Mountain Sickness: S.A.C. Jahrb. National Parks: Brunies, J., Schweiz. Nat. Park. - Canadian A. C. Rinehart, M. R., Tenting. - Rocky Mn. Nat. Park. – Toll, Ř.W., Rocky Mn. Nat. Park. U.S. Railroad, Administr. New Expeditions: Aig. de la Gde Sassière, C.A.F. Montagne. Aig. de la Tête Plate, Montagne. Lac Aig. du C.A.F.Blanc, Montagne. Aig. du Pouce, C.A.F. Montagne. Aig. Foch, C.A.F. Montagne. Allalinhorn, S.A.C. Jahrb. Becca Boyard, C.A.I. Riv. Mens. Becca d. Crottes, C.A.I. Riv. Mens. Bessanese, C.A.I. Riv. Mens. Blanc Giuir, C.A.I. Riv. Mens. Böser Faulen, S.A.C. Jahrb. Col du Milieu, C.A.F. Montagne. Cornomeridionale, C.A.I. Riv. Mens. Dammazwillinge, A.A.C. Zürich. Eggstock, A.A.C. Zürich. Galenstock, S.A.C. Jahrb. Gend. d. Chermontane, C.A.I. Riv. Gend. Wehrlin, C.A.F. Montagne. Great Britain, Fell and Rock. Kammlistock, A.A.C. Zürich. Kühbodenhorn, A.A.C. Zürich. Kurmütschi, A.A.C. Zürich. Mont Blanc du Tacul, C.A.F. Montagne. Mt Velan, S.A.C. Jahrb. C.A.I. Riv. Mens. Mt Dorland, Amer. A.C.

Mt Edith Cavell, Amer. A.C. Muttenhorn, A.A.C. Zürich. P. Bernina, S.A.C. Jahrb. P. Rotondo, A.A.C. Zürich. Picos de Europa, C.A.F. Montagne. Pucher, S.A.C. Jahrb. Pta Bovard, C.A.I. Riv. Mens. Pta Gastaldi, C.A.I. Riv. Mens. Pta Nera, S.A.C. Jahrb. Rhonejoch, A.A.C. Zürich. Rocher Silvano, C.A.I. Riv. Mens. Rosenlauistock, S.A.C. Jahrb. P. Rotondo, A.A.C. Zürich. Saashorn, A.A.C. Zürich. Schneehühnerstock, S.A.C. Jahrb. Schneestock, S.A.C. Jahrb. Weitenalpstock, A.A.C. Zürich. Wyttenwasserstock, A.A.C. Zürich. New Zealand: Turner, S., Alone on Mount Cook. Obiou: C.A.F. Montagne. Ortles-Cevedale: C.A.I. Riv. Mens. P. Bernina: C.A.I. Riv. Mens. P. di Gavia: C.A.I. Riv. Mens. Pte Garibaldi: C.A.F. Montagne. Picos de Europa: C.A.F. Montagne. Poschiavo: S.A.C. Jahrb. Pyrenees: Fell and Rock. Ski: Frei, H., Davoser Skitouren. - S.A.C. Echo. · Ski. Switzerland: Stucki, G., Schüler. büchlein. Tête des Faux : C.A.F. Montagne. Tête d. Cibiroles: C.A.F. Montagne. Tirol: v. Grabmayr, K., Süd-Tirol. Urner Alpen: S.A.C. Jahrb.

Valais: Portier, F., Grimentz. Weissthor: C.A.I. Riv. Mens.

Wellenkuppe: Fell and Rock.

## NEW EXPEDITIONS IN 1919.

## Mont Blanc Group.

MONT BLANC (4810 m. = 15,782 ft.) BY THE SOUTH FACE. August 20, 1919.—S. L. Courtauld and E. G. Oliver, with Henri and Adolphe Rey and Adolf Aufdenblatten spent the night, August 19–20, 1919, on some rocks just to the North of the Col du Fresnay, about 11,850 ft.

The party, climbing on two ropes, left the bivouac at 06.05 on August 20, and went first by ice and then by easy rocks up the ridge which divides the upper Fresnay and Brouillard Glaciers. They passed a little below and to the West of the summit of a small peak VOL. XXXIII.—NO. CCXX.

mentioned by Mr. Eccles in Alpine Journal, viii. 411, and descended on to the Col. Thence they followed the continuation of the ridge, up easy but rotten rocks, until just below two red towers. The first of these was climbed by a difficult chimney to the left, the rock being nearly vertical but very firm, and the second which stands a little to the West of the ridge, was turned by climbing steep grey rocks on its crest (09.30). After passing some easier rocks the party halted for breakfast at 09.50, at about 13,600 ft.

Starting again at 10.25, the party passed along a short level



1. COL DU FRESNAY. (Bivouac.) Started at 06.05.
2. Point reached at 07.55
3. ,, ,, 09.50
4. ,, ,, 12.30
5. ,, ,, 13.30
6. ,, ,, 14.45
7. ,, ,, 15.20
8. Summit ,, 16.20

knife-edge of snow, and arrived at a point where the ridge hitherto followed becomes very steep and uninviting; they therefore traversed to the left, into the broad couloir to the West. This couloir consisted of rock, snow, and ice; it is closed at the top by red cliffs which fall from near the summit ridge, and breaks away at its lower end into precipitous gullies and grey rock faces, which descend to the head of the Brouillard Easy rocks were climbed on Glacier. the left bank of the couloir for about half an hour; the party then crossed to the West over ice and rocks to a first and immediately afterwards to a second rib of rocks in the couloir, and ascended the second rib without difficulty to the point where it joins the right bank of the couloir. A gulley descending to this point from the crest of the conspicuous ridge forming the right bank of the couloir was then climbed by easy ice and rocks; and the crest was gained just below a prominent red tower with an overhanging top

(12.30). The ridge was followed, either on the crest or just below it to the left, interesting climbing being provided by several towers of good rock and snow arêtes. A short halt to put on crampons was made at 13.30 at a point beyond which the ridge became broader and consisted almost entirely of snow; the snow being in bad condition, use was made of a few rocks which protruded to the East of the ridge. One section of very rotten snow was difficult. Finally a rather narrow arête of snow and ice, up which steps were cut, led to the main Brouillard ridge, which was joined at 14.45 at a point about two-thirds of the distance from the Pic Luigi Amedeo to Mont Blanc de Courmayeur. The party then followed the Brouillard ridge over snow and knobs of rock, traversing the snow portions a little below the crest on the North-West side, where the snow was in good condition. The last rocks, about ten minutes below the summit of

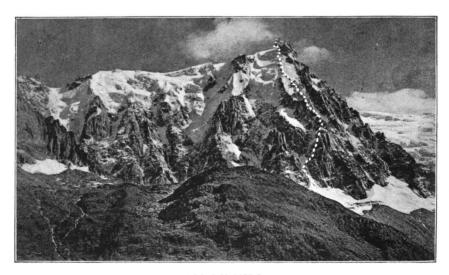


THE SOUTH FACE OF M. BLANC FROM PUNTA BIOULA (VAL SAVARANCHE)
(Telephoto)



Photo. W. F. Donkin]

CHARMOZ FROM PIC DU TACUL



AIG DU MIDI FROM PLAN DE L'AIGUILLE

Mont Blanc de Courmayeur, were reached at 15.20. There a halt was made for lunch.

Proceeding at 15.40, the party traversed across the snow slopes below and to the West of the summit of Mont Blanc de Courmayeur and the rocks to the North of that summit; gained the ridge at its lowest point between Mont Blanc de Courmayeur and Mont Blanc and arrived on the top of Mont Blanc at 16.20.

The ascent occupied 101 hours, including three halts totalling

about 1½ hours.

The party left the summit at 16.30, reached the Vallot Hut at 17.00, the Dôme Hut at 19.30, and Courmayeur at 01.00 on August 21, the expedition having taken 19 hours including halts.

This is a fine expedition and deserves to be repeated, the route could also be used for a descent. It was not dangerous: the risk from stone falls in the couloir was so slight as to be negligible. The difficulties consisted in the steep rock pitches on the lower part of the climb, and in the bad snow below the Brouillard ridge; no long periods of step-cutting were necessary.

AIGUILLES GRISES RIDGE (Mont Blanc). (Pt. 3377 m. = 11,076 ft. and the Ridge to Pt. 3647 m. = 11,962 ft.).—In the 1914 edition of the Kurz Guide four points are mentioned, 3247 m., 3377 m., 3647 m., 3800 m. env. Against the first two is 'pas d'informations'; 3647 m. accessible from the Dôme Hut, and 3800 m. from the Col where the ordinary Dôme route joins the ridge connecting 3800 m. with the main Bionnassay ridge. Point 3247 m. looks a short but interesting climb.

On August 7, 1919, leaving the Dôme hut (3120 m.) soon after 6 A.M., and climbing straight up steep snow and easy rocks, I struck the ridge between points 3247 m. and 3377 m. The ridge is good going without any difficulties over 3377 m. to 3647 m.; none of the points have any cairns, and it is hard to say which of two points close together is 3647 m.

Between points 3647 m. and 3800 m., there is some harder climbing, as three or four small points have to be passed. The first gave a pleasant scramble, the second was rather smooth and steep for a single climber of prudent habits, but a descent into a couloir above the Bionnassay Glacier enabled me to turn the difficulty; the rest was not at all difficult, a narrow bit of snow ridge finally leading from point 3800 m. to where the ordinary Dôme route falls in (6 hrs. to Dôme). A very cold wind and lack of condition precluded any idea of completing the ascent of Mont Blanc, and I descended from the Dôme to the Aiguille du Goûter and so to Les Houches. The Aiguille du Goûter is not nearly so good to descend as to ascend, the rocks of the most northerly of the ribs of rock being loose and steeper than those of the ribs further West, but if the easier rocks are taken the crossing of the big couloir when some steps in ice have to be cut is not without risk.

There is a very small stretch, not more than a few score yards, just before leaving the Miage Glacier on the way to the Dôme hut where a concealed crevasse might be met with, but late in August or in a less snowy year the Glacier would probably be dry up to this point. With this exception the route is a good one for those who may be impelled to climb alone. It gets the sun some hours earlier than the Rochers du Mont Blanc route which is horribly cold owing to the high parts of the Brouillard ridge keeping off the sun till late in the morning.

R. L. G. IRVING.

AIGUILLE DU MIDI (3843 m.=12,608 ft.) FROM PLAN DE L'AIGUILLE. August 5, 1919.—The objective on the upper part of the mountain was the steep snow-slopes and the edges of a hanging glacier seen

from Plan de l'Aiguille immediately below the summit.

Starting at 2.30 A.M. the party crossed the northern arm of the Glacier des Pèlerins, mounted to the l. of a square-headed moraine and reached, at a point immediately above its bergschrund • the first conspicuous couloir to the right of those on the N. face of the peak which are overhung by ice. This couloir was followed nearly to its elbow, when the rocks to the right of it proved easily accessible. This buttress is the true right bank of the most conspicuous long couloir which seams the N.W. face of the peak. The rocks were followed without difficulty to the foot of a formidable tower (breakfast 6.30 A.M.); after turning this obstacle on the right by the snow of a tributary couloir, the objective snow-slopes were gained and followed to the edge of the hanging glacier. To avoid cutting up the ice on the right, it was necessary to work up this edge to the bergschrund. A possibility soon presented itself of traversing to the left in order to gain the N.E. arête where a rocky buttress merges into it; but this alternative was rejected as the ice and rocks immediately below the arête looked exceedingly steep and repulsive. It proved possible to turn the bergschrund by climbing a broken ice wall at its western (r.) extremity. It would have been practicable again after this to have traversed to the left, then gaining the arête, by very steep snow, where a spike of rock emerges from it. The party, however, preferred a direct ascent to a point where a perpendicular wall of ice meets the rocks of the lower summit; it was hoped that these rocks could be surmounted easily, but in fact a pitch of 20 ft. was climbed only with great difficulty. The summit was gained at 12.15 P.M.

> G. MALLORY. H. E. L. PORTER.

GRANDS CHARMOZ (3442 m.=11,293 ft.) FROM GLACIER DE TRÉLAPORTE. August 2, 1919.—Starting from Montanvert we went up the Mer de Glace, contoured the lower slopes of the N.E. ridge of the Charmoz to the Glacier de Trélaporte, and breakfasted under

the rocks. We then followed the line of previous parties when climbing the Grépon by this face (v. 'A.J.' xxv. 739, and xxvi. 260).

The bergschrund was crossed without great difficulty (6.15 A.M.) on the right. The snow above was in good condition, but it was necessary to chip steps till the rocks were reached and three deep avalanche funnels were crossed. Traversing first to the left, then up shallow grooves, and finally by the easy chimneys bounding the forbidding wall on our right, the level of the 'Red Tower' was reached about 8.30. It was now well away on our left. From this point our objective was a subsidiary arête or rib of rock leading to the first tower on the arête above the Aig. de la République. The lower end of this rib presents a conspicuous red wall and a slabby couloir lies to the left of it. We worked upwards, bearing to the left until near the couloir, traversed right under the red wall and reached the crest of the rib above it by an ascent up slabby but conveniently broken rocks covered in places with snow (10 a.m.).

The rib was then followed to the main N.E. arête of the Charmoz. There was little or no choice of route. The climbing was of a highly interesting character. When confronted, almost too dramatically, by the blank wall of the final tower, we traversed under an overhang to the left. Once the N.E. arête was joined, it was followed to the main crest of the Charmoz (4.15 P.M.) with comparative

facility.

Joseph Pollinger, who made the first ascent on this side of the Charmoz, tells us that he went up by the couloir to our left—a fact which accounts for Kurz's condemnatory remark apropos of stones (v. Kurz, 1914, p. 191)—and then by a chimney directly to the summit. He says that some stones fell. Having regard to the quality of the rock, it is difficult to believe that the danger from stones can be extremely great even in the couloir. None fell, or seemed likely to fall, on our rib.

G. MALLORY. H. E. L. PORTER.

## Pennines.

Lyskamm (4538 m. = 14,889 ft.) By the S.W. Face. August 8, 1919: Messieurs Joseph and Baptiste Gugliermina. M. Joseph Gugliermina writes to Captain Farrar: 'The S.W. face is contained between the arêtes Perazzi and del Naso, and appears to have remained unexplored. A few details of this new ascent, made by my brother Baptiste and myself alone, may interest our colleagues of the A.C. On the morning of August 8 a violent wind delayed our leaving the Cabane Gnifetti until 5.45, when it got rather calmer. Following the ordinary route we were on the Calotte del Naso and at the foot of the S.W. face, on the W. plateau of the Lys glacier, at 8.15. This face, which we saw for the first time, presents itself really splendid and imposing. A direct route seemed quite possible; but

for fear of falling stones or ice, we chose a safer route, commencing by a great rocky spur rather to our right. This we quitted higher up and took to the centre of the face, right to the summit. Leaving the plateau at 9.20, we were on the summit at 4. The ascent took time on account of the steps to be cut; almost everywhere was snow-ice. The rocks were not difficult and the route is interesting throughout, and to be recommended, starting very early from the Cabane Sella. Our route is marked on the fine photograph placed at our disposal by Mr. Vittorio Sella. On the summit the wind was again violent and drove us down at once. So as to be sheltered from it, we decided to descend by the S. arête (del Naso) which, covered with snow, took us more time than expected. A little above the Colle del Naso we left the arête and effected the descent to the W. Glacier de Lys by a spur of rocks, broken and unstable, crossing couloirs, and finally by a snow-slope, steep and frozen hard, which, after much work, led us to the bergschrund, gaping wide and very high, without any bridge. After long ineffectual attempts, we finally got over by a jump of 5 to 6 mètres. We reached the Cabane Gnifetti at 11.30 by moonlight, much pleased with our day. . . . Another important expedition, suggested by myself, was done on July 31, by our friend F. Ravelli and some friends, viz.: the first ascent of the W. Lyskamm (4478 m.) by the S. face. Details will appear later.'

## VARIOUS EXPEDITIONS IN 1915 AND 1919.

COL DU MONT DOLENT (3543 m. = 11,625 ft.). E. G. Oliver with Henri Rey and Alexis Brocherel, August 24, 1915.—We left the Cabane du Jardin d'Argentière at 06.00 (French time), and reached the foot of the bergschrund under the Col at 07.10.

The bergschrund was in bad condition, and it took nearly two

hours hard step-cutting to pass it (09.00).

We then cut straight up the ice-slope above the bergschrund to gain the lowest portion of the rocks considerably to the East of the couloir. The first few pitches of these rocks were not difficult, and we made good progress; but above the difficulties accumulated, as the rocks were partly covered with heavy lumps of snow, frozen hard on to them. We were gradually forced more to the East against the very steep rocks, descending from the Pointe du Pré de Bar. These rocks did not look practicable, and, after climbing some very difficult pitches passing under and to the West of them, we traversed in a westerly direction with great difficulty, moving very slowly until we reached a point close to the main couloir descending from the Col (16.00). From this point we could have traversed into the main couloir without much difficulty, and another ice couloir branching to our left in a South-Easterly direction offered an alter-