, and after a strenuous effort succeeded in ascending to within several hundred feet of the top, but on account of the steepness, they decided it was impossible to go further, so gave up the attempt.

After the several failures and pronouncements of difficulty in the climbing of the Three Sisters, Dr. Worthington of Canmore and myself became interested in the possibility of climbing one of them, so on August 12th, 1921, we decided to travel up the Three Sisters Canyon and make some investigations which we hoped would reveal a feasible route to the top of one or more of the peaks. By fairly easy travelling we worked our way up to the head of the Canyon which terminated abruptly at the base of a precipitous part of the mountain. From this point it could be seen that some very difficult climbing would be necessary in order to ascend on to the saddle between the second and third Sister, so it was decided that the Doctor should climb up into the saddle between the first and second Sister, while I should go up and investigate the difficult climbing that separated us from the top of the second saddle. As I proceeded up, I encountered some very steep and difficult climbing, but could not see a very great distance above me, so kept going on and on endeavouring to determine whether a complete ascent into the saddle could be made and after some considerable time I finally arrived above the steepest portion of the climb and felt encouraged to go on up to the saddle, which I accomplished in due time. Upon my arrival there, I felt that I was so close to the summit of the second peak, that I could not resist the temptation to complete the climb, so, much to my glory and satisfaction, I finally arrived at the pinnacle of the second Sister, from which I beheld a very glorious view of the Bow Valley and surrounding mountains, and felt well justified in the strenuous effort I had made in negotiating the peak.

I found no monument or other indications that anyone had preceded me, so I hurriedly built a monument and started my descent, then realizing that the Doctor would probably become worried because of the length of my absence, it having been our original plan only to reconnoitre, to ascertain if the climb was possible. I arrived at the bottom of the steep part of the mountain in time to see the Doctor making his way down toward the head of the Canyon, and overtook him in due time, and we were able to get down to the foot of the Canyon just before being overtaken by darkness.

By observations taken from the top of the second peak, there were indications that a way might be found to ascend the third peak from the south side, but on account of the distance one could not be sure as to the success of such an attempt without actually trying it, but I suggest that the possibility of success would justify an attempt, and am hopeful of making the endeavour in the summer of 1922, and shall be glad to have any member of the Club arrange to join me in the attempt if there are any who may be interested.

M. B. Morrow.

Mt. Logan

A few weeks ago, I saw, in passing, a suggestion by, I believe, Prof. Coleman, which seemed like a "Challenge" to the Alpine Club of Canada. Personally I should like to see the matter very seriously considered by the members of the Club.

Referring to the expedition to Mt. Everest, stimulated by the Alpine Club in the Old Land, he mooted the idea that a similar enterprise, on of course, a much more modest scale, might be undertaken by our Club, to reach the summit of the loftiest peak in Canada, Mt. Logan, well over 19,000 feet above sea level, and second only to Mt. McKinley on the North American Continent.

This seems a task within our powers, and well worthy of them. Scientifically and topographically, as well as from a purely mountaineering point of view, this makes a strong appeal to one's imagination. It may be somewhat formidable (physically and financially), but it is feasible, it is fascinating, and it is right in line with our aims and aspirations.

May I suggest that the rank and file should express their opinion, and that the Executive should also weigh the pros and cons carefully and exhaustively, with a view to some definite recommendation ?

James Outram.

Nomenclature

The perusal of Messrs. Palmer and Thorington's admirable Climber's Guide, with its list of some 450 mountains, is very suggestive in numerous ways. One of these concerns the names of the peaks. There seems to have been little or no system, save in a few exceptional cases—such as the Royal Group, and some attempts with very mixed results, to celebrate Generals, Victories, and British Alpinists. The former little group of Mts. Alberta, Columbia, Saskatchewan and Manitoba, instead of being extended to completeness, has been shorn of the last-named. There are numerous instances of duplication—e.g. Two Douglas peaks, or more, two or three Pyramids, etc, etc.,—and some notable cases of important names either omitted or bestowed upon insignificant points in out of the way corners. The absence of commemoration adequately of pioneer explorers and mountaineers is particularly noticeable. Among the latter, Huber—comparatively unknown— lies the seventeenth highest peak named after him. Stutfield comas No. 21, and Woolley No. 30; these being the only names appearing in the list of the 37 highest triangulated mountains. The majority of noted climbers, including those who made the Rockies themselves the field of their exploration, are topographically remembered in the obscurest fashion; we do not suggest that these names are of national importance, but we cannot forget that the members of the Canadian Alpine Club, and their predecessors, are largely responsible for the present prominence and popularity of the Canadian National Playground.

The names of Prof. Collie and Prof.. Fay deserve signal recognition. Personally I should like to see a move in this direction. The magnificent "Twins"—named,, I believe, by the former—close to Mt. Columbia, bear a name fairly suggestive but of no real importance. One is the third highest triangulated peak in the chain, the other little lower. Would it not be fitting to have these named after Collie and Woolley, who climbed so much in company, and who are our most noted Alpine pioneers? The present Mt. Woolley might then be taken for Mr. Whymper or Prof. Fay. The Northern Pyramid, about 12,000 feet, is another mountain where the loss of the present name would be a gain, and commemoration be made of some one who has helped to develop the region where it stands.

But the main object of this note is to suggest that the A. C. C. —officially, as a public

body—should take it upon them to make representations, now and from time to time, to the Board of nomenclature, urging their views, and those of the Club which has made the Rockies so famous and which is therefore entitled to special consideration.

James Outram.

Note.—The confusion referred to by Sir James Outram is the result of early exploration and the names then given. The Geographic Board of Canada has a very distinct objection to changing names that have been published.

Pyramid Mountain on Mistaya River, north of Bow Pass, has been named Mt. Chephren by the Board. Mts. Collie and Woolley were named by the pioneer climbers and Mt. Fay was named at the special choice of Professor Fay himself. Mt. Whymper was so called because it was first climbed by that famous mountaineer in 1901.—Editor.

Origin of the Name Crows' Nest Pass

This was well authenticated by two chiefs among the Peigan Indians—a branch of the Blackfoot family—on their reserve at Brocket, Alberta, called "Big Swan" and "Cross Chief" who died about four years ago, at the ages of 87 and 90 years, who themselves took part in the slaughter by the Blackfoot tribe of the Crow Indians under Turtle Mountain, near the present town of Frank. I have seen these two Indians, and they often spoke to the Rev. W. R. Haynes, in charge of the Church of England Mission at Brocket, on the subject.

The true Crows' Nest Mountain among Indians, and which they pointed out to me, is what is now named Turtle Mountain, so named by the Garnett Brothers in 1881, with whom I lived in 1882, from its obvious resemblance to a turtle, before the Frank Slide changed its shape. W. S. Lee, a very reliable old-timer, who had married an Indian wife, promised to take me to the site of the Crow massacre under Turtle Mountain, which he knew well, where I hoped to find bones, flint arrow-heads, etc., but the Frank Slide covered the ground before I was able to go.

It is not suggested to change any name now, but only to establish facts of the early history of our country and its mountains. All other derivations of the name are pure romance.

F. W. Godsal.

Gould's Dome

The true Gould's Dome, 10,169 ft., at the head waters of the Livingstone Branch of the Old Man's River in Southern Alberta was so named by Captain Blackiston, R. A. of the Palliser expedition in 1858. It is unfortunate that the Geographic Board, on insufficient evidence, has changed its name to "Tornado," transferring "Gould's Dome" on their maps to a lower mountain; as the true Dome is, and always will be, called "Gould's Dome" by local residents and others.

Blackiston described it without any possibility of mistake. He wrote:—"I was now looking through the gap in the near range (which he later called the 'Livingstone Range') through which the river (North Fork of Old Man River) issues: I saw a very decided dome-shaped mountain. It afterwards proved to be, when seen from the plains, and also from the top of a mountain in the Kootanie Pass, the highest and almost the only peak rising above the others in this part of the mountains. After the distinguished British naturalist, I named it 'Gould's Dome.' The gap through which I had seen this mountain was in the eastern, or near range, of very regular form, extending, with the exception of this gap, for a distance of five and twenty miles without a break. The crest of the range was of so regular a form that no point could be selected as a peak. I therefore gave

the whole the name of 'Livingston's Range': it is a very marked feature when seen from the plains outside."

Standing where Blackiston did near the present Walrond ranch, or at any point all the way up the river to Heaton's ranch, the true "Gould's Dome" appears like the foresight of a rifle looked at through the backsight, or the V formed by the Gap he describes in the Livingstone Range. There could be no possibility of greater certainty of the dome-shaped peak designated, as no other such peak can be seen.

Further on, in same report, a few days later in the Kootanie or South Fork Pass, Blackiston says:—"I halted to contemplate the scene. All appeared, however, utter confusion, such slight differences there were between the different mountains and ridges. One peak alone showed itself above the general surface. It lay to the northward, about 30 miles distant, and I recognized it as 'Gould's Dome' which I had previously remarked from the edge of the plains." Could any identification of a mountain be more absolute? Dawson says of "Gould's Dome" in his Annual Report, Vol. 1, 1885, "doubtfully identified but retained."

Again, in the same volume:—"a high, rough, limestone mountain, which is in sight from many points during the ascent of the valley, and constitutes a remarkable outlier of the main range. This mountain is supposed to be identical with that seen from a distance by Capt. Blackiston, and named by him, 'Gould's Dome'."

Again, on page 83 of Dawson's Report, "the valley turns to the north and runs between the main range and the Southern Spur of 'Gould's Dome' for two and a half miles" (thus does Dr. Dawson absolutely prove that the 'Southern Spur,' which the Geographic Board has named 'Gould's Dome' is only a spur of the true Dome, which the Board has named 'Tornado Peak.')

Again, on page 83, Dawson writes "opposite Southern end of Gould's Dome" (he calls the whole mass 'Gould's Dome', consisting of the "southern spur or end", and the northern or highest dome). Nothing that Dawson writes conflicts with the 10,169 ft. peak being the true Dome .selected by Blackiston; nor is it likely that lie would have chosen a lower spur of the mass in honour of Dr. Gould.

Further, let it be remembered that during the summers Dawson was in the Rockies the air was thick with smoke from fires: we seldom saw the Rockies from the prairies, and James White mentions this fact in his notes when he was with Dawson. I met Dawson on his trips, and have since become thoroughly acquainted with "Gould's Dome" and its surroundings.

It causes confusion for the Geographic Board at Ottawa to change a well-known and old-established name in the West.

F. W. Godsal.

REVIEWS

Mountain Craft—Edited by Geoffrey Winthrop Young.[20]

To review this book with due consideration in moderate space is almost impossible. It should be read carefully and as carefully assimilated. It is full of information of the utmost value and probably will be a book of final reference for at least a generation. Every earnest mountaineer should make it his own. If one were to try to sum up its gospel in a few words perhaps one could best express it as the need of perpetual balance: balance of action, balance of skill, balance of party,

20 Methuen & Co., Ltd., 36 Essex St., W. C., London.

balance of temper. Only so is the true rhythm of the mountaineer attained.

Under such conditions it has been thought best to devote attention to the chapter which most concerns ourselves and with which it is possible to deal adequately.

Chapter XIX, dealing with the Canadian Rocky Mountains is written by Mr. A. L. Mumm.

First let me say that Mr. Mumm is a very competent writer to deal with the subject. He has had a wide experience of mountains and mountaineering in the European Alps, in the Himalaya and in the Canadian Rockies. In the last mentioned range he has had exceptional opportunities by means of expeditions made on his own and through his connection with the Alpine Club of Canada and his frequent attendance at its annual camps.

His sketch in the said chapter deals chiefly with geographical distribution and approach, and topographical or scenic features do not seem to come within its scope. Taken as a whole the article is accurate and clearly summarizes the facts it sets forth. This is done in Mr. Mumm's own charming way, and he at once disarms criticism by setting forth the premise early in the article, that in dealing with an area so extensive and so little known it is impossible to give any information at all without putting forward statements which may turn out to be erroneous. The same holds good of any other person and, in the light of twenty odd summers spent in various parts of the Canadian Rockies, I know of no one better able to discuss them than Mr. Mumm.

The advent of the Canadian Pacific Railway in 1885 and of the Grand Trunk Pacific and Canadian Northern Railways in 1911 and 1912 opened the doors to the parts of the mountain regions which they respectively traverse. Beyond, except in the case of a few isolated areas, little is known other than in a general way. Detailed exploration and study still remain as an incentive to the mountain enthusiast.

The region adjacent to the Canadian Pacific Railway is, as Mr. Mumm puts forward, one of exceptional interest. It is a remarkable fact that although, at the time of location of the said railway, all that was sought by its engineers was the shortest possible alignment, yet, if it had been the primary object, the railway line and the access it gives could not have been placed to better advantage.

As soon as these railways were in operation explorers began to arrive and a mountain literature began to accumulate that is not without its thrills of interesting adventure. It is on such literature that Mr. Mumm largely bases his treatise, supplemented by his own expeditions and the results of government and other surveys. From 1913 on, the survey of the boundary between the Provinces of Alberta and British Columbia, which boundary is composed of the watershed of the main range, gave an official status and the results of early explorers were possible of verification and adjustment upon a more permanent basis with regard to location and altitude. The writer has been in charge of the topographical section of the said survey since its inception and may say it has been to him a source of much surprise to note the closeness of the early results to the truth as ascertained by more precise methods, particularly those of Coleman and Stewart, and Collie and Stutfield.

By the boundary surveys a very close approximation to the truth has been arrived at for the main range, from the International Boundary to the Canadian National Railways at Yellowhead Pass. The map sheets from the said boundary to the Canadian Pacific Railway have been published and are obtainable by application to the Secretary of the Department of the Interior at Ottawa. From the C. P. Ry. to the C. N. Rys. the maps have been completed and will soon be published. The Grand Trunk Pacific Railway, referred to on p. 574, has been incorporated with the Canadian

Northern Ry. under the term Canadian National Railways.

On page 575 the discovery of Mt. Edith near Banff, by Dr. Norman Collie, as a good rock climb has been supplemented by a later discovery of Mt. Louis, the next peak adjoining to the north, which was first ascended by Mr. A. H. MacCarthy with the guide Conrad Kain in 1916, and the following year by Val A. Fynn with the guide, Edouard Feuz. Mr. Fynn speaks of it as one of the most difficult and interesting ascents he has made in the Canadian Rockies. Still another good peak adjoins Mt. Louis to the north. An account of the first ascent is recorded in this issue of the Journal under the title of "First Ascent of Mt. Fifi."

A reference is made to the old well-known C. P. R. hotel at Field—Mt. Stephen House—which occupies such a warm place in the recollections of early explorers, when the names of the Miss Mollisons and Mrs. J. M. Young, as managers there, at Lake Louise Chalet and at Glacier House, were synonymous with all the Canadian Rockies had to offer. Alas, this comfortable hostelry is no longer available for mountaineers, having been turned over to the C. P. Ry. Y. M. C. A. At present the only accommodation in the vicinity, giving access to the Yoho Valley, is at Emerald Lake Chalet. Wapta Lake Camp, a C. P. Ry. community concern, a few miles west of the summit of the range, adds further to the available accommodation and gives access to Lake O'Hara and Sherbrooke Lake.

Of Collie's four groups of mountains referred to by Mr. Mumm as lying between the C. P. Ry. and the G. T. P. Ry., Nos. 3 and 4—the Columbia Group and the Mt. Hooker Group—are undoubtedly the least known and of greatest interest. They afford an excellent field for detailed exploring, forming as they do the climax of the range and centering around the great Columbia Icefield and its numerous ramifications, containing more than 110 square miles of ice. Here still is a field worthy of adventure, containing the highest peaks of the range. Mt. Columbia, 12,294 ft., as yet un-climbed by the northern route, is the second highest. The northern of Collie's Twins, close by, is 12,085 ft. Mt. Clemenceau, 12,001 ft., caps the Mt. Hooker Group. Mt. Hooker, itself 10,874 ft., has as yet not been attempted and is a climb worthy of any foeman's steel.

The fifth group referred to by Mr. Mumm on page 581 as the Edith Cavell Group would, perhaps, be more aptly known as the Geikie Group. Mt. Geikie, its most commanding peak, is still unclimbed and appears inaccessible. It is a peak of the continental divide and the centre of a fine group of difficult peaks that have not yet been attempted.

Access to the Geikie and Edith Cavell Group is now made from Jasper by way of Whistler Creek. It is the very worst trail the writer knows of and entails a steady climb of 4000 feet from the Athabaska Valley to the summit of Marmot Pass, when a descent of 1400 feet is necessary to the bed of Portal Creek. At its head an easy pass—Maccarib Pass—is crossed to arrive at Tonquin Valley, which lies at the northern base of the Geikie Range.

On pages 582 and 583 Mr. Mumm refers to the Wilcox Pass and the direct line of travel from Laggan to Jasper. It may be mentioned that the discovery and use of the pass by Mr. W. D. Wilcox was due to the obvious line of travel by the foot of Athabaska Glacier and the head of the Sunwapta Valley being blocked by a deep rock canyon about two miles from the glacier. Efforts are now being made to have the Jasper Park authorities open up the lower route by a trail high up above the canyon. It would be of great service at times when snow comes early and lies late. It would, moreover, shorten the route and cut out the steep ascent and descent of Wilcox Pass.

Mt. Fitzwilliam, so prominently in view from Yellowhead Pass, on both sides of the summit is, as Mr. Mumm suggests, a climb of much interest. It is best approached from Rockingham Creek Valley at its western base.

Mr. Mumm's reference to Mt. Robson and its region is of great interest. Here stands Mt. Mumm facing the great massif on the north side. Mt. Robson is the highest peak of the main range. Though only 13,068 feet, an altitude that is tentative, it is one of those mountains that may be said to be climatic, and on such account presents more than the usual difficulties of a climb, being always subject to sudden storms which may readily defeat the best planned assault. The region to the north of it offers much in the way of exploration and is little known and but very casually mapped.

Mr. Mumm's references to outfit are very apt. I agree with his packer informant who said that a tent and stove are preferable to a teepee with fire in it. The writer has always found the tent and stove superior, as there is none of the smoke that cannot be wholly eliminated from a teepee and which makes the inhabitant blear-eyed and subject to much discomfort. All possible necessities for camping in the Canadian Rockies can be purchased at Calgary, Banff or Edmonton and at those places suitable equipment can probably be more readily obtained than at the more distant, though larger, centres.

Mr. Mumm's chapter on the Canadian Rockies is a valuable addition to Mr. Young's excellent work and the author is to be congratulated upon having obtained his authoritative collaboration There is so little to add to the chapter that it may be considered almost negligible. The Canadian Rockies are quite safe in Mr. Mumm's hands and I feel sure that all who have visited them would greatly like to hear from him in the form of a book recording his expeditions therein, which, with his knowledge of mountain craft, would be a valuable addition to their literature.

Arthur O. Wheeler.

A Climber's Guide to the Rocky Mountains of Canada—By Howard Palmer and J. Monroe Thorington.[21]

It is a real privilege to have been permitted to study and commend to others the valuable little handbook for climbers in the Canadian Rockies, just published by the American Alpine Club.

This is a pioneer book of its kind; its value appears threefold: First, as a Record; Second, as a Guide; Third, as an inspiration. Its mission will be wide in the sphere indicated by its title, as Guide, but its interest as a record is incontestable, and I venture to say that as an inspiration its effect will be widest of all, in that it will lead men and women to the wonder peaks and passes of our Canadian Playground, and also lead them to the fascinating pages which narrate the more detailed accounts, so ably summarized and admirably tabulated in the introduction. In those pages, and, above all, among those peaks, the readers will not fail to be stimulated to gain, along with health and vigour, good comradeship, and a well-stored memory, a greater love for the Mountains and their Maker.

The pioneer is a very welcome one: concise, practical, exact and thorough. All who use this little manual in the future—which should include every one who makes an ascent—will owe a deep debt of gratitude to the authors for the compilation, which represents an immense amount of labour, careful research and collation. The bulk of the detail, I understand, has been a labour of love on the part of Dr. Thorington, during many months of enforced leisure from his regular occupations through illness. We regret the cause, but rejoice over the results of his happy thought in conceiving the idea of the Guide which we now have for our benefit.

21 Pub. for the American Alpine Club by the Knickerbocker Press, New York, $2.50.

The handbook gives a digest of virtually all that is known _from a climber's point of view—of the Canadian Rockies for about 450 miles from the United States Boundary, till they are lost in practically unexplored and almost inaccessible regions and have ceased to be truly alpine in character.

All the books published which deal with climbing within this area (and many others with incidental reference to the peaks), sundry unpublished records, Government reports and maps from earliest days to the very latest issues not yet published, have been ransacked for information which has been digested, quoted or epitomized so thoroughly and admirably that in the little pocket volume of 200 pages, 6 1/2 x 4 1/2 inches, we have a summary of no less than 435 named peaks, over 9,000 feet in altitude, with notes regarding each, an account of every first ascent of which there is a record, and concentrated but seemingly adequate instructions as to the details of climbs, when such have been made public.

The method of working out the theme is, in my view, admirable. The book is divided into three main portions comprising three great mountain regions: No. 1 covers the Divide Range and contiguous peaks from the U. S. Boundary to the Kicking Horse Pass, where the transcontinental route of the C. P. R. marks an obvious partition. No. 2 traverses the region from thence to Fortress Lake, where a somewhat arbitrary division is made (which is open to criticism of a minor type), presumably in order that No. 3 may comprise the territory primarily accessible from the Yellowhead Pass, served by the Canadian National transcontinental lines, though the greater part of the last two sections of the Second Division appears to me to be more closely connected with the northern than the southern field. The three divisions deal, respectively, with 200, 153 and 82 named peaks! besides some unnamed ones, which are described and catalogued.

Each of the chief divisions are subdivided into smaller sections, numbering twenty-four in all. These are most suitably arranged in sequence along the Divide, or contiguous groups, and bounded by the more important of the numerous passes which cross the backbone of the Continent, separating the mountains into 24 easily distinguishable groups of convenient area, some of them being again subdivided into minor clusters.

Every section is preceded by a useful little resume (which often might with advantage be amplified) narrating its principal features, and these, read in sequence, give an excellent description of the entire chain. Following this preface comes a detailed mention of every prominent peak in the section alphabetically arranged, with altitude, map reference (Government Survey where possible), paged references to the book or books mentioning the mountain, the exact location relative to well-known points, and any interesting items peculiar to the peak. Then, if it has been ascended, there follows the date of the first recorded ascent, the names of the climbers, and a summary of the route taken. If two, or more, important variations of route are on record, these are similarly described.

Another delightful feature in a well-thought-out scheme is the enumeration of the peaks of each section, where such is called for, under three headings, covering (1) peaks on the Divide, and

(2) and (3) those west and east of the Divide. Unfortunately this is not strictly adhered to, even when quite obviously advisable (e.g. Sec. xi.) though in one or two sections farther on, as the authors justly remark, the topography hardly lends itself to this classification.

An excellent point is the placing generally of the climbers' names in alphabetical order, though again this has been occasionally departed from for no apparent reason. The exhaustive list of peaks in the index, and the list of 37 highest triangulated mountains in the chain, are of great interest and most valuable for reference.

Several maps and key plans are included, which add much to the value of the text, though the necessary reduction in size makes some so minute (esp. that on p. 152) as almost to require a magnifying glass. Unfortunately there is no index to these in the book itself, and I would suggest that in future editions, which are sure to be called for, the list of Maps should follow the list of Sections on p. xii, that the "General Information" in the leaflet accompanying the book be amplified and incorporated in the volume, and that the instructions anent the use of the key map on p. x. be printed below the map itself.

Taken as a whole, the work is, so far as my knowledge of the mountains goes, marvellously accurate, and criticism is well-nigh put of place. The suggestions made above, a few minor errata, and ideas, Which have been communicated direct to the authors, and one matter of arrangement in Section vii, I venture to mention. This latter is of small import, but it would seem more helpful and accurate if Mt. Rundle, the Three Sisters and Wind Mt. were placed in Section viii. These have absolutely no connection with the group trending northwesterly from Simpson Pass, with which they are now included; they are nearer in distance to the peaks of Section vi, and topographically more closely allied there than in vid, but the most suitable affiliation seems to be with the mountains about Banff, where Sulphur Mountain is included, itself far nearer to and more connected with the other groups than are the three in question.

But these are small incidents in a work of consummate research, splendid arrangement, and accurate information, which will be a boon to numbers of climbers for years to come, and prove, in all probability, the basis of all similar efforts in the future.

James Outram.

"Down the Columbia"—By Louis R. Freeman.

One of our modern writers has described a certain imaginary holiday trip across the continent as the most enjoyable as well as the cheapest trip he ever made. His method was to write to the various railway and steamship companies and get their illustrated literature describing the particular attractions of the part of the country traversed by their lines.

On obtaining this literature the would-be tourist sat down in an armchair before a crackling wood fire and after getting his pipe into first class working order and sorting the various folders into their proper geographical sequence, he spent, in imagination, evening after evening looking at scenery, dancing and dining at the most exclusive and expensive hotels, playing games on the decks of magnificent steamers and otherwise revelling in all the delights of modern travel. In this manner he made the round trip from Atlantic to Pacific and home again without having to suffer from any of the inconveniences or annoyances that persons making the actual trip sometimes encounter, and all for the very modest sum of sixty-three cents (spent in postage).

Very few books of travel are written in language sufficiently vivid 'to bring the actual scenes described so vividly before the eves of the reader, but one author of today who is well able to do so is Louis E. Freeman, the well-known writer of books on travel. His latest work "Down the Columbia" is a wonderful account of a wonderful trip from source to mouth of a wonderful river, and to read it is not only to know just where the author-went and what he saw and who he talked to, but is without any undue effort of the imagination, to go where he went, see what he saw and talk to and listen to the various people he met and talked to on his trip.

If the author is picturing the icebergs on the Lake of the Hanging Glaciers, the reader can hear them clash against each other; if he is "lining down" Surprise Rapids the roar of the water can be heard and the spray felt on one's face; if Ike Emerson is at the sweep of his raft steering it

through Hell Gate the wad of "eating tobacco" in his cheek is very apparent; and when the camera man asks Freeman to slip and fall into ten feet of ice-cold water because the camera was not set up the first time he did it, the reader actually holds his breath while Freeman is deciding whether to pay no attention to the request or to throw the camera man into the hole he has just crawled out of.

From personal experience we can back up the old-timer's statement that the Columbia River is a real "he river" to boat on, but as not everyone can have the opportunity of travelling down its best or worst places in a rowboat or canoe, even though a few days spent in this way is worth years of ordinary travel, so far as scenery, excitement, "local interest," and everything else that people travel for when they are not forced to leave home, is concerned, they can come closer to it by reading Freeman's "Down the Columbia" than in any other way short of the reality, and the trip by book will certainly prove to be one of the most interesting and enjoyable journeys it is possible to make.

"Starting at the source of the river at the head of the Windermere Valley, lying between the Rocky Mountains and the Selkirk Range, in British Columbia, the trip was made down river, around the Big Bend, where only an occasional trapper or timber cruiser ever finds his way, through dangerous rapids and over treacherous sand bars, hidden rocks, and forbidding canyons, to Revelstoke on the main line of the Canadian Pacific Railway. From there to Robson the well-known and beautiful Arrow Lakes were traversed, and leaving the foot of the lakes in a small sixteen-foot dinghy the author and his companions continued down stream into the Stats of Washington and after many exciting experiences he eventually ended his trip at Portland, Oregon.

He has not confined himself to a stereotyped description of the country passed through, and his splendid descriptions of the different parts of the river and surrounding territory are very frequently interspersed with anecdotes and incidents, humorous or otherwise, relating to the history of the river and the men who had travelled and lived on it.

He introduces us to Byron Harmon, the official photographer of the Alpine Club of Canada, and gives us an insight into the patience, persistence and hard work so often required by this artist to obtain the splendid photographs of the mountains with which the members of the Alpine Club are so familiar. We also meet and get to know Captain Armstrong, the first man to steamboat on the Columbia River in British Columbia, and who for many years was a well known figure to travellers in the mountains. The skipper's inexhaustible fund of stories regarding the river and the characters associated with it is freely drawn upon and tends largely to add to the "local interest" which makes the book not merely a description of the trip but also a compendium of notable events which have happened on the river.

Bob Blackmore and Andy Kitson, two of the most merry and capable "swift water" boatmen to be met with anywhere, are introduced and the reader is given some idea of the experience, ability and quickness of thought and movement required to handle a boat safely through boiling rapids, eddies and whirlpools.

Capt. McDermid, the only man ever to take a steamboat down the Grand Rapids, and who was accompanied on the trip by his brave little wife, who wanted to be able to talk about it afterwards if they got through safely, or to go to the bottom with her husband if such was to be his fate, is met farther down stream.

Among other figures in the book are such members of the Alpine Club as J. P. Forde, a former Vice-President of the Club and well-known climber, Randolph Bruce of Windermere and Conrad Kain, formerly the Club's official guide.

The splendid reproductions of photographs illustrating scenes and incidents on the trip add still further to the reality of the journey down this, one of the world's most magnificent waterways.

J. P. Forde.

OFFICIAL SECTION

Greeting From The Hon. President, Sir Edmund Walker, To The Welcome Home Camp, 1920.

Sorry as I am on my own account to miss the animal joys of the Alpine Club I am much more sorry that I could not be present in this particular year at the Camp near the monarch Mt. Assiniboine to welcome home to Canada those of our members who served in the great war. We can never recognize too warmly those of our men and women who during five long years displayed in every theatre of the war that knowledge of mountains and plains, that resourcefulness in camp or in the field which made their services valuable above almost all others.

Of those who happily have returned many have gained distinction. I need not remind you of the truly splendid career of our late Vice-President, Brigadier-General C. H. Mitchell, C. B., C. M. G., D. S. O., nor is it necessary to recall the specially distinctive service on the Somme and at Passchendaele of Colonel Bell, C. M. G., in the Medical Service and Lieutenant-Colonel Poster, D. S. 0., in the infantry. The Club was also represented in other arms of the service such as the Artillery, the Engineers and the Flying Corps by Major E. O. Wheeler, M. C., and by several of the younger members. I am delighted to observe that among the members who served there were created three Brigadier-Generals, seven Colonels and a considerable number of Majors and junior officers and that we have a long list of nurses. Surely we may be excused if we feel intensely proud of such a record.

Having all this in mind, would it not be fitting if the Alpine Club of Canada took steps to put in some permanent form a record of services of its members, which in any event should provide for the erection at the Club House or elsewhere, of a memorial to those who fell.

At the camp fire for many years we shall sadly miss those who have not come back, the twelve who made the supreme sacrifice. Our sorrow for the fallen is intensified in the loss of the President Elect, Major Stanley Jones in the Battle of Sanctuary Wood and in reverent memories of them the Club will always realize its particular contribution to the war.

Report Of The Assiniboine Camp, 1920.

The Fifteenth Annual Camp of the Alpine Club of Canada was held at the foot of Mt. Assiniboine from July 27th to August 8th. The original plan had been to hold it a week earlier, but the unprecedented late lying of the snows rendered it impossible. When finally summer did start the weather was perfect, but the end of the camp was troubled by the smoke of forest fires which later developed to serious proportions.

The holding of the Camp was made possible by the institution of the Walking Tour scheme, the members making use of the comfortable camps on their way to and from Banff. From Golden Valley Camp the first ascent of a neighbouring mountain was made by a number of members from Edmonton. They hoped it might be called Mt. Edmonton but the Geographic Board disallowed the name though none other was suggested and the mountain remains nameless.

The Camp was especially designed to give an official welcome home from the Great War to all members who were on military service overseas, and was held in their honour. There was also present a party from The Alpine Club (England) with which the Canadian Club is now affiliated. In the party, escorted by our old friend and Life Member, Mr. A. L. Mumm, and his shadow, Moritz Inderbinen, were Mr. Douglas Freshfield and Mr. and Mrs. J. A. Osler. Unfortunately owing to the unexampled difficulties of the Trail Mr. Freshfield was unable to come to the Camp, a great disappointment to our members. Mr. Osler's appreciation appears on another page.

Camp was pitched in a sheltered position near the creek. It was singularly warm at night, the cold air sinking to the trough of Lake Magog.

The keynote of the climbing was, naturally, Mt. Assiniboine; not a difficult mountain for an experienced climber but not to be attacked by the novice. It was climbed during camp by thirty-five members who found it of great interest. The graduating climb was Mt. Magog, which gave good experience to the beginner.

Other peaks ascended were: Mt. Sturdee, the first ascent; Mt. Marshall, Wedgwood, Naiset Peak, Wonder Peak, Mt. Towers and the traverse of Mts. Magog and Terrapin. An attempt was made on Mt. Eon but the route chosen was impracticable and the summit was not readied.

The Swiss Guides were Ernst Feuz and Rudolph Aemmer, the latter being only available for part of the time. Their services were as usual invaluable.

Mt. Assiniboine is the centre of a magnificent country affording opportunities for excursions of surpassing interest. Perhaps the most striking was Marvel Valley with its chain of lakes and the superb background of Mts. Assiniboine, Eon and Aye.

There were present members of the English, Swiss and American Alpine Clubs, the B. C. Mountaineering Club, the Appalachian Mountain Club, the Mazamas, the Sierra Club, the Royal Geographical Society and the Royal Society.

Those present at Camp were drawn from the following places:

Canada
British Columbia: Britannia Beach, Cranbrook, Esquimalt, Fernie, Grand Forks, Invermere, Kerrisdale, Sidney, Vancouver. Vernon, Wilmer, Victoria.
Alberta: Banff, Calgary, Canmore, Edmonton, Grand Prairie, Irricana, Leduc, Macleod, Springdale.
Saskatchewan: Melville, Regina, Saskatoon.
Manitoba: Winnipeg.
Ontario: Kitchener, Madoc, Toronto, Woodstock.

England
London, Birmingham, Kendal.

India
Dehra Dun.

Switzerland
Interlaken, Zermatt.

United States
California: Los Angeles.
District of Columbia: Washington.
Georgia: Atlanta. ‘
Iowa: Des Moines.
Illinois: Aurora, Chicago, Galesburg.
Indiana: Lafayette.
Massachusetts; Boston, Weston.
Minnesota: Minneapolis.
New Jersey: Summit East Orange.
New York: Brooklyn, New York, White Plains.
Oregon: Portland.
Pennsylvania : Philadelphia.
Washington: San Juan Island.
West Virginia: Spencer.

The following passed the test for Active Membership:

Mt. Magog, July 28th.
Mrs. T. Cabot. I. Miller. Miss Macleod. Miss C. R. Nickell.
Mt. Assiniboine, July 29th.
T. Cabot.
Mt. Magog, July 30th.
Miss H. Reid. Mrs. P. S. Thompson.
Mt. Assiniboine, July 31st.
Prof. Hooke.
Mt. Magog, July 31st.
Miss Burwash. Miss Scholes. Miss Thorpe. Miss Henley. M. B. Morrow. B. Beyer.
Mt. Magog, Aug. 1st.
Miss Carscadden. Miss. H. Dafoe. Miss P. Dykes. Miss Buck. Miss Silvester, Miss Speetzen. D. G. Foster. N. Allin.
Mt. Magog, Aug. 2nd.
Mrs. Wakefield. Miss P. Hodgins. Miss Boutelier. Miss Miller. Miss Shaw. J. W. Jeffery. Dr. Hurlburt.
Mt. Magog, Aug. 3rd.
Miss M. G. McDonald. J. MacNeille. D. R. Sharpe. A. N. Hardy.
Mt. Assiniboine, Aug. 3rd.
H. Pollard.
Mt. Sturdee, Aug. 5th.
F. Archibald.
Mt. Magog, Aug. 5th.
Miss. E. Ellison. Miss Wylie. Dr. Fortin.
Mt. Assiniboine, Aug. 4th.
J. Geddes. G. Gambs.

Mt. Assiniboine Welcome Home Camp, 1920

A Group of Mermbers returned from War Service Overseas

Back Row, L. to R. F. C. Bell. Col., C. M. G.; C. B. Reynolds (Wounded); G. M. Smith, Capt., M.C.; Miss A. L. Burwash (V.A.D.); Miss E. McPhedran (C.A.M.C.); Miss M. H. Kilmer (V.A.D.); E. L. T. Taylor, Capt.; A. W. Wakefield, Capt., M.O.; F. Trant (Wounded); W. W. Foster, Lt.-Col., D.S.O.

Front Row, L. to R. C. W. Hurlburt, M .O.; G. Cameron, Lt. (Wounded); P. S. Thompson, Capt.; A. C. C. Cooper, M.O.; Rev. A. H. Sovereign, Y.M.C.A.; E. O. Wheeler, Major, M.C., Legion of Honour; H. Westmorland, Capt.

Annual Meeting, 1920.

The Annual Meeting of the Alpine Club of Canada for the year 1920 was held around the Camp fire at Mt. Assiniboine on the Morning of August 4th, 1920, the President in the chair.

The Minutes of the 1919 meeting were read and confirmed.

The President then made his address stating that all had looked forward with peculiar interest to this meeting at which official welcome home again was given to the members who were on active service Overseas. He then addressed these members, welcoming them and read the names of those who had gone, never to return.

Greeting was then extended to the members of The Alpine Club, England, who had journeyed so far, bringing with them a message of sympathetic appreciation from the most distinguished of all Alpine Clubs.

He then expressed the gratitude of the Club to the Director, Mr. Wheeler, for his labours in carrying on the Club during the War and in making the Assiniboine Camp a fact in the face of the extraordinary difficulties. Mr. Wheeler was the rock on which the great success of Canada at the Alpine Congress at Monaco had been built.

The Director then delivered !his address. He welcomed those returned from the war and the contingent from The Alpine Club. He expressed gratification at the Club's affiliation with The Alpine Club and at the success made by Canada at The Monaco Congress. He alluded feelingly to the losses by death. He expressed the thanks of the Club to all those who had made the Camp possible by their labours under very trying circumstances both at Club House and Camp.

Major Walker reported that the Club finances were satisfactory but that greater income was needed to extend the propaganda.

Mrs. Henshaw's report of the Monaco Congress was read by the Director and that of the Photographic Committee by Dr. Bulyea.

Dr. Wakefield presented the result of the election for officers for the ensuing term and the names of the six sections which were entitled to representation on the Executive Board.

The Secretary-Treasurer's Report is summed up in "More Members of the right mountaineering kind. Work for the Club."

Mr. A. L. Mumm made clear the strength of the bond between the oldest and the youngest of the National Alpine Clubs and expressed the thanks of Mr. and Mrs. Osler and himself for the kindnesses received in the Canadian Mountains.

The meeting then proceeded to new business.

A resolution was passed that the matter of raising both entrance and Annual fees for Active and Graduating members and also the Life Membership fee be submitted to a ballot of the Active members in the ordinary routine.

The matter of badge qualifications was discussed and postponed until next Annual Meeting.

Another resolution was passed that the Memorial to members who had taken part in the Great War Overseas should take the form of a tablet to bear the names of the fallen to be placed in the Club House and to be accompanied by a book recording the names of all members who had borne their part in the war. And that any balance of the fund be turned over to the Executive for utilitarian purposes.

Col. Foster, on behalf of those who had been overseas, expressed appreciation of the Club's hospitality to them at the Camp but even more for the splendid courage of the President and the Director which kept the Club alive during the war years. The returned members wished to present

the Club House with baths as a practical evidence of their gratitude.

The President accepted gratefully. A vote of thanks was passed standing.

The question of joining the Associated Mountaineering Clubs of North America was then brought up. The meeting was very strongly of the opinion that the Alpine Club of Canada would gain no advantage by joining this body, which is largely composed of Clubs that are in no sense mountaineering. A motion in accordance with this opinion was passed.

The usual votes of thanks were then passed.

The retiring President, Mr. Patterson, then made a graceful farewell speech and the New President, Col. W. W. Foster, was installed.

The meeting then adjourned.

The Banff Club House, 1920.

The Alpine Club House was open to members and their friends during the entire season. The attendance was the largest yet experienced and, as will be seen, was drawn from an unusually wide area.

Owing to the abnormally late opening of the season and tie heavy forest fires less original climbing than usual was done. The face of Cascade, the Traverse of Mt. Norquay, several ascents of Mt. Edith were made during the season and the other excursions of the beautiful Banff region were enjoyed.

As usual many strangers made enquiries concerning mountain matters and the opening of a well informed and appreciative bureau of mountain information for the general public becomes more and more imperative.

Visitors to the Club House were drawn from the following places:

Canada

British Columbia: Britannia Beach, Esquimalt, Fernie, Grand Forks, Invermere, Sidney, Vancouver, Vernon, Victoria, Wilmer.
Alberta: Banff, Calgary, Edmonton, Grand Prairie, Irricana, Leduc, Lethbridge, Macleod, Okotoks, Springdale, Trochu.
Saskatchewan: Melville, Prince Albert, Regina, Saskatoon.
Manitoba: Winnipeg.
Ontario: Kitchener, Madoc, Toronto, Woodstock.
Quebec: Montreal, Westmount.

England

London, Birmingham, Forest Row, Kendal, Peterborough.

United States

California: San Francisco. District of Columbia: Washington. Illinois: Evanston, Chicago, Galesburg, Winnethan. Indiana: Lafayette. Iowa: Des Homes. Massachusetts: Boston, Weston. Maryland: Baltimore. Michigan: Lansing. Minnesota: Minneapolis. New Jersey: Summit. New York: Brooklyn, New York, Rochester. N. Dakota: Grand Forks. Oregon: Portland. Pennsylvania: Tunkhannock. Wisconsin: Milwaukee.

India
Dehra Dun.

Switzerland
Interlaken, Zermatt.

Report Of The O'Hara Meadows Camp, 1921

The Sixteenth Annual Camp was held in the Meadows near Lake O'Hara from July 20th to August 6th. It is a curious coincidence that four Camps have been held in this neighbourhood at intervals of four years; in 1909 we met in the same site and enjoyed perhaps the most successful of any of our camps. That year the British Association met in Winnipeg and the Club extended an invitation to twenty British mountaineers. The veteran Edward Whymper was there, and many others, several of whom have since repeated their visits, to our great pleasure.

This year an invitation was extended to the veteran climbers in the Canadian Alps from the United States. Our Hon. Member, Professor Charles E. Fay, organized the representation. There were present besides Professor Fay himself, Rev. Dr. H. P. Nichols of New York, Mr. B. S. Comstock of S. Orange, and Mr. W. D. Wilcox of Washington.

No more fascinating camp site could be found in the mountains. Lake O'Hara won the heart of the great painter Sargent who declared it the most beautiful lake he had ever seen. To appreciate it fully it has to be lived with and seen in every light—in sunshine and in storm.

The weather afforded all varieties of condition, from warm summer to snow, but as a matter of fact there were only two bad days.

The accident to Dr. Stone, referred to elsewhere, cast a shadow over the camp and necessitated taking away one of the Swiss Guides, thus curtailing the more serious climbing, although all the newcomers who wished were able to graduate.

The Camp was a fine centre for excursions and climbs of all kinds of difficulty. The famous two day expedition was repeated four times. Leaving O'Hara in the morning, Abbot Pass, the Victoria and Lefroy Glaciers and Mitre Pass were crossed to Paradise Valley, where the night was spent in a comfortable bivouac camp. Next day, by way of the Wastach, Wenkchemna and Opabin Passes and Glaciers, O'Hara was again reached. There is probably no other expedition in the mountains which reveals the heart of things bo fully and with so little labour.

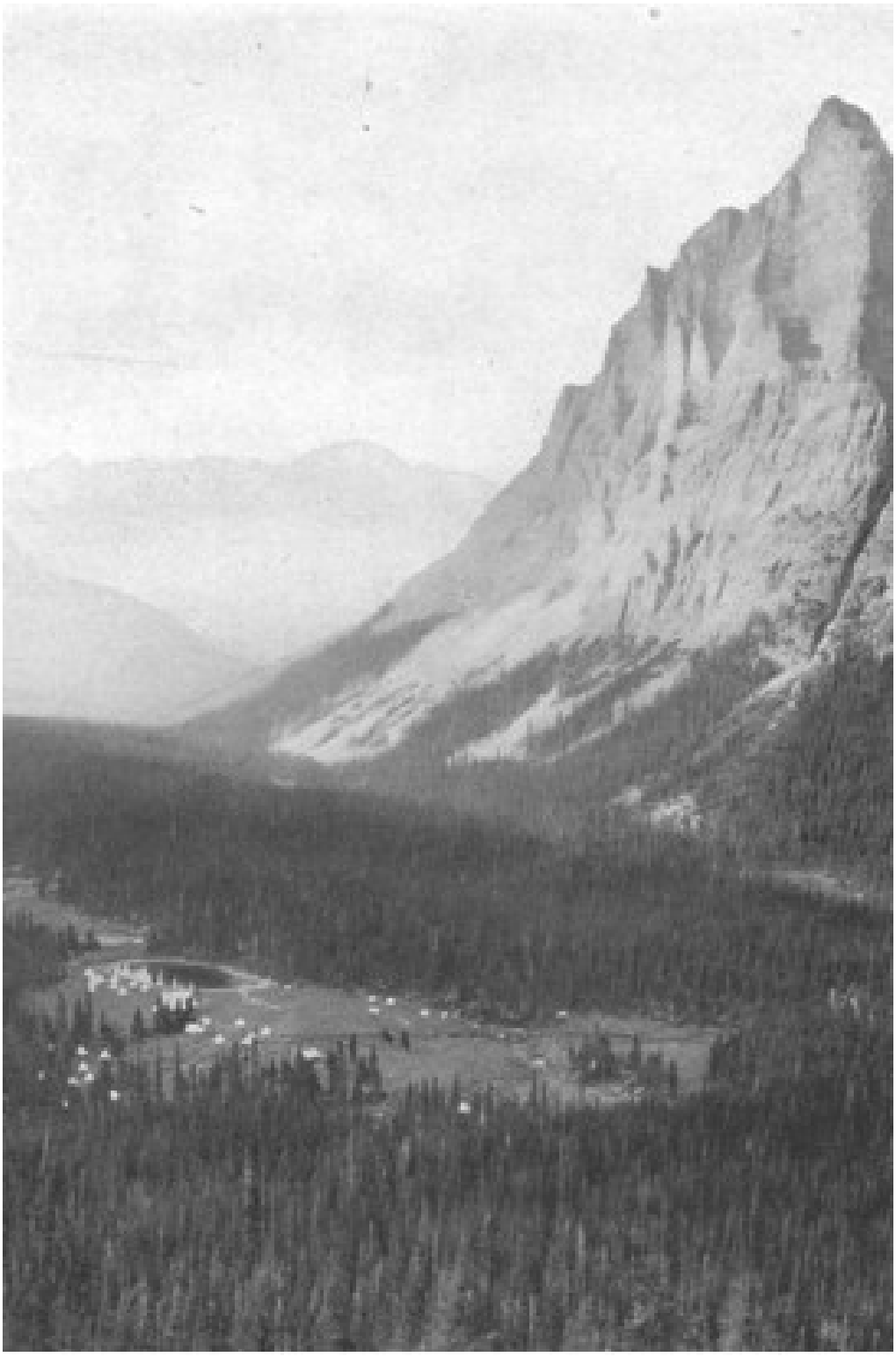
Mt. Odaray was the qualifying climb and found to be of great interest. Huber which was the graduating climb in 1909 was in no fit condition.

A new policy, as outlined in the circular, was developed, which was found to work out admirably. Before inexperienced members were allowed to tackle the Graduating climb they were sent on preparatory, instructive climbs and according to reports of their fitness were permitted to attempt graduation. No one more appreciated the advantages of this scheme than the novices themselves, and the knowledge thus acquired made their test climb a thing of joy.

The most valuable training climbs were the Opabin Pass and Mt. Wiwaxy. On the latter some very interesting rock work can be obtained.

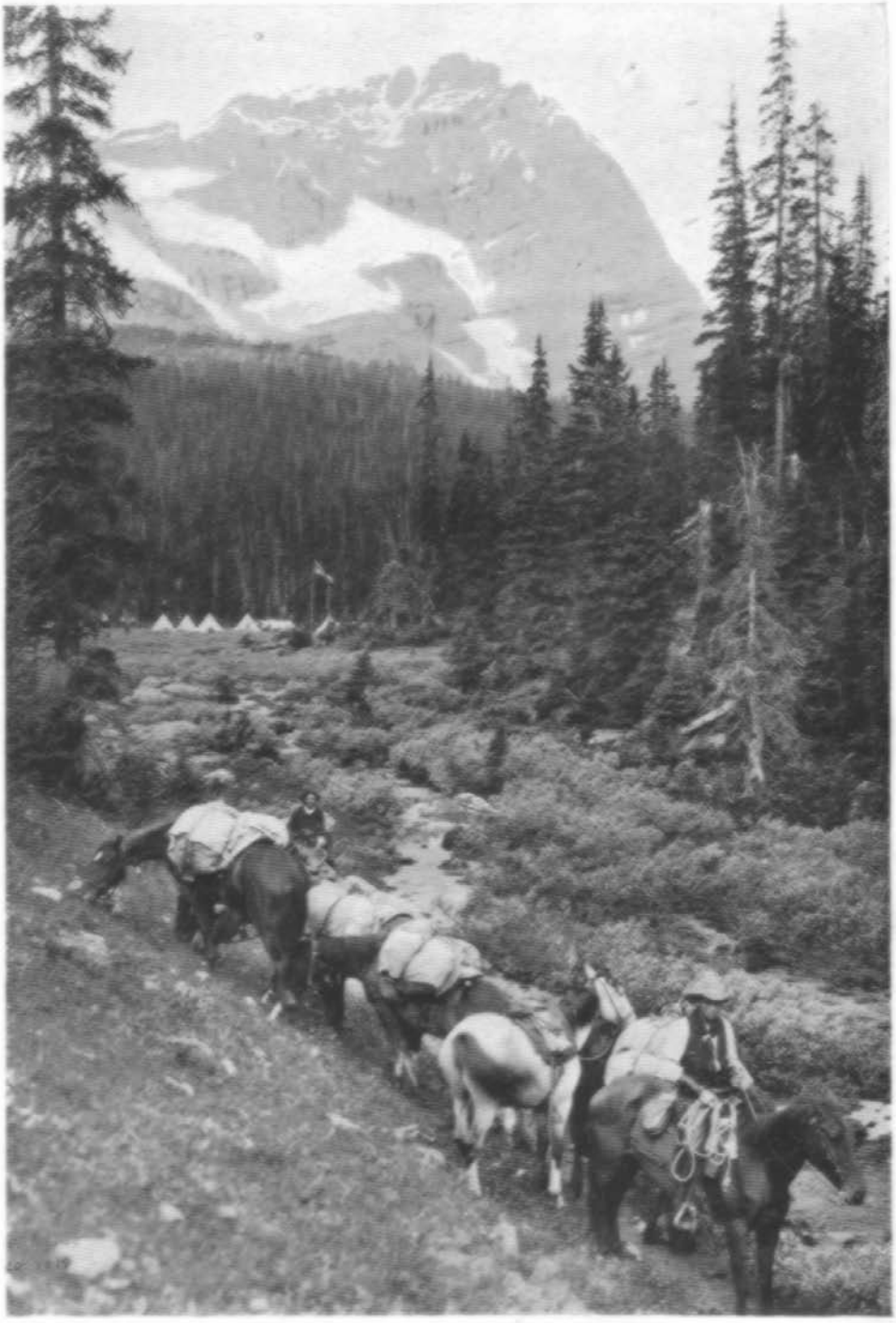
In addition to Odaray and Wiwaxy, climbs were made of Victoria, Schaffer, Yukness and Park Mountain. The last was found to be by no means as easy as was anticipated.

The Swiss Guides were Edward Feuz and Christian Häsler. The former was called away during Camp to help in the search for the body of Dr. Stone. Their invaluable services were as greatly appreciated as ever.



Camp at Lake O'Hara Meadows, Below Wiwaxy Peaks, 1921. Photo, H. Pollard

MT. ODVERAY



The Approach To Lake O'Hara Meadows Camp. Photo, H. Pollard

One party came into camp from Field by way of the Duchesnay Pass and did not think the interest equalled the labour. A trip, as in 1913, was made to Lake Linda under the kindly guidance of Professor Fay, and as in 1913, was a little late in returning.

The camp fires were as enjoyable as ever and the reminiscences of the pioneers were of the utmost interest. The lovely voice of Mrs. Burnett will linger long in the memory of those who heard it.

There were 157 placed under canvas, among them representatives of The Alpine Club, England, The American and Swiss Alpine Clubs, the Appalachian Mountain Club, the Green Mountain Club, The Sierra Club and the Royal Geographical Society.

Those present were drawn from the following places:

Canada
British Columbia: Creston, New Denver, Saanichton, Sidney, Vancouver. Vernon, Victoria.
Alberta: Banff, Calgary, Edmonton, Irricana, Lethbridge, Macleod, Nordegg, Vulcan.
Saskatchewan: Moose Jaw, Regina, Saskatoon.
Manitoba: Winnipeg.
Ontario: Kitchener, Peterborough, Toronto.
Quebec: Montreal.

England
London, Sunbury-on-Thames.

United States
California: San Francisco.
Connecticut: South Manchester Stamford.
District of Columbia: Washington Massachusetts:
Boston, Milton, Tufts College.
Michigan: Ann Arbor. Minnesota:
Minneapolis. New Jersey: Orange, Summit, Maplewood
New York: Brooklyn, Mt. Vernon, New York.
Pennsylvania: Pittsburgh, Wilks-Barre.

The following passed the test for Active Membership.

Mt. Odaray, July 28th.
J. Balch, J. H. Hall, Jr.
Mt. Odaray, July 29th.
D. Underhill, L. S. Southwick, R. S. Hull.
Mt. Odaray, July 30th.
M. Brubaker, K. L. Tate, R. G. Williams.
Mt. Victoria, July 30th.
Miss M. Morton, M. Morton, Jr.
Mt. Odaray, August 1st.
Miss M. Hills, Miss S. Grey, Miss P. Grierson, Miss M. Laidman, Miss M. Miner, Dr.

Milne, H. C. Boyd.
Mt. Odaray, August 2nd.

Miss J. Craig, Miss W. Heathcote, Miss J. McLaughlin, Miss E. P. Merrill, T. J. Porter, A. W. Drinnan, C. P. Gooding.
Mt. Odaray, Aug. 5th.

Miss I. Walroth, Miss H. H. MacDonald, Mrs. F. McFadden, Miss M. J. Bayne, Miss M. E. Purdy, Miss V. Mason, Miss M. Craig, Miss L. Bentley, L. Crease, Col. H. R. Gale, H. B. Cowan, G. Wallace.

Annual Meeting, 1921.

The Annual Meeting of the Alpine Club of Canada for the year 1921 was held round the Camp Fire at O'Hara Meadows on the morning of August 1st, 1921, the President, Col. W. W. Foster, in the chair,.

The minutes of the 1920 Annual Meeting, held at Assiniboine Camp were read. Moved by B. S. Comstock, Seconded by Hon. Mr. Justice Gait, that the minutes be confirmed. Carried.

The President then gave his address. He spoke of the 1920 Camp which was only possible through men with vision and with executive ability like the Director and his assistants. He extended an official welcome to the Pioneers from the United States and alluded to the Mt. Everest expedition in which the Club was person ally interested through its affiliation with The Alpine Club and also because Major E. O. Wheeler, a Life Member, was taking an important part in it.

He congratulated the Local Sections on their work and spurred them to fresh exertions. He urged the whole Club to increase its efforts in bringing the mountains of Canada to the notice of the world.

Professor Fay, on behalf of the Pioneer guests, expressed appreciation of the hospitality of the Club.

The Director then gave his address. He stated that the Club was in satisfactory financial condition but that better work could be done with more means. He expressed appreciation of the work of the officers of the Club and of the Local Sections. He announced that definite action would be taken about the Club Memorial to members who had been overseas in the Great War. He endorsed the President's appreciation of the guests from the United States. He then alluded to matters which were later brought before the meeting for action and in answer to requests for information detailed the policy of the Walking Tour scheme with which the Club is in hearty sympathy. He alluded sympathetically to the loss of Dr. Stone, a true friend of the Club. He concluded by expressing appreciation of the work done by so many members in making the Camp possible.

The meeting then proceeded to new business. Resolutions were passed, all unanimously, that the Entrance Fee should be reduced to $5.00; that the Club badge should only be acquired by climbs in the Canadian mountains and that men and women should earn it on equal qualifications. In addition it was decided to place the Memorial arrangements in the hands of the Western Vice-President, Mr. H. B. Mitchell, for immediate action. ,

The President, Seconded by the Director, moved a vote of sympathy with Mrs. Stone in her sad loss and expressing the greatest appreciation of the Club's loyal friend, that true mountaineer, Dr. W. E. Stone.

The sum of $500.00 was voted to be placed at Mrs. Stone's disposal for use in any way she might wish as a mark of sympathy and esteem from the Club.

The usual votes of thanks were passed and the meeting adjourned.

Club House Report, 1921.

The Club House had a very happy season and was never without guests during the entire summer, some making long stays. The usual local climbs were made from it. Miss Gold and Messrs. West and Wates climbed Mt. Edith after camp and had a very enjoyable time. They experienced no difficulty.

Dr. Hickson, Mr. L. S. Crosby and Edward Feuz, made the first ascent of the pinnacle beyond Mt. Louis which had been an object of interest to climbers for some time.

Later on Mr. Morrow made the ascent of one of the Three Sisters, at Canmore. It is believed this was first climbed by Mr. J.J. McArthur, D.L.S., in 1889.

As usual the Club House was the rendezvous of strangers seeking information about the Canadian mountain regions—information which is apparently available nowhere else.

An added attraction was the installation of the bath system so kindly subscribed for by the Overseas members. In addition Mr. T. 0. A. West kindly presented some necessary equipment.

Mr. A. L. Mumm gave a number of magnificent enlargements of views of the Assiniboine country. These are framed and hung in the dining-room together with the Mt. Robson pictures by the same author. As all the pictures in the dining room are by him, it might well be named the Mumm Collection.

Mr. W. D. Wilcox presented a set of his beautiful pictures of the mountains, which fascinate all who see them.

Our Honorary Member, Professor Charles E. Fay, presented the Club with the ice axe of Peter Sarbach, bearing the following inscription: This axe was the property of Peter Sarbach, the first Swiss guide in the Rockies, in 1897. On the breaking of the shaft of the Appalachian Mountain Club axe Sarbach loaned it to C. B. Fay, who used it for the first ascents of Mt. Lefroy (Aug. 3), Mt. Victoria (Aug. 5), and Mt. Gordon (Aug. 10).

The Club will keep this axe in the Banff Club House, where all may see the trophy of an earlier day, so graciously given by our old friend.

The visitors to the Club House came from all over Canada and the United States as well as the United Kingdom of Great Britain and Ireland.

Canada
British Columbia: Creston, New Denver, Sidney, Vancouver, Victoria, Wilmer.
Alberta: Calgary, Edmonton, Irricana, Lethbridge, Rimbey.
Saskatchewan: Moose Jaw, Prince Albert, Regina, Saskatoon, Swift Current.
Manitoba: Winnipeg.
Ontario: Fort Frances. Kitchener, London, Ottawa, Toronto. Quebec: Montreal.

England
London, Levens.

Ireland
Kilkenny.

U. S. A.
California: San Francisco. Connecticut: South Manchester, Stamford. District of Columbia:

Washington. Delaware: Dover. Illinois: Chicago. Indiana: Lafayette. Iowa: Dubuque. Michigan: Ann Arbor, Detroit. Massachusetts: Boston, Tufts' College. Minnesota: Minneapolis.
New York: Brooklyn, Jamica, Mt. Vernon, New York, Scarsdale, Tuckahoe.
New Jersey: Maplewood, Orange, Summit. Pennsylvania: Pittsburgh.
Washington: Seattle, Tacoma.
Wisconsin: Milwaukee.

Report Of The Photographic Committee

It is satisfactory to be able to report that the photographic work of the Club is progressing steadily if slowly. The greater part of what has been accomplished in the past year falls under three heads, Lantern Slides, Competitions and Albums. A suitable routine has gradually been evolved in the first two of these classes and some attention is now being given to the third. It is to be hoped, however, that nothing in the nature of stagnation will take place as a result of things running too smoothly. Suggestions are always most welcome but members should not overlook the fact that the work of the Photographic Committee is being done voluntarily and suggestions involving more work will be accepted with greater alacrity if accompanied by offers of assistance. At the present time, your chairman is doing all that he feels he can spare the time for, but work which would be of benefit to the Club along photographic lines could be assigned to one or more willing member.

The following is a statement of progress during 1920 and 1921.

Competitions

The Annual Competition held in 1920 at the Welcome Home Camp at Mt. Assiniboine resulted in the following awards:

Class A (Challenge Cup) Subject: A set of three enlargements to illustrate "Lakes and Waterfalls of the Canadian Mountains." —M. P. Bridgland.

Class B. Subject: A Canadian Mountain Landscape.—M. P. Bridgland.

Class C. A set of three pictures of Rock Climbing.—L. H. Lindsay.

Class D. Subject: Set of prints to illustrate the 1919 Camp at Yoho Lake.—C. G. Wates.

The competition in 1921 at Lake O'Hara resulted in the following awards:

Class A. (Challenge Cup) Subject: A set of three enlargements illustrating a Peak, a Pass and a Snowfield.—L. S. Crosby.

Class B. Subject: A Canadian Mountain Landscape.—Dr. W. E. Stone.

Class C. Subject: Snow Climbing.—Dr. W. E. Stone.

Class D Subject: The best view of Mt. Assiniboine taken in 1920.—Trevor 0. A. West.

Class E. Subject: Set of prints to illustrate the 1920' Camp at Mt. Assiniboine.— D. J. M. McGeary.

It is a favorable symptom that the number of entries in these competitions is steadily on the increase and also that the prizes are so widely distributed. The awards of the judges, who have a thankless task at best, has, for the most part, met with general approval and any dissatisfaction that may have been felt must be blamed to the Committee who have so far failed to provide the judges with sufficiently explicit instructions with regard to marking, etc. This will be remedied in future years.

The subjects for 1922 are as follows:

Class A. (Challenge Cup) The best set of three enlargements to illustrate the following titles: "Mountain and Forest," "A Canyon or Mountain Torrent," "An Ice Fall."

Class B. The best enlargement of a Canadian Mountain Landscape.

Class C. The best picture (any size) to illustrate "Freaks and Curiosities of the Mountains."

Class D. The best set of three pictures (any size) to illustrate "The Flora of the Canadian Mountains."

Class E.. The best set of six pictures (any size) to illustrate the 1921 Camp of the A. C. C.

A circular is available giving full rules and other information and intending competitors should apply for one of these and read the instructions carefully.

A set of enlargements including the 1921 pictures and a selection from those of previous years is available for circulation among the sections and application for the loan of these should be made well in advance of the date on which they are to be exhibited.

Lantern Slides

Numerous contributions of Lantern Slides during the past year have brought the Club Collection up to about 400. A descriptive catalogue is available to any member who wishes to make use of the slides and may be obtained by applying to the local member of the Photographic Committee or by writing to the Chairman. A selection of slides, not to number over 125, will be sent to any member or section in Canada upon payment of express charges. Unfortunately, the customs regulations prohibit the shipment of slides into the United States at present.

In order for the Lantern Slide collection to attain its full degree of usefulness, there should be slides illustrating all sections of the mountains and all branches of the climber's craft. Members can do much to promote this end by donating slides from especially interesting negatives. The cost is not great and the benefit to the Club is permanent. Further information will be furnished gladly by any member of the Committee.

Donations of Lantern Slides are acknowledged as follows: Byron Harmon, F. N. Waterman, H. E. Bulyea, B. S. Comstock, P. S. Thompson, R. I. Raiman, H. Pollard, L. H. Lindsay, C. G. Wates, and the Vancouver Island, Vancouver, Calgary, Edmonton, Winnipeg, Saskatoon, New York, and London (England) Sections of the Club.

Albums

With a view to rendering the large number of loose prints at the Club House more available to visiting members, several albums were purchased in 1919. One of these, covering the district between the C. P. R, and the G. T. P. was completed and in the Club Library this summer (1921). Your chairman expects to have the others ready by the time the season of 1922 opens. .

It is to be greatly regretted that the set of albums illustrating the annual camps has been discontinued. With a view to bringing these up to date the Committee appeals to all members who have pictures of the Camps from 1916 to 1921 inclusive, to look up their negatives and send in prints of their best pictures as soon as possible. Authorization has been given for the necessary albums and if all members will attend to this matter at once the Committee will endeavour to have the Albums completed in time for use at the Club House this summer. Members are asked to remember that pictures for this purpose should be selected as much for their personal interest as for their artistic qualities. Groups, climbing parties and pictures illustrating amusing incidents or pleasurable experiences help to make up an album which will be a source of delight to the members for all their lives, helping to recall, year by year, glorious memories of unforgettable days in the great hills.

C. G. Wates.

The Club Library

The Club Library grows, but new mountaineering books are still few.
Among books we should like to possess are:
Mountaineering Art.—By Harold Raeburn. London, Fisher Unwin.
Life of De Saussure.—By Douglas W. Freshfield. London, Edward Arnold.
Flora of the Rocky Mountains and Adjacent Plains.—By P.A. Rydberg. New York.
The Pyrenees.—By H. Belloc. London.

The list of additions follows:
Spencer Fullerton Baird.—By W. H. Ball. Donor, Mrs. Wheeler.
Champlain Series — Select British Documents.— Edit. W. Wood. Subscription.
Climber's Guide to the Rocky Mountains of Canada.—By H. Palmer and J. Monroe Thorington. Review copy. (Reviewed on a previous page.)
Flora of Southern B.C.—By J. K. Henry. Donor, Mrs. Wheeler.
Midsummer Rambles in the Dolomites.—By Amelia B. Edwards. Donor, A. B. Dawson.
Mountaineering Craft.—Edit. G. W. Young. Donor, J. W. A. Hickson. (Reviewed on a previous page).
Roughing it in the Bush.—By Mrs. S. Moodie. Donor, Mrs. J. Macoun. An interesting account of very early days in Ontario, when hardships were very real and grumbling rare.

Pamphlets

Topography of the Gold Range and Northern Selkirks.—By Howard Palmer.
Pioneering Beyond Mt. Robson.—By Howard Palmer. Reprints of interesting articles.