

divides at the foot of the peak, the branch running S. in the direction of the Mummery peaks being about eight miles long; the N. branch which goes past the foot of Mt. Dent seems to be about six 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 icefield and the peaks surrounding it could not be seen very clearly because of smoke, but Mt. Forbes was very prominent and imposing.

FIRST MT. CLEMENCEAU EXPEDITION, JULY-AUGUST, 1922.

BY HENRY B. DE VILLIERS-SCHWAB.

FAR out on the Canadian National Railway, about thirty miles E. of the Continental Divide at the Yellowhead Pass, lies the little town of Jasper, now the administrative centre of Jasper National Park. Some sixty miles S., along the Athabasca River and its big tributary, the Chaba, lies magnificent Fortress Lake, its eastern extremity but a few hundred yards from the Chaba, and just across the line in British Columbia. Six and a-half miles away, its western end drains into turbulent Wood River, which, after flowing past the base of Mt. Serenity (10,573 ft.), first climbed by Messrs. Palmer, A.C., and Carpe, Am.A.C., in 1920, is joined by Clemenceau Creek and then flows away through a canyon into still wilder territory, eventually to join the Columbia River.

In this angle between Clemenceau Creek and Wood River, and seeming to block the end of the valley, stands Bras Croche (10,871 ft.), while farther back, towering above Clemenceau glacier, stands the majestic form of Mt. Clemenceau (12,001 ft.), bearing a striking resemblance to the well-known view of the Jungfrau from Interlaken.

This splendid peak is the fourth highest summit in all the Canadian Rockies, and is to-day its second highest unclimbed mountain.¹ To the few explorers who have seen it from a distance, among them Professor A. P. Coleman, A.C., and Mr. Walter D. Wilcox, Am.A.C., and to the few trappers and grizzly bear hunters who have penetrated to this Wood River

¹ The North Twin (12,085 ft.) is the highest.

region, the peak has been variously known as Misty Mountain or the Pyramid ; but not until 1920 did the Canadian Survey Party establish stations in the district, determine its height and importance, and officially bestow upon it the name of Mt. Clemenceau.

Allen Carpe, having been greatly impressed by the sight of Mt. Clemenceau from Mt. Serenity in 1920, proposed the subject of an expedition to this district to the writer in January 1922, and eventually Henry S. Hall, jun., Am.A.C., became the third member of the climbing party. The leisure hours of the ensuing six months were none too many for the proper planning of the expedition, and the preparation of a number of special articles of equipment, such as extra-light sleeping-bags and tents, suitable for back-packing.

Thus, on July 27, 1922, the three climbers, together with the packer-guides, W. D. Harris and H. J. Mellor, with young Dean Swift as assistant-packer, and employing six riding and seven pack horses, set forth from Jasper completely equipped for a four weeks' campaign.

The first day's march was twenty-two miles to Athabasca Falls ; the next of twenty miles farther along this river ended at the confluence of the Sun Wapta ; while the third, which should have taken us about eighteen miles to the eastern end of Fortress Lake, ended just below the ford of the Athabasca, owing to the writer being kicked in the knee by one of the pack horses. On the fourth day the Athabasca was forded, and in turn the Chaba, when, after crossing the Continental Divide out of the Park into British Columbia, the march continued through the trailless woods on the north side of Fortress Lake until darkness forced a bivouac, after barely three miles net distance had been gained. From 7.30 A.M. until 4.30 P.M. the next day we laboured, negotiating the remaining four miles to the W. end of Fortress Lake, an advance party of two chopping out a way through great fallen trees, patches of devil's club, and thickets of obstinate alders, while the rest drove the tired pack animals with the greatest difficulty.

On Tuesday, August 1, the sixth day, Alnus Creek, which joins Wood River a mile or two below the lake end, was forded and the march continued down the valley on its N.-W. side, Serenity Creek being reached at 4.20 P.M. Knowing that the Survey party of 1920 had forded Wood River near here, this spot opposite Ghost Ridge—the long ridge between Clemenceau Creek and Ghost Creek, culminating in The Ghost (10,512 ft.)—was selected as our base camp. But, alas ! no fordable place

could be found either above Serenity Creek or in the remaining miles before the river enters the canyon ; evidently owing to the hot smoky weather the depth of the river was much greater than had been the case in 1920. Consequently, there was but one thing to do : retrace our way next day and establish base camp on the flats by Alnus Creek, where we were able to cross the two rivers before their junction. However, owing to cut-banks and cliffs on the S.-E. side of the river, horses could not be used there. This meant that back-packing would commence from this point, and accordingly the balance of the day was spent in weighing out provisions for the climbing party and preparing the back-packs.

At 9 A.M. on Thursday, August 3, the party having forded the two rivers on horseback, bade good-bye to Mellor, who remained to tend the base camp and horses, and toilsomly made its way through the woods, thick with entangling undergrowth, to the flats near where Ghost Creek runs into Wood River, which was reached about 1 P.M. After lunch a return journey to Wood River ford was made in two hours, and the second relay of packs brought forward to Wood River camp. These packs averaged only thirty-five pounds, but this was the heaviest that could be carried owing to the difficult nature of the ground. Bulldog flies and mosquitos abounded hereabouts and annoyed us greatly, while several times hornets' nests suddenly trodden upon caused unwelcome excitement.

Next day the party crossed Ghost Creek on a felled tree, made its way through the heavy woods and up Ghost Ridge, passing timber line at about 6000 ft. and continuing up boulder, debris, and rough grass slopes to the bare promontory on which is the Survey Cairn of Wood River S., height 7300 ft., which was reached about 3.30 P.M. Having cached our packs here, we returned to camp in about two hours.

The writer's knee, which, although lame, had stood up manfully since the accident on the 29th, gave out completely under the heavy strain of back-packing. Consequently, August 5 had to be devoted to summoning the aid of Mellor and some horses, and getting the writer across Wood River by a series of tree-bridges, and so back to the base camp. There he remained unable to walk at all for several days, in care of Mellor and Swift, later being taken down Fortress Lake in the large canoe of the Hinman-Philips camping party, which touched at the E. end of the lake. From there he rode back to Jasper in three days with Swift and one pack-horse, being in the company of this party as far as Athabasca Falls.

of
sed
ck.

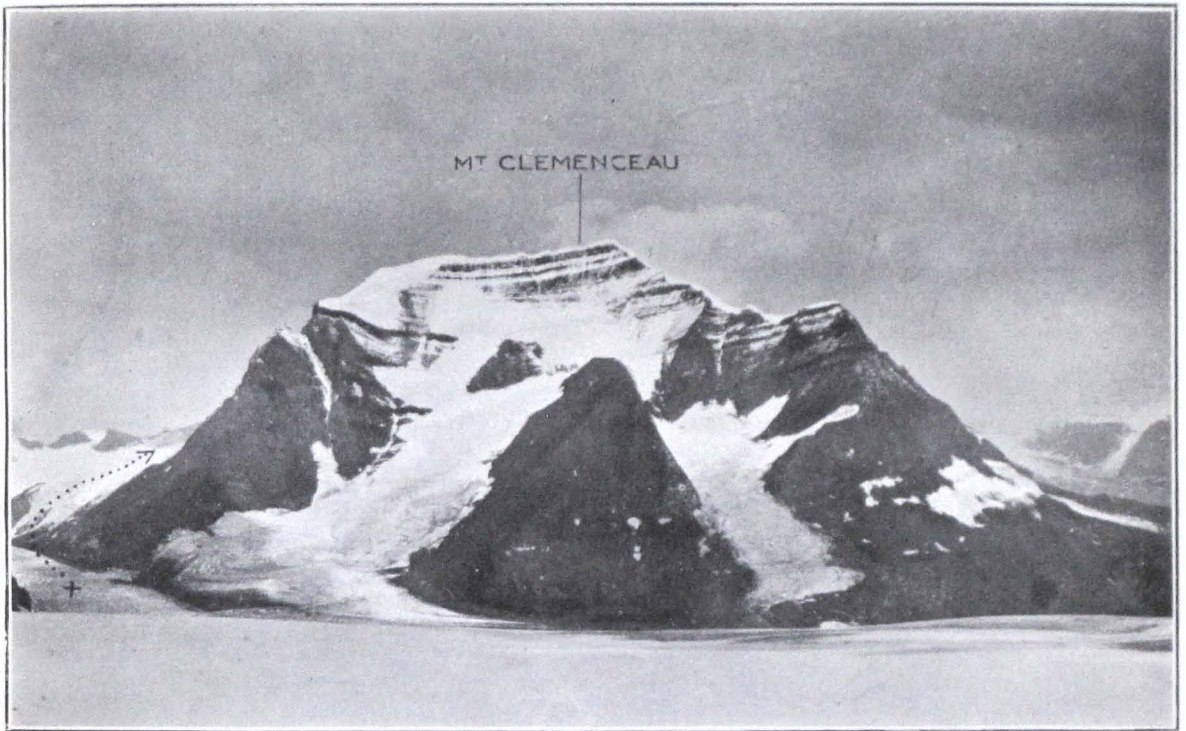


Photo H. S. Hall, Junr.

FROM CLEMENCEAU GLACIER.

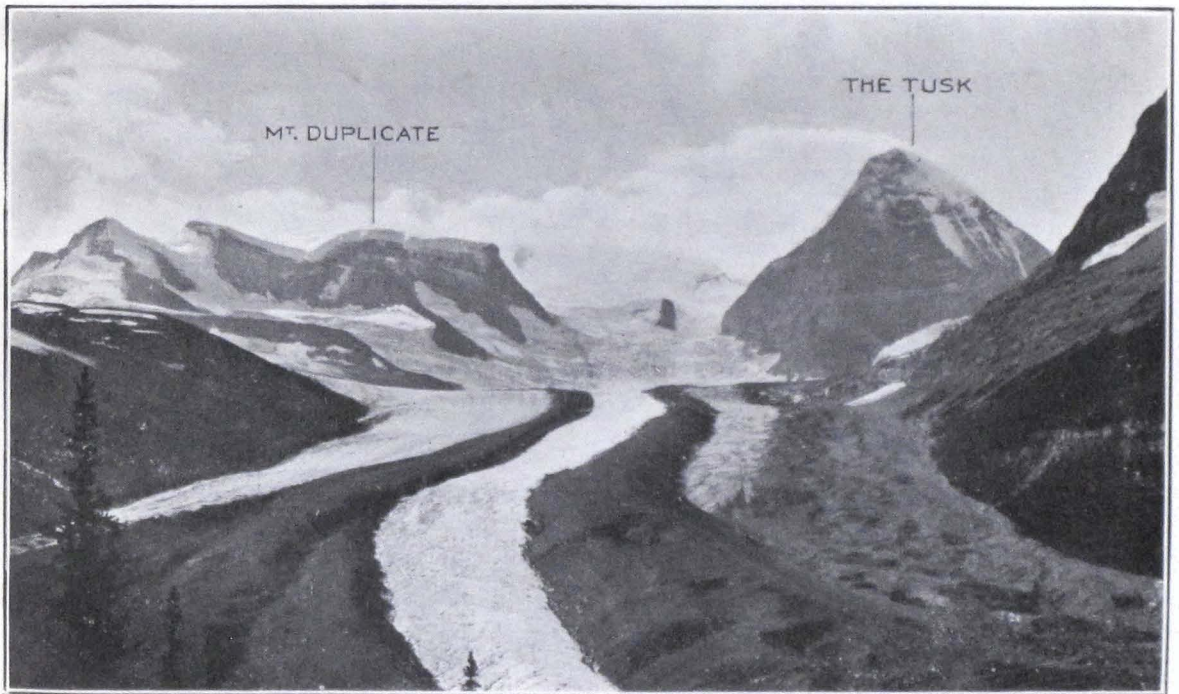


Photo H. S. Hall, Junr.

CLEMENCEAU GLACIER.
From above Camp.

Cliff
Glacier.



Photo H. S. Hall, Junr.

FROM ACROSS CLEMENCEAU CREEK.

Clemen-
ceau
Glacier.

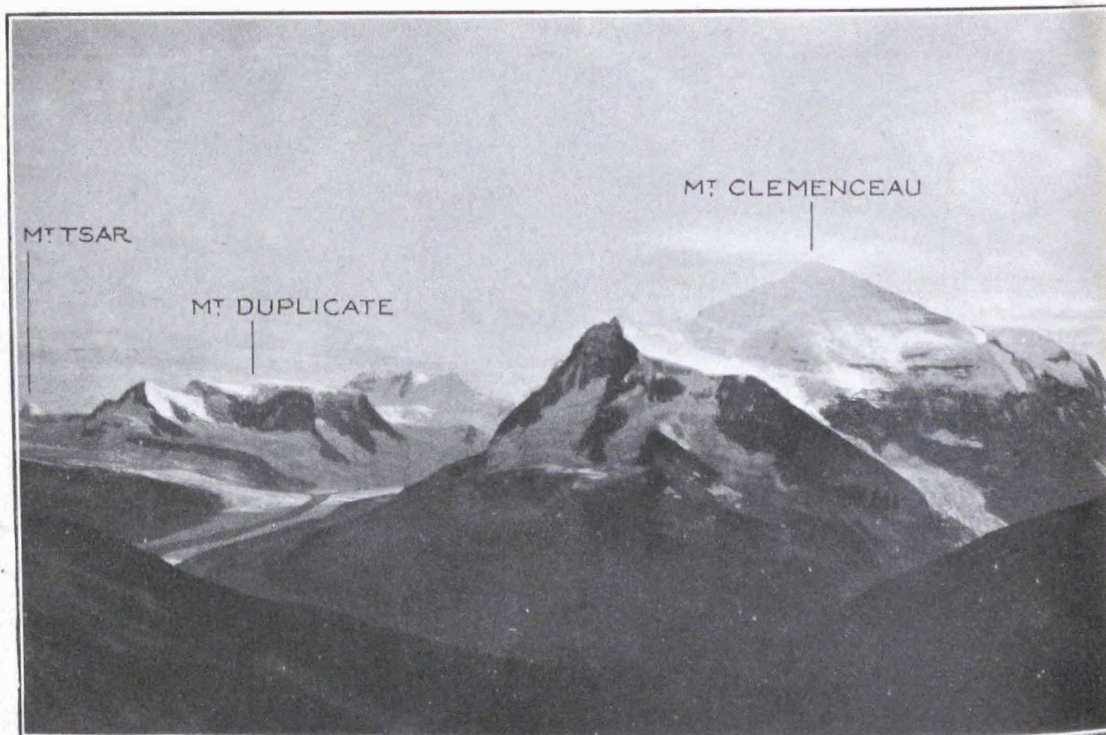


Photo H. S. Hall, Junr.

FROM SHORT RIDGE, 7,300 FEET CAIRN.

On Sunday, August 6,² Carpe, Hall, and Harris, setting out from Wood River Camp, carried the second relay of packs up the ridge, and then along the rough debris slopes above Clemenceau Creek to a point opposite Cliff glacier, where they bivouacked at 7 P.M. at a height of about 6600 ft. (Bivouac 2). After a bad night, owing to their uncomfortable position and the falling of light showers, they went on some distance, but coming to an impassable cliff were forced to retrace their steps nearly a mile before a descent could be made almost to tree line and so around the obstacle. Thoroughly tired, Camp 3 was made about 2.30 P.M. at the edge of a large rock slide just below tree line at a height of about 6250 ft. There being no water here, snow for cooking had to be procured from some distance.

Leaving at 7.40 A.M. on the 8th, the party returned to the 7300 ft. cairn on Ghost ridge in three hours; then, after a rest for lunch, they returned to camp with all the provisions and equipment necessary for the reduced party, taken from the five packs left here on the 4th.

Next morning a two hours' march brought the party on to Clemenceau glacier, about a mile above its snout, and a quarter of a mile farther on they discovered the site of the 1920 Survey Party's camp. Here, in the pine woods, about a hundred yards from the ice and close to a pretty stream, Climbing Camp was established. During intermittent rain a return was made to Camp 3, and the second relay of packs brought in.

On August 11 Carpe and Hall walked some five miles up Clemenceau glacier in a southerly direction to a height of about 8300 ft., first following a large medial moraine for about two miles, then crossing a debris 'island,' and on to the middle snowfield. When near the foot of Mt. Duplicate (10,100 ft.) a snowstorm came on and drove them back to camp. Heavy rain confined the party to camp next day, and that night it snowed down to the 7500 ft. level.

August 13 was clear, although clouds still hung low on the peaks. Starting at 8.15 A.M., Carpe and Hall walked up Clemenceau glacier beyond the middle snowfield until opposite the Tusk (11,000 ft.) they rounded the base of Mt. Clemenceau, where they halted for lunch. Later they crossed the upper snowfield in a westerly direction to the low ridge forming the

² The rest of the narrative is based on the diary of Henry S. Hall, jun.

local divide between what might be called the Clemenceau Creek drainage area and the great basin to the W. In this connection it might be pointed out that Mt. Clemenceau is entirely surrounded by glacier except for less than a mile on its N. base; nowhere does the mountain rise less than 4000 ft. from its encircling icefields, and on the N. the height is fully 7000 ft.

The ridge reached by Carpe and Hall is about two miles from the base of Mt. Clemenceau, and should afford a full view of the side on which we had proposed to attempt the ascent. Unfortunately, heavy clouds hid all but the lower portion of this face, yet enough was seen to confirm the opinion that the most promising route would be up these crevassed névé slopes to the main S.W. ridge, and along that to the summit. A good view westward toward the Northern Selkirks was obtained. Camp was again reached by 7 P.M., both climbers pretty tired.

The day after this reconnaissance was one of rest, and the ensuing was one of enforced idleness because of rain. Realising that with a weakened party, and under existing unfavourable conditions of weather and snow there was no chance of a successful ascent of Mt. Clemenceau, a minor peak was made the final objective.

On Wednesday, the 16th, in somewhat cloudy weather, Carpe and Hall left Climbing Camp at 5.40 A.M., proceeded S. up Clemenceau glacier, and over the middle snowfield until near Mt. Duplicate, when they swung first eastward, then north-eastward, toward an unnamed peak rising from the névé. This was ascended over rocks and snow patches without difficulty, the summit altitude of which is about 10,625 ft. being gained at 12.45 P.M. The name Apex Peak has since been accepted for this peak. From it distant views were had of Mt. Alberta (11,874 ft.) far across the Chaba Valley, The Twins (12,085 ft. and 11,675 ft.), Mt. Columbia (12,294 ft.) about twenty miles to the E. over the Columbia icefields, and Mt. Tsar (11,232 ft.) ten miles to the S.W. The near views of the Tusk and Mt. Clemenceau were, of course, very fine. Leaving Mt. Apex at 2 P.M. in dense mist the party arrived back at camp at 6.50 P.M.

In lovely weather the climbing party broke camp shortly after 8 A.M. next day and marched back past Ghost Ridge Cairn to the little plateau about five hundred feet below, where Ridge Camp was established at 5.30 P.M. Next morning the descent was made to Wood River, and so Alnus Creek Base

Camp was reached by 4 p.m., where all was found to be well with Mellor and the horses.

On the 19th, by a long day's work, the pack-train was driven all the way to the E. end of Fortress Lake. Thence successive marches to the Sun Wapta and Athabasca Falls brought the entire party back to Jasper in the afternoon of the 22nd.

As these lines are being written—in February—tentative plans are under discussion for another and stronger expedition during the coming summer, in which it is hoped that the knowledge gained in 1922 will prove the deciding factor for success.

THE NEW ZEALAND ALPS : HOW TO GET THERE
AND WHAT TO DO.

BY ARTHUR P. HARPER.

[Partly read before the Alpine Club, May 1, 1923.]

SO much has been written about the Southern Alps during the last forty years, both in books and in the JOURNAL, that I feel rather diffident about reiterating much that must be already known to members. In addition to this, I have shown slides here on three previous occasions, and a great many of the pictures must be familiar, at any rate to the older members.

However, one or two of my contemporaries have gently reminded me that the years are passing (a fact some of us are apt to forget) and that many have joined the Club since the views were last shown, and these will naturally be interested in seeing them for the first time—they have also very kindly said that the pictures will bear repetition. This is all very comforting, but it still leaves me wondering how to find anything new to say.

During my two months in England, so many have asked me for advice, with a view to a possible visit to our distant country, that I have decided to give some practical information which will be useful to anyone contemplating an expedition, and at the same time show slides which will cover as much country as possible.

I may say at once that I am not going to detail any difficult climbs, for the simple reason that personally I have no record for big peaks in New Zealand. When I returned there after leaving Oxford in '88, I found Mannering and the late