

The conditions were very favourable except on N. arête where there was some ice. Many and long halts for photography.

The times given above are actual times of walking.

Summary of times (approximate) :

Ascent (from hut) = 9 hrs. 10 mins.

Descent = 4 hrs. 50 mins.

Halts = 4 hrs. 0 mins.

Total = 18 hrs. 0 mins.

13. September 2, 1911.

L. W. Rolleston. Guide, Josef Lochmatter ; Porter, Albert Chanton.

E. A. Broome, H. K. Corning. Guides, Heinrich Fux and Brantschen—See Mr. Broome's paper in the present issue of the Journal.

The quite abnormal conditions of the splendid 1911 summer have unduly depressed the former reputation of this great expedition. I do not, however, hesitate to repeat my previous description of it—viz. :

'In any case the ascent, even under good conditions, is very long and makes great demands on the endurance of the party, although the technical difficulties when the mountain is in good condition are not so serious as might be expected.

'It cannot be too strongly urged that an expedition of this magnitude imperatively demands that the rocks shall be dry (for it is for the greater part of the way a rock climb), the weather perfect, and the climbers thoroughly experienced and in first-rate condition.'

THE BRENVA ROUTE UP MONT BLANC.

MR. COOLIDGE'S ASCENT IN 1870.

DR. WILSON has received from Mr. Coolidge ('to be used as desired') the following interesting account of his ascent of Mont Blanc by the Brenva route on July 15, 1870. It is clear that Miss Brevoort's remark that the party came into sight at the top of the Corridor must not be taken literally—as Mr. Coolidge states, both here and in his note in the 'Alpine Journal' (vol. v. p. 135), that they kept to the left of the Col de la Brenva, and joined the usual Corridor route up Mont Blanc near the Petits Mulets. To anyone familiar with the locality it is easy to follow his general route, though the crossing of numerous stone-raked

couloirs is not obvious: possibly they were below the ice-arête. The dangerous-looking 'traversieren' higher up was probably a traverse to reach the rock rib, and it is clear that difficulties were experienced just above the highest rocks, for 'at 2.30 they were lost in the shadow of a rock, round which they went,' and were not seen again till about 4.15, when they were somewhere near the head of the Corridor. Mr. Coolidge's communication runs as follows:

'I only published a short note in "A.J." p. 135, of my Brenva Expedition of July 15, 1870, and my personal recollections are very vague, save on four points, viz. the great difficulty of crossing the Brenva glacier from our bivouac to the foot of the ascent; our going up (but not astraddle) the famous snow arête, shown in the 'A.J.' ii. illustration; the crossing of many stone-raked couloirs, and the fact that very high up we bore left, not touching the Col de la Brenva, but joining the usual Corridor route at about the Petits Mulets rocks. But I have lately turned up a letter from my aunt, Miss Brevoort, to my mother, dated July 16, 1870. She first states that she saw my party arrive at the top of the Corridor at 4.30 P.M. She adds these further particulars. Bertolini, the landlord of the H. Royal (whom we had known since 1865, when we crossed the Col du Géant) told her that about half an hour from Courmayeur there was a spot on a hill, on the edge of a pine and larch wood, whence the whole Brenva route could be well seen. He said that in 1865 he and others had thence watched the progress of Moore's party. So my aunt hobbled up thither (she had hurt her foot in Dauphiné), with Bertolini and Julien Grange, a Courmayeur guide who had been our local guide up the Grandes Jorasses in 1869. Bertolini had a fine telescope mounted on a stand, which helped them much. I now copy the letter.

"At last, about 10, Mr. Bertolini for the first time sighted our travellers. They had then only just crossed the branch of the glacier which separated their sleeping place from a ridge of rocks which divides the glacier into two great rivers as it were. According to Mr. Moore's account they had reached this point 2 hrs. earlier, a proof of the excited (sic) state of the glacier this year, for had it been no worse (and that was bad enough) than it was when they did the pass, I am certain that Christian [Almer] could find his way thro' quicker if possible than even Melchior. At all events there they were climbing the rocks rapidly, altho' very difficult. Christian first (he led to the top, hacking away at the ice—we could see the splinters flying) then Ulrich [Almer], who once in a great while lent Will a hand, then clumsy old [Christian] Gertsch, carrying the provisions. The day was perfect. When we began to be able to see we watched them for the next 4½ hours unceasingly. We saw them over that terrible ice arête, but they did not go astraddle over it as did the others. The ice seemed terribly hard, judging from C.'s blows. They went beautifully. We saw them stop and drink once, but never whilst in sight sit down or eat. After the arête came steep

slopes of ice and snow, and the sun by this time (nearly 1) was baking. Still they pushed on unflaggingly. You may imagine how good was our glass when I tell you that we could distinguish their axes, and even the tin wine bottle Christian carried slung around him. After these slopes came much dangerous-looking 'traversieren.' Grange assured me that I had done much worse things on the Grandes Jorasses without thinking of it; but at a distance it looks awful for lookers-on, and at last, at 2.30, they were lost in the shadow of a rock, round which they went, and we did not see them again until a little after 4 (I think 4.15). Grange knew that they must come out into sight at the top of the Corridor for 20 or 30 minutes. So he arranged the glass to catch them whenever they should appear, and sat there dozing and gazing alternately, whilst we went into the shade. At last, at the time I said, Grange called out 'Je les vois,' and I rushed to the glass. They had just come into sight and crossed, as if on the stage, a great spot of sunshine, and then were lost in the deep shade on the left after about 15 minutes. They were walking at a good pace, and did not show any signs of fatigue, altho' they had now been *en route* for nearly 14 hours, and such a route and such an ardent sun. After that, as there was no chance of seeing them again from our hill, we came back to the hotel well satisfied, as the dangers of the Brenva were over for them and the pass made." I merely say :

"On Friday we left at 2.45 A.M., crossed the glacier in 4 hours, climbed steep rocks, and couloirs and slopes of snow and reached the top of Mont Blanc at 5.35 P.M. The Corridor was first attained and then the top, but we cut right up to the top, thus making the first ascent of Mont Blanc direct from the Gl. de la Brenva. We only got as far as the Grands Mulets that night at 9.10 P.M."

THE HEIGHTS OF CERTAIN POINTS ON THE BRENVA ROUTE.

SOME correspondence, evoked by the remarkable discrepancies in the various published accounts, has taken place between the undersigned upon this subject. As the Brenva route has been so fully dealt with in the present volume of the ALPINE JOURNAL, it may be useful to record the conclusions arrived at, after much comparison of the available data.

Two heights are given in the Imfeld-Barbey Map—and two—not very dissimilar—on the Mieulet Map. So far as is known no survey of the Italian side was made for either map, and the heights are presumably drawn from pre-existing Italian sources.

Imfeld, 3330—Mieulet, 3345—appears to indicate the lowest point, or snout of the great buttress which terminates above in the famous 'ice-arête.' The earlier ascents were made by the crest of this buttress, which was gained at a snow saddle about 150 mètres higher

than the snout, and which is shown vertically below Mont Blanc de Courmayeur on the plate facing p. 203. Later parties have left the glacier further N. and climbed by a subsidiary ridge (3 to 8 on plate facing p. 203) to the arête.

Imfeld, 3921—Mieulet, 3954—are difficult to locate. We believe them to refer to some point on the E., or Brenva, face of Mont Blanc off the route, and to its S.

One of us (J. P. F.) took readings with a Hottinger aneroid in 1893. The instrument is that used by the Swiss Federal Surveyors, and is probably quite reliable for indicating *differences of altitude over a short period of time*. The party struck the main frontier ridge of Mont Blanc about 50 or 60 mètres below the Rochers Rouges Hut, the height of which is 4508 m. (Imfeld). They struck the ridge, that is, at about 4450 m. The readings show a difference of 419m. between the snow saddle where the ascent of the buttress commenced and the ice-arête, and of 552 m. between the ice-arête and the point where the frontier ridge was struck. This would give a height of 3479 m. to the snow saddle, and 3898 m. to the ice-arête.

The altitude of the highest rocks on the route (13 on plate facing p. 203) must be guessed. Most writers have placed them at nearly the same level as the Col de la Brenva (4333 m. Imfeld). They are probably some 30 mètres lower, but certainly over 14,000 feet. It will be noted that this figure does not agree with Mr. Caesar's estimate (*ante*, p. 279).

To sum up the altitudes arrived at are as follows :

Snout of Buttress	3330 m.=10,922 ft. (Imfeld).
Snow Saddle on Buttress	3479 m.=11,411 ft. (Aneroid)
Top of Lateral Rib (No. 8, p. 203)	12,650 ft. (estimated)
Ice-arête . . . (No. 9, p. 203)	3898 m.=12,785 ft. (Aneroid)
Highest Rocks . (No. 13, p. 203)	14,100 ft. (estimated)
Col de la Brenva	4333 m.=14,212 ft. (Imfeld)
Rochers Rouges Hut	4508 m.=14,787 ft. (Imfeld)
Summit of Mont Blanc	4810 m.=15,776 ft. (Imfeld)

J. P. FARRAR.
C. WILSON.

THE DESCENT OF THE BRENVA FACE OF MONT BLANC.

By R. W. LLOYD.

OUR successful ascent of this face in the summer of 1911 spurred us to attempt its descent this year. This descent was one of the quickly vanishing Alpine problems, untouched save for the partial descent of Messrs. Mummery, Collie, and Hastings referred to in 'A.J.' xxvi.