

fine peaks of the Venediger and Gross Glockner districts, whose outline reminds the traveller of the bolder parts of the Graian Alps. As it happens, we can speak from recent experience of a portion of this district, and we gladly bear our testimony to the careful and thorough manner in which Mr. Ball has done his work. We may remark, by the way, that the path on the south side of the Nieder Joch is now a good and well-marked one; and, unless the glacier is one that varies much in different seasons, we should hardly think guide or rope absolutely necessary in settled weather.

The third and remaining mountain zone is divided, though by a line necessarily somewhat arbitrary, into the South Tyrol and Venetian, and the South-eastern Alps. In these the author has described the district made familiar to the public by Messrs. Gilbert and Churchill's 'Dolomite Mountains.' Without quite endorsing the high praise bestowed upon this region by the authors of the above admirable work, we will say that it is one that no student of physical geography or lover of fine scenery should leave unvisited. Though at times he may complain of a certain monotony caused by the absence of important snowfields and glaciers, he will be to a considerable extent compensated by precipices more tremendous and peaks more strangely shaped than can be found in other regions of the Alps, except perhaps in one or two of the wildest parts of Dauphiné. To the geologist this zone is especially interesting, owing to the presence of large deposits of dolomite, and the extensive underlying and interbedded masses of augitic and feldspathic porphyry and volcanic art between the Etschthal and the Val d'Agordo. Both afford very fine scenery: the former constituting the peaks and precipices mentioned above; the latter sometimes soft and smiling, with cliffs of richest purple, as in the neighbourhood of Botzen; sometimes dark and gloomy, as in the ravines near Caprile. The major part of the sedimentary rocks in this district belong to the Trias, and the correlation of the Hallstadt beds with the abundantly fossiliferous strata near St. Cassian have added greatly to our knowledge—previously so imperfect—of the fauna of that epoch. Most of these topics, and the various theories on the origin of dolomite, are noticed incidentally by Mr. Ball; and having ourselves known the inconvenience of visiting some parts of this district without a good mountain guide-book, we can more thoroughly estimate the boon that the editor of the 'Eastern Alps' has conferred upon future travellers. It is hardly too much to say his work on the Alps has made an epoch in the publication of guide-books; and we suspect that a good many of those compilers who have lived before this Agamemnon will find long oblivion speedily oppress them.

T. G. B.

ALPINE NOTES.

July 10.—George Edward Foster with Hans Baumann and Jakob Anderegg made the first ascent of the Gspaltenhorn. Spent the night at the same gîte as Messrs. Hornby and George did last year. Started at $\frac{1}{2}$ past 2, and reached the arête, where they were stopped, at 6.30.

Ascending by this, which was much serrated, and presented very considerable difficulties, reached the summit at 8.30. They stayed there only $\frac{1}{2}$ an hour, as the final arête, which was snow, was in a dangerous condition, and returned to our camp about 1.

July 12.—The same party, with the addition of Mr. Horace Walker, slept at the Stufenstein châteaux, and made the second ascent of the Jungfrau by the Roththalsattel. They found the couloir much more difficult than their predecessors had done, and did not reach the Sattel till 12, and the summit till 1.15.

July 31.—The same party left Montanvert at 2 for the second ascent of the Aiguille du Midi, and reached the summit at 12. In descending kept to the right after leaving the rocks, and descended to the Glacier de Bossons by a couloir, where they were exposed to great danger from the rottenness of the rocks and avalanches. Reached Pierre Pointue at 6.30, and Chamounix at 8.10.

To the Editor of the Alpine Journal.—Dear Sir,—Not finding in Mr. Ball's 'Guide to the Eastern Alps' any account of a convenient pass between the valleys of Matsch and Schnals from which the Weisskugel could be ascended *en route*, I enclose a short notice of an expedition made by me last year, which may, perhaps, be of interest to some of the readers of the 'Alpine Journal.'

Although I myself crossed from Matsch to the Oetzthal, the lower part of the Schnalsenthal might have been reached in the same time.

The descent from the Hintereis Joch to the Steinschlag Glacier presents also an opportunity for combining the ascent of the Weisskugel with the passage from the Oetzthal to the Schnalsenthal. I remain, dear sir, yours faithfully,

M. HOLZMANN.

Marlborough House, Pall Mall :

July 19th.

THE 'STEINSLAG JOCH.'—Having found tolerably fair night-quarters at some châteaux, called the 'Glieshof,' in the higher part of the Matscherthal, I started at 4.35 a.m. on August 31, 1868, with a chamois-hunter of Matsch as guide, and ascended to the upper part of the Matscher Glacier by the same route by which Messrs. Tuckett, Fox, and Freshfield descended in 1865. As there was only a very thin film of fresh snow on the hard ice, and as we were without a proper ice-axe, we left the glacier and climbed without difficulty some steep-looking rocks at the southern face of the Weisskugel up to within a short distance from the final ridge leading to the summit of the Weisskugel. The latter was reached at 11.5. We descended to the col named in Mr. Ball's Guide, the 'Hintereis Joch,' and to the upper part of the Hintereis Glacier. My guide being afraid to traverse the whole length of the glacier, we crossed the ridge separating it from the upper part of the Steinschlag Glacier (marked on No. 310 of Reymann's 'Spezialkarte von Deutschland'), and passed along the left side of the latter glacier, and over a very rough slope of 'Geröll' at the base of the cliffs running from the 'Inner Quell-Spitz' to the Hochjoch. We struck the track from Kurzras to the Hochjoch about five minutes

below the highest point of the pass, and arrived at Fend at 6 p.m. Time of actual walking $11\frac{1}{4}$ hours.

Dear Sir,—Though not a member of the Alpine Club, I take the liberty of writing to you to communicate to you the following notes which may interest you.

Col de Béranger (11,000 ft.)—At 4.8 a.m. on July 9, 1869, our party, consisting of a lady, myself, Christian and Ulrich Almer, and a porter from Contamines, left our bivouac (estimated at 7,000 ft.) above Contamines, and passing over the glacier named Gl. de la Frasse in Ball's 2nd Edition, reached the col between the Aiguilles de Miage and de Béranger at 8.45 a.m. The party ascended the Aiguille de Miage and descended to a point 15 minutes above the col. We left this point at 11.55 a.m., and descending a couloir filled with snow, which might be ice later in the year, passed a rather wide bergschrund, and descending carefully through a maze of concealed crevasses reached the level of the Gl. de Trélagrande in 50 minutes from the col. We walked down the glacier to the base of the Col du Mont Tondu, crossed that col, and reached Motets in the evening. The view from the col of the Aiguille de Trélatête is superb. A fine view of Mont Blanc is gained on reaching the Gl. de Trélagrande.

On July 17, 1869, the same party, with D. Ballay of St. Pierre, but without the porter, left their bivouac, 8,000 ft. high, considerably to the left of the usual route, and ascended a couloir of snow which landed them on a vast plateau at the foot of the Grand Combin, which was successfully attacked. This route is much shorter than the one commonly taken.

The St. Pierre guides intend to construct a hut on the ordinary route.

On July 24, 1869, with C. Almer and A. Ritz, I crossed the Sesia-joch for the third time. The time, actual walking, from the highest châteaux in Val Sesia to the summit of the pass, was 8 hours. There was very little snow. Towards the top we avoided the worst rocks by cutting our way up a steep ice-slope which was raked by stones, none of which, however, struck us. I cannot recommend this way to anyone. Time, actual walking from the châteaux to the Riffel Hôtel was 11.50.

On July 18, 1868, our party consisting of a lady, myself, C. Almer, Gärtch, and P. Roth, left the highest Oeschinen châteaux to ascend the Blümlis Alp. We followed the usual route to the glacier; but we then passed to the right of the Blümlis Alpstock instead of to the left as heretofore. No serious difficulty was encountered, but bad weather delayed us so much that we were unable to ascertain how much time was gained by this new route. We reached the col, and thenceforward followed the ordinary route to the summit.

Hoping you will insert the above in the 'Alpine Journal,' I am yours truly,

W. A. B. COOLIDGE.

Exeter College, Oxford:
September 1868.