

them; and that he was, like Lionardo da Vinci (in his sketches), keen to note the characteristic features of their sterner landscapes, even where he no longer cared to dwell on them. The modern mountaineer will not readily give up his claim to a special bond of sympathy between himself and the poet who had such a taste and talent for exact topographical description, such a love of space, sunrises, and clear wide skies; who, whether by the aid of experience or intuition, has described so well and closely the incidents of mountain travel as we know it, of rock-climbing as we practise it.

NEW EXPEDITIONS—(continued).

Mont Blanc District.

DÔME DE ROCHFORT (3,997 mètres = 13,114 feet). *August 12.*—Mr. J. Eccles, with Michel and Alphonse Payot, after bivouacking near the Capucin rock on the Glacier de Leschaux, started about 4.30 A.M., and in 1 hr. 15 min. reached the bergschrund, which runs from the Mont Mallet along the base of this chain. In 1873 it was impracticable, but in 1881 was much smaller, and was easily crossed. After it, a moderately steep ice-slope led in about half an hour to the base of the rocks, whence an easy climb led at 7.30 A.M. to the summit, of which this was the first ascent.

Monte Rosa District.

ROSSBODENHORN (3,917 mètres = 12,794 feet). *July 11.*—The same party made what is believed to be a new route up the peak. Starting from the Rossboden châteaux at 3.15 A.M., they kept along the same side of the glacier for $\frac{3}{4}$ hr., then crossed it to the base of a spur which falls from the ridge separating the Bodmer and Rossboden Glaciers. Mounting along the left side of this spur for about 1 hr. 30 min., they then took to its crest (crossing for a short time to the right-hand side), and thus reached the summit at 10.25 A.M. The line of ascent is well seen from the road between Simpeln and the Hospice.

TÊTE DU LION FROM THE NORTH. *August 7.*—Mr. J. H. Wicks, with Ambrose Supersax and Theodor Andermatten, starting from the Stockje hut, crossed the Tiefenmatten glacier to the foot of the great couloir leading up to the Col du Lion (2 hrs.), and having cut up an ice wall exposed to falling stones, took to the rocks on the (proper) left of the couloir (*i.e.* the Dent d'Hérens side), and mounted direct to the summit, the final ridge being struck about 100 yards west of the actual peak. The descent was made to the Col du Lion in $\frac{3}{4}$ hr. From the foot of the couloir to the top of the peak the party employed $7\frac{1}{2}$ hrs. They consider the expedition dangerous and difficult, owing to the insecure nature of the rocks and to the falling stones, though the latter are for the most part confined to the couloir itself.

We may note here that the *Verstanklahorn* (3,302 mètres = 10,834 feet) in the Silvretta district, which enjoys a very high reputation for

difficulty, was ascended on August 20 from Vereina (previous ascents—two or three in number only—having been made by a very roundabout way from the Silvretta Club hut) by the guides Guler and Schlegel, of Klosters. Four days later Guler led Herr Geisler, of the German A. C. (who had been left behind at the foot of the peak on the 20th, owing to bad weather), to the summit. The climb is described as difficult and dangerous, lying through a steep snow couloir and then over the rocks to the left. Two hours were required for the ascent from the *Bergschrund* and $2\frac{1}{2}$ for the descent.

The central and highest peak of the *Levanna* (3,640 mètres = 11,943 feet) in the Graian Alps has been climbed direct from Ceresole (*i.e.* from the north) by way of the rocky ridge, falling immediately from the summit. This was first done on August 10 last by Signor Simonetti, the Italian engineer charged with the new survey of the district, led by a local man, Blanchetti, and again on August 12 by the four Signori Sella, with Maquignaz and Bich. The latter party, who describe the ascent as not easy, took 8 hours (including halts) from the *Levanna* Alp to the top.

REVIEWS AND NOTICES.

Relazione sulle condizioni geologiche del versante destro della valle della Dora Riparia tra Chiomonte e Salbertrand. Del dottore Martino Baretta. (Turin: Camilla e Bertolero, 1881.)

This pamphlet is also connected with railway geology, as it arises from an investigation made by Dr. Baretta into the petrology and stratigraphy of the beds traversed by the railway from Modane to Turin, between Chiomonte and Salbertrand. The line was much injured by falls of rock last May, and there appeared a probability of others, so that Dr. Baretta was instructed to examine the geology of the district with a view of seeing how far these were due to the nature of the rocks. To this the second part of his pamphlet is devoted, from which it appears that in his opinion a portion of the line is highly unsafe, owing to the geological conditions, that all attempts at repair will be very costly and of dubious stability, and that (as we infer) some change in its course is necessary. To this report a brief sketch of the geology of the surrounding district is prefixed, which is of more general interest. From this it appears that three great formations may be recognised—the lowest, called the *Ancient* or *Central gneiss*—a formation consisting almost wholly of a granitoid gneiss, rich in porphyritic crystals of felspar; the next, or *Pietre verdi* zone, consisting of serpentinous and horn-blendic schists, opicalcite and crystalline marble, with gneiss and mica-schist rich in nodules of quartz; and lastly a group locally called *pietra marcia*, consisting of less crystalline rocks, limestone, gypsum, quartzites, and schists. The three appear to be unconformable, though, as we infer, the unconformity is not very strongly marked, and it is in the uppermost of these that the dangerous spots occur.

T. G. B.