

DEATH OF JOSEPH CROUX.—Many of our readers will learn, with much regret, the death of this well-known Courmayeur guide, at the comparatively early age of about fifty-seven. It is hoped to publish details of his mountaineering career in the next number.

DEATH OF A VETERAN SWISS SURVEYOR.—The death on January 4 at Bern is announced of Herr Jacky Tayler at the age of eighty-two years. For no less than the last fifty-seven years he had been intimately associated with the Federal Topographical Bureau. He was the last survivor of the cartographers who worked under General Dufour, and was in active employment at the Bureau almost to the end. During the course of his long career Herr Jacky Tayler made many important ascents, but as these were practically all accomplished when surveying he has published little or nothing concerning them. Most of these ascents were in the Bernina, Albula, and Adula ranges. An interesting letter from him dealing with a trip in Vals Bregaglia and Codera [1882] will be found in the S.A.C. Jahrbuch for 1910. His death will be widely regretted.

NOTES ON THE CAUCASUS.

THE expeditions carried out by MM. Egger and Miescher referred to in 'A.J.' xxviii. p. 410 were as follows:

Kurmütschi (4058 m.)—Andurtschi (3914 m.).

Dschan-tugan-Tau (3899 m.).

Baschkara-Tau (4129 m.)—Gadül-Tau (4120 m.) and the snow summit (3900 m.) S. of Gadül.

Elbruz (on ski).

Tschegegem-Basch (4501 m.).

Tiu-Tiu-Basch (4413 m.).

Unnamed points 4369 m. and 4365 m. S. and N. of Freshfield's Pass.

Koja-ugu-ausch-tschaft-Baschi (3877 m.).—'Alpina,' 1914, p. 210.

HIMALAYAN NOTES.

DR. F. DE FILIPPI'S ASIATIC EXPEDITION.—The fourth Report of the work has now been received by the Royal Geographical Society, and by the courtesy of Mr. D. W. Freshfield, its President, we are permitted to reproduce an outline by Dr. de Filippi himself of the work of the expedition:—

The expedition was able to complete the whole of its programme in sixteen months and a half.

In the domain of geophysics, the gravimetrical survey (made by the Survey of India) in the plains of Hindustan has been joined by that of Russian Turkestan (made by the Military Geodetic Institute) by means of a chain of stations across the mountainous regions between Northern India and Central Asia, and through Chinese Turkestan. In addition the complete system has been connected with the European net through a fundamental station, the one of Genoa.

Fourteen stations were made, and in spite of the difficulties met with, on account of the exceptional conditions under which we had to make our observations, they were carried out by the most precise scientific methods. Eight pendulums were always observed. The gravimetric apparatus was always used without a support, and was generally placed on a large rock embedded in the ground, and with this method we obtained always very small variations in the value of the flexion. Where buildings were lacking, a large tent specially constructed was used, in which temperature variations could be maintained within the necessary limits. The geographical co-ordinates of each station were rigorously determined, and topographical data of neighbourhood were collected, with addition of photographic views and panoramas. The expedition was provided with chronometers and astronomical instruments.

On account of the peculiar features of the regions crossed by the expedition, the analysis of the results should lead to interesting conclusions on the influence that mountain masses, altitude, &c., exercise on the value of gravity. The stations were made at heights varying from 5000 to 17,000 feet above sea-level.

At all stations observations were also made to determine magnetic inclination, declination, and force; and at Skardu, taking advantage of the length of our sojourn, the daily magnetic variation was studied.

Wherever the expedition stopped to make geophysical observations, regular meteorological data were collected and pilot-balloons sent off, and, weather permitting, observations of solar radiation were made by means of various pyrheliometers. Particularly remarkable in this respect is the station of Skardu, which was open during four months of the winter 1913—14, and the one on the Depsang plateau at an altitude 17,500 feet, where uninterrupted observations were made for two and a half months.

In collaboration with us, pilot-balloons were sent up from various stations of the Indian Meteorological Department at similar hours, and it is hoped that these observations may lead to some conclusions concerning the circulation of the winds, more especially in regard to the monsoon.

Without the aid of maps and illustrations it is difficult or

impossible to describe the geographical work, therefore I limit myself to a few short observations. The eastern extremity of the chain of the Karakoram mountains was, previous to this expedition, very slightly known. About 1865, a topographer of the Indian Survey, Mr. Johnson, had made surveys of the caravan routes between Ladakh and Central Asia. He had seen the front of a glacier, from which rises the Shyok, one of the principal tributaries of the Indus, and had given it the name of Remo. But he had been unable to show either its extension or the direction and the position of the valleys through which it flows. Nor was he able to ascertain the position of the watershed. The explanation of this glacier and of the neighbouring portion of the Karakoram was the work that the expedition accomplished last summer. The Remo is a glacier of unexpected size and importance. Its area is more than 300 square miles in extent and is formed by three large rivers of ice, each about 20 miles in length and 3 to 5 miles wide. The glacier has many peculiar characteristics, and its basin is, as it were, a transition between valley and plateau. This is only an instance of a more or less general phenomenon which we found prevalent in our explorations of the region. The most interesting fact, undoubtedly, is that from the Remo rises the river Shyok, a tributary of the Indus, discharging its water into the Indian Ocean, and also the Yarkand, one of the large rivers that loses itself in the sands of Central Asia.

The discovery of the source of the river Yarkand led later to a systematic exploration of all its upper basin. This work was much hampered by persistent bad weather. Nevertheless, thanks to the sustained efforts of all, it was possible to triangulate and survey about 5000 square miles of country.

Particularly interesting was the determination of the differences of longitude by means of time signals sent by wireless telegraphy from the wireless station at Lahore, and received simultaneously at the headquarters of the Trigonometrical Survey of India at Dehra Dun, and by us at our various stations. Before and after the transmission local time was determined by star observation. Thus, the difference of longitude could be calculated very exactly, and so it will be possible to show—with the help of the latitudes—the deviation of the plumb-line at all our stations situated in the valley of the Indus, and at the Depsang station. Also exact co-ordinates of the Karakoram and Central Asia stations have been obtained, and this should be of the greatest use to correct the old maps, and for all future topographical work in the region.

The vast mountainous zone situated between Western India and Central Asia did not interfere with the transmission of signals, which were always received quite clearly, even in the distant stations of Yarkand and Kashgar.

I have still to mention the geological researches. These covered a much vaster area than that included in the itinerary of the expedition—viz. a large portion of Balistan and of Ladakh, some of the

high plateaux of Western Tibet, and the eastern extremity of the Karakoram. A large quantity of fossils was collected, which will make it possible to assign a date to the formations crossed by us; the extension and the limit of the past periods of glacial age were also especially studied. It is hoped that with the material collected it will be possible to form some sort of a rational classification of this complicated system of mountains based on their geological composition.

Prof. Dainelli, in his numerous geological excursions, also collected abundant material for the study of the anthropo-geography of Balistan and of Ladakh. Up to the present time this has not been systematically studied, and so many contradictory assertions regarding the races that inhabit these regions have been circulated.

In addition, the expedition has brought back abundant illustrative matter referring to all the fields of its activity.

DIARY OF A TRIP IN BARA BANGHAL, LAHOUL, ZASKAR IN 1914

July 5.—Left Dharmsala; arrived Palampur.

July 6.—Marched from Palampur to Beijnath.

July 7.—In morning, marched to Bir; in afternoon crossed Salethar Pass, 9500 ft.; arrived at Gundla after dark, in rain.

July 8.—Marched to Piakch, in rain.

July 9.—Reached Paniartu bivouac, about 12,000 ft.; some rain on way.

July 10.—Crossed Thamser Pass (15,000 ft.); climbed small, easy peak of 16,000 ft. whilst waiting for coolies to arrive; reached Bara Banghal village same evening. Perfect day.

July 11.—Rest, and obtained fresh coolies to take me into Lahoul. All declared the Bara Banghal or Sha Pass to be impossible and never crossed, but said the Lahmi Pass was close to it and quite easy, and one of my twenty coolies said he knew the way.

July 12.—To 'Drizzle Camp'—a very wet day's march.

July 13.—To camp on moraine of E. Lahmi Glacier, about 13,000 ft.; poor weather, grand scenery, amidst 18–20,000 ft. peaks.

July 14.—Our 'guide' coolie took us up 'Watershed Pass' (about 16,800 ft.), which, instead of leading N., led W. and looked down into W. Lahmi Glacier.

Climbed peak, close by, looking for real pass, and returned defeated and re-pitched camp.

July 15.—With Rifleman Jitram Gurung, crossed 'Watershed Pass,' and reached fine climbers' pass at head of W. Lahmi Glacier, but no good for coolies; returned in evening to find guide and other orderlies had discovered the real pass and moved camp up glacier; very tired after 12 hours' day without halts. Perfect day.

July 16.—Crossed Lahmi Pass, about 17,500 ft., up steep shale and rock; coolies on bare feet marvellous where I had to use hands. Little snow plateau on top, and very dangerous and steep descent in

rotten rock. Went ahead to cut down a little ice-slope to the bergschrund leading to glacier below, and had narrow escape from stones dislodged from above by coolies. Down a long snow nullah till dark and camped in it. Perfect day.

July 17.—After $\frac{1}{2}$ hr. got out of nullah and found ourselves near village Muling in Lahoul. Our pass does not seem to have been used for 14 years, when our guide crossed as a small boy on his father's back. Reached Kyelang same afternoon. Perfect day.

July 18 and 19.—Rest, refit, and up hill behind to photograph.

July 20.—Marched to Jispa; heavy thunderstorm and weather broke badly.

July 21.—Marched to Topo Tokpo nullah; here turned off Baralacha route and went up Palamao nullah; camped in rain.

July 22.—Moved on up nullah to near side nullah running up to Shingo Là Pass. Wet day.

July 23.—Explored up main nullah; weather poor, so decided to cross Shingo Là, hoping to get better weather further N. Sent for coolies.

July 24.—Up to a bivouac about 15,000 ft.

July 25.—Climbed 'Golind Peak,' about 17,800 ft. Morning poor, did not start till 5.15 A.M., easy shale scramble; traversed; difficult descent through cornice and down a steep snow-slope to a glacier in Shingo Là nullah, with Riflemen Jaising Gurung and Jitram Gurung.

July 26.—Struck camp and marched up Shingo Là nullah in rain; left two orderlies at base camp.

July 27.—Crossed Shingo Là (16,722 ft.) in driving snowstorm, nearly lost way and got off track amongst crevasses—ordinarily an easy snow-pass crossed by ponies and yaks. Camped on N. side in Zaskar at about 15,300 ft. on first grass; delightful situation amongst 19–20,000 ft. peaks.

July 28.—Up Camp View Peak, with Rifleman Jaising: easy shale and huge, corniced snow-cap, about 18,500 ft. 10 A.M. to 3 P.M. cloudy.

July 29.—'Snowstorm Peak,' about 18,800 ft., with Rifleman Jaising. A rather strenuous climb in blinding storm most of way, but had route firmly in mind luckily; one very steep snow-wall of 500 ft. impossible but for crampons. 7 A.M. to 2.30 P.M., with only few minutes' halt on account of the cold.

July 30.—Scrambled up the 'Bivouac Arête' alone for photography, about 17,500 ft. 11 A.M. to 2.30 P.M. Fair day; weather improving.

July 31.—Perfect day. Tried 'Shingo Là Dent Blanche,' via the 'Buttress' and 'Buttress Aiguille'—difficult climb, with Rifleman Rabia Thapa; rock and corniced arête. Stopped at about 18,500 ft. by impossible gendarme. Mountain coated in new snow from recent bad weather. Descended to N. side of peak to a glacier and had great difficulty getting off it. 4.50 A.M. to 4.30 P.M.

August 1.—The 'Silver Cone,' about 19,500 ft., with Rifleman Jaising, via Snowstorm Col (at top of same steep snow-slope near Snowstorm Peak). Last 500 ft. very fatiguing, along corniced snow arête in deep snow, though slope gentle. A perfect day. 4.20 A.M. to 2.30 P.M.

Aug. 2.—Climbed 'Camp Nightcap' with Rifleman Rabia. Up steep shale, then rocks, iced couloir, and more rocks; dislodged a stone, which damaged one finger rather badly, but had to cut up final snow-slope and through projecting cornice (the 'Nightcap'). Began to snow before reached top; descended by snow—one pitch of 300 ft. very steep—to Shingo Là; back to camp in driving storm. 8 A.M. to 3 P.M.

Aug. 3.—Snowed all day and bitterly cold—felt it rather, as had left bed and all luxuries, such as chair and table, at base camp.

Aug. 4.—Explored glacier W. of 'Nightcap' with Riflemen Jitram and Ajabsing. 11 A.M.—3 P.M. Back in snowstorm; sent off to Kingdiak, first village in Zaskar, for coolies.

Aug. 5.—Snowed all day.

Aug. 6.—Cleared in morning—perfect day—snow thawing, avalanches crashing all round. Coolies came up.

Aug. 7.—Back over Shingo Là in deep snow—gave coolies bad eyes. Reached base camp at dusk.

Aug. 8.—Up to bivouac on Pyramid Peak, but returned before night in bad weather.

Aug. 9.—Rainy day.

Aug. 10.—Cleared afternoon; hastened towards Pyramid Peak; bivouac in drizzle at about 14,500 ft. Rained in night.

Aug. 11.—Started 5 A.M. in drizzle up Aiguille Noire, about 16,500 ft. up arête; good going to Aiguille Blanche, about 18,000 ft. or more; very difficult descent and traverse of dangerous snow-covered slabs. Sent back Rifleman Ajabsing and Jitram, and went on with Jaising only. Reached a col and got up to the Pyramid Shoulder, about 18,500 ft. 2 P.M., very tiring; first gendarme on real ridge showed us unwisdom of going on; turned back about 18,600 ft. and 2.30 P.M.; difficult descent, reached rucksack 5.40, on Aiguille Noire; 10 minutes' rest, first since 7 A.M. Began to snow, and were benighted at 7 P.M.—*first time we had left lanterns behind*. Eventually reach camp at 11 P.M.

Aug. 12.—Left at 10 A.M. and marched down to Jispa—about 15–18 miles—by 6 P.M.

Aug. 13.—Reached Kyelang, meaning to go off towards W., but found a telegram recalling me to Headquarters; heard first war news.

Aug. 14.—Crossed Rang-ka-la Pass (14,800 ft.) to Gundla, 12 miles.

Aug. 15.—Double marched to Koksar.

Aug. 16.—Double marched over Rahtang Pass, 13,400 ft., to Manali.

Aug. 17.—To Naggar; no coolies to be had, so could not get on.

Aug. 18.—Double marched to Karaun.

Aug. 19.—Three marches, with aid of pony, to Dhelu, over Babboo Pass, 10,000 ft.; men and coolies and bedding did not come till late, or early next day.

Aug. 20.—Three marches, on three ponies, to Dharmsala. (From Jispa to Dharmsala about 180 miles.)

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REVIEWS AND NOTICES.

Freedom. Poems by Geoffrey Winthrop Young, Author of 'Wind and Hill.'
London: Smith, Elder & Co. 1914. 5s. net.

WHEN Mr. Young's previous volume of poems* was reviewed in this Journal, we were told that they who love the mountains truly would find in the author a certain friend. Mr. Young's new volume will assuredly increase the friendship. The very name of 'Freedom' awakens an answering chord in every climber's heart.

For his inspiration Mr. Young goes to nature—to the sea, and the field, and the mountain. He is no mere follower in the footsteps of other singers: convention he regards not. His metres are largely his own, and it is not always on the first perusal that a reader grasps the whole of his meaning. In fact, he sometimes seems to perplex us purposely. But this we forgive him for his freshness, his frankness, his obvious sincerity.

But we are here most concerned with mountains, and for us

There is great easing of the heart,
and cumulance of comfort on high hills.

Here is the first stanza of the poem entitled 'The Lonely Peak':

L'Isolée is a very lovely peak,
looked at from every side,
veiled in sheer darkness for a summer week,
white-veined at winter-tide;
aloof on sombre walls, in wind and sleep,
she makes her lonely stand;
the menace of hoarse glaciers from the deep
dies past on either hand.

Here are two stanzas from 'Mountain Speed':

O the winter joy of the flying of feet over snow-clad hill,
the rush and the snow-leap vying with the flight of our will;
the hiss of our ski, and the sighing of speed that frost cannot still!

Like the pouring of glacier on ocean, in fiords of the sea,
like the flood of a people's devotion, in arms to be free,
is our soaring of passionate motion o'er mountains, the swirl of our ski!

* *Wind and Hill.* Poems by Geoffrey Winthrop Young. See 'A.J.' vol. xxiv. pp. 700-1.