

daily by the Government official in charge of the observatory, for the purpose of calculating the heights attained. Sun temperatures were also taken with the black bulb thermometer. Above 13,000 ft. the temperature of the sun's rays was found to average considerably higher than in the Indian plain in the warm season. Readings were obtained at altitudes above 17,000 ft. as high as 204° F. Many photographs of the regions visited were secured.

CANADIAN ROCKIES.

MT. GOODSIR (circa 12,000 ft.).—This, the highest peak of the Ottortail group, was ascended in July by Messrs. C. E. Fay (President of the American Alpine Club) and H. C. Parker, with the guides Christian Kaufmann and Christian Häslér.*

ALPINE NOTES.

'THE ALPINE GUIDE.'—Copies of Vol. I. of the new edition of this work, price 12s. net, and of 'Hints and Notes, Practical and Scientific, for Travellers in the Alps' (being a new edition of the General Introduction), price 3s., can be obtained from all booksellers, or from Messrs. Stanford, Charing Cross.

THE LIBRARY CATALOGUE is now printed, and may be obtained, bound in cloth, on application to the Assistant Secretary, 23 Savile Row. Price 3s.; postage, 4d.

THE ALPINE CLUB OBITUARY.—R. W. Broadrick (1902), W. D. Freshfield (1858), Rev. James Robertson (1864).

DISCOVERY ON THE GREAT ALETSCHE GLACIER.—We have received from the Rev. A. Fairbanks the following note, which, if no mistake has been made, indicates a very unusually rapid movement in Alpine ice:

On August 9, 1902, a hat and an alpenstock were lost in a crevasse on the Great Aletsch Glacier, their owner being fortunately recovered unhurt with the help of a rope. The crevasse—certainly 20 ft., probably 25 ft., deep—was situated in the lower part of the broken ice immediately above the upper crossing place from Rieder to Bel Alp, about 500 yards from the E. bank of the glacier.

On September 2, 1903, this hat and stick were found lying on the surface of the glacier in a depression among the lumpy ice at the foot of the 'Fall,' probably about 300 ft. below the spot where they were abandoned the previous year. As I have not been able personally to verify the exact point at which they were found, I cannot make any deductions as to the rate of the glacier movement; but this astounding fact *does* seem to be made clear—that the ice on which they were found (on the surface of the glacier) was, a year before, *below* the place in the crevasse where they were lodged.

* *The Boston Sunday Herald*, August 6, 1903.

THE MOTION OF GLACIERS.—We are indebted for the following note to the 'Morning Post' of October 1, 1908:—

Since Professor Tyndall's time no one in England has paid much attention to the problem of glacier flow; but some instructive experiments have been recently made on a glacier near Vent, in the Tyrol. At a distance of about $1\frac{1}{2}$ mile from the top of the glacier, where its breadth is 2,130 ft., and the height of its surface above sea level 8,580 ft., a boring in the middle reached rock at a depth of 500 ft. The various measurements made resulted in the following conclusions: that the temperature of the ice is at the melting point throughout the whole mass of the glacier; that the bed of the glacier is trough-shaped; that the ice moves more slowly at the bottom than at the surface. The boreholes were filled up with pieces of wood, which will serve for many years to come as indexes of the rate of movement and of surface melting.

TETNULD.—On August 9, what appears to be the second ascent of Tetnuld by Mr. Freshfield's route was made by Messrs. T. G. Longstaff and L. W. Rolleston. Starting from a bivouac on the right bank of the Nageb glacier, they reached the summit in $7\frac{1}{2}$ hrs.' actual going, and descended in $3\frac{1}{2}$ hrs. The state of the snow, which made step-cutting unnecessary, and the tracks of Herren von Ficker and Scheck, who had made the ascent from Adish, combined to shorten the time taken.

THE CAUCASUS IN 1908.—This summer in the Caucasus has been favoured by splendid weather, and many new climbs have been achieved. Besides the new expeditions described elsewhere in this number of the 'Journal,' a number of known expeditions were repeated. Tetnuld received three separate visits; the Laila, Elbruz, Dongusorun, Shekhildi, Saluinan Bashi, and the Betsho Pass were climbed twice; Chatuintau and Charinda complete the list. All the climbs this year were accomplished without guides.

MEMORIAL TO SIR JAMES HECTOR'S SON.—We hear from Mr. Edward Whympier that it is proposed to erect a memorial to the son of Sir James Hector, K.C.M.G., who died quite suddenly at Revelstoke on August 10. It is felt by some of the frequenters of the Canadian Rockies that their sympathy with the man who discovered and brought before the world the region to which they are indebted for so much pleasure might very properly take this form. To give effect to the idea contributions are being invited from Canadian, American, and British mountaineers who have travelled in the Rockies, and may be sent to Edward Whympier, 29 Ludgate Hill, London, E.C.

SCHALLIHOHN FROM THE SCHALLIJOCH. *August 28.*—Mr. Edward A. Broome, with Alois, jun., and Heinrich Pollinger, accomplished this ascent, which was combined with the traverse of the Moming Spitze. Starting from the Schallijoch-Weisshorn Gite, about 4 hrs. above Randa, they went up the Schalliberg glacier and through the icefall (this year rather troublesome) to the pass. From here the rock ridge was taken to the summit (18,052 ft.), all the gendarmes being climbed over except the last

of all, which looked very difficult and was turned to the E. by a steep and unpleasant descent in an iced couloir, a disagreeable traverse, and an equally unpleasant ascent up another couloir. The last slope up to the peak was ice, and took care and time. The rocks throughout the climb were bad and rotten, and great caution always necessary; but the descent to the Ober Schallijoch was easy.*

From the Ober Schallijoch the Moming Spitze (12,695 ft.) was traversed to the S. Moming Col—steep, good rocks on the ascent, and an easier ridge, followed by snow, on the descent. This little peak had only been climbed twice before. From the Moming Col the usual route back to Zermatt, *via* Hohlicht and Rothhorn glaciers, was taken.

Times (actual going): Gite to Schallijoch, 3 hrs.; Schallijoch to Schallihorn, 3½ hrs.; Schallihorn to Ober Schallijoch, ¾ hr.; and to Moming Spitze, also ¾ hr.; thence to Zermatt, 4½ hrs.

TO SKEESTERS.—Mr. W. R. Rickmers will be in Adelboden from December 29 to February 1, and hopes that many members, or friends introduced by members (ladies are also welcome), will take advantage of his offer to teach them skeepng. Terms, none; conditions, enthusiasm and discipline.

At Easter Mr. Rickmers proposes to be on Ben Nevis if a sufficient number of those interested in the sport promise to join him there; otherwise he will be glad to make appointments for the Feldberg (Black Forest) as last year (see 'A. J.,' No. 159). Please address: W. R. Rickmers, Radolfzell, Baden, Germany.

THE NOMENCLATURE OF THE MONT BLANC GROUP.—In view of the number of names in this district in which 'Rouge' already occurs, I wish to withdraw the name 'Les Rouges' for the rocky aiguilles between La Noire and the Aiguille du Géant ('A. J.,' xx. p. 538). At the same time it is desired to change the name of the Pointe du Piolet ('A. J.,' xviii. p. 245) to Pointe des Papillons.

G. YELD.

TOFANA DI ROCES.—Would the correspondent who wrote on this subject be good enough to write again, as his communication has unfortunately been mislaid?

REVIEWS AND NOTICES.

Mes Escalades dans les Alpes et le Caucase. Par A. F. Mummery. Traduit par Maurice Paillon (London: Fisher Unwin. Paris: Lucien Laveur.)

THIS volume, in which the late Mr. Mummery described his 'Climbs in the Alps and the Caucasus,' had an immediate success, owing both to the extraordinary nature of some of the feats de-

* The Schallihorn had been once previously descended by this N. ridge (see *Alpine Journal*, vol. xx. p. 264), but apparently somewhat less on the actual ridge than on this occasion.