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 IN 1902.—T. Brooksbank (1868), W. W. Ford (1877), H. G. S. Lawson (1899), J. Nerot (1877), Rev. H. M. Patch (1882), Rev. J. Sowerby (1864).

PRESENTATION TO THE ALPINE CLUB.—H.R.H. the Duke of the Abruzzi has presented a copy of his book 'La "Stella Polare" nel Mare Artico, 1899–1900,' on which he has written his autograph.

ALPINE HONOUR.—Mr. George Yeld has been elected an honorary member of the Italian Alpine Club.

AN AMERICAN ALPINE CLUB.-We are glad to be able to announce the formation of an American Alpine Club, of which Dr. Charles Fay is the first President. Its objects are defined as the scientific exploration and study of the higher mountain elevations and of the regions lying within or about the Arctic or Antarctic circles; the cultivation of the mountain craft; the promotion and dissemination of knowledge regarding the regions above indicated. Persons eligible for membership are those who have made the ascent of one or more mountain elevations which are considered 'acceptable' to the Board of Directors (no mountain will be allowed in this category which does not attain an altitude 2,000 ft. above the snow-line of its region); those who have conducted explorations in the Arctic or Antarctic tracts, or contributed substantially to a knowledge of the natural phenomena of those regions and of the regions of high mountain elevations; those who are engaged in the special study of (recent) glacial phenomena. Ladies are eligible for membership. Five honorary membersnamely, H.R.H. the Duke of the Abruzzi, Sir W. M. Conway, Mr. Douglas W. Freshfield, General H. W. Greely, and Rear Admiral G. W. Melville-have been appointed by the 'Board of Directors.' The Secretary is Mr. H. G. Bryant, 2013 Walnut Street, Philadelphia.

THE DUTCH ALPINE CLUB, LEYDEN.—We welcome the appearance of this new Alpine Club, and wish it every success.

S. LUIGI VACCARONE.—We learn with great regret of the death of S. L. Vaccarone on February 3. He was not only an able climber but a distinguished writer, and his work, both as a mountaineer and a historian, is well known to all who are interested in the exploration and history of the Southern and Western Alps. He was an honorary member both of the Italian and French Alpine Clubs. THE CANADIAN ROCKIES.—In the 'Times' of December 16 and 27, 1902, will be found two letters, entitled 'Round about the Great Divide,' by Mr. Edward Whymper. Amongst other varied information they contain some notes on the fauna and flora, and may be warmly recommended to those who are interested in the Canadian Rockies.

MOUNT MCKINLEY (over 20,000 ft.).—We are indebted for the following note to 'Science,' N.S. vol. xvii. No. 418, p. 40:—

'Mount McKinley, the highest mountain on the North American continent, was visited last season by Alfred H. Brooks and his party from the United States Geological Survey, of which Mr. D. L. Reaburn was topographer. As far as is known this is the first time the slopes of the peak have been reached by white men, though in 1898 its altitude and moisture were determined from a distance by Robert Muldrow, of the same survey. The mountain is located near the western margin of the Alaskan range, the general name given to the large mountain mass which separates the Yukon and Kuskokwim waters from Cook Inlet drainage. It is a great domeshaped mountain, formed of intrusive rock, towering to an elevation of over 20,000 ft. above the sea level. Though its summit reaches so high an altitude, almost four miles above tide, it probably is not as difficult of ascent as some other Alaskan mountains—for example, Mount St. Elias –because of its relatively high snow line. As the season was well advanced, as much of his itinerary had still to be carried out, and as it was no part of the original plan, Mr. Brooks did not attempt to pass the snow line, though this point was reached. Now that the location and height of the mountain have been established by the exploration of the Geological Survey, travellers and individual explorers will doubtless soon attempt to reach the summit. In anticipation of these attempts Mr. Brooks is preparing a description of the country, giving routes by which the mountain may be reached and other information valuable to those interested in its ascent. His paper will appear in one of the leading geographical magazines. The more elaborate and extended report of the exploration will be published by the Geological Survey at an early date.'

From 'Notes of Exploration by the U.S. Geological Survey 'we take the following :---

'A reconnaissance party in Alaska, in charge of Mr. Alfred Brooks, left Seattle in May with an outfit of twenty pack-horses, and landed at Tyonek, on Cook Inlet, June 1, whence they crossed to the Tanana River and to Rampart, on the Yukon, where work was closed in the late fall. The trip was so arranged as to skirt Mount McKinley and the Great Alaskan Range, with a view to determining the mineral resources of the region, and also of depicting the topography of this unknown area of central Alaska.

⁶ From Tyonek the party made its way north to the Skwentna and Keechatno Rivers, both of which were crossed by swimming, and then took a westerly course to the Great Alaskan Range of mountains. This was crossed by an old Indian trail which led to a comparatively easy pass, and by far the best yet found; it took the party to an altitude of 4,000 ft., and is described by Mr. Brooks as the only feasible one for pack animals. Thence the party crossed one of the forks of the Kuskokwim River, which was followed for 100 miles before they emerged from the mountains. Their route took them along the north-western base of the mountains, and they camped at one place within 10 miles of the summit of Mount McKinley.

'Throughout, a careful route map was made of the territory traversed and of all within sight, and, as a result, all of the western and northern side of the Great Mountain Range was mapped to its summit, as seen from adjacent foothills, with the aid of vertical angles and micrometric measurements. The method employed for measuring distances has proved the most satisfactory yet attempted by these Government expeditions into Alaska. Heretofore the stadia has been employed; also distance measurement by means of a split object glass, by an instrument known as the stenometer. On this trip, however, movable cross hairs in the eye-piece of a telescope were used, the amount of motion of which, or the angle subtended, was measured by a micrometer screw, and by this means it was possible to observe directly distances far in excess of anything possible with the stadia, and much more accurately for any distance. These measurements were made by placing two signal poles at a known distance apart. These were observed from various points in the route travelled, as long as they remained in sight, and the distance between them was measured by the micrometer screw. The observation on this horizontal base of known length gave the resulting distance. The extreme measurement made in this manner was on a base nearly 700 ft. long. The two signals left at each extremity of this were occasionally observed upon up to a distance of 30 miles, which is undoubtedly the greatest distance ever measured directly or by what is known as the range-finder method. Throughout the journey signals were placed on bases varying from 50 ft. to 700 ft. in length, according to the distance from which it was expected they might be seen.

'In skirting the Great Alaskan Range the party made its nearest camp to Mount McKinley at a distance of only 10 miles from the summit in a direct line; thence the surveys were conducted to an altitude of 4,000 ft., within about 9 miles of the summit, and Mr. Brooks climbed to an altitude somewhat greater than this. A number of observations were made on the summit to ascertain its elevation, and the reduction of six of these, considered to be particularly good, indicates that it is somewhat lower than the height previously reported three years ago by the first reconnaissance party of the Geological Survey which observed it. The final computations have not yet been made, but they show that the altitude is very close to 20,000 ft.—perhaps the highest mountain peak in North America.

'The camp at the base of McKinley was on the edge of the snow line, and from this point the mountain rose in a horizontal distance of but 10 miles to a height of 16,000 ft. above the camp. This is probably the most abrupt mountain slope for its height in North America. The summit was found to be double-topped, the northern peak being about 1,000 ft. lower than the southern or highest peak, and $1\frac{3}{4}$ mile distant.

'Another result of this reconnaissance was to distinguish Mount McKinley from the second highest peak of the range—Mount Foraker, which lies about $14\frac{1}{2}$ miles to the S. of it, and reaches an altitude of about 17,000 ft. The pass between the two summits is at about an elevation of 10,000 ft., being the highest prominent mountain pass on the continent.

'The entire slope of this great mountain mass, for a distance of over 50 miles on the north and west sides, and at all points above the snow line at 4,000 ft., is under a mass of snow, which has been consolidated into a permanent névé or glacier, so that the whole mountain range may be said to be ice-capped, almost as is the interior of Greenland. From the snow line big glacial streams fill the larger valleys. In 50 miles six great glaciers were observed and mapped, and these terminate in streams of water in which the more prominent rivers of the western slope rise.

'The territory traversed by this party was of very great extent. The pack train which reached Rampart completed a journey of nearly 800 miles, the longest taken with a pack train in Alaska. In the neighbourhood of the Great Range, especially near Mounts McKinley and Foraker, the country passed through is reported by Messrs. Brooks and Reaburn, both of whom are experienced campaigners in the western United States, as undoubtedly the greatest game country on the continent. The party were never without fresh meat, and they report that on the north slopes of the mountains moose, cariboo, and mountain sheep, or big-horns, were unusually plentiful. The cariboo grazed with the pack animals at night, and as many as 100 sheep were counted in a single flock. Ptarmigan, the finest game bird, were so abundant and so tame that all that were needed for food were easily despatched with sticks or shot with pistols. Bear also were seen in large numbers, especially grizzly, cinnamon, and black bear. In fact the country never having been visited by white men, nor in all probability ever hunted by Indians, all varieties of game, in addition to their abundance, were so tame that they could be approached within a few feet.'

THE MONT BLANC GROUP.—To all who are interested in the Mont Blanc group we can heartily recommend the series of articles on Mont Blanc and its neighbours in the new 'Bollettino' of the C.A.I. for the year 1902 (vol. xxxv. No. 68).

THE 'SPORT CLUB AMPEZZO.'—The 'Sport Club Ampezzo,' headquarters in Cortina d'Ampezzo, was founded on January 24, 1903, and already numbers close on 100 members. The aim of the club is to further and facilitate the interests of every form of winter and summer sport, and membership is open to all—mountaineers, cyclists, skiers, tobogganists, skaters, &c. Subscription, 2 kronen, Austrian money, yearly. Herr E. Terschek, Cortina, is the secretary.

NOTES ON THE 'CLIMBER'S GUIDE TO THE BERNESE OBERLAND,' VOL. I.—Preface, p. x. *Tschingelhorn* (addendum to p. 24).— This route, the Tschingelhorn from the Wetterlücke by the N.E. arête, was done by Mr. E. H. F. Bradby and his guides in July 1892, according to an entry in the Ried visitors' book.

P. 1. *Plattenhörner.*—Another point, 2,622 m., which is marked by a triangle on the Siegfried map, was climbed by the late H. A. Cohen alone on July 3, 1895.

P. 5. Balmhorn, Rte. 3, S. face.—A somewhat more detailed description of this route is given by Mr. Marsh, who did it with Mr. Harold Topham and a porter on September 17, 1892.* From the Fluh Alp they made for the first stream descending from the Fluh glacier, turned 1. just before reaching it, mounted a grassy gully and easy rocks to a small steep snow-field, and traversed this to a ridge of rocks with a conspicuous yellow rock at the top. This led to a small snow-slope and the ridge between the two peaks (3,676 m. and 3,711 m.), close to the lower one, which was reached in 7 hrs. 20 min. (including halts) from Leukerbad. On the descent they glissaded down to the Fluh glacier, and by the rocks below it gained, with some difficulty, the Dala glacier and the Gitzifurgge.

P. 8. Ober Tatlishorn.—The ascent was not made by Messrs. Benecke and Cohen, but by Mr. Benecke alone, in 5 hrs. 40 min. (not 5 hrs.) from Kandersteg.⁺ The suggestion which is quoted from Mr. Benecke's notes, that it would be easy to follow the ridge from this peak to the Altels, is evidently incorrect, as the Herren Wäber took 4³/₄ hrs. to traverse only a portion of the ridge, as stated under Rte. 3 of the Altels.

P. 17. Hockenhorn.—Though a reference is given to the 'Alpine Journal,' vol. xix. p. 64, the route there described, up a rock gully at the junction of the E. and S.E. faces of the peak, which is decidedly more interesting than the ordinary route, is not mentioned.

P. 19. Tellispitzen.—The account given does not make it clear that the ridge can be traversed from end to end, *i.e.* from the glacier until the rocks practically cease. This affords about $4\frac{1}{2}$ hrs. climbing, an improvement on the $2\frac{1}{2}$ hrs. given in the text for an ascent of the highest peak only.

P. 24. *Tschingelhorn.*—The 'conspicuous snow couloir' is often dangerous from falling stones, and it is decidedly preferable to climb the rocks on its E., which are not difficult.

P. 30. Grosshorn.—11,533 ft. is a misprint for 12,533 ft. To the references for Route 3, 'Alpine Journal,' vol. xix. p. 599, should be added, where a route keeping more on the arête from the Schmadrijoch is described.



^{*} Two Seasons in Switzerland, 1895, p. 102.

[†] See Alpine Journal, vol. xvii. p. 584.

P. 78. Breitlauihorn.—The ordinary route (Rte. 1) up this little peak gives only 15 min. easy climbing from the glacier, the whole time required from the Baltschiederjoch being about 1 hr. 40 min. Rte. 2, M. Gallet's, seems to consist in gaining, from the W., the long S. arête (not S. face) and following it.

P. 83. Beich Pass.-10,269 ft. is a misprint for 10,289 ft.

P. 148. Mönch, Rte. 4, by S.W. arête.-Mr. Claude Macdonald has informed me that he did not follow the ridge itself from the Jungfraujoch. The object of his party was to reach the top of the mountain as soon as possible, with a view to descending to the Wengern Alp, and they therefore traversed on the snow below the top, avoiding the actual arête when it was practicable to do so. The only passage of the ridge is therefore Herr Fischer's, which took about 8 hrs., the conditions, however, being very unfavourable.

P. 152, line 6. The name should be Bullock. SKEEING.—Mr. W. R. Rickmers invites members to visit the Feldberg (Black Forest) during the latter half of March and first half of April. He will then be glad to give them lessons (as an amateur) in the new system of Alpine skeeing, which enables a moderately active man to be safe on the most difficult ground after a few days' practice. No infringements of the most orthodox mountaineering rules need be feared. There is more snow than enough till the beginning of May, and plenty of rock-climbing can also be had.

There is a very comfortable large inn near the top (almost 5,000 ft.) and the terms are moderate (35s. to 42s. per week). This hotel can be reached from London in 36 hrs. Travellers leaving Victoria at night will find a through carriage in Flushing which lands them in Freiburg at 10 P.M. The return fare London-Freiburg via Flushing is 5l. (by the Hoek only 2s. less).

Five days running of practice are an ample allowance, and to obtain these at the top a holiday of nine days (or even eight) will suffice.

Please address W. R. Rickmers, Radolfzell (Baden), Germany.

REVIEWS AND NOTICES.

Aconcagua and Tierra del Fuego: a Book of Climbing, Travel, and Exploration. By Sir Martin Conway, President of the Alpine Club and Slade Professor of

Fine Art in the University of Cambridge. Pp. xii + 252, with 27 illustrations and a map. (London : Cassell & Co. n.d.)

In the later part of 1898 Sir Martin Conway halted, on his way back from the Bolivian Andes, first at Valparaiso to visit Aconcagua, and then at Punta Arenas, on the mainlaind side of the Magellan Strait, to see a little of the mountain scenery in Tierra del Fuego. So the present volume is practically a supplement to 'Climbing and Exploration in the Bolivian Andes,' already noticed in this 'Journal.'* On the first of these expeditions fortune stood his

