

- (1) Highest peak of the range, formerly known as Earl Grey, perhaps 11,000 ft.
- (2) Peak N. of it, sometimes called Lady Grey.
- (3) Peak immediately S.W. of Mt. Toby, formerly known as Mt. Gleason.'

The last two were well over 10,000 ft.

Measurements were taken of the Toby Glacier tongue, which is steadily retreating and more markedly during the last three years. (Measurements have been carried out during a period of nine years.)

As there are no accurate maps of the above region it is difficult to locate the peaks precisely.

W. E. Stone (killed on Mt. Eon, 1921) and A. H. MacCarthy (the Mt. Logan leader) travelled and climbed extensively through this region. Their articles appear in *Appalachia* and *The Canadian Alpine Journal*.

In the Wind River Range of Wyoming, almost the only remaining partially unexplored mountain district in the United States, three first ascents were made by a party of the Colorado Mountain Club led by Professor Albert R. Ellingwood. The peaks climbed were Mt. Helen (13,600 ft.), an unnamed peak N.E. of Helen, slightly lower, and an unnamed peak N.-N.E. of and slightly higher than Helen. A new route was made on Fremont Peak by the N. face.

It will readily be seen that the season of 1924 in the Rockies has been probably a record one, both in numbers of first ascents accomplished (something over thirty altogether, all but three being in Canadian territory) and in the number of separate parties and the total of different climbers engaged.

THE MOUNT LOGAN EXPEDITION.

THIS expedition, which has been before the minds of members of the Alpine Club of Canada since it was mooted by Professor Coleman in 1922, has now been launched, and already its energetic leader, Mr. A. H. MacCarthy, is on his way from Cordova in Alaska to push the transport of supplies and equipment over the proposed route. The peak itself, 19,850 ft., is the highest unclimbed mountain of the continent, the pre-eminence of which was recognized by the American explorer, J. C. Russell, who estimated its height at 19,500 ft. and named it after Sir William Logan, founder and first director

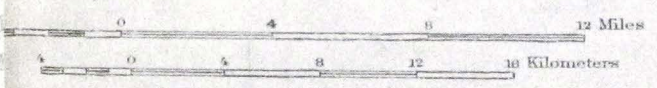
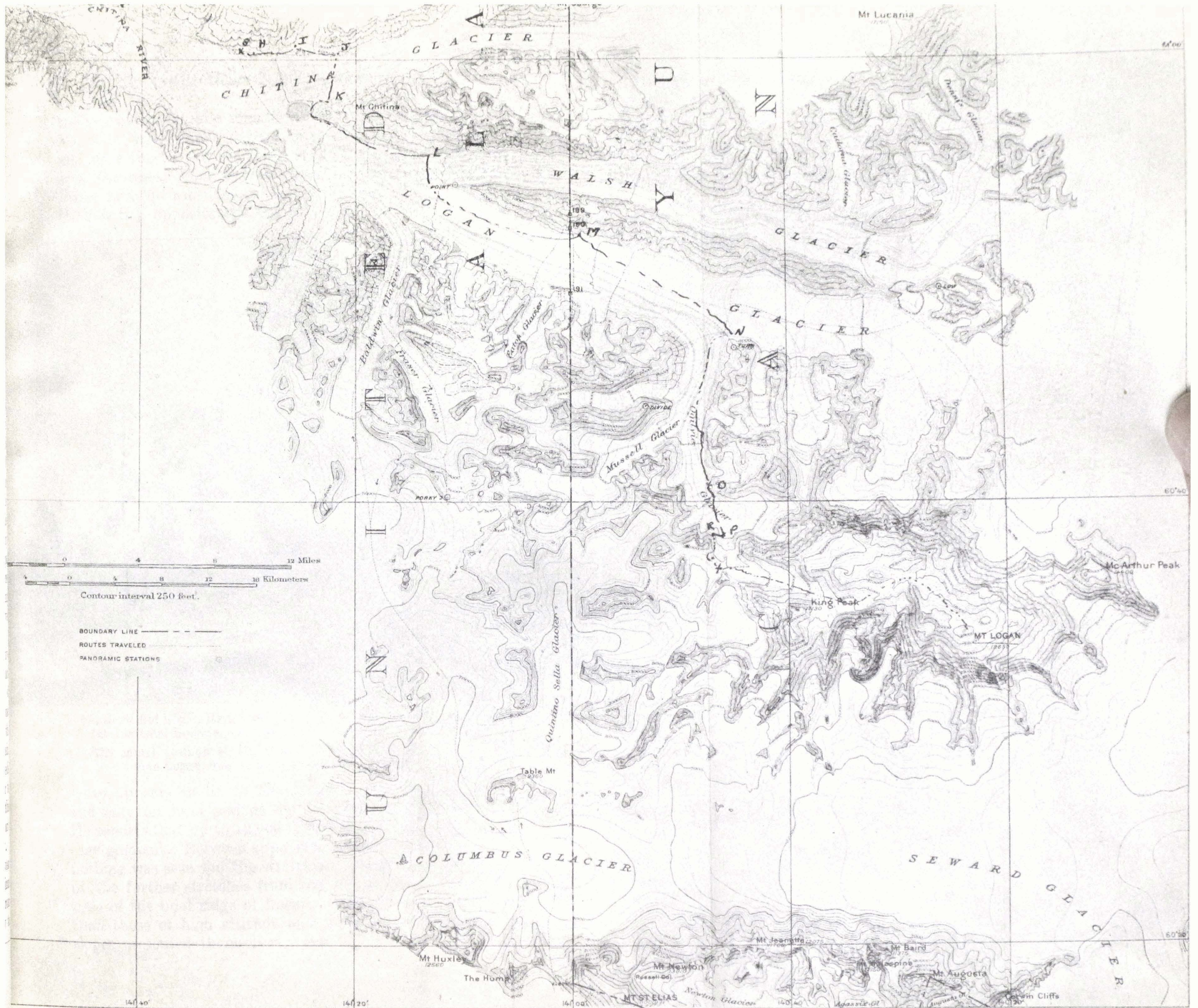
of the Geological Survey of Canada. His observations were confirmed in 1913 during the work of the International Boundary Survey. The peak is situated $60^{\circ} 35''$ north latitude in Canadian territory, in the S.W. corner of the Yukon, twenty-six miles N.E. of Mt. St. Elias (18,100 ft.), and eighty miles from the shores of the Yakutat Bay. Although 9300 ft. lower than Mt. Everest, it is 1500 miles nearer the North Pole, and this tends to equalize the temperatures prevailing in these two very different mountain regions.

Mt. Logan (est. height 19,850 ft.) rises about 14,000 ft. above the level of the surrounding glacier, and is actually fifty miles from forest vegetation. Its bulk is enormous, its base having a circumference of one hundred miles. At the 10,000-ft. level it measures sixteen miles from E. to W. and eight miles from N. to S. From the eastern end of the massif flows the Seward Glacier, one of the largest Alpine glaciers known, itself a tributary of the Malaspina, on the S. side of the group, one of the largest of the Piedmont type, which descends practically to the seashore, having an area of 1500 square miles. Between Mt. Logan and St. Elias lies the huge and little known Columbus Glacier; on the N.W. side lies the Logan Glacier, the explored part of which is forty-five miles long and from three and a half to five miles wide. It is nearly eighty miles up the Chitina Valley to the foot of the Logan Glacier, and then there are fifty miles of ice and snow to traverse to the foot of the ice-fall of the King Glacier. The real climbing, which will then begin, involves an ascent of over 11,000 ft., over a distance of sixteen miles to the summit.

There are three possible routes of approach to the objective of the expedition. One by way of the Malaspina and Seward Glaciers from Yakutat Bay was followed by the Duke of Abruzzi's expedition in 1897. It has been discarded because of the unfavourable fog conditions along the coast, and the apparently unscalable cliffs of the S. side of the mountain, as indicated by the photographs taken by the Abruzzi expedition. Another route is by way of the Kuskawalsh Glacier to the E., and then from Lake Kluane to the N.; but of this route nothing is known beyond Lake Kluane, and another year's reconnaissance would be required to ascertain its feasibility.

The route decided upon, and which was prospected last year (1924) by Mr. MacCarthy, starts from McCarthy,¹ the terminus of the Copper and North-Western Railway running from Cordova on the Pacific. It leads up the Chitina Valley to

¹ Not named after the leader.



Contour interval 250 feet.

- BOUNDARY LINE ————
- ROUTES TRAVELED - - - - -
- PANORAMIC STATIONS ○

141°40'

141°20'

140°40'

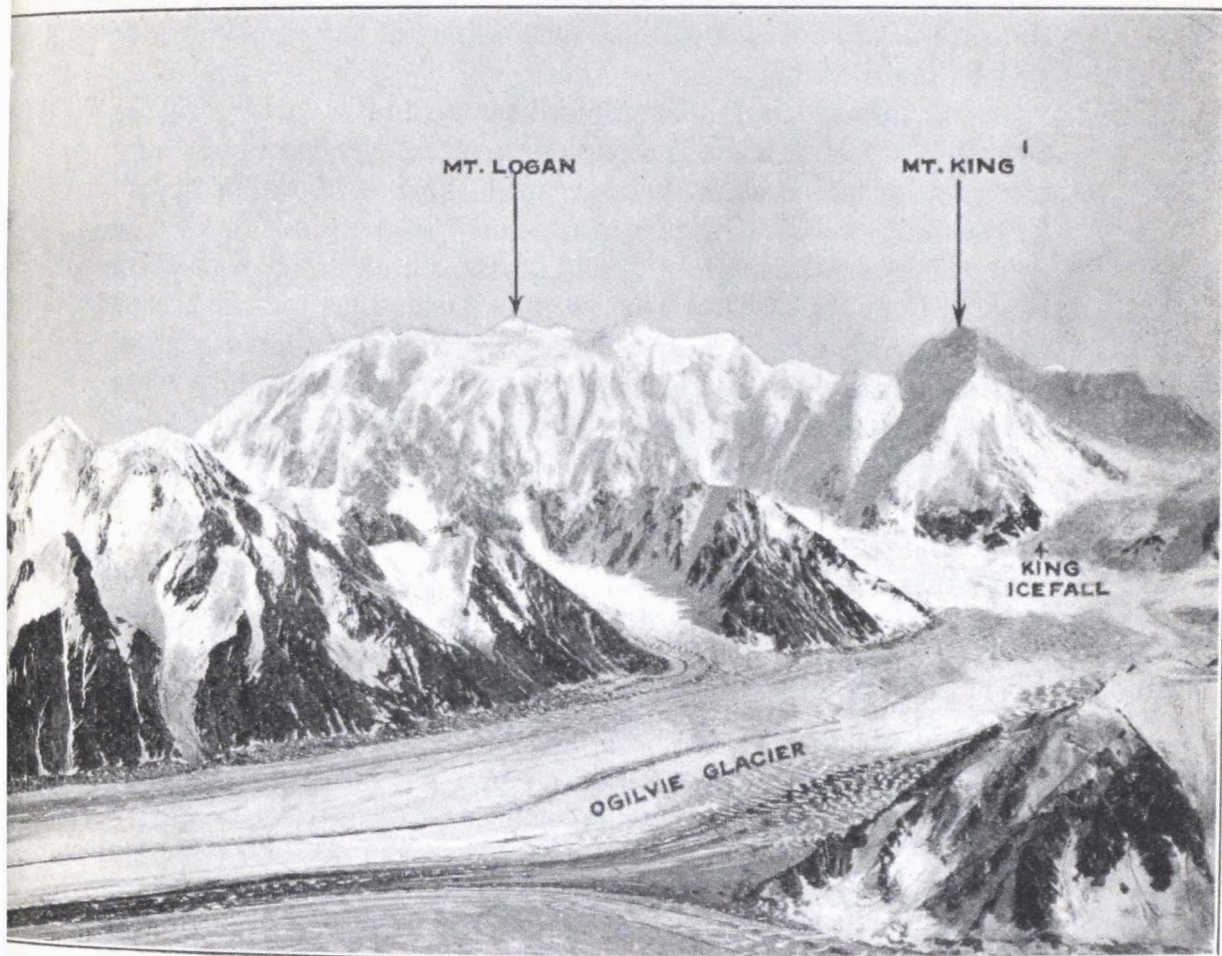
140°40'

60°20'

60°40'

60°00'

the Logan Glacier, and then up its tributary the Ogilvie Glacier. Mr. MacCarthy made a base camp at the end of the latter and near the foot of the King Ice Fall at about 8500 ft., and at a distance of some sixteen miles from the summit of Logan. From here he ascended to a point called Observation Peak (10,200 ft.), opposite the Col of King Peak, over which the



North side of Logan Range, taken at a point above Logan Glacier on the International Boundary at a distance of thirty miles from Logan itself.

1.—The actual position of Mt. King = King Peak, which is 2700 ft. lower than Logan, may be more to the left. Compare the map.

route appears to lie to Mt. Logan. Bad weather prevailed and only for brief periods did he obtain fairly good views. He reports that up to 12,000 ft. the way is little broken and of easy gradient. Between approximately 12,000 ft. and 14,000 ft. nothing was seen but the stretches. From what could be seen of the further stretches from the top of the King Col to the base of the final ridge of Logan, no climbing difficulties other than those of high altitude and miles of steep snow and ice slopes presented themselves. But it must be borne in mind

that these views were distant ones. Mr. MacCarthy spent forty-four days on the way between the end of the railway and return to it, and the information he has brought back has been largely decisive in forming the plans for the present party. On February 17 he was on the point of leaving McCarthy to superintend the taking in of supplies by dog teams for the expedition. These will be *cached* at convenient places along the proposed route, and thus the advance of the climbing party will be facilitated.

It is hoped that snow conditions and weather will be sufficiently favourable to allow of provisions and equipment for ten men for two months being placed at an advanced base camp at the foot of the King Ice Fall, and for one month along the route between there and the end of the railway. The weight of this food, on the basis of four pounds per day per man, is around thirty-six hundred pounds, or five thousand pounds gross. The remaining outfit will make another five thousand pounds.

For oil stoves, Primus, roarer type, and Coleman No. 2 have been chosen, and a supply of 45 gallons of petrol provided.

This is what Mr. MacCarthy, with porters and dog teams, aims at transporting before the end of March. If possible he will return to Seattle, to sail thence, with the other members of the expedition, for Cordova on May 2. The expedition hopes to start from the Alaskan railhead toward the end of May.

The best time to start over the glaciers and snowfields appears to be in the early part of June. The spring melting of the winter snow has then usually ended, and the heavy summer melting of the glaciers will not have begun. Moreover, during June and July there is almost continuous daylight, which is very helpful to a strenuous mountaineering expedition.

The personnel of the party is the following :

- Mr. A. H. MacCarthy, A.C., A.C.C., A.A.C., in command.
- Mr. H. F. Lambart, of the Geodetic Survey of Canada and a Vice-President A.C.C., second in command.
- Col. W. W. Foster, A.C., former President A.C.C., A.A.C.
- Mr. Allen Carpe, A.C., A.C.C., A.A.C.
- Mr. Norman H. Read, A.C.
- Mr. Lennox Lindsay, A.C.C.
- Mr. H. S. Hall, jun., A.C., A.C.C., A.A.C.
- Mr. Robert M. Morgan, President Dartmouth (New Hampshire) Outing Club.
- Mr. Hamilton Laing, of the Department of Mines, naturalist and photographer (lent by the Canadian Government).

Mr. MacCarthy, elected to the A.C. in 1916, made in 1913, with Col. Foster and Conrad Kain, the first ascent of Mt. Robson, and has given many other proofs of his ability, determination, and endurance. The value of his preliminary exploration, made at his own expense, of the route in 1924, on which he and his two packers spent weeks on the glaciers hampered by storm and fog, cannot be too highly estimated, while the self-sacrifice which, when no suitable alternate could be found, he is again exhibiting this year in not only superintending but actually sharing in the work, under desperate winter-conditions, of getting the store-caches all laid ahead, proves again that the members of the expedition have in him a leader under whom they can be proud to serve. He has all the attributes required in the ideal leader of such an expedition.

Mr. Lambart, one of the vice-presidents of the A.C.C., has had, naturally, considerable experience in mountaineering, and served as one of the British surveyors on the Alaska Boundary Commission covering the Mt. Logan country. He thus possesses very valuable local knowledge.

Col. Foster, D.S.O., A.D.C., elected to the A.C. in 1921, a well-known Canadian soldier with a distinguished record in the War, a former President of the A.C. of Canada, took part in the conquest of Mt. Robson and has climbed in other parts of the Canadian Alps.

The Young Guard is represented by men all close about thirty, viz. :

Mr. Allen Carpe, elected to the A.C. in 1923, is the author of a model paper on the Cariboo Mountains in the present number. He had, while a student in Europe, considerable experience in the Alps, and has since shown, in the company of Mr. Howard Palmer and others, not only great powers as a mountaineer, but has applied his scientific training with marked success to the elucidation of the topography of the various groups of the Canadian Alps which he has visited. He may be relied on to second in every way the efforts of his leader.

Mr. Read, elected to the A.C. in 1916, served in the R.A.F. in the War and has also had considerable Alpine experience. He will give a good account of himself.

Mr. Lennox Lindsay is a well-known Alberta rancher and member of the A.C.C.

Mr. Henry S. Hall, jun., elected to the A.C. in 1924, is crammed full of energy and enthusiasm and will pull his weight. He spent several winters in the Engadine, and has also served under Mr. Howard Palmer and has given proofs of endurance and enterprise.

Mr. Morgan is a younger man—twenty-three. His mountaineering experience is necessarily limited, but he brings to the expedition personal strength and a perennial fund of good comradeship that is a valuable asset.

Mr. MacCarthy is fortunate in his staff, and we know full well that *everything that reasonable care will justify doing* will be done.

Thus, so far as the mountaineering clubs of the English-speaking world go, it is of quite international composition. The Dominion Government is seconding Mr. Lambart and Mr. Hamilton Laing for the expedition and paying their expenses, and Messrs. Read, Hall and Morgan go as volunteer supporters. The services of two experienced local packers, Andrew Taylor, formerly of Ottawa, and Miles Atkinson, known as "Scotty" since, happily, he hails from Edinburgh—one never fails to find in every venture a Scot there or thereabouts—have been engaged. No professional mountain guide is included in the party.

Major Wheeler, of the first Everest Expedition, son of our Hon. Member the Director of the A.C.C., and Mr. Belmore Browne, one of the conquerors of Mt. McKinley, have rendered great services in the equipment.

An idea of the difficulties likely to be encountered will be gained by reference to Sir F. de Filippi's article on the Duke of the Abruzzi's Mt. St. Elias expedition, 'A.J.' xvi. 116 *seq.* (with photographs and sketch map), or to his magnificent book, and to Mr. Belmore Browne's stirring 'The Conquest of Mt. McKinley.'

The Alpine Club of Canada is supported in its ambitious enterprise by other kindred clubs and associations: the Alpine Club, the American Alpine Club, the Royal Geographical Society, and the Appalachian Mountain Club. The handsome aid given by the Canadian Pacific Railway deserves also to be specially mentioned.

The real difficulty of any attempt on a peak like Logan is not so much in its height as in the risk of unfavourable weather, in having to live for weeks on snow and ice, and to transport food and equipment over wind-swept wastes. An impasse may be encountered, according to Mr. MacCarthy, at or near the Col of Mt. King, marked \times on map, which would render the choice of a different route imperative. The expedition may be expected back at Seattle early in August.

The map is a reproduction of the map of the British-U.S.A. Commission for the delimitation of the frontier.

Mr. MacCarthy's route and camps of his preliminary survey in 1924 are marked. *R* indicates the site of the proposed advanced base camp. The dotted line beyond this indicates Mr. MacCarthy's proposed line of ascent so far as can at present be laid down. The King Col above the Camp is indicated by a \times .

We are indebted to Professor Hickson, A.C., President of the A.C. of Canada, for the information embodied in this note as well as for the map and photographs which will enable the expedition to be followed intelligently. He will not need to be assured that this great undertaking of his Club will be followed by all of us with the keenest interest.

Later.—Mr. MacCarthy reported under date March 6 that he had reached the Chitina Glacier immediately below the Logan Glacier in seventeen days from McCarthy. He encountered greater difficulties than expected, and may not, in the time, get the supplies higher than the junction of the Logan and Ogilvie Glaciers.

Mr. MacCarthy, at the date, was pushing on with his two men and three dog-teams with a temperature touching at times -30° F. Nothing more had been heard of him up to April 11, when the boat left Cordova for Seattle. Cordova is in telegraphic communication.

The proposed programme is: The party will leave Seattle on May 2. To Cordova by steamer is 1600 miles (5 days); to McCarthy by rail is 191 miles (2 days); to Chitina Glacier (3000 ft.) by pack train is 88 miles (6 days). At this point back-packing begins across the fifty miles of the Chitina, Walsh, and Logan glaciers to the advanced base (8850 ft.) (6 days). The real climbing difficulties begin here. From advanced base to King Col—8 miles, rise 5650 ft.; from King Col to 18,000 ft. level—5 miles, rise 3500 ft.; from 18,000 ft. level to 19,000 ft. level between domes—4 miles, rise 1000 ft.; from 19,000 ft. to either summit—1 mile, rise 850 ft. The total distance is thus 18 miles, and the total height to be climbed 11,000 ft.

To these distances and elevations must be added the many difficulties encountered in travel across badly broken and moraine covered glaciers, long detours to get round crevasses, and the constant delays from crevasses in the 18-mile traverse

of Logan's ice blanket, almost 200 square miles in area, the advanced base camp site being the last rock outcrop on the route to the summit.

Mr. MacCarthy is under no delusions as to the serious character of the expedition. He sums up as follows :

' On account of uncertain weather and incomplete data concerning several stretches of the 18-mile traverse of the ice-cap to the summit, there seem to be four possibilities as to the outcome of the venture :

' (1) That good weather and good snow and ice conditions will permit the summit to be attained in orderly fashion and a return to be made promptly to the base camp. Time and provisions would then be available for an exploration of the Logan Glacier to its source or where it flows east towards the Kuskawalsh.

' (2) That the summit will be reached only after the greatest difficulty and labour on account of heavy going and bad weather, with no time left for further work.

' (3) That the difficulties and dangers encountered will prove too great for the party to surmount or an impasse will be encountered at the King Col, thus making necessary the choice of an entirely different route and so turning this year's expedition into one of reconnaissance.

' (4) That bad weather and low temperature may keep the party stormbound at the advanced base camp until supplies and endurance are exhausted, which is highly improbable.'

We are also indebted to Mr. Howard Palmer, V.P. of the American Alpine Club, for various details.

A VISIT TO THE GLACIERS OF RUWENZORI.

By CAPT. H. B. THOMAS,

Uganda Protectorate Government Service.

[This journey follows the line of approach of the Duke of the Abruzzi's expedition described in *Geographical Journal*, xxix., February 1907, which contains some superb photographs by Signor Cav. Sella, and the best map of the group.

A summary of this journey, including some photographs and the map, is contained in a paper by Mr. Freshfield, 'A.J.' xxiii., 386 *seq.*