

pamphlet on October 6; it is countersigned by a government official at Stalden on the 8th of the same month, and Mons. de Torrenté's preface is dated November 24.

The publication of this 'Rapport,' which we have not thought it necessary to do more than summarise, does not seem to us to serve either of the two purposes for which an official publication might have been made. It does not help us much, if at all, to solve the painful questions which are forced on our minds by the occurrence of which it treats; it does not, at least in our judgment, clear Mr. Borckhardt's guides from the serious blame which, as we have before thought it our duty to say, appears, from such evidence as we have, to rest upon them. To be of any real service for either of these purposes the 'Rapport' should have been accompanied by a full statement of the sworn evidence of all the witnesses at the judicial enquiry, the speedy publication of which seems to us to be urgently called for.

NEW EXPEDITIONS IN 1886 (*continued*).

Bernese Oberland.

OLMENHORN (3,318 mètres = 10,886 feet). *August 27.*—Messrs. Charles E. Groves and Charles H. Townley, with Louis Zurbrücken (del Ponte) and Fritz Graf junior, ascended this peak. Starting from the N. end of the Märjelsee they crossed the Gross Aletsch glacier to the grass slopes of Im Olmen, which they mounted at first S.W., then nearly due W., to the mouth (recognised by the great accumulation of screes) of a well-marked couloir S.W. of the summit. They climbed up this couloir to the base of the lower or W. peak, traversing which on its S.W. side, the snow ridge connecting it with the higher peak was gained. Following this ridge to the base of the higher peak, its summit was reached by a scramble over loose rocks (four hours from the Aletsch glacier, including some time lost on the grass slopes). After building a cairn (for the peak seems to have been previously untouched) the party regained the W. peak by the same route, traversed its S.W. flank, and then crossed over the rock ridges to the N.E. side of the mountain, which was descended by the ridge between the second and third snow couloirs (reckoning from the summit). When this ridge became too steep the party crossed the third couloir and turned over the dividing ridge to the snow, descending to the Aletsch glacier (rather N. of the point 2,531 mètres, and nearly opposite that marked 2,522) by a small glacier which may be called the Olnen glacier. On this face of the mountain, the rocks are rotten and the couloir steep. (3½ hrs. from summit to Aletsch glacier.)

TIEFENSTOCK (3,513 mètres = 11,526 feet). *September 25.*—Herr A. Lorria, with J. Gentinetta, starting from the Rhone Glacier hôtel, at 4.30, reached by a short cut the Hôtel Belvedere, and followed the usual route to the Rhone glacier, by which (in fresh deep snow) they gained, at 9.45, the Tiefensattel, between the Galenstock and the Tiefenstock. The latter peak was then climbed in twenty-five

minutes by the easy S. ridge. On the summit a cairn (without any cards or names) was found, which was probably built by the party charged with the Rhone glacier survey, though no notice of the ascent seems to have appeared in Alpine literature. Between the Tiefenstock and Rhonestock there is a very fine rock peak (c. 3,550 mètres) not named on the Federal map.

Leaving the peak at 11, the Rhone Glacier inn was regained at 2.30 by the same route.

Monte Rosa District.

HOHBERGHORN (4,226 mètres = 13,866 feet). July 30.—Messrs. O. Eckenstein and A. Lorria, without guides, left the usual camping place for the Dom at 3.45 A.M., and reached the Festijoch at 7.15. Descending to the Hohberg glacier they crossed above the icefall to the top of the west ridge of the Hohberghorn (9.15 A.M.). This rock ridge was found to be very difficult, but by means of it the summit of the peak was reached at 3.45 P.M. Leaving the peak at 4.15 the party descended by Herren Schulz and Burckhardt's 1881 route from the S.,* but, having failed in an attempt to force a way down the icefall of the Hohberg glacier, had to spend the night on the Festijoch.

It is believed that the peak had not before been reached by the western ridge, though Herr Burckhardt's party † descended the upper 20 mètres of this ridge, then taking to the west flank of the peak.

GALENHORN (3,360 mètres = 11,024 feet). August 6.—The same party, without guides, left at 4.30 A.M. a bivouac on the right bank of the Hohberg glacier, crossed the ridge dividing Hohberg and Dürrenpfad E. of the point marked 2,911 mètres, and descended to Dürrenpfad at 8 A.M. After half an hour's halt, the two climbers separated. Mr. Lorria circumvented by *débris* the ridge below the point 3,066, and reached by the S.S.W. ridge (not marked in the new Federal Map) the summit of the peak at 10.30. About the same time Mr. Eckenstein also arrived, having traversed the ridge above the point 3,066, passed by the end of the Galen glacier (3,114), and climbed up the peak by the S. flank. No traces of previous visitors were found, and no earlier ascent seems to have been recorded. On the Gassenried side the peak descends in fearfully steep ice precipices. The descent by the easy ridge to the Galenjoch (close to which the party bivouacked for the night) took from 1.30 to 1.50 P.M.

KLEIN DÜRRENHORN (3,831 mètres = 12,570 feet). August 7.—The same party started from their bivouac near the Galenjoch at 5.30, and climbed for one hour along the rocky ridge which leads from the pass to the Klein Dürrenhorn. Then they took to the steep (47°) snow slopes on the right, keeping as close as possible to the ridge. The ridge itself was regained at 7.30, and after a difficult climb the party reached an ice arête where 110 steps had to be cut in hard ice covered with two feet of fresh snow. This took two hours, and was followed by iced rocks, by which the summit of the peak was gained at 11.20. The fresh snow rendered the climb difficult and dangerous. The two

* *Alpine Journal*, vol. x. p. 339.

† *Ibid.* vol. x. p. 340.

climbers descended at 12 to the col between the Klein Dürrenhorn and the Dürrenhorn, and descended down a snow couloir to the plateau of the Dürren glacier. Then they kept by the rocks to the right, ascended by them to the point marked 3,126, crossed the Galen glacier, and, after a long rest, regained at 5 P.M. their bivouac. A cairn was found on the Klein Dürrenhorn, but no card or names.

ADLERHORN (3,993 mètres = 13,101 feet). *July 26.*—Messrs. C. C. Branch and A. Lorria, without guides, left a bivouac on the Fluhalp at 3 A.M. After being forced to wait an hour for daylight, they gained, by way of the Findelen glacier, the Adler glacier, and at 8.10 reached the foot of the peak near the point 3,470, having been much delayed by a companion who remained here. Between 300 to 400 steps had to be cut in hard snow, the rocks being taken to when possible. In this way the summit was reached at 11.50, where no signs of any previous ascent were found. The return was made by the same route.

DENT D'HÉRENS (4,180 mètres = 13,715 feet, Federal map: 4,175 mètres = 13,698 feet, New Italian Survey). *September 7.*—Messrs. A. Lorria and Charles Townley, with Louis Zurbrücken and Joseph Gentinetta, having reached the summit of this peak by the western ridge,* left it at 11 A.M., and descended by the south-west rocky ridge to the Za de Zan glacier (12.20), whence Zermatt was regained by the Tiefenmattenjoch. This south-west ridge is shown quite accurately on the Val Tournanche sheet of the new Italian Survey; it is not very difficult, and completely free from all danger of falling stones. It is quite distinct from the ridge followed usually, and from that ascended by Mr. Giles Puller from the Col des Grandes Murailles.

Arolla District.

DENT PERROC, FROM THE EAST (3,655 mètres = 11,992 feet). *July 22.*—Messrs. J. C. Mills and J. A. Luttman-Johnson, with Franz (Weiss-horn) Biner and Gabriel Taugwalder as guides, crossed the Dent Perroc from Arolla to Ferpècle, descending on to the Montay glacier in the amphitheatre formed by the east face of the Dent Perroc and two spurs running eastwards from the main ridge of the Dents. The route followed in the descent is, so far as is known, new, though the main ridge farther south has been reached from the east at the point marked 3 679 mètres (and called Pointe des Genevois from the first party which ascended it on July 22, 1885: see 'Echo des Alpes,' 1886, p. 23), at the end of August 1885, by Mr. W. F. Donkin (with the brothers Andenmatten) by way of the southernmost of the two spurs.

The party descended the face by steep but firm and easy rocks until nearly half-way down to the glacier, where the rocks became more difficult. It was soon evident that a direct descent was out of the

* [As there seems to be some confusion as to recorded ascents by this ridge, it may be well to state that it was first traversed on July 17, 1873, by Mr. A. Giles Puller, descending from the peak (*Alpine Journal*, vol. vi. p. 294). Dr. R. von Lendenfeld mounted by it on July 26, 1879 (*Oesterreichische Alpenzeitung*, 1881, p. 170; *Alpine Journal*, vol. x. p. 358 note), and was followed on September 8, 1879, by Messrs. J. Baumann and Cullinan (*Alpine Journal*, vol. ix. p. 382).—EDITOR.]

question, and to the left the rocks were smooth and impracticable. The course lay of necessity to the right. Passing nearly horizontally over the face, and crossing several gullies, they reached the top of a chimney of about 100 feet, leading down to a couloir separated by a seam of rocks on the farther side from an avalanche-swept snowslope. The descent of the chimney was not an easy matter for the last man. On reaching the couloir the party descended close to and sometimes upon the rocks to the left, and striking the bergschrund at the head of the glacier at a comparatively favourable point, crossed it after some little trouble. Traversing the Montay glacier the party descended to the Mont Miné glacier, and thence reached the Ferpècle hôtel.

The ascent of the Dent Perroc from Arolla occupied $5\frac{1}{2}$ hrs.; the descent to Ferpècle, 9 hrs.

Dolomites.

WESTERN PEAK OF THE SASS MAOR (2,767 mètres = 9,079 feet). August 12.—Herrn G. Winkler and A. Zott, without guides, having ascended the eastern and highest peak (2,812 mètres) of this mountain (first climbed on September 4, 1875, by Messrs. H. A. Beachcroft and C. C. Tucker with François Dévouassoud, 'A. J.' vii. 333-5) by way of the great 'trough' leading up to the notch between the E. and W. peaks, returned to that notch, and at 5.45 P.M. started to attack the hitherto virgin W. pinnacle. This presented most formidable difficulties, owing to the smoothness of the rocks and the fact that they frequently overhang. The summit was, however, successfully vanquished, after great trouble, at 8 P.M. The party was forced to spend the night there, enjoying wonderful moonlight views and a splendid sunrise. Starting again at 4.30 A.M. on the 13th, they spent three hours in regaining by their former route the notch between the two pinnacles, and reached San Martino di Castrozza the same afternoon.

Special shoes of canvas with hempen soles (prepared by Schwaiger, of Munich) were worn by Herr Winkler on this difficult climb, and are warmly recommended, having survived many a hard climb in the Dolomites.*

On September 4 Count Denys de Champeaux and M. Henri Brulle, with the guides Bettega, of San Martino, and Barbaria, of Cortina, made the second ascent of the western peak. The most serious difficulties had to be overcome for the space of more than $1\frac{1}{2}$ hour, quite equal to the worst bits on the Meije or Western Dru. The peak is also known at San Martino as the Cima della Madonna.

* *Mittheilungen des D. u. Ö. A.-V.*, 1886, pp. 228-9.