

## NEW EXPEDITIONS IN 1914.

*Bernese Oberland.*

**METTENBERG** (3107 m. = 10,194 ft.) **BY THE W. ARÊTE.**—On July 11, 1914, J. H. Wicks, W. A. Wills, E. H. F. Bradby, and C. Wilson, with Henri Rey, ascended the Mettenberg by the W. arête. Having first tried, and failed, to force a way up the great limestone cliff above 'Hohthurnen,' they rounded the end of the W. arête, and scrambled up the ravine on its S. side to a chamois-tracked col on its crest at the point where limestone and granite meet. Here they crossed the ridge and, ascending on its N. side, regained the arête where it turns in a southerly direction towards the summit. The descent was made by the S.E. arête and W. face. This obvious route appears to be new, and offers a pleasant traverse in either direction.

**GWÄCHTEN** (3169 m. = 10,397 ft.) **BY THE N. FACE.**—On July 21, 1914, J. H. Wicks, E. H. F. Bradby, and C. Wilson (having been prevented by bad weather from starting early for a longer expedition) left the Gleckstein about 9 A.M. and traversed the Gwächten to the Bäregg, ascending from the middle plateau of the Ober Grindelwald Glacier, straight up the N. face to the summit. The E. branch of the Wechsel Glacier, which forms the chief feature of the climb, is seamed by enormous crevasses which, later in the year, might prove impassable. The descent to the Schwarzegg path was made by the glen between the Gwächten and Klein Schreckhorn.

[Sir Felix Schuster's party in 1880 descended the E. branch of the Wechsel Glacier direct to the Ober Grindelwald Glacier. Cf. Mr. Coolidge's 'The Bernese Oberland,' Vol. II. p. 76 (1904).]

**EIGER ROTSTOCK** (2668 m. = 8754 ft.) **BY THE S. FACE and W. ARÊTE.**—On July 14, 1914, C. Wilson, with H. Rey, ascended this rock by the S. face and W. arête, reaching the arête near its western end. As no record of this route is found, it may be new. The rocks of the S. face are so steep and smooth that the rope becomes a menace rather than a security, and neither climber would care to repeat the scramble. Once on the ridge the climb is interesting, up two rather difficult pitches.

## ALPINE NOTES.

'BALL'S ALPINE GUIDE.' VOL. I. THE WESTERN ALPS.—Copies of the new edition (1898) of this work can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. Price 12s. net.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition (1907) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes those portions of Switzerland to the N. of the Rhône and Rhine valleys. Price 6s. 6d.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition (1911) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, is now ready, and can be obtained from all booksellers, or from Messrs. Stanford, 12 Long Acre, W.C. It includes 'those Alpine portions of Switzerland, Italy, and Austria which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige.' Price 7s. 6d

MAP OF THE VALSESIA.—Some copies of the Map issued with the ALPINE JOURNAL No. 209, and of the plates opposite pages 108 and 128 in No. 208, are available and can be obtained from the Assistant Secretary, Alpine Club, 23 Savile Row, W. Price for the set (the Map mounted on cloth), 3s.

THE ALPINE CLUB OBITUARY.—Bainbridge, O. J. (1900); Buxton, Sir T. F., Bt. (1860); Carfrae, C. F. K. (1910); Chater, G. (1862); Dent, L. W. (1903); Eccles, J. (1874); Fuller, Sir J. M. F., Bt. (1885); Head, Bernard (1915); Jex Blake, T. W. (1862); Saunders, F. W. (1887); Squires, R. D. (1913); Walker, Harry (1906).

THE MONT D'OR TUNNEL AND THE FRASNE-VALLORBE LINE, of which it forms a part, were opened to traffic on May 15. The new line avoids the circuitous Pontarlier route, with its heavy gradients, and shortens the time of the journey between Paris and Milan, *via* Lausanne and the Simplon, by about half an hour.

Besides the Mount d'Or Tunnel, which is nearly 3½ miles long, there are four other shorter tunnels on the line, which has been remarkably difficult to construct, not only because of the water-bursts in the Mont d'Or Tunnel, but also because it runs for a time through peaty, boggy land near Frasne, where it was extremely difficult to make any solid foundation at all for the embankment on which the line has to pass.

The tunnel and the line should have been opened to traffic on May 1 last year, the latter having been begun in September 1910. The tunnel was pierced on October 2, 1913, but water-bursts seriously interrupted the work. The worst of these water-bursts occurred in December 1912, when a spring suddenly gushed out, flooding the shaft with over 600 gallons of water a second.

When this water-burst occurred a stream, the Bief Rouge in French territory, near the Mont d'Or range, and of great importance to the local population not only for water-supply purposes but for furnishing power to factories, dried up completely. All the many places at which water percolated into the tunnel have now been plugged up with cement, and the springs feeding the Bief Rouge stream have again begun to flow normally.

The new line is a double track, the traction being by steam, but as the Mont d'Or Tunnel is virtually straight, ventilation in it is easy. Vallorbe Station, belonging to the Swiss Federal Railways, once a small and unimportant building, has now blossomed out into a large international frontier station, where the Swiss Customs examination takes place. The rebuilding and enlarging of this station has cost the Federal Railways £300,000.

The original estimate of the cost of constructing this new line and tunnel amounted to £1,480,000, a sum which must now have been very greatly exceeded owing to so many unforeseen difficulties. —*The Morning Post*.

THE LEUKERBAD LINE, the latest of the Swiss mountain railways, has just been opened. The construction of this new electric line, just over  $6\frac{1}{2}$  miles long, was begun in 1912.

DR. FILIPPO DE FILIPPI, the Italian explorer, before the Royal Geographical Society on June 14, gave a lecture on his expedition to the Karakoram and Central Asia in 1913-14. To the King of Italy; the Government of Italy, who lent nearly the whole outfit of scientific instruments; to the Government of India, and to many scientific bodies, Dr. Filippi said he owed the support which enabled him to make the arrangements for the expedition. His discoveries in connection with glaciers to the east of the furthest point reached by Sir Francis Younghusband, Dr. and Mrs. Workman, and the Duke of the Abruzzi more than justified the prophecies of Dr. Longstaff, on whose advice he undertook the expedition. Dr. Filippi related how he determined longitude by means of wireless time signals transmitted from Lahore. In January 1914 he set off on a long excursion up the valley of the Shyok, starting from the point at which it joins the Indus. His excursions proved that it is possible to penetrate without any serious difficulty, and during the depth of winter, into the most outlandish valleys of Baltistan, carrying an equipment so light as to exclude any supplies beyond the mere necessities of life. A four-days' march above Skardu, at Kharman, an oasis which lies at the foot of an imposing castle, he found the Indus frozen from bank to bank, which made it possible for people and ponies to cross the river safely. As he advanced higher up the valley it became more and more common to meet with these convenient natural bridges which served to connect villages and districts at other seasons completely isolated. Very rarely did the party find the Indus sufficiently narrow to allow of

its being spanned by the picturesque rope-bridges so characteristic of Baltistan. Leaving the valley of the Shyok, the exploring party climbed narrow gorges hemmed in by precipitous cliffs. Here they were obliged to wade for long stretches through the rushing and turbid waters, which at that season (the end of May) of melting snow surged through the bed of the gorge. Later they entered upon a road the aspect of which grew more and more dismal. It was literally strewn with the remains of animals dead from exhaustion, mountain sickness, and starvation; carcasses of horses, asses, and camels in every stage of decomposition, from bodies surrounded by birds of prey to skeletons bleached white from long exposure. Two marches beyond, they arrived at a spot 17,400 ft. above sea level, which served as their headquarters until August. The surface of the plateau was a mass of minute detritus and entirely devoid of vegetation. The explorer's comment on this place was: 'There can surely be few corners of the world which give such an impression of dreariness and utter desolation as this barren region of rocks and stones, which, moreover, during our entire sojourn, was swept continuously by an icy wind and beaten upon by hail and sleet. The line of skeletons which marked the length of the caravan road across the plain is a fitting feature of this desolate country.' Here it was for nearly two-and-a-half months that two of the scientific men, often working day and night, collected meteorological data, carried out aerological investigations, and also took readings of solar radiation on the rare occasions when the atmosphere was clear enough. From here two other members of the party made an independent exploration of the upper basins of the Shyok, Remo, and Yarkand. Later the Indo-Asiatic watershed to the east of the Seachen Glacier as well as the Remo Glacier were explored.

**STACK-A-BIORRACH.**—We have received the following note from Mr. R. M. Barrington:—

'In May 1913 you inserted an account of my ascent in 1883 of the famous stack at St. Kilda called Stack-a-Biorrach.

'Various estimates of its height were then given from old writers, but Heathcote's recent figure of 240 feet was assumed to be probably correct. The Admiralty chart does not help us, though it gives the height of several other stacks.

'A short time ago I came across some barometric readings taken by me at the time with a pocket aneroid, which enable one to estimate the height of Stack-a-Biorrach with a reasonable degree of accuracy.

'There are three points in St. Kilda—over 1000 feet—on which the aneroid was tested, and the difference between the readings at the sea-level and summit recorded; these were the great cliff Conacher, 1220 feet; the summit of Borrera, 1072 feet; and the top of Soa, 1031 feet. These heights are marked on the charts. Tested in this way it was found that this aneroid registered a fall of .01 of an inch for every 8.71 feet ascended, and as the difference between

the readings at the sea-level and the summit of Stack-a-Biorrach was .23 of an inch its height works out at 200 feet almost exactly.

‘ RICHARD M. BARRINGTON.

‘ Fassaroe Bray,  
Co. Wicklow.  
Feb. 3, 1915.

‘ P.S.—Wishing to obtain the latest information in possession of the Admiralty, I have been advised by that office, since writing above, that the height of Stack-a-Biorrach is given as 210 feet in a map published by the Geographical Society, but that the accuracy of that figure is not vouched for.—R. M. B.’

## REVIEW.

*Den Norske Turistforenings Aarbok for 1915.*

THIS annual, as usual, devotes a good part of its space to mountaineering. Herr Tönsberg contributes two papers. The first, which deals with some remarkable achievements on the rock peaks of the Nordland coast, has previously appeared in ‘ Norsk Fjeldsport,’ a book which has already been reviewed in our JOURNAL. The second describes a winter journey on ski through the mountains of Jotunheim. The Norwegians are beginning to discover the possibilities of winter mountaineering and Herr Tönsberg is one of those who are giving them a lead in this direction.

There is a paper on the ascent of Uranaastind in Jotunheim and another on the glacier region at the head of the Aalfotfjord, but for those who are interested in Norwegian mountaineering the principal item is ‘ A Guide to the Climbs in the Horunger, prepared by the Norsk Tindeklub.’ This is an instalment of the first climber’s guide ever published in Norway. A start has rightly been made with the Horunger, for the group contains a finer combination of first-class ice and rock climbing than any other in the country.

Anyone who has followed the development of mountaineering in Norway during the last ten years will know that the authors have brought to their task a very intimate knowledge of their subject, and they are to be heartily congratulated on the result of their labours. There are broad directions for the ascent of each peak by various routes, and there is a wise restraint from those minute descriptions of detail which so often prove useless in practice. I am able to compare the directions for the majority of the routes with memories of finding my own way up or down them, and I believe that they should be sufficient to bring about the finding of the right way by anyone who has judgment and experience enough to make him a fit leader above the snow-line. The division into three classes, difficult, medium and very difficult, is a doubtful advantage when