

and a traverse led to the 'Gemsfreiheit,' the great basin of easy slabs under the Engelhorn. The final wall of some 500 ft. up to the Sagizähne had appeared from below to be at an easy angle, but was found to be very steep, with the holds sloping the wrong way. Starting from an exposed stance, one stretch of 90 ft. up a steep wall with little hold was very severe. There was no anchorage above or below, and it was with relief that I watched Kohler draw himself over the top. From here an exposed traverse of over 100 ft. led to a subsidiary ridge, which was followed to the final wall, and a long crack of sound rock led to the ridge at 11.20. Whence a pleasant scramble over the Sagizähne led to the Unter Engellücke (11.45). Descent in bad weather to the Urbachthal. The climb is about 2800 ft. high and is continuously difficult, the final wall being very severe. The best way is hard to find, but rotten rock could probably be avoided. Neither of us wishes to repeat the ascent.

M. G. B.

Bregaglia Group.

PIZ BACONE (3249 m. = 10,660 ft.), BY THE S. RIDGE. August 29, 1921. Mr. N. S. Finzi, with Josef Biner and Adolf Schaller.—Starting from Maloja, the ordinary route was followed to the col just S. of the Piz Bacone. From this point the ridge itself was followed almost continuously to the summit. The ridge lies along steep slabs, with small but firm holds, until a nearly vertical crack is reached, with very little but friction holds. There is another succession of steep slabs to a point where there are two cracks in a vertical wall, one going directly upwards and the other obliquely. We took the oblique crack. It is possible to keep outside this for about half its length (30 ft.), but then a rather difficult traverse must be made into it; two of us kept a knee in the crack the whole time. Then follow more slabs, and a short, extremely difficult crack, climbed by the leader, Schaller, which the others preferred to turn by a traverse through loose stuff below it. After a few more steep slabs, the route to the summit joins that by the chimney, which is usually taken from the above col, and leads up moderately easy rock to the summit. Total time from Maloja, approximately 6 hours.

VARIOUS EXPEDITIONS.

Graians.

ROCCIA VIVA (3650 m. = 11,976 ft.), BY THE N. FACE. September 1, 1921. Messrs. S. L. Courtauld and E. G. Oliver, with Adolf and Alfred Aufdenblatten.—Bivouac in Upper Valnontey among trees, about two hours from Cogné. Left bivouac 5.15. Up moraine to Grandcroux Glacier, 6.45. Crossed glacier to S.E. to gain well-marked rib of rocks and snow descending due N. from summit

of Roccia Viva, being a continuation of ridge dividing Grandcroux and Monei Glaciers.

Breakfasted on snow-slopes just below ridge, 9.15-9.45. Bad snow over ice on ridge, much step-cutting. Then up steep rocks, badly plastered with new snow, and very difficult, 12.10. Summit, 13.45-14.45.

Descended in S.E. direction to Roccia Viva Glacier (very easy), and by long traverse over moraine and snow to Col de Teleccio, 17.15. Cogne, 22.00.

The route described ('A.J.' xxix. 200) appears to be approximately the same from the point where the upper rocks are struck, but approaches these rocks from the other side. The route now described is free from danger of séracs or hanging glacier.

There is no real N. arête, notwithstanding the map. There is a jagged arête of rocks between the two glaciers, but a considerable space between these rocks and the upper rocks, which appear, consequently, to be more properly described as a rib, as is done in this note.

Mont Blanc Group.

MONT BLANC DE COURMAYEUR (4753 m. = 15,595 ft.), BY ECCLES'S COULOIR AND THE PEUTERET ARÊTE.—Messrs. S. L. Courtauld, G. I. Finch, and E. G. Oliver, with Adolf and Alfred Aufdenblatten. August 9, 1921.—We left the Gamba hut in fine weather at 5.15 and worked up moraine to the Brouillard Glacier (6.00). Observed that sun would strike Mont Blanc about 5.30 next morning. Put on crampons. Started up glacier 6.15, much step-cutting. Very little snow on lower parts. Breakfasted on some stones opposite the Innominata, 8.00 to 8.30. After much more step-cutting and a traverse across the N.W. face of the Innominata, necessitated by the bad condition of the upper part of the glacier, we reached our bivouac place of 1919, on some rocks close to the Col du Fresnay, at 10.00.

Left 11.30, and went up snow-slopes and rocks until near the top of Eccles's Peak, which we passed five minutes below the summit on the W. side, to reach the col between the peak and the S. face of Mont Blanc de Courmayeur. We found an indifferent bivouac place on the rocks of the S. face, just above the col, 14.30 (about 4000 m.).

It appears from Mr. Eccles's account that he traversed the peak on the E. side, and we saw from some steps that Messrs. Gugliemina had done the same thing on their ascent of the S. face of Mont Blanc de Courmayeur a few days before.

Our intention had been to climb to the Col de Peuteret and do the whole Peuteret ridge from there, ascending the Aiguille Blanche as well, if time permitted. But the heavy fall of rocks and ice which took place last winter had completely changed the aspect of the Col de Peuteret, and the ridges on each side of it, since we last

looked at them from the same spot in 1919. The col looked considerably lower than formerly, and the ridge leading to Mont Blanc de Courmayeur appeared to be entirely cut off by a great ice cliff. There is now a much larger bergschrund between the col and the Aiguille Blanche than in 1919. It would have been possible, however, to cross the bergschrund farther to the S., and so climb the Aiguille Blanche.

We decided, therefore, to try Eccles's route, which leads at first up the great couloir contained between the Mont Blanc de Courmayeur and the Peuteret arête, and gains this arête about 3 hours below the summit of M. B. de C. The main difficulty was evidently the bergschrund at the base of the great couloir, which apparently was possible, though with difficulty, only at a point to the left (W.).

The sun set behind Mont Brouillard at 17.00.

August 10.—Left bivouac 5.00 and descended a steep couloir of extremely rotten rocks, leading towards the upper part of the Fresnay Glacier. This was easy, except for loose stones, and was free from ice. We then crossed some steep slopes to the left, exposed to risk of stone and ice-fall, and reached the level part of upper basin of the Fresnay Glacier. There was no bergschrund at this point. 6.00.

The bergschrund below Eccles's couloir proved, as we anticipated, very difficult, and necessitated some skilful work on the part of Adolf. Finally it was passed at the point selected over-night, and after traversing a snow-slope to the right, exposed to some risk of stone fall, we reached the rocks on the true right side of the couloir. 7.50. Took off crampons. Went up rocks, easy, but very rotten, breakfasted 8.25-8.50, and reached last rocks bordering the couloir 10.10. (Estimated 4450 m.) Then up a snow-ridge, which after a short distance joined the main Peuteret arête a short way above Pt. 4381, and thence up the arête itself on bad snow for about 100 m. We then cut across an ice-slope to reach the rocks on the left of the Peuteret arête, which we ascended until these rocks ended a few minutes below the summit of M. B. de C. (12.50). Rocks were rotten and difficult in places, and only taken to to save time, the snow on the ridge being in bad condition. Put on crampons. Went up short remainder of ridge (very bad snow on ice), and cut through cornice on top of M. B. de C. 13.15.

Reached top of Mont Blanc in fog and high wind, 13.45.

Descended to Chamonix *via* Grands Mulets.

We think that the nameless peak on which Mr. Eccles bivouacked in 1877, and which certainly exceeds 4000 m., should be called the Pic Eccles. The pass between it and M. B. de C. is called by Messrs. Gugliermi Col du Mont Blanc, but with deference to these very distinguished mountaineers, we think the important name 'Col du Mont Blanc' should be reserved for a possible pass over the arête leading from Mont Blanc to M. B. de C. As the col is at the head of the Brouillard Glacier we suggest the name Col du Brouillard, corresponding to Col du Fresnay lower on the same ridge.

Pennines.

TRAVERSE OF DOM (4554 m. = 14,942 ft.) AND TÄSCHHORN (4498 m. = 14,758 ft.) FROM DOM HUT TO MISCHABELJOCH. August 6, 1921. Dr. O. K. Williamson, with Heinrich and Albert Fux.—The party ascended the Dom by the N.W. arête and descended by the S. arête. A conspicuous gendarme on this ridge was turned by the rotten and very steep rocks on the Saas face. From the Domjoch the N. ridge of the Täschhorn, then shrouded in snow, was climbed; and the descent of the last-named peak made by the S.E. ridge—the upper part very snowy—to the Mischabeljoch, use being made of the tracks of our party three days previously in an ascent by this route; whence the Täschalp and Zermatt were reached.

The very large amount of snow on the two arêtes of the Täschhorn, compared with the previous year when the same party traversed them from S. to N., should be noted, a fact interesting from the contrast to the good conditions that obtained generally on the high ridges in the summer of 1921.

Times (exclusive of halts):

Hut to Dom	6 hours 40 minutes
Dom to Domjoch	2 „ 35 „
Domjoch to Täschhorn	1 „ 40 „
Täschhorn to Mischabeljoch	3 „ 15 „
Mischabeljoch to Zermatt	5 „ 10 „
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Total	19 hours 20 minutes

The expedition—especially the ascent of the Dom—was made trying, and the times materially lengthened, by a cold and very strong N.W. wind.

Bernese Oberland.

TRAVERSE OF GRÜNECKHÖRNER (S. summit, 3810 m. = 12,500 ft.; N. summit, 3869 m. = 12,694 ft.) AND GROSS GRÜNHORN (4047 m. = 13,278 ft.).—July 6, 1921. Dr. O. K. Williamson, with Heinrich Fux and a porter. From the Concordia inn the party reached the col between P. 3441 m. of the Grüneck and the S. summit of the Grüneckhörner. They ascended the latter peak by snow-slopes, and went along the rock and snow-ridge to the higher Grüneckhorn, thence to the col between that peak and the Gross Grünhorn, which they ascended by the S.W. arête. The descent was effected by the interesting N. arête, keeping throughout on the actual crest; on three steep pitches some 30 or 40 ft. high the spare rope was used. The ridge was left a little above the col between the Gross and Klein Grünhorn; but thereafter much delay was caused by the abominable conditions on the Ewig Schneefeld and the exasperating idiosyncrasies of the porter.

Times (exclusive of halts) :

To col between P. 3441 and lower Grüneckhorn	3 hrs. 12 m.
To lower Grüneckhorn	1 hr. —
To higher Grüneckhorn	— 55 „
To col between Grüneckhorner and Gross Grünhorn	— 30 „
To Gross Grünhorn	1 „ 27 „
To col between Gross and Klein Grünhorn	3 hrs. —
To Concordia inn	4 „ 45 „
Total	14 hrs. 49 m.

Mount Olympus.

Mr. Marcel Kurz, surveyor, Topographical Bureau of the Swiss Service, at present seconded to the service of the Greek Government, sends us the following note :—

In August last I spent a fortnight's holiday surveying the whole range of the High Olympus with a photo-theodolite, 13 × 18 Zeiss. The map that I hope to have ready this year covers an area of about 100 square kilometres on a scale of 1 : 20,000 in the style of the Siegfried map. The heights calculated to date are as follows :

Skolion	=	△	2905·45 m.
Pic Venizelos	=		2917·85 m.
Throne of Zeus	=		2909·94 m.

On August 12 the chamois-hunter Christos Kakkalos and I left our bivouac at Bara, and rode in 1 hr. 25 min. up to Skolion. Here we sent the mules back and followed the main ridge in 15 min. to a point named *Skala* and marked J on the photo facing page 209 in Mr. Baud-Bovy's paper in the *Geographical Journal* of March 1921. In 7 min. more we got into the gap at K, enjoying wonderful views of the big walls surrounding the Trani-Gurna. From the breach over débris and firm rocks in 15 min. to the Tarpeian Rock where I found no traces of Mr. B.-B.'s 1913 party. In a few minutes I climbed the highest hitherto unclimbed summit of the Virgin, consisting of a succession of big slabs.

From the Tarpeian Rock, we went about 10 m. down on the E. side, crossed under the wall and reached in 7 min. the col between the Virgin and the Cock's Comb. To get down direct from the Virgin to this col would require a double rope. Following the main ridge again, we crossed the different points of the Cock's Comb and reached in 13 min. the top of Pic Venizelos, crowned by the big stoneman of the Genevese (about 1 hr. actual going from the Skolion).

In the cairn I found no cards, but the name of a hunter roughly written on a stone with the date : 20. vii. 1920, and on a big slab the name : 'Pic Venizelos,' probably engraved in 1919 by

Boissonnas. We spent $1\frac{1}{2}$ hr. on the top, enjoying the most delightful weather.

But the hardest bit was still before us. The ridge running down from the top to the deepest gap between it and the Throne of Zeus looked very bad indeed. Enormous blocks, balanced on the narrow crest, threatened to yield to the lightest touch. Kakkalos refused to try this way and we got down easily by a straight couloir, close on the right of the ridge. After 30 min. we came to another couloir that led us in 12 min. to the col. All these couloirs look worse from below than from above, owing to the stratification. From the col we followed the main ridge again and got in 15 min. to the first summit of the Throne of Zeus. The highest tower looked so bad that Kakkalos refused to go on. After a good luncheon and a pipe I roped and started to try the tower. The first bit went all right and then K. took his shoes off and followed. We crossed then to the left, on a very narrow ledge and reached the top by a crack. There we built a big stoneman, that can be seen from Litokhoron (first ascent).

With another companion I had tried to follow the whole ridge running down to the saddle between the Throne and the Pic Jacques Philippe. But K. has no experience of the use of the rope, and this traverse is certainly not easy. It is a very narrow crest, flanked by perpendicular rock walls and bristling with many half-ruined gendarmes.

So we retraced our steps, went down to the col and by the same couloir to the big shaly ledges which run almost horizontally at the base of the peaks and lead without difficulty to the glen E. of Skolion. The descent from the top of the Throne to the bivouac, took us about $1\frac{1}{2}$ hr. actual going.

According to Kakkalos, the Pic Venizelos is called *Mitka* (needle) at Litokhoron, and the Throne *Stephan* (crown). Seen from this village they look really so. The Pic Jacques Philippe bears the name *Tumba*, which means hillock.

ALPINE NOTES.

'BALL'S ALPINE GUIDE,' THE WESTERN ALPS.—Copies of the new edition (1898) of this work, reconstructed and revised on behalf of the Alpine Club, by W. A. B. Coolidge, Fellow of Magdalen College, Oxford, can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. It covers the Western Alps from the Mediterranean to the Simplon, S. of the Rhône. Price 13s. net, post free 13s. 8d. net.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition (1907) of this portion of 'The Alpine Guide,' by the late