

character of the coast rendered the track along it and over its many promontories extremely difficult, and most traffic went by water. Dante's reference to the 'ruina' between Lerici and Monaco is emphatic and well known. Brockedon in his 'Passes of the Alps' describes the narrow paths and 'giddy heights which overlook the sea,' and the unbridged torrents which up to 1828 made travel more or less dangerous even on mule-back. De Saussure's journal of 1780 fully confirms this account.

5. Mr. Torr's captious comment (p. 54) as to the Barricades on the route of the Col de l'Argentière hangs on his omission of the words 'on either side' which follow 'interrupted' in the review from which he is quoting.

These words make it clear that the reviewer was not making the absurd suggestion that Hannibal passed the Barricades 'on the way up on the west side.'

6. The treachery on the part of the tribesmen (p. 59) mentioned by Polybius consisted not in their misleading the Carthaginians but in their wearing peace-emblems. There is nothing said of their luring Hannibal into a gorge off the direct road. The narrative distinctly implies the opposite. The army went on next day *through* the gorge.

We might continue for several pages, but our readers will have had enough of Mr. Torr's querulous complaints and crude rejoinders. They can judge for themselves of the value to be attached to his *Counterblast*.

AN EARLY VISIT TO TONQUIN VALLEY.

By HOWARD PALMER.

(President of the American Alpine Club.)

NOWADAYS the lovely alp-lands of Tonquin Valley, its glistening amethyst lakes, and the frowning walls of the ramparts are well known as one of the show-places of the Canadian Rockies in Jasper Park. As recently as 1919, however, despite the fact that an excellent map of its trails and peaks had already been published for several years, few tourists had gone there, and apparently no mountaineers at all. III. 8.

The locality seems to have been visited first by M. P. Bridgland in 1915, while conducting the governmental survey of the Park. Many of the peaks to the E. and N. of the valley were then occupied as photographic stations, but none on or to the



Photo by Howard Palmer.

BASTION PEAK
from the N.W.

CLITHEROE.

OLDHORN.

THRONE.

BLACKHORN.



Photo by H. Palmer.

LOOKING S.E. ACROSS MOAT LAKE.

Illustration 7.

PARAGON.

NAMELESS.

DUNGEON.

REDOUBT.



Photo by H. Palmer.

THE RAMPARTS
from the E.

Illustration 8.

W. of the continental divide, which forms the boundary of the Park hereabouts. The maps and a descriptive booklet, illustrated with the beautiful survey photographs, were issued by the Government in 1917.¹ These supplied the first detailed information about the area, including Mt. Geikie and its remarkable neighbours, which lie just over the divide in British Columbia. The ascents made by the surveyors, and that of Mt. Edith Cavell (11,033 ft.) by the late Professor Holway and Dr. Gilmour in the same season (although well removed from Tonquin Valley), comprise all the mountaineering carried out prior to the visit reported in the present paper.

In 1919 the late Major R. H. Chapman and the writer selected Tonquin Valley as the goal of our summer holiday. Who could resist the lure of such a galaxy of untouched peaks, with the mystery of the unknown region beyond their skyline thrown in for good measure? We hoped to combine some mapping with our climbing, and took along a plane-table for the purpose. On the way out to Canada we fell in with Allen Carpe, who was also headed for the mountains, and he accepted our invitation to become one of the party.

On August 10 we set forth from Jasper with two men and twelve horses supplied by the Brewsters, outfitters. We followed the Cavell road for four miles to the lateral valley of Whistlers Creek, where an old Indian trail climbs out of the Athabaska Valley in a steep ascent of nearly a thousand feet, partly over cliffs. Here we almost lost a pack-horse, which was heedless enough to step off the track and roll a hundred feet down the hill-side until arrested by a tree. Beyond this the trail had not been cleared of windfall for years, so progress was retarded by constant chopping, and at nightfall we had to camp in a swampy meadow on the slopes of Marmot Mt., having advanced only a mile up Whistlers Creek valley. During the night all but two of the horses returned to Jasper, thinking nothing, apparently, of descending in the dark the very cliffs where they had made such a fuss in the daylight. It took the best part of the following day to bring them back, so no forward movement could be undertaken.

¹ See *Description of and Guide to Jasper Park*, which should be consulted for details regarding routes of access, distances, heights, etc. In 1921 the Boundary Survey extended the mapped territory well to the W. and S. of the Park, and to-day their Sheet No. 28 (reproduced in $\frac{1}{2}$ in. to mile scale with Mr. Fynn's paper, *A.J.* xxxvi.) is of first importance in connection with this whole district.

The writer took advantage of the beautiful weather to ascend Marmot Mt. (8557 ft.), whence a lovely view across the Athabaska Valley to the distant Maligne Lake peaks rewarded him. Little did he then suspect what adventures they were to afford him in a future year.

Continuing on the 12th up Whistlers Creek, we covered several miles of rough going, through forest and along stony, wet hill-sides to the open country below the glacier. Here we turned S. and crossed Marmot Pass (7400 ft.) leading to the valley of Portal Creek. A 1500-ft. drop to the bottom, through burned timber, next ensued, then a rather pleasant march up the S. fork of this stream. The mountains hereabouts are of the second class, without much snow, but of pointed, cliffy architecture. During the day the weather clouded up, and next morning the trip over Maccarib Pass (7150 ft.) was cold and cheerless, although enlivened by the sight of a splendid band of twenty-one black cariboo, led by a mighty bull with wide-flung antlers.

Maccarib Pass gives access to one of the sources of Meadow Creek, which drains Tonquin Valley to the N. We rode through a rolling, open country with grassy slopes and few trees, wet under foot. Three miles below the pass, at the corner of Mt. Clitheroe (9014 ft.), Meadow Creek valley joins the Tonquin, and we approached the place with keen anticipations, for we knew that the Ramparts would come into view. Nor did the disclosure belie them. Black walls of rock shot up into the clouds so steeply that one involuntarily caught one's breath. Snow could scarcely find room for lodgment anywhere. Along the base of the wall extended a row of diminutive glaciers, perched high up on banks of moraine. Washing their lowest boulders and reflecting the grim precipices above, lay two of the prettiest sheets of water of which the Rockies can boast, three miles long and a mile wide. About them stretched green meadows, interspersed occasionally with groves of small evergreens, the whole comprising a unique picture of pastoral park-like greensward, contrasted with ragged, beetling crags.

Passing along the swampy margin of the lakes, at times finding easier going in the shallow water itself, we waded the gently babbling brook which drains them towards the S., and camped on dry ground just beyond (elevation 6465 ft.). The first good day, after settling ourselves, we went down into the valley of Penstock Creek and ascended the Fraser glacier, which occupies the only pronounced break in the mountain wall for

many miles in either direction. A huge landslide from the mountains to the N. almost blocks the valley. Some of the boulders are of the proportions of small cottages, as we discovered to our cost in trying to make our way through them. The glacier is quite easy to ascend. The lower half divides into two tongues, flowing N. and S. respectively from a broad saddle. The latter drains into Simon Creek. We occupied a prominent hummock of rock (8600 ft.) on the southerly arête of what is now McDonell Peak, which afforded a splendid panorama of the then unexplored district to the S. and E., including the wide glacial basin of Simon Creek, the old 'North Whirlpool,' with its entourage of interesting rock peaks.

We discovered that McDonell Peak was easy of access from the Fraser glacier, so on August 17 we ascended it with the plane-table in six hours and forty minutes from camp. This was the first occasion that any peak on the continental divide between Tonquin Pass and Athabaska Pass, a stretch of twenty-five miles, had been gained. Unfortunately, dense smoke from forest fires concealed everything. Only the outlines of the northerly peaks of the Ramparts and Geikie could be made out. The long, corniced ridge connecting us with the snowy dome of Simon Peak (10,899 ft., the loftiest summit of Mt. Fraser) looked perfectly feasible under proper conditions; but now it was mostly bare ice, which would entail heavy step-cutting, so we regretfully dismissed it from our thoughts. It has since been ascended by Dr. Thorington and party. The lower twin peak of McDonell, now named Bennington Peak (10,726 ft.), also attracted us, but it looked difficult and would involve more time than we could spare, so we postponed it for future attention. It still remains unclimbed, and can be recommended as a desirable goal for the mountaineer. We returned from McDonell Peak as we had come, in four and a half hours, the total expedition occupying fourteen hours, of which almost three were spent on the summit. The elevation is 10,776 ft.

A hot, smoky day now ensued, bringing out flies and mosquitoes in annoying numbers. Many falls of ice rumbled down from the little glacier near the lake. We strolled lazily over the meadows, photographing and enjoying the scenery. Twenty-one different kinds of flowers were noted. In the evening a gale arose with thunder and lightning accompaniments. Our tents flapped ominously as the gusts hummed across the guy ropes. At one time we feared that they would be carried away bodily. High winds are frequent in these lofty valleys near the divide, as the branches of the trees and

gnarled, bent trunks testify. Many trees have branches growing on the lee side of the trunk only.

At sunrise the fury of the storm abated, and by 9.30 it looked like clearing. Lest the day should be wasted, Carpe and I decided to take a shot at one of the rock pinnacles of the Ramparts, which rose directly overhead. Under the prevailing conditions, and with such a late start, we had scant hope of solid accomplishment, but at least we could reconnoitre for a future day and the physical activity would be welcome.

Accordingly, we started off at 10 A.M., swinging up around the grassy slopes in a spiral course for the tiny glacier occupying the gorge behind Surprise Point. An hour and a half later we pulled into the col at the top of the glacier (7500 ft.) after kicking many steps and surmounting a bit of steep ice. The view from here into the basin of Fraser Glacier, to the S., was very fine—the sun now coming out brightly between big woolly cumulous clouds, which cast lovely shadows on crag and glacier.

Turning sharply to the right we mounted along the broken, nearly horizontal, ridge which led westerly directly to the Rampart wall. We encountered big teetering boulders here as well as a file of gendarmes. Some had to be climbed, while others could be traversed on one side or the other. With a larger party, the smooth snowy glacier bordering the N. side of the ridge would save time. At 12.30, on the top of the ridge, we tarried twenty minutes for luncheon. The barometer showed a rise of nearly 1800 ft. from camp. Another half-hour's scramble along the arête brought us to a saddle (8000 ft.); beyond which our peak rose sharply, partly concealed by a large bastion jutting out towards us. The well-splintered rock promised favourable climbing.

III. 8,
on left.

Continuing up the broken wall of the bastion, we gained its top at 2.30 (elevation 8550 ft.). From here it was plain that our arête led directly to the summit in an unbroken sweep. In shape the peak approximated a triangular pyramid, steep and clean cut. Opposite sides connected in deeply incised saddles, with other towers of the Ramparts on either hand.

III. 8.

Leaving the remaining food and one ice axe behind, we started up. At two points only did we encounter difficulty. The first was a steep 10-ft. pitch with awkward holds; the other, a thousand feet higher, occurred where a horizontal ledge, covered with hard snow, interrupted the arête. Steps had to be chopped straight up until the rocks of the ridge could again be followed. The width of the snow-band exceeded our 50-ft.

CASEMATE MT.

POSTERN MT.

MT. GEIKIE.

TURRET PK.

BASTION PK.

DUNGEON PK.



Photo, H. Palmer.

Bennington Glacier.

PANORAMA N.W. FROM SUMMIT OF PARAGON PK.

Illustration 3.

BENNINGTON PK. NAMELESS PK.
MCDONELL PK. (behind)

SIMON PK.



Photo, H. Palmer.

PANORAMA S.W. FROM SUMMIT OF PARAGON PK.

Bennington Glacier.

rope, so with only one axe our position was distinctly insecure while the leader hewed the last dozen steps to the rocks. On the right the precipice dropped to the waters of the lake in quite a sensational manner. Of like character was the brilliant view of Dungeon Peak through the col contrasted against the dark silhouette of our own ridge. For a short space here we had first-class climbing on sound rock, and it demanded careful attention. Rather suddenly, at 4.45, we poked our heads over the edge of the flattish summit, and Paragon Peak (as we later named it) was ours. The height is approximately 9950 ft.

It was a moment of keen triumph, a success beyond hope crowning a day of uncertainty. Even the most abandoned sinner against the canons of mountaineering cannot expect to do much after a ten o'clock start, let alone a first ascent. Yet we *had* made it, and our peak was the first of the forbidding Ramparts to be conquered into the bargain—if our former climb of McDonell Peak should not be considered to belong to them, as may well happen.

- But this natural elation vanished into thin air as soon as we looked about us. Awe and profound astonishment took its place. Never in our lives had we witnessed such a concatenation of towers and spiky pinnacles. The sky simply bristled with them. Opposite to the curving line of the Ramparts, and paralleling them, stretched another row of castellated peaks,
- III. 3. a northerly offshoot or spur of Simon Peak (10,899 ft.) at our left. Of these, Postern (9720 ft.) and Casemate (10,160 ft.) have been named. Between, and seemingly at our feet, lay a vast gorge or canyon, down which the snaky tongue of Bennington glacier wound its sinuous course. In the distance, closing the vista, stood the superb blunt tower of Geikie (10,854 ft.) with its attendant fangs—Bastion (9812 ft.) and
- III. 4. Turret (10,200 ft.), the last of which overhangs definitely towards the E. Farther to the right, above hopeless precipices, towered the rugged, pointed dome of Dungeon Peak (10,290 ft.), the culmination of the Ramparts proper.

In attempting to portray such a scene, one's pen falters helplessly. Words cannot convey the sense of austere grandeur evoked by those serried ranks of jagged, fretted teeth 'biting' into the sky. And the effect was heightened for us by the thought that we were the first among mortals to view them in this aspect. At that time the crest line of the Ramparts (the continental divide) formed the extreme limit of the Park map, which had been entirely constructed from photographic stations situated miles away to the E., and although, of course,

the summits above mentioned had been observed in the distance, no one, we believe, had ever looked over the Rampart wall into the depths of the gorge, nor had the S. sides of Geikie, Turret, and Bastion been seen before. Walled in on all sides by sheer precipices, the canyon extends for six miles, being from 4000 to 5000 feet deep and less than two miles wide from crest to crest.

To the S. and E. the outlook was commanding. Bennington Peak and a nameless intervening crag a few feet higher than ourselves displayed impressive precipices. In the extreme distance, thirty miles away, Mt. Clemenceau was plainly in view beyond the upper Scott glacier. Mt. Scott looked decidedly higher than Mt. Hooker. Columbia, Fryatt, and Cavell stood forth prominently, the latter somewhat lacking in majesty on account of its far-flung lofty buttresses and rather small, shaly summit gable. III. 4.

Towards the N.-E., down the Athabaska Valley, I felt quite certain that I could see out of the mountains to the prairies, and Paragon is the only peak I ever climbed from which this was true. III. 6.

But the rapidly sinking sun and lengthening shadows in the valleys warned us that we must not tarry longer; so after building a cairn and leaving our record we commenced the descent at 5.45. It took two hours to get down the steep 1400-ft. stretch of ridge to the rucksacks, which was accomplished without incident, save the surprising discovery of a little pika living in the crags at an elevation of 9000 ft. A roping off at the abrupt pitch was avoided by a traverse out on the face. At the first col it became obvious that the light would not last long enough for us to traverse the long ridge with the gendarmes, so we abandoned the route of the morning and started down the heathery slopes on the S. leading to the valley of Penstock Creek, 2000 ft. below.

We had only casually glanced into this valley a few days previously and knew nothing whatever about conditions likely to be met with there; but the chance had to be taken, for it was essential to get as low down as possible if (as seemed likely) we were to spend the night out. Plunging down broken, grassy slopes and long fingers of scree in couloirs, we made famous progress. But the onset of darkness was quicker, and we had accomplished only half the descent when it became necessary to feel our way along. At length we arrived at the flattish brow of a cliff several hundred feet high, where bushes and stunted trees grew. A stream shot out into space over the edge. Here we rested a while and took refreshment.

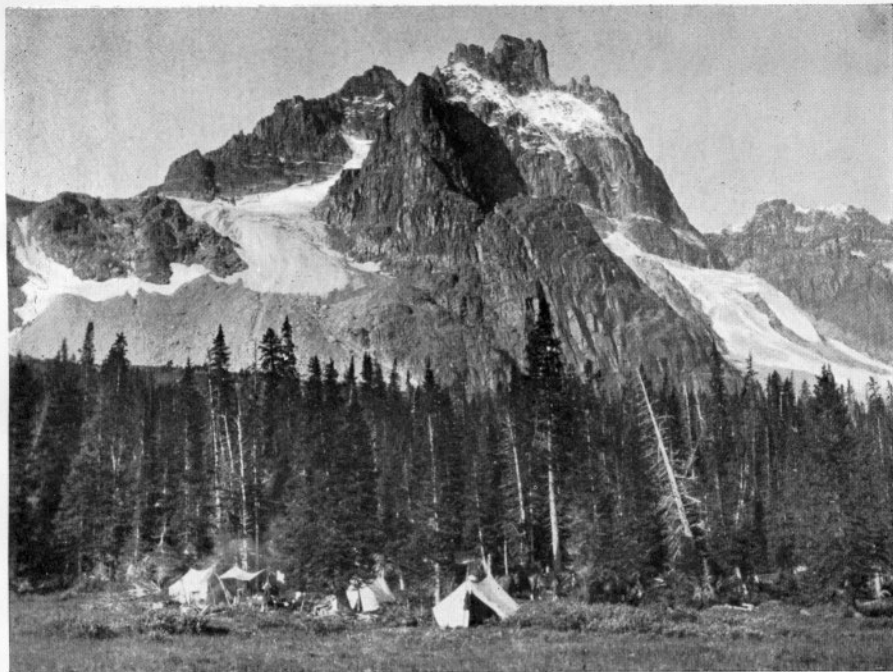


Photo by Howard Palmer.

BASTION PEAK FROM THE N.E.



Photo by H. Palmer.

AMETHYST LAKES and TONQUIN VALLEY,
from ARÊTE of PARAGON PK.,



Photo by H. Palmer.

TURRET PK. (left) and MT. GEIKIE (right)
from the N.W.

Illustration 9.

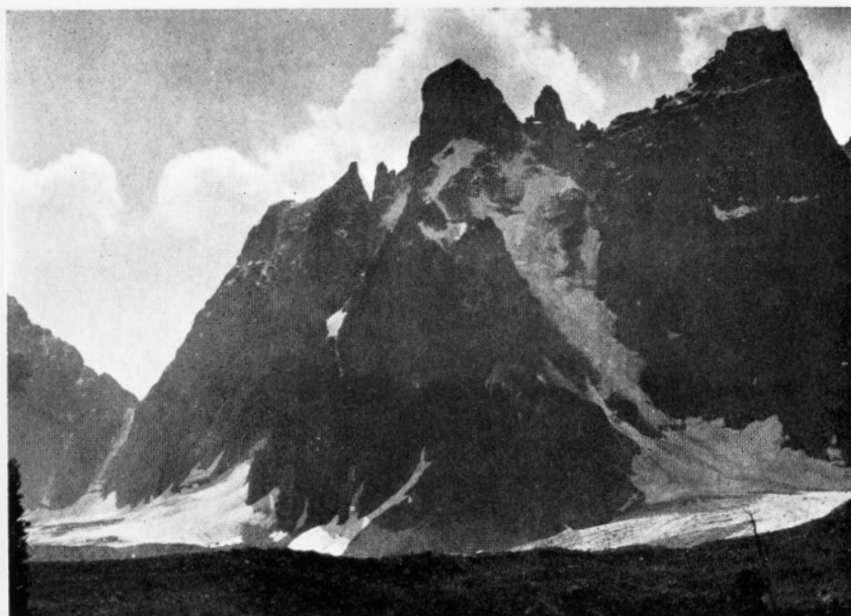


Photo by H. Palmer.

TURRET PK. (centre)
from the N.

Illustration 10.

The smooth white surface of a glacier towards the right did not look very far beneath us, so after a while I worked back in that direction and was delighted to come upon a slope of moraine that might afford an access to it. (My eyes were becoming adjusted to the gloom, and I could really see quite well.) The glacier curved around the foot of the buttress in a kind of ice-fall, with radiating crevasses. Along the cliff they were large and broken, but farther out they narrowed to almost insignificance. With the aid of the rope I descended the bank of moraine and discovered a rounded segment between crevasses which formed a sort of icy causeway leading out into the gloom.

Carpe joined me and, moving cautiously, one at a time, we edged along it. The going improved as we advanced, and in a few moments we found ourselves out in the middle of the dry glacier, a smooth icy plain losing itself in mysterious dusky shadows on every side. Although, alas! no stranger to nocturnal ambulations amongst high peaks—(Has anyone ever had the luck to escape them entirely?)—I must confess that our plight presented certain aspects of novelty. We were adrift on a frigid waste of ice where no one had ever stood before. Nor had we ourselves seen it, except casually as a part of the panorama of the morning. The night was moonless, and our only guidance the gentle slope of the icy surface. But it shone with a kind of phosphorescence sufficient to reveal a crevasse or other obstacle; so we struck boldly downwards, and after perhaps a quarter of a mile gained the end of the tongue. Fortunately, the glacier terminated in a thin smooth lip which permitted us to get 'ashore' with surprising ease.

Our aim now was to follow the valley stream. We knew that this would guide us to the meadows which we had crossed on our ascent of McDonell Peak, and once here we had some expectation of being able to work our way back to camp. It was a forlorn hope, but better than waiting passively for daylight. However, off from the white ice, the darkness became Stygian in intensity. The little candle lantern which we now lit seemed even to increase it. We could only grope along the bank, splashing through pools and stumbling over the tricky stones. The next couple of hours remain in my recollection as a painful nightmare needless to detail. The map shows that we covered only about a mile to the meadow, but it seemed an age. Here, kind fortune directed our faltering steps to the rude game trail which mounted through the heavy forest to the alps 500 ft. above where the camp was situated. At each halt we dutifully extinguished the candle, our last one and

almost gone. In the abysmal forest the faint trail was indistinguishable without it. Finally the trees thinned out and at midnight, exactly as the feeble flame consumed the last drop of grease, we emerged on the flowery alps, where a gorgeous display of the aurora lighted us to camp. We had been out fourteen and a half hours, of which four had been spent in feeling our way in the dark. Although Paragon is a small peak and probably the easiest of the Ramparts to climb, it gave us the tussle and adventure of a far bigger mountain. All in all, the day will stand out in our recollections as a memorable one.

August 20, a magnificent day, we broke camp, moved around Amethyst Lakes, crossed Tonquin Pass, and established ourselves on Tonquin Creek just below the tremendous north cliffs of Mt. Geikie. The distance covered was nine miles. We had no idea of attempting to climb it. Our time was too limited, provisions were low, one of our men had left on account of illness, and the peak would obviously require a regular campaign to subdue it. We simply wished to view it at close quarters and, if possible, look around the westerly end of the range into the unknown country to the S., where the Fraser took its source.

Mt. Geikie is perhaps the finest single rock peak of which the Rockies can boast. The abrupt 4000 ft. leap of the northerly precipice from the level valley floor makes it unique. Added to this is the compelling grandeur of its almost grotesquely sculptured neighbours. The total ensemble quite begs description, and even the most blasé mountaineer cannot stand before it unmoved. III. 9.

After a day of uncertain weather, we crossed the creek, and, traversing around Barbican Peak, ascended to the crest of the ridge which extends westerly from it, reaching an elevation of 8900 ft. This gave us a view far up towards the Fraser's headwaters. Later we traversed the entire ridge westerly to the shaly dome (8200 ft.) which terminates it. We found that it would be feasible to take a pack train across into the Geikie Creek valley, and this has since been done by others. III. 10.

On August 23 the return march to Jasper was commenced. With lightened packs, much better time was possible. We camped on Portal Creek that night and reached town the following afternoon.

Although nearly seven years have passed since our expedition, Tonquin Valley has not yet come to its own as a climbing district. The important peaks: Geikie, Simon, Barbican, III. 7.

Erebus (10,234 ft.), Oldhorn (9779 ft.) and the nameless summit between Paragon and Bennington peaks have fallen in the meantime, it is true, (as well as Bastion Peak described elsewhere in these pages,) but plenty of others remain which may test the skill and resources of the climber even more than some that have succumbed. In this connection, it is of interest to note that the annual camp of the Alpine Club of Canada will be held in Tonquin Valley during the present summer. This, doubtless, will inaugurate a period of deserved popularity for the region and result in addition to the climbing lore of the range.

In conclusion it may be timely to mention briefly some of the good things yet remaining to be done.

- III. 10. First and foremost must be placed Turret Peak (10,200 ft.). Although examined from every side, this striking tower has not disclosed any promising line of access. Its northern aspects look entirely hopeless; the best chances appear to lie on the southern side where a camp must be established, in itself no light task.

- In the Ramparts proper, Dungeon (10,290 ft.), Redoubt (10,220 ft.) and their adjacent peaks have no easy sides, their westerly façade rising in cliffs as forbidding as those above the lakes. Postern and Casemate require a bivouac in Geikie Creek Valley. This can be accomplished by crossing the broad saddle (about 8700 ft.) between the Ramparts and Bastion Peak. The ascent is some two thousand feet above Tonquin valley and the descent of the far side will probably be somewhat more, though without difficulty. Unless the Cols in the Postern-Casemate ridge turn out to be less severe than they look, the assault will have to be made from the west and this will entail an additional march of three or four miles, or preferably a second bivouac in the S. fork of Geikie creek near Icefall Lake.
- III. 3.

S. and E. of Tonquin Valley proper, but readily accessible from it, stand half a dozen attractive unclimbed summits, upwards of 9500 ft. high, which will well repay attention, but the limits of this paper have already been transgressed, so the bare mention of them must suffice. The whole region is one of surpassing beauty and interest, and the assertion is hazarded that no one, be he traveller or mountaineer, will go there without feeling repaid in the fullest measure for the time and effort expended.