

slopes brought me to a fine viewpoint 5300 m. above sea-level. Near the top I panted a little, but felt that with proper training I might qualify for 6000 m. or even higher.

After that I shifted the heavy kit to Altin-masar by devious ways, while the mountaineers walked down the Fedchenko Glacier. Now came the second attack on Mt. Kaufmann³ (7130 m.) by the Sauk-sai valley and glacier. This glacier proved another surprise. It runs E. along and *past* the southern flank of the big mountain. Only then does it curve northward tapping the eastern shoulder of Kaufmann. From a camp on this saddle (5700 m.) Allwein, Wien, and Schneider climbed the culminating point of Soviet Russia on September 25. All came down with frozen feet now fortunately cured. During the last stages of the climb they had to rest every 10 yards.

Anyway, I have learnt something new on this trip. I shall take a secretary. She will do the writing, and I shall do at least some climbing and not only hear about the climbs that the others have done. Fortunately there is still a lot to be accomplished in and around the Pamirs.

[We are indebted to the Council of the R.G.S. for the use of the two maps.]

'MYSTERY MOUNTAIN' (MT. WADDINGTON), 13,260 FT.

By W. A. DON MUNDAY.

(Reprinted from the *Vancouver Sunday Province*.)

THE year 1928 saw three of the original 1926 party united to tackle 'Mystery Mountain,' the trio being my wife, my brother, A. R. Munday, and I. Our good friends, the officers and crew of the Union s.s. *Venture*, landed us on June 12 at the Knight Inlet Cannery, where we received a hospitable

³ The mountain is so named after the celebrated Russian General, Constantine Petrovitch Kaufmann, conqueror and Governor-General of Russian Turkestan from 1867 till his death at Tashkend in 1882. He took Samarkand in 1868, also Khiva, Bokhara and Khokand. His advance was the main cause of the British-Afghan war of 1877-8.—T. G. L.

The mountain has been rechristened lately in honour of a notorious assassin who died in a lunatic asylum. In these pages the name of Mount KAUFMANN will be maintained.—EDITOR, *A.J.*

reception. Knight Inlet is one of British Columbia's most magnificent fjords and perhaps one of the windiest, but as guests on board the fish-warden's launch we sailed next day in comfort up the inlet for 30 miles till the packing blew out of a cylinder. While repairs were being made we unpacked our 'kicker' (outboard motor) and with our rowboat towed the launch.

This delayed us getting ashore, but after midnight we got into camp on a spot which, by the grace of the turbulent Franklin River, was unflooded. We had 2 months' supplies to transport on our backs to our base camp, 5400 ft. above sea-level. This meant three tedious trips up the Franklin gorge and up the glacier which descends to within 500 ft. of tidal water. In doing this we climbed altogether over 16,000 ft., and travelled well over 100 miles, two-thirds of that distance among the crevasses of the rugged glacier. We were now in the midst of a region where every valley was occupied by rivers of ice tributary to the main glacier.

Snow covered most of the ground at the site of our base camp and we spent the first night on a snowbank. Next day we built up platforms of logs to get level spots on which to pitch our tents on the steep slopes at the brink of the cañon of Yellow Creek, 9 miles from our mountain, this being the nearest point possessing good shelter and plenty of wood—we had suffered from lack of these the previous year. To some people, rocks are just rocks, but the rock around Yellow Creek is a volcanic *breccia*, apparently of Cretaceous age and therefore of much interest to geologists because of its occurrence in this part of the Coast Range.

All the way up the glacier the big peak had been in sight, always tempting our eyes aside from the task of picking safe footing among the chasms barring a direct course. Perhaps mountaineers would not regard this section of the glacier as especially dangerous, but when burdened with 60 or 70 lbs. one's nimbleness does not amount to much at the end of 12 hours on the ice. We had not got properly settled in the base camp before a southeaster rolled up, the first of a series of storms which clung tenaciously around the mighty form of Mt. Waddington.

We used this unwelcome leisure in making the camp comfortable. Under the fly which was our dining-room and kitchen, we built a table, shelves and seats. Next, with axe and knife, we constructed a sled fashioned of gnarled timberline trees. On it we hoped to haul our packs to the foot of

Mt. Waddington from the 7200 ft. pass at the head of Yellow Creek. While reconnoitring this new route, in a brief spell of welcome sunlight, we climbed Mt. Whitetip, a snow-covered rock tower of about 8700 ft.

Returning from this interesting little conquest, we descended from the upper sunlight into a sea of cloud, dark as coal smoke. This meant more days of rain at base camp, with snow on the high levels.

Getting desperate at the way time was slipping by, we packed up in defiance of the weather and started for Mt. Waddington. We got a real thrill out of tramping along and letting the sled groan and creak under the weight of our packs, but increasingly bad sledding forced us to resort to 'back-packing' once more on the upper part of the W. branch of the Franklin Glacier.

Climbing the 1000-ft. icefall of Fury Glacier in the evening shadows to Fury Gap, which still proved to be a gateway for storm, we hurriedly built up a rock platform on which to pitch the tent and were presently under cover with the oil-stove purring cheerfully.

Before this spell of evil weather blew itself out we doubted the wisdom of having pushed forward to this ledge on the desolate western cliffs 5000 ft. from the summit of Mt. Waddington. Weary of confinement in the tent, we set out near midday, July 7, towards Mt. Chris Spencer, 11,000 ft., being rewarded at 9000 ft. by a view down the Scimitar Glacier's gorge which surely is the most impressive of its kind in Canada. Here the remodelling of the world is still in full swing and Scimitar Glacier is dotted with hills of débris hurled down in landslides from the gaunt precipices walling its sinuous course for miles. The region N. of Mt. Chris Spencer bristles with spire-like peaks, many of which may force climbers to restore the word 'impossible' to their climbing vocabulary.

We climbed the rocks to nearly 10,000 ft. till the fantastic crags and buttresses were lost in persistent cloud, yet at the same time the giant form of Waddington was revealed almost cloudless, gleaming in sunshine, and challenging; a mountain beneath which to stand in awe and wonder. Snow conditions looked reasonably good on the upper levels, so, foregoing the ascent of Spencer, we turned back to camp to prepare for Waddington.

The oil-stove balked badly when I lit it at 1 A.M., July 8, to cook breakfast, so we did not get away till 4.35. By 7 A.M. we had mastered the rotten rocks of Fireworks Peak and at

10,500 ft. were above the clouds eddying over the lesser mountains. We went on, laden with small rocks with which to mark our trail across a zone of masked crevasses likely to prove dangerous on our return after dark. The storm had left every snow slope icy hard at this elevation.

With ice cliffs dropping away for 6000 ft. on the left and still steeper rock cliffs on the right, one felt while travelling along the narrow crest of the great W. ridge of Mt. Waddington as though treading the roof-tree of the Coast Range. It is hard to describe that skyline climb over the crests of five peaks from 10,500 to 11,500 ft. high, but it was certainly no place to be on without tried companions.

There were places calling for all the coolness and skill we possessed. One of these was the descent of the 'Gangway,' a narrow ledge we discovered last year; it angled down for 300 ft. along the base of the ice-cap of Bulge Peak; the ledge was from 6 ins. to 2 ft. wide and actually overhung the void below so that we could see daylight between the rocks underfoot. There were two breaks in this ledge where we had to work across the face of the ice wall.

We lunched leisurely on the top of Bulge Peak, rightly judging that while we did so the sun would soften the face of the next shoulder ahead so that when we reached it we would be saved an hour of step-cutting.

On crossing a 12,000-ft. snow-dome, we swung down, thanks to a none too permanent-looking snow bridge over an otherwise impassable chasm, into the hollow of 'Angel' Glacier. At this point Mrs. Munday took the lead for a time and almost at once came to a wide crevasse with no way round, our whole hope of success depending on a doubtful snow bridge. It cracked under her feet and settled visibly, but it held and she went on cautiously while we followed.

Seemingly the snow never thaws on this slope of the mountain. Our boots froze, though the sun shone brilliantly. We toiled for 1000 ft. up an icy slope drifted over with loose snow. A little short of 13,000 ft. we sat down on the snow and ate supper.

The final 400 ft. of the peak looked deceptively easy and not unduly steep. It turned out to be mostly as steep as to be possible to ascend after the treacherous cover of snow had been cleared and steps cut in blue ice. The time was 7.25 P.M.

We had struck the only part of the summit where it was possible to see down the other slope as two corniches flared upward and outward, leaving us so little room between them

that there was not even space for a picture of the party straddling this altogether extraordinary summit. The S. peak was a few feet lower, while the E. peak, ice-festooned and quite accessible, was a few feet higher than the main mass on which we perched wondering a little how we were going to get down.

To the N., Mts. Tiedemann, Combatant and Asperity towered to about 12,800 ft. Across their crests we saw Twist Lake and beyond it the source of the W. branch of the Homathko River in the blue Chilcotin plateau. To the N.E. we looked through the mountain portal by which the E. branch of the Homathko penetrates the range at Tatloyoko Lake. We also saw the full length of the Klinakline Valley which, like the Homathko, cuts a greater trench through greater mountains than the famous Fraser Cañon.

The magnificent panorama covered at least 25,000 square miles, and the Matterhorn-like monolith of Mt. Monarch, 11,714 ft., although 70 miles away to the N.W., stood out even in the middle distance. A lesser peak of similar outline overtopped all the violet crests of the Vancouver Island mountains to the S.

Westward an unexplored chain of 10,000-ft. peaks with notable snowfields seemed an entirely new contribution to the known geographical features of the province. Eastward a few clouds prevented adding to our knowledge of the immense Homathko snowfield which probably covers over 200 square miles.

Though the sun was still an hour above our horizon, the whole scene suddenly flamed with colour. Overhead the sky was violet black; the whole horizon was rimmed with orange, and above it a broader band of vivid green merged into the intense blue of high altitudes. Transformed with purple, green, blue, rose and bronze, the mountain glowed for one glorious hour during which we descended to 12,000 ft. Later a pale aurora in the N. dimly lighted our way through the wind and frost of the night as we climbed the rock and ice cliffs of the barrier peaks of the W. ridge. Evil weather was brewing, although too slowly to threaten our descent to camp, which we reached at 2.30 A.M.

When next we saw Mt. Waddington clear of cloud it was draped with new snow for 4000 ft. below the summit, but we had been granted our one perfect day. Although we had hoped to climb other peaks in this magnificent region, we started for home well content.



Photo. Mrs. Don Munday.

'Mystery Mountain' (Mt. Waddington), N.W. and S.W. peaks from
9500ft. on Mt. CHRIS SPENCER.

Mr. Munday kindly sends an additional note . . . 'We climbed the N.W. peak [of Mt. Waddington]. The ascent involved the traverse of four subsidiary peaks 11,000-11,500 ft. and almost a complete traverse of one somewhat higher; the descent was a repetition of this. The mountain is 5 miles long at the 10,500-ft. level, and comprises a score of peaks ranging from that height to 13,260 ft.

'Mts. Combatant, Tiedemann, and Asperity, to the N., we found to be between 12,700 and 12,800 ft., and therefore higher than any of the Rockies except Mt. Robson.

'Scimitar Glacier, discovered by us in 1927, we saw more fully. It flows in a general northerly direction, following a remarkably sinuous course and failing to fit in with the drainage system of the West Homathko River as shown on existing maps. It is the most interesting of the three great glaciers of the great group of peaks; it can scarcely be less than 12 miles in length, possibly much more. Tiedemann Glacier is about $16\frac{1}{2}$ miles. Franklin Glacier is 20 miles and covers 100 square miles. Scimitar Glacier is burdened with the débris of four immense rockfalls which might be termed landslides. Waddington Glacier, descending 9,500 ft. from Mt. Munday (11,000 ft.), does not touch Mt. Waddington. To the N.W. between Mts. Bell, Chris Spencer, and Geddes, there is evidently an immense glacier draining to the Klinakline River. Franklin Glacier represents a zone of glaciation of 12,700 ft., Tiedeman Glacier about 11,000 ft. To the W. of the Klinakline valley we saw clearly for the first time an unexplored, unknown range about 40 miles in length with a uniform height of about 10,000 ft. Its glacial features are developed on a huge scale, not improbably surpassing the Waddington region. Following along the core of the range S.E. from Waddington, glaciers continue on a scale generally unsuspected, for at least 100 miles, and a glacier 15 miles in length is creditably reported by a recent geological survey party as existing at the head of the Lillooet River.

'The average height of the peaks will not, of course, equal the main range of the Rockies, though the glaciers so completely dwarf anything S. of Alaska. Still, there are a goodly number of peaks over 1000 ft., and, curiously enough, the progress of accurate surveys is adding height to the peaks. Garibaldi Park has acquired two 9000-ft. peaks as the result of the survey just completed.

'We are hoping to go back this year to look for the not obvious way up the main pinnacle of Mt. Waddington. The

mountain is more intricately dissected than distant views suggest—very much more so. Last year we got into the district more easily, but at best it is a slow process getting supplies up the glacier.

The following names have been approved by the Geographic Board: Mts. Bell, Chris Spencer, Geddes, Waddington, Tiedemann, and Munday. Approximate heights: Bell, 12,000 ft.; Spencer, 11,000 ft.; Geddes, 11,500 ft.; Tiedemann, 12,800 ft.; Munday, 11,000 ft.

‘If this note has grown to undue length, please make allowance for the natural enthusiasm of one whose privilege it has been to be the first to make known a great new Alpine area. Few of the pioneer climbers on this continent have penetrated areas about which so little was known before they came. We have not achieved much from the point of view of summits attained, but the exploration has been a wonderful experience.

‘W. A. DON MUNDAY.’

[For another illustration of ‘Mystery Mountain,’ see ‘A.J.’ 40, 100.]

A BAVARIAN (1928) EXPEDITION TO THE CAUCASUS.

AN expedition, organised and partly financed by the Munich A.V.’s section ‘Hochland’ and the Rhine-Westphalian sections, left Munich on July 4, 1928, with the object of visiting the Caucasus. It consisted of the following mountaineers: Herren Paul Bauer, Ernst Beigel and Hans Niesner of the ‘Hochland’ section and of Heinz Tillmann of the ‘Duisburg’ section and Munich A.A.V.

The party proceeded *via* Berlin and Warsaw to Moscow, where they got into touch with members of Russian mountaineering circles, and their journey onwards was facilitated by the assistance of the German Embassy. After a long journey *via* Voronesh and Rostof, they arrived on July 15 at Naltshik at the N. foot of the Caucasus. A two days’ ride then brought them to Bezingi, the highest village in the valley of the Western Cherek. A day’s march with two pack animals for the carriage of the combined kits and food led to a ‘Karaulka’ (military post) on the right lateral moraine of the Bezingi Glacier at a height of some 2380 m. Here the tent was permanently pitched as a standing camp for 18 days.