

Bhagat Karak, Kulhia and Raikana seem obviously appropriate. For the great tributary glacier which flows down between the Kamet and Raikana glaciers I suggest the name Strachey. It was explored by Pierre Blanc and flows from the foot of the 24,170-ft. peak triangulated by Strachey.

Throughout the season we all of us felt the altitude more or less when above 18,000 ft. Above 20,000 ft. all suffered. During all the summer that I was employing the Bhotias I never had any reason to complain of them. We were all delighted to have them with us. They were very intelligent and always willing and cheerful. I supplied them with thick clothes and boots, which they took to at once and very kindly. They are perfect cragsmen and would very soon pick up the rudiments of snowcraft. Their powers of endurance are remarkable and they did very well at high altitudes, but the question of how to feed Hindu coolies at high altitudes where they are unable to cook for themselves is a difficult one.

We left Niti on August 13 and sailed from Bombay on September 7. I should like to record that the kind assistance lavished on us by Pandit Bidya Datt Dimri, European panda at Badrinath, was quite invaluable.

I should add that in 1910 we had our first view of Kamet during a flying visit to British Garhwal. We then discovered from the pass at the head of the Khaiam glacier that the upper course of the Ghastole glacier lay between us and Kamet. This glacier is about twice the length given it by the maps and is not straight but describes a right angle in its descent to Ghastole. Thus it provides a highway to the western base of Kamet. In the same year we also ascended a triangulated peak of 20,600 ft. It is a lower summit on the same ridge as the 21,000-ft. Balbala. I suggest for it the name of Balbala West. It can be seen for a long way down the valley of the Mana Pass.

DIARY OF EXPEDITIONS IN THE HIMALAYA MADE BY
MAJOR THE HON. C. G. BRUCE, CAPTAIN O. E. TODD,
HEINRICH FUHRER (GUIDE OF MEYRINGEN), AND
OTHERS.

[The district described lies due N. of Simla, on the main chain of the Himalaya, roughly half way between Kashmir and Kumaon. See Sheets 46 and 47 of the Indian Atlas, 4 miles to an inch. It has not previously been visited by climbers. Major Bruce writes: 'The average traveller in Lahoul sees nothing of it; the

main routes are bare and dusty and Tibetan. Once back in the mountains it is splendid, and not too huge,' &c.]

KULU AND LAHOUL. May 20—August 19, 1912.

May 16 : Arrived at Manali, Kulu, from Simla.

May 20 : Arrived at Dundi Camp, Solang Valley.

May 21 : Practise climb. Self, Fuhrer, and Gurkhas up to 14,500.

May 23 : Pindri Peaks from Dundi, 5 A.M. to 2 P.M., approximate height 16,000 ft. Self only and F.

May 24 : Col E. of Blaitière. (See below, June 24, 25.) Self, F. and Lalbahadur, 1.30 A.M. to 11 P.M. ; approximate height 17,500 ft. ; glacier and snow work ; conditions bad ; return to Dundi Camp.

May 26 : Explored Upper Solang, called Beas Kund. Ascended pass at the head of the Solang Valley and climbed peak N. of pass. Climb to pass difficult and laborious, condition of snow bad ; from pass to peak easy, good going on perfect snow, 1.30 A.M. to 11 P.M. Approximate height 18,000 ft. ; the peak is situated at junction of Kulu, Bara Bhagal, and Lahoul watersheds. Self, F. and Lalbahadur.

May 27 to 29 : Weather bad.

May 30 : Return to Manali.

June 2 : Left for Koksar in Lahoul.

June 3 : Crossed Rohtang Pass, 13,500 ft., to Koksar.

June 4, 5, 6 : Explored Gaphan, and on the 6th climbed to Gaphan main N.E. ridge, approximately 18,000 ft., 1.30 A.M. to 10 P.M. Snow conditions pretty bad ; very steep in parts ; gorgeous weather for once ; a laborious climb. Self, F., Lalbahadur.

June 7 : Left for Hamta Pass.

June 8 : Crossed Hamta ; snowed all day ; camped Chitra (?).

June 9 : Fuhrer and Lalbahadur stayed at Chitra. I returned to Manali ; accident on road.

Since our arrival at Manali, May 16, fresh snow fell high up almost every day, and generally clouds came up by 10 to 11 A.M.

June 10, 11 : F. and Lalbahadur explored main ridge to examine Deotiba group ; climbed two peaks approximately 17,500 and 18,000 ft.

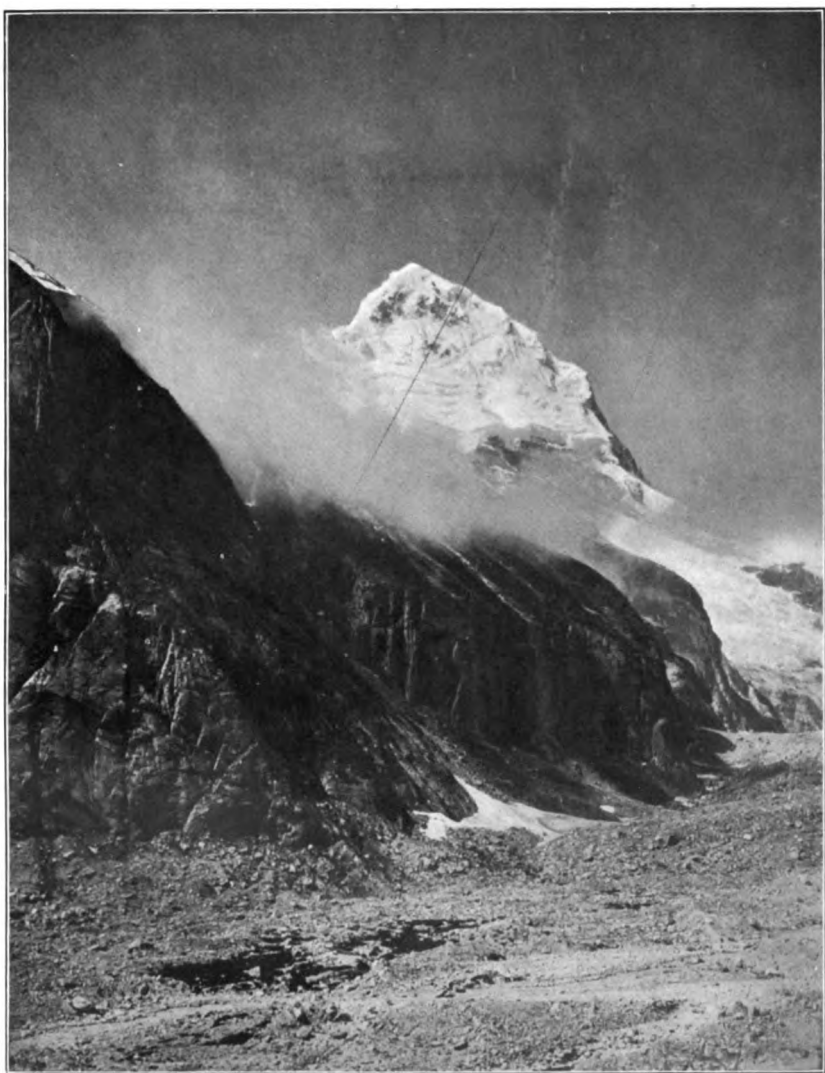
June 12 : Manali Dak Bungalow.

June 14 : Fuhrer and Lalbahadur up Manali Valley. Week spent exploring ridge dividing Solang, Manali, and Bara Bhagal. Two points reached, approximately 18,000 ft.

June 19 : Return Manali Dak Bungalow.

June 20 : Refit and returned to Manali Valley.

June 23 : Successful ascent of Solang Weisshorn, approximately 19,800 ft. Start 1 A.M.



C. F. Meade, photo.

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**NILAKANTA,
From Satopant Glacier, above Kunaling Camp.**

- June 24, 25 : Ascent of two peaks ; no local name ; called by Fuhrer Solang Blaitière (marked Gov. map 19,000 ft.) and Solang Charmoz. All these three climbs were very severe, the rock work in the two last being of the highest order. Snow conditions good. Lalbahadur and Fuhrer.
- June 26 : Return to Manali.
- June 29 : Depart for Lahoul.
- June 30 : Koksar.
- July 1, 2, 3 : Second attack on Gaphan ; on 3rd Lalbahadur and F. reached to within twenty minutes of the top, when they were caught in a 'tourmente' and obliged to descend. Ridge from point reached on 1st attempt steep and winding ; much bad snow and heavily corniced. From point finally reached, no cornice, but narrow and exposed snow arête without difficulty in good weather ; point reached 19,000 ft.
- July 5, 6 : Whole party to Sonapani Valley. I get along with my arm in a sling ; I had previously crossed the Rohtang in the same uncomfortable condition. F. and Lalbahadur explored the Sonapani Glacier. Had some interesting ice work in magnificent surroundings.
- July 7 : To Sissu.
- July 8 : Observation-point above Sissu about 15,000 ft. with Fuhrer.
- July 9 : Fuhrer, Jitman, and Lalbahadur attempt to find a way through the ice-falls leading to the Gondla Massif S. of Sissu. Peak marked 20,300 on Gov. map.
- July 10, 11 : Sissu Schreckhorn (so-called by Fuhrer), which is a peak in the Gaphan Ridge. Magnificent climb. Traverse of peak ; ice, snow, and rock work of high order ; approximately 19,000 ft., probably rather less.
- July 12 : Arrival of Capt. Todd.
- July 14, 15 : Attempt to reach Gondla Peak *via* unnamed nullah S. of Sissa. Horrid climb amidst quite rotten rocks ; impossible to reach Gondla Col ; could make no impression.
- July 16 : To Nyelang.
Capt. T. and Self arrived Gondla at 5 p.m. and left at 6 p.m. after lunching ; tried to race over the Tilbu-ri or Rangka La, 14,800 ft., before dark ; got into bad weather and did not get off till 2 a.m. *Very young performance.* Arm in sling still.
- July 18, 19 : Marched to Patseo.
- July 21 : Exploration of Maiwa Nundinoo north of Patseo.
- July 22 : Camped under mountain at 15,900 ft.
- July 23 : F., Capt. T. and Rifleman Chandra Sing ; ascent of Maiwa Nundinoo, approximately 19,300 ft. In my opinion most difficult piece of climbing done in the Himalaya since Mummery's climbs on the N.W. face of Nanga Parbat. Many and difficult gendarmes ; all the rock

- work difficult and some ice. Final ridge a very narrow snow arête. F. is to be greatly congratulated. 3.30 A.M. to 5.45 P.M. During this climb I moved the camp to the north to near the foot of Kundini.—Camp, 17,000 ft.
- July 25 : Ascent of Kundini ; height approximately 20,300 ft. ; a very fine climb ; snow, rock, and ice ; an all-round mountain ; return by night to Patseo. Fuhrer and Capt. T.
- July 28 : Moved camp up the Kakti Valley (Kakti R. joins Bhaga River four miles above Patseo from the north).
- July 29 : Fuhrer and Self (arm out of sling) to observation-point above first Kakti Camp, approximately 17,600 ft.
- July 30 : Climbed Little Kakti Peak ; topographically very interesting ; approximately 19,200 ft. Self, Todd, Fuhrer. 3 A.M. to 11.30 A.M. from lower camp ; at 12 noon established Soft Stone Camp, 17,600 ft., on Little Kakti Glacier.
- July 31 : Crossed northern watershed and climbed unmarked and unnamed peak, approximately 19,800 ft. ; interesting glacier expedition, and final snow arête ; fine view over the Ningti plains and towards Zanskar. T., F. and Self.
- August 1, 2, 3 : Bad weather : snow and sleet.
- August 4 : Todd and Fuhrer climbed magnificent snow peak called by us the 'Giant' or Todd's Giant. Weather very threatening and cold ; fine rock arête and steep snow ; a very laborious climb, beginning at the camp itself almost. Height 20,500 approximately ; 6.30 A.M. to 4.30 P.M.
- August 6 : Ascent of Kakti Peak at the head of main Kakti valley and glacier. Whole party on two ropes. F., T., Self, and three Gurkhas. Interesting glacier and snow expedition. Wonderful view over Lahoul, Zaskar, and towards Thibet. Height 20,000 ft. approximately ; probably right.
- August 7 : To Patseo.
- August 9 : Up Patseo Nullah.
- August 10 : F. and Todd ascend aiguille on ridge beyond Point X¹ ; 2.30 A.M. to 1 P.M. Much moraine, but firm rock ridge with steep and interesting climbing ; approximate height 19,500 ft.
- August 11, 12 : Bad weather.
- August 13 : Moved camp up to foot of Todd's aiguille ; camped at 16,000 ft.
- August 14 : Ascent of higher aiguille beyond Todd's ; rough and rotten climb ; final arête good and interesting rocks. Wonderful view from summit ; both the Chandra and Bhaga Rivers are seen. Gorgeous view of group to the S., unnamed and unmeasured. Height of our point 20,000 ft. as near as can be. Final climb.