

THE EVEREST EXPEDITION, 1921

DIARY OF G. H. BULLOCK

[In 1960 Mrs. G. H. Bullock presented to the Alpine Club the diary kept by her husband on the 1921 Mount Everest expedition, the first of a long series of British expeditions to the mountain. This diary, which is printed in the present and next succeeding issues of the A.J., was, apparently, the only complete diary kept by members of that party, and is, accordingly, a valuable original document.]

The opportunity has been taken, also, to ask the Mount Everest Foundation, into whose hands have come the various collections of papers of all the Everest expeditions, to print such letters and reports (or abstracts of them) as seemed worth publishing as supplementary material on the early attempts on Everest. If, therefore, the printing of Bullock's diary proves acceptable to readers, we may at a later date print some of the basic records of the launching of the great venture of 1921, and its successors in 1922 and 1924.—T. S. BLAKENEY.]

19 May Thursday. Left Darjeeling 10.45, arrived Peshoke 4.30. (2,800) 17 miles.

20. Left 8.30 arrived Kalimpong 12.45 (4,100) crossed Teesta bridge 710 (? 14 miles). Rained heavily during morning. Saw Mr. Graham of the Mission Schools and the Prime Minister of Bhutan, son of man (Ugyen-dorji) who was agent for British Govt. in Bhutan and vice versa, who apparently was instrumental in the unification of Bhutan under a single permanent Maharaja.

Saw jackal prowling around and white cat which watched me with a glowing eye for about ten minutes, seemed very wild.

21. Rose 6.30. Took chota hazri and left at 7.55 to breakfast with Dr. Graham and his two daughters also MacDonald (actg. pol. agent, half-Lepcha) nice breakfast. Showed us Tibetan ornaments. Not much variety, somewhat disappointed. Preferred one or two Bhutan pieces. Went on $\frac{1}{2}$ mile to Mr. and Mrs. Lloyd's and there waited for others.

Left again 10.45 arrived Pedong 2.45 By upper road. Gradual rise to 9,400 (?) and descent to 4,800 at Pedong. Very little rain.

From Goom onwards typical tropical scenery. Especially dripping forest before descending to Pedong.

Sunday 22nd. Pedong to Ari (about 4,900 ?) about 8 miles. Stopped here to give mules a rest, the forward party being at Rongli (2,700).

Mules in fairly good condition. Only two incapacitated. Steep descent down rough paved road from Pedong and equally steep to Ari, which is two or 3000 ft. below the pass. Left 8.25, bottom of valley 9.45. Reached top of pass, walking alone, in two hours steady pace, 3000 ft. Returned to bungalow in time to escape very heavy showers. Found Bury and sergeant there.

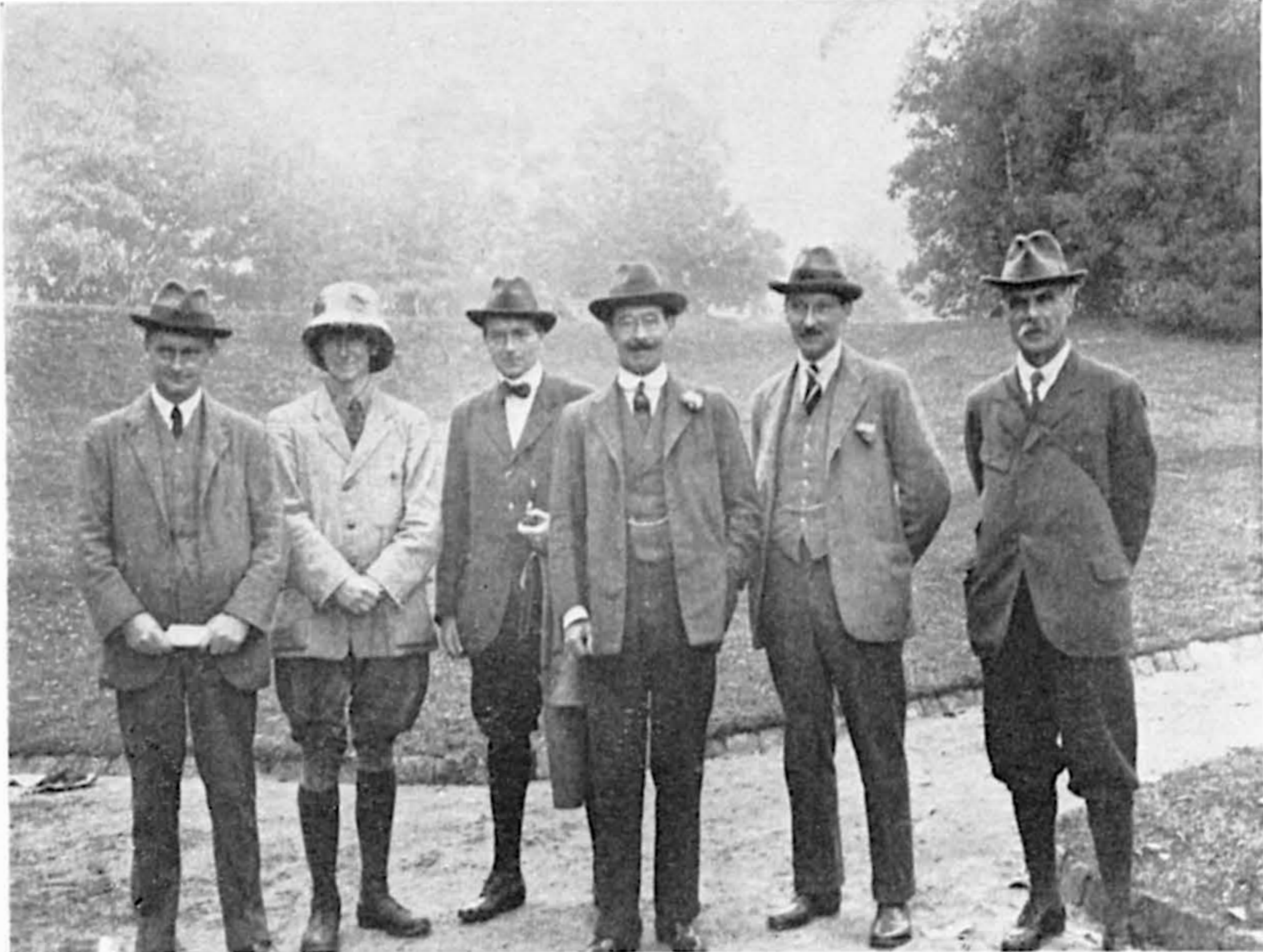
Monday 23. Hot sun. Out after butterflies, did not catch many varieties, one species of dragonfly, all on top of divide. Saw cuckoo chased by two miners, also large vulture or eagle. From Pedong to Ari very well cultivated slopes. Pedong bungalow in full view from here.

Tuesday 24th. Ari to Sedongchen (Padamchen). 6,500 ft. Pleasant descent to Rongli. From there follow valley to Padamchen. Steep ascent last 2000 odd feet after crossing stream. Rough paved road most of way and whole of steep part. Met many wool caravans. Hottest day so far. Caught a number of butterflies. Small bungalow. Heavy rain after our arrival at about 1.30, start at 7.30. Word from Bury that all govt. mules are to be left behind, owing to their inability to cope with local conditions, hills, food etc. Mules were too soft and fat to start with, and long descent of first day was a very bad start. A number of our mules could go on all right. Rode a good part of way. Fine day but no distant views. Rather pretty valley.

Wed. 25th. To Gnatong (? 12,000) 9 miles walked. Steep climb about 4000 feet, followed by easy gradient through forests of Rhododendron, generally bare ground underneath. Occasional pine trees. Rhododendrons on the grassy plateau very beautiful in all shades from orange to purple, pink and white. Later on chiefly grass, with masses of dark purple primula. No views, but no mist locally. 41 new mules went well. None of the party have appreciable mountain sickness. I felt rather tired up last of steep part, and have a little uneasiness in the head now, but not headache. Poor village, good stone bungalow.

Thursday 26th. Gnatong to Kupup, 5 miles, 12,000 ft. about. Mist and rain. We made this march to make the next one easier. My pony's hind feet unshod, and footsore on the stones. Had them shod at Kupup. Road crosses two subsidiary passes. Kupup itself is a pass between valleys to N and S. I had a headache in the evening, and failed to eat any supper, going to bed instead. Bed composed of Rae-burn's two baskets, too narrow for comfort. Passed rather a wakeful night, but not a bad one. Very stormy night of rain.

Friday 27th. Kupup to Yatung (9500). Started at 7.30, rather misty, but no rain. Scenery Scotch or Swiss in appearance. Patches of snow on higher hills. Cold wind on top. 1½ hours to top. Rode about 300 yards from bungalow and walked rest of way to Chumbi valley. Very pretty valley down, fir trees all the way, of two kinds. Rhodo-



Left to right:

A. F. R.
WOLLASTON

G. L.
MALLORY

?

LORD
RONALDSHAY

COL.
HOWARD
BURY

H. RAEBURN



LAMAS AND ACOLYTES AT DONKA MONASTERY, CHUMBI VALLEY.

dendrons, irises, roses, primulas, forgetmenots, etc. Very bad road for animals but quite safe. Passed ruined stone houses, old Chinese fort, etc. and old Yatung. Reached Chumbi valley at Rinchengong, road centre for three passes. Large village. Streets deep in mud. Houses rather Chinese in style, elaborate painted windows. Had tea in shop with small crowd of spectators. Passed several villages with some excellent looking houses, old Chumbi, and arrived at new Yatung (same as new Chumbi). Chumbi valley has a narrow flat bottom, very wide for Sikkim country. Yatung has a British detachment, and trade agent (MacDonald). Mrs M. sent us an excellent lunch. Raeburn and I called on her at 5 and were received by their three daughters, who spoke English excellently. Their mother cannot, she did not appear.

Paid off mules. I am leaving my pony here. Saw bird of bright dark blue with black tail. Also bird with black body, white cap and orange tail. Also hoopoe with orange crest, and very bright black and white markings.

28. Yatung to Gautsa. 12 miles ? 11,500 ft. $4\frac{1}{2}$ hours stiff march. After a couple of miles we pass round a steep bluff, on which is a presumably Chinese fort and presently come to a great expanse of water meadows about 2 miles long perhaps $\frac{1}{2}$ mile wide at most, with nomad tents, horses, cattle and yaks grazing. After crossing this we enter another gorge, where river again passes through large barrier with many windings, but with open bottom practically all the way. Bringing us eventually to Gautsa. No villages in the gorge, but frequent native rest houses. Road ascending steadily. Apparently we are getting out of the gneiss to some extent, with slate, perhaps sedimentary and some white granite outcrops. Pretty spot, high cliffs on either side.

Sunday 29th. Gautsa to Phari, 14,300 ft. Felt unwell and weak owing to digestion upset. But improved somewhat during the day. Two hours of bad road, after which road comes on to long stretch of upland valley of brown grass slopes. Caught a few butterflies here. Valley gradually widens and flattens until it becomes a perfectly flat rather dry plain, with diminutive dwarf rhododendron looking like heather and some other flowers. Gradually rounding a domed hill we caught sight of aiguilles flanking Chomolhari, itself in cloud, and after a few minutes sighted Phari, three miles or more off in the plain. Looked much closer. Cold wind sprang up about now. Rode the last half mile. Also rode a mile after lunch at a stream in the plain.

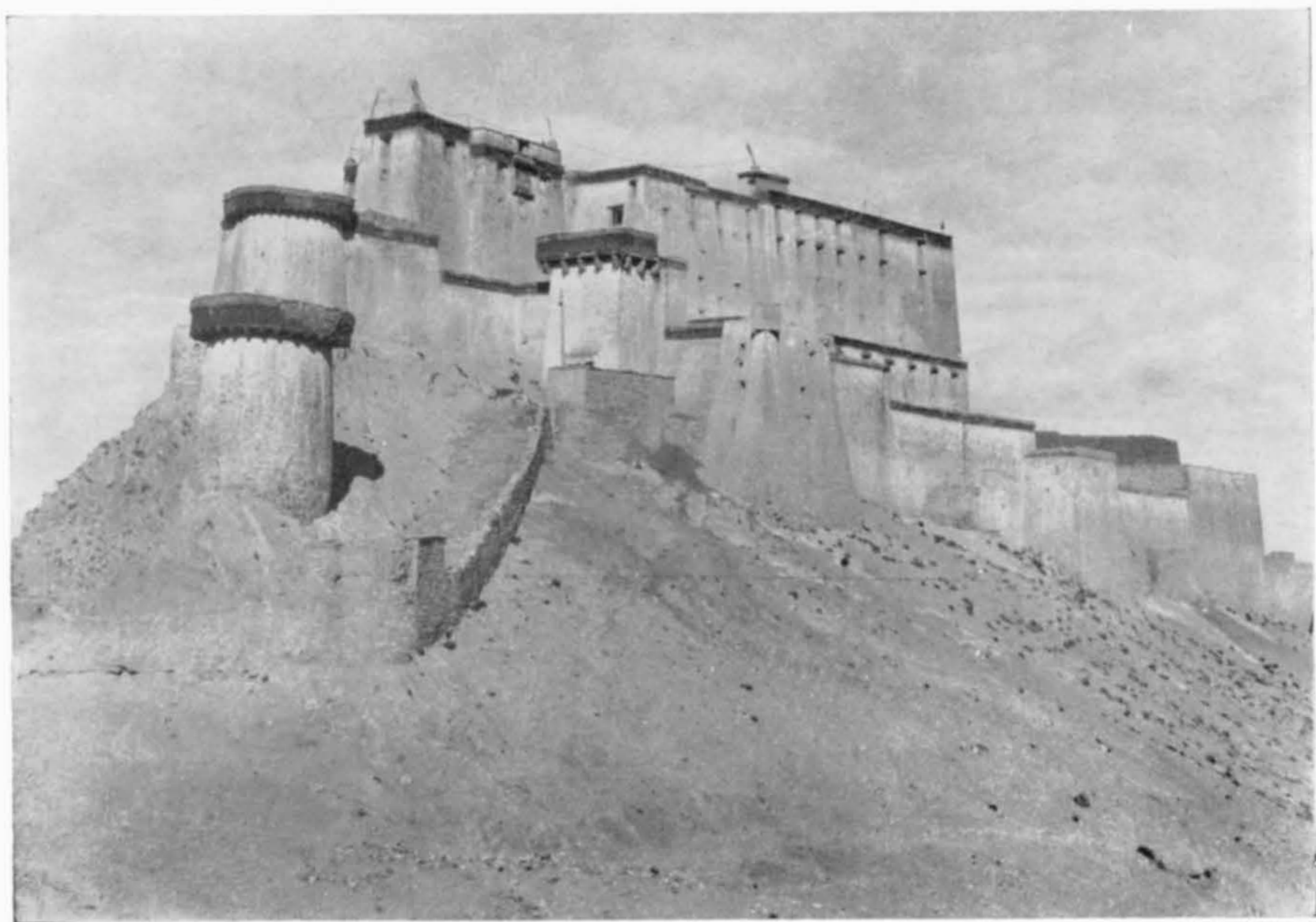
Monday 30th. At Phari.

Kellas who had been pretty sick was still pretty bad with enteritis. Bury rode off to about 17,000 to photograph Chomolhari. Mallory and I walked up to the pass leading into Bhutan about 15,600.

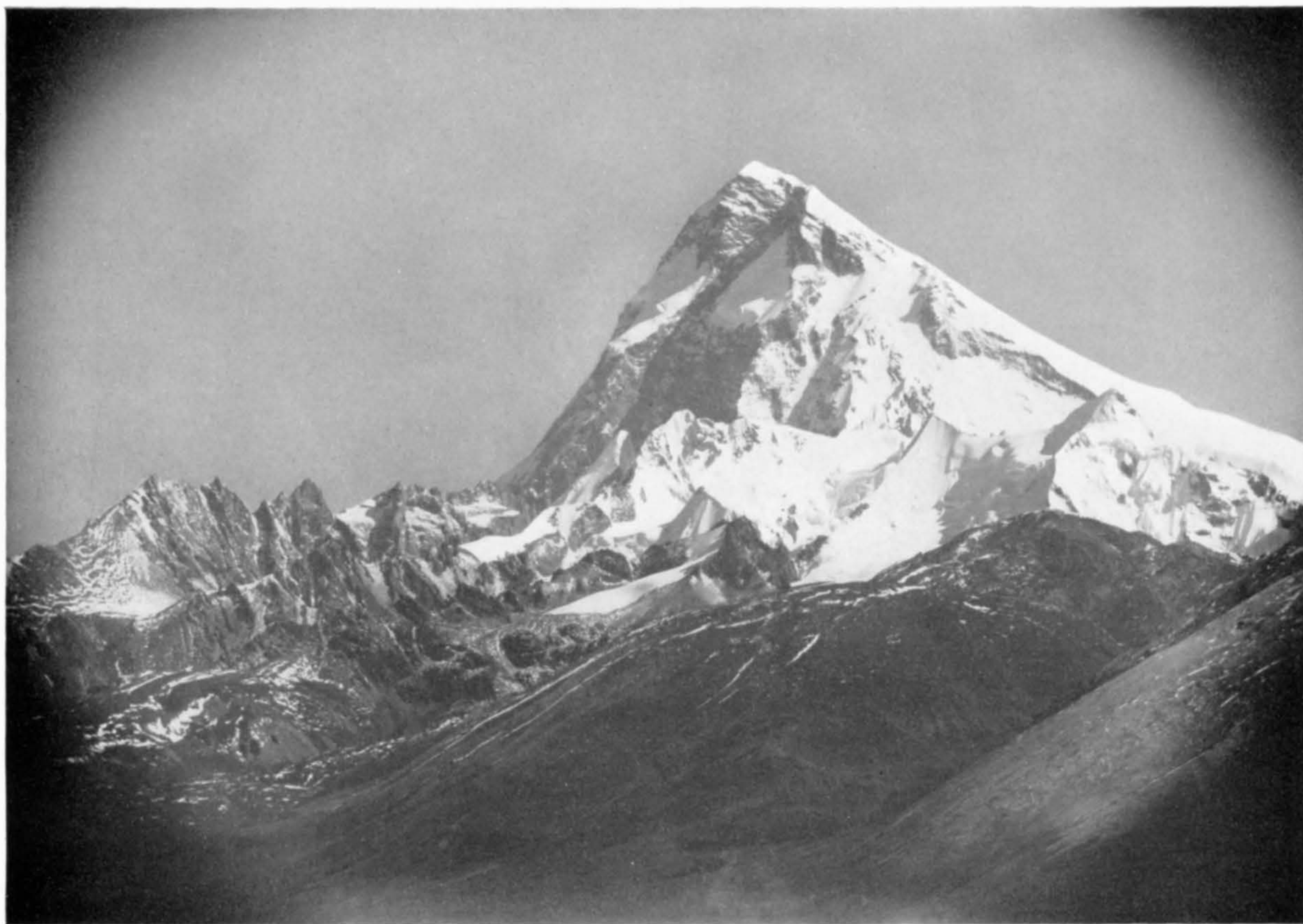
Good views of Chomolhari and Pauhunri. Phari is a filthy place, dusty streets, houses of sods without windows, many rooms apparently



MALLORY AND BULLOCK LEAVING PHARI, MAY 1921.



KAMPA DZONG.



CHOMOLHARI FROM THE SOUTH (Telephoto).

only with interior doors and chimney holes. Luckily quite dry and no mud. Fort is fairly imposing. Has been rebuilt since it was damaged by artillery fire. All people excessively dirty.

At six o'clock four of us went to dine with the Jongpen, who ushered us into a poky little room, quite in the dark. Lights were brought presently. Conversation through our interpreters. Tea with milk, and small cakes and hard dried fruit. Followed by variety of dishes of vegetables and minced meat. Quite good. Spoons provided. Ginger wine and brandy.

Saw hoopoe near house, and several ravens.

Tuesday 31st. To Tuna 21 miles. Started late owing to new transport mules and small donkeys and two bullocks. We were provided with riding mules. Kellas very sick came in chair with four bearers, started last and arrived after dark. Pleasant ride up to pass 15,200, quite flat all the way to Tuna. Rode all way and got rather sore and tired, especially as saddle rough and stirrup broke repeatedly. Raeburn fell off his horse twice and got kicked on head and knee and rolled on as well. R. went to bed after arrival. Ditto Kellas. Saw several kiang with handsome markings, one herd of 12. No one molested them, and they seemed quite tame. Cold wind.

Wed. June 1st. To Dochen, about 12 miles (? 14,700). Pleasant ride, continuation of same valley plain on Lhasa road. Stopped at delightful spring (quite a good sized stream) caught butterfly, frogs, saw Brahmini ducks. Leaving late rode to pass through greener land, got much bogged in quicksand. Fortunately had bottom at about 2 ft. and so mule able to get out. In afternoon went after geese on shores of large lake. Shot two but lost one in water and mud. Retrieved 2nd by wading in 18 in. of mud. Barheaded goose, proved excellent eating later. Kellas still carried.

Thur. June 2nd. To Khetam, about 11 miles. (? 15,000) Leave trade route and up the side valley of Dochen and over pass at left end (? 16,500) pleasant route up, passing jolly little oasis, bad stony pass down. This could be avoided by bearing well to right (N) over another col, and then still keeping to right until plain is reached.

Mallory lost his mule, which returned hill upwards. Went out after gazelle on the plain, but saw nothing. Decent small stream, half way across plain or a little further. Water bad at Khetam. Grey hares seen near hamlet, which is small and miserable. Ruins in yellow mud of a large town stretching right across the plain. Strong cold wind blew during afternoon.

Friday June 3rd. To Kheru, nomad camp of black woollen tents. (15,700 by aneroid) about 10 miles. Westward up the plain to where it divides, then bearing slightly to right up the hillside to a small hidden valley, with a little water which is . . .

Lot of gazelle (burrel) at the head of valley. Caught a number of butterflies near camp. Returned to valley after gazelle, but did not get a shot. Kellas still sick.

Saturday June 4th. To Tatsang, about 15 miles (16,000 by aneroid, probably less). 17,000 Pass is just to right (N) of noticeable 18,500 foot peak, with striking rock band across near summit, showing from both sides. From camp cross minor ridge and from there straight on over pass, and down valley, and then across flat sandy desert to Takang at foot of rock with nunnery. No village.

Mallory, Heron and I went up rounded hill over camp to photograph, not much view. In coombe below 18,500 peak had several shots at burrel without success. Had lunch under wall on pass. Gyaljen arrived to say Kellas, who was riding on a yak had collapsed just below. He was brought on to shelter of wall. I then rode on and fortunately overtook Wollaston in 4 or 5 miles, who went back to Kellas who had been taken to a tent 2 miles from pass. He eventually was brought into camp on an improvised stretcher after dark.

I caught a number of snow trout etc. of small size with butterfly net. Good eating. Many gazelle, also kiang on desert.

Sunday June 5th. To Kampa Dzong 21 or 22 miles. In a straight line up valley westward. Barren slopes, gradual rise about 11 or 12 miles to col 17,500 about, with highest point of containing wall about 18,000. Just beyond pass Bury shot an ovis ammon. Two remaining, I stalked them successfully, but missed an easy shot, and my ejector not working failed to get in another. Pleasant ride down enclosed valley, fairly green. Suddenly closed at bottom, and narrow gorge leads to Kampa at its foot. Completely overawed by a great fort, about 400 ft above on vertical cliffs, with steep slabs at the back. Very striking great stairway, or rather wall, with round crenelated towers etc. Morshead has been camped here eight days. Many presents from the Jongpen.

News brought in that Kellas had died, just beyond pass. Wollaston rides back, and finds his body being carried in, not far from here. Death due to heart failure, brought on presumably by general weakness.

Monday June 6th. Mallory and I went up hill to right of jong and above the older building higher up, nearly 1000 feet. And had excellent view of Everest range, as well as Kanchen. etc. Makalu appears rather solitary well to the left (4°).



Nearer peaks in black. 1 is marked as Makalu in Everest pamphlet,

but is evidently nearer, and may be peak hiding part of Everest from near Kangchenjunga. 2 appears a distant and very high peak. The large snowy range striking N in front of Everest, appears formidable, but seems to have rather low pass almost straight in line with Makalu.

About 11 o'clock we buried Kellas on the lower slope of hill we climbed in morning, in view of Pauhunri, Kangchenjau and Chomionmo (Kellas' three peaks) and of Everest. Large stones were placed over the grave, and a tomb stone is to be erected with his initials and date, in English and Tibetan.

Very hot during day. Secured a 15,000 to 23,000 ft. aneroid. Reading 14,800 for camp at foot of fort.

Thursday June 7th. 9 A.M. A.B. 14,600

7 P.M. A.B. 14,800

June 8. 6.30 A.M. A.B. 14,750

Nothing much of interest. Read 'Hints to Travellers' and Bell's Grammar. Pretty sunset and view of Makalu. Raeburn still has stomach trouble, and Wollaston decides to take him to Lachen, to recruit. W. will return at once.

Wed. June 8th. To Lingga ? 17 miles.

W. and R. left about 8 with a number of coolies. Rest of party waited till 9.45 until new transport asserted itself. Westward over flat plain past Mende and other villages to the (Arun) Yaru, about 15 feet wide and one foot deep. Continue over low shoulder and plain to Lingga. Pleasantly green and large ponds. Native dance by man and boy with drums. Good view of Everest early in morning, but soon covered. Makalu clear much longer. Mallory and I went up the little peak in the plain prominent from near Kampa Dzong. Spent an hour, pleasant view of Yaru plains. Barometer reads 14,100—probably too low.

Th. June 9. To Tinki Dzong 12-13 miles. Over same flat plain, very sandy in parts with a good many pieces of water. The plain would be largely under water with any rain. Tinki lies in a side valley a little northwards. We were plagued with midges on the march. They did not bite, but got into one's ears, eyes etc. and were very irritating.

Any amount of ducks and geese, which are very tame, as they are protected round here. Saw no large game. Hares plentiful.

Friday June 10th. Fine warm morning. Visited Jongpen with Bury. An old Chinese looking man. Received us in temporary quarters, as principal residence is under repair. Buttered tea, very salt and horribly rich. Good macaroni. He showed us ancestral sword with wave markings. Onyx ink-pot. Jade ring, with corpse stains. He had a rather mangy looking cat.

Sat. June 11th. To Chushar. 14 miles. Decided to start early with Mallory and Morshead to take photographs of N. ridge. At 4.15 it was raining warm and cloudy. But at 5.15 it had improved. So we had a hasty breakfast and got off at 5.55. Walked up valley about an hour, and then started up hill side. After about 1000 ft. M. and I needed a rest, but Morshead went straight on for about 2,500. I felt the height a good deal, feeling very tired but no headache, except a little after reaching camp, perhaps due to not wearing glasses, which were left behind. M. was sick, apparently from slight ptomaine poisoning. And Morshead who got in about 6 suffered similarly and more severely. ? mountain sickness. After reaching view point, found clouds obstructed view, and we worked slowly round to Tinki pass ?17,000. 6 miles down from pass to this place, which is round corner to south. Strong S. wind to walk against. The N. range is just across valley, which is broad and flat. Has no snow at this end, which gradually gets lower after the 20,000 ft. rock peak.

Sunday June 12. Chushar to Gyankar-Nangpa. 10 miles. This is the estate of the Phari Jongpen, run by his brother. Had an excellent pony and comfortable saddle. Pleasant ride across dry plain of Yaru which we forded. We were very late in getting off, owing to slowness of transport men, and frequent upsetting of loads. Left about ten. Just before reaching Gyankar we had to make detour to avoid water and bog, and were met by J's brother, (saw geese) who took us to tea and subsequently about 2 o'clock lunch off meat dumplings. Cloudy day, cleared towards evening; looked straight up to peak 20,400. J's brother dined with us. Before dinner watched vigorous games of boys and girls.

Mon. June 13. To Shiling. M. and I left at 7 and rode through unmapped Yaru gorge, which passes far to the N of Everest map, and finally bends sharply W and S and then back again into a desert plain, at far side of which enters Tingri river.

After looking at map we returned to the mouth of gorge, and leaving ponies, climbed up behind the steep cliffs on N side about 11 o'clock, 1000 ft. or more. On top we sat down to watch if clouds clear off E. group. Below we saw caravan ford river at almost identical spot we had chosen. Kangchenjunga a fine sight, 20,400 just showing, also amazing point of 21,050, (This point is near 21050 peak but is not the same) and evidently Makalu just to its right. From these points we established our position, with a minimum triangle of error, by compass bearings. And as Evt. gradually cleared, we took its bearings and of neighbouring peaks to left and right. Some nice rock peaks to N. of us. Very large peak immediately W or SW of Ev. NE ridge of Ev. straight towards us. On E face seems to be very steep slope not far from top. N face seems rock with some snow on it. Lower part perhaps moderate angle, could not see upper part owing to cloud. W ridge possibly easy

angle. High col seemed visible. Lower slopes of whole mountain covered by low intervening range.

4 o'clock came down. Recovered ponies and riding after caravan in small sand storm, found them encamped at spring in middle of desert. Jolly place. Some very perfect crescent dunes. After tea Ev. quite clear, mostly in shadow. Made outline panorama from afternoon's sketch, and prepared paper for bearings of peaks. To bed 10.20.

Tuesday June 14. To Chumbab 12 miles. Left camp early with M. and crossed the Tingri river near its confluence with Arun, crossing wide flats with an inch or two of water. Crossing channel on far side, M.'s pony had to swim. I escaped by a slightly different crossing. In climbing cliffs on other bank, ponies refused steep sand. But we got them up a very steep little gully and bank. We then climbed principal hill on W. bank of river. Took ponies up spur for 1000 feet. From there very steep shale for 1000 feet. Reached N summit; 2 others to S, one to two hundred feet higher. Saw Makalu between the two, and top of Ev. over highest. Took photos. of Makalu and 22,000 peak of N. range. 20,400 peak looked very well and sharp. 21,050 spire rises from snows. Peaks W. of Ev. mostly in cloud. By aneroid 17,650. Starting from below 14000, 4 P.M. Down to mules in half an hour. Crossed river about 3 miles further N. after wide flat, found channel at far bank, my pony found a spot of mud, just before reaching bank, had to jump off and pull him in. Wet to knees. Rather cold riding in dark. Reached Chumbab about 7.30. Up a side glen a little way, on true left bank, soon after valley opens out.

Wed. June 15. To Kyishong 17 miles. Camp was not loaded until 9 o'clock. Rode direct to Kyishong $4\frac{1}{2}$ hours, over wide plain, narrowing at N.W. end. Many villages. Fertile river bed on our left with trees. Keep on true left of Tingri river whole way, over old beaches or lake bottoms. Saw various butterflies on march. But we caught edge of rain storm on arrival, and no more appeared. Sky all cloud-covered. Snow fall on hill close to us.

Th. June 16. To Shekar-Dzong 13 miles. Walked direct. After 6 miles up fairly narrow valley cross small spur and turn N towards Shekar across gravelly plain. After one hour come to clear stream and bridge. Caught a few fish. Shekar stands on slopes of a pinnacle, with jong half way up and shrine on top. Plenty of water and cultivation. We camped in an enclosure with grass and young willows. The camp was attacked by a madman in the night. I chased him out of camp with an ice axe and captured his gun rest.

Friday June 17. Spent at Shekar. There was water in our tent in the morning, and the camp was partially flooded, as the irrigation ditch had been turned on all night. Spent two hours after butterflies. But did not see many and only caught four. Considered climbing very

striking (?) limestone mountain to N.W., which is end of a remarkable ridge, and is considered holy, for views of Everest. But eventually decided to climb ridge on south side of the Bhong Chu.

Saturday June 18th. Shekar to Pangla. Up early to get started. After some delay six coolies and Dukpa, the latter carrying his own bedding were loaded and sent off. We carried two Mummery tents only. Shortly afterwards our ponies arrived, one without stirrups, also without bits. Did not get off till 7. My pony very difficult to mount, and spirited. Always a nuisance to mount, but gradually lost some of its high spirits, though difficult to manage sometimes, e.g. when wishing to follow other pony. Riding fast caught up men near bridge, and continued on towards Bhong Chu. Curiously mistook river for side stream, and so kept edging to left to twin spur into next valley, which eventually proved to be a negligible tributary. I rode ahead to find shortest route and coming to river forded it; pony had to swim under far bank. Got wet on one side well above knee. Was convinced that this was main stream. Rode on to village to enquire, but got no information. Returning met party where I crossed, and Mallory attempting same crossing, got thoroughly soaked. Coolies crossed lower down, water almost to their waists. Long halt to dry etc. Continued up south bank of Bhong Chu, and after some time came to bridge which is direct route from Shekar, about 5 miles, and the one we should have followed. Map is incorrect here. We met the main caravan about 3 o'clock: they had started at 12. Shortly afterwards we turned up a side valley and camped at the village of Pangla. ? 14300 feet. 4.30 P.M.

Sunday June 19th. Rained for some hours during night. Cleared up in morning. M. and I got up at 4 and were off at 4.30, along gently sloping path towards pass to S. Walking steadily we reached point above pass in 1 hour 50 minutes. Mallory ten minutes or so less. Height something like 2000 feet. Both felt very fit. Splendid view from Makalu through Ev. and 27000 ft. peak to peaks W of Tingri. Had a very good view of Ev. system. Appeared to be a comparatively narrow valley in front of us, and beyond that another with many southern branches. There seemed to be a low and rather indefinite ridge at the head of these valleys—forming E container of Tingri Maidan. The 26 and 27 thousanders formed a great ridge with very steep N. face, only apparent point of attack from W end. After about 15 minutes view clouded over all lower ridges. Returned to camp before 8, and left at 9. Reached Memong about 2.30 about 14 miles, after very hot march. Camped on edge of water meadows. Geese and two storks. Small hail storm. Both here and at Tsakor, 5 miles back, we were surrounded by curious natives.

Monday, June 20. Left at 6 and leaving coolies behind, rode on to

Tingri about 9.45. Pleasant ride and horse going nicely. We found E. end of Tingri plain flooded by irrigation canals. Tingri lies in the middle of a plain, sending flat valleys in four or five directions, on slopes of a small rounded hill, on top of which are the four square walls of the jong. We camped in a building of four courts, formerly a Chinese rest house, with mud floors, and paper hanging loose from walls and ceilings.

Tuesday June 21st. Clouds over mountains still. Arrangements for fortnight expedition towards Everest on 23rd, M. and I and Gyaljen and Dukpa with 16 coolies and some donkies. Read 'Three Black Pennies' and Oscar Wilde's Fairy Tales.

Wed. June 22. Rearranged my belongings for fortnight's trip, leaving big kit bag behind. Wrote home. Bought dagger knife and two bracelets, 2 rupees each = 6 rupees. Wollaston arrived having ridden from Shekar Dzong.

Thursday June 23. To Nezungu. (Stone shelter, no house). Mail. Letters and chocolate and fudge. Got coolies off at 6.30 and four bullocks. Left at 7. On rotten pony. Transport tried to make us stop about 8 miles out on wrong side of valley. But we continued straight on, sending bullocks to be changed by Gyaljen. Halted at 2 o'clock where plain begins to rise. Rain storm coming on, we pitched Mummery tent. 6 new half bred yaks arrived at 4, so we continued at 4.30 for about 4 miles, fairly steep. Rising 1000 feet over great moraine, which spreads right across valley, and forces river entirely onto east side, and forms the limit of view from Tingri. At west end of this moraine there is a drop of about 500 feet to valley again. On east side of river is also a large moraine. Camped by river a mile below bridge, at 6.30 15200 by aneroid, Saw kiang and goa.

Friday June 24. To Zambu. Proceeded to bridge at Nazurgu and back upwards over moraine, down on other side and into our valley running S. of E. round the big spur from the south. Up and down path to head of valley and over pass, 16200 by aneroid and camped at Zambu 15100 by aneroid 4 P.M. Top of Everest just visible. Walked a few 100 feet up hill E. of camp and took photograph of 16000 peak. Junction of NW and NE buttresses of Everest just visible. NW face very steep, also W. ridge. Some of coolies rather tired.

Saturday June 25. To Chöyling. Left about 7 for Chöbuk which we reached in $1\frac{1}{4}$ hours. Route either down valley to junction and by bad path along main stream, or better over end of intervening ridge. We took 15 yaks carrying transport, dung etc., paid for 6 only 12 tonkas. At Chöbuk cross the river by cantilever bridge. Yaks and ponies forded. This river runs straight to NW coombe of Everest, and a western branch runs up under 25990 peak [Gyachung Kang] and probably under main ridge between that and Everest. From Chöbuk up the valley across stony flats, then turning southwards, and at the

junction of torrents again almost due south. Finally valley turns a little east and Everest appears full in view at the end; with nothing in between. Shortly afterwards arrived at Monastery of Chöyling and decided to pitch base camp just beyond. Height by aneroid 15900—seems too low. Time $3\frac{1}{2}$ hours from Chöbuk.

Very stony valley, but some grass at our camp. Just above junction of torrents many flowering shrubs in actual river channel. Walked up valley about 20 minutes. There is a village just beyond, and some houses a good deal further along. The ice pinnacles of the flat glacier are visible, which runs quite gently into the coombe under the final cliffs—? 10 miles.

Sunday June 26. Everest perfectly clear, yesterday the base was in cloud. For the first time we see low extension of NW ridge, which apparently terminates abruptly, and may possibly be entirely embraced by the flat glacier without a col. True W ridge is visible beyond, steep, high, and crinkly.

General wash and brush up. Camp arrangements. Everest visible all day, lower slopes partially obscured during afternoon. Prepare for early start tomorrow, and arrangements to move to upper camp the day after. There are a number of monks living in separate houses or huts scattered throughout the valley or district, which is called Rongbuk.

Monday June 27th. Started at 3.30 with Gyaljen and 6 coolies. One coolie sent back because he had come without boots. In the dark (moonlight) we took the left hand path behind the last headland sticking into the river, which took us a good deal up hill, and again another left hand path along the top of some moraines, as far as the first principal side streams, which we succeeded in crossing dry foot, but in the afternoon had to wade lower down. From here we crossed the level to foot of glacier, about 6, and over to true left hand edge, which we followed until 9, fairly easy going, with a halt for breakfast at 7. We saw no ice crossing the glacier, and only an occasional black slope along the edges. At 9 we reached a point where a small side glacier came down. Here we ascended to upper shelf on top of old moraine and followed this as far as the corner of the large glacier from the SW, then descended to the glacier edge again, where the coolies were. Highest point 17850. I was very exhausted. After a meal we crossed the glacier. About the middle we entered a compact region of *penitents*, many of them 50 feet high or more. We spent two hours crossing this part, which at first was very heavy work, involving a lot of step cutting up and down, and much of the bottoms were lakes. When dry the bottoms were covered with shale, from which the dazzling white pinnacles and walls rose vertically or nearly so. After a bit the valleys grew a little more passable and we made better progress. Probably a little lower down the crossing would be quite easy. The coolies went pretty well, but had no knowledge of

how to use the rope. After a long halt and a meal we crossed the remainder of the stone covered glacier, and struggled up to the upper moraine shelf, all pretty tired. At 4 o'clock we passed good camping ground. Soon after this we decided to follow the glacier's edge, and came down along the bank of a large stream which ran into a pool on the glacier edge. We had to work round the glacier side of this, as the stream could not be crossed. After a short halt here in a somewhat exhausted condition, we found a continuous level channel, stony of course, which took us without a break onto the level of the foot of the glacier, 5.45-6.25. Continuing without a halt we reached camp about 8.15. The last half hour pretty dark. The coolies arrived about 20 minutes later. I found in the walk home that by continuous heavy breathing I restored my strength considerably.

Tuesday June 28th. Rested. Fitted crampons. Visited monastery at 5 o'clock. Saw shrine, not particularly interesting after Shekar Dzong. New meeting room just completed, quite ornate. Composite wooden beams used in construction. No prominent monk appeared to show us round. In the morning the lama, who is seeing no one for one year, sent us presents of flour, salt and milk. Slept badly, Aneroid 15800.

Wed. June 29th. After several delays, e.g. filling small tins of kerosene and spirits, etc. we started at 8 with 13 coolie loads, sirdar and cook for upper camp, with 2 Whymper and 2 Mummery tents and rations and fuel for 4 days for 6 coolies. One coolie left in charge of camp, and two sent to Tingri. Men very heavily loaded. Crossed first stream without much trouble. But on reaching glacier at left corner, where stream issues, (aneroid 16400) and climbing up its face, several coolies showed considerable fatigue. Little Nyima especially coughing very badly. Getting down to crack of glacier's edge, proceeded more easily to first drinking water. Long halt here, during which coolies fed, while M. and Gyaljen went up side moraine and explored upper shelf for camping ground, finding water a good long way along. Most of the coolies went up the high and steep moraine and up along shelf very well, but a few had a bad time, Nyima only arriving at 4.15 but very game. Aneroid 17375 (17400). Pleasant place by small lake, good places for tents. Felt a little tired on reaching camp, but soon recovered and walked back to encourage tired coolies. Slight headache later, presumably due to height. But felt better after an indifferent supper. All coolies remained the night contrary to plan.

Thursday June 30th. Fairly good night. Cloudy and misty, snowed a little during night. Cold morning, no sun. Aneroid 17500.

Weather improving we started about 9.30 and proceeding to corner of western glacier crossed it in $1\frac{1}{4}$ hours on moraine. Where the stones of W glacier meet the ice pinnacles of main glacier there is a bank of stones which cross to opposite corner in a straight line, so that the best

route is probably to get across to the pinnacles and follow their edge. Back again and down the glacier edge to the last small cross glacier from which point we ascended to the moraine shelf, and so to camp as a shower came on. I felt pretty slack during the day, and so we decided that Mallory would go without me tomorrow. Dined off tinned chicken. Pretty fair especially the peas. Probably better cold in jelly.

Friday July 1st. Mallory off early after a disastrous struggle with the primus, and a somewhat similar experience the night before. Got up at 8.15 and had a good wash. Caught 3 butterflies and some flies and bees. Shower after lunch. A goa passed above camp. Barometer 17650 at 4.30 p.m. Mallory had a good day and nearly reached col at foot of NW ridge. Passing another col behind peak immediately beyond branch glacier. He did not get clear view of N buttress col but it appeared to be difficult and steep. Slopes on S side of 1st N peak appeared to be very steep. Reached about 19000 feet. Turned back on account of bad weather.

Sat. July 2nd. Rest day. Caught 4 butterflies. Yesterday Gyaljen came up with some supplies and 6 men, quite versus instructions. Returned this morning, and will bring general supplies from Zambu in 3 or more probably 4 days. Today high-climbing box and 2 tins biscuits and my leather bag brought up, the latter by mistake for two guns. Fine day. Aneroid still 17650. Studied Hindustani words.

Sunday July 3rd. Aneroid 17800, 5 A.M. 17650 9 P.M. Started at 5.10 along the moraine shelf and turned up the first side glacier, which we gradually crossed and followed its true right up to upper field beyond moraine. Height by aneroid over 20000. Halted after $1\frac{1}{4}$ hours and again for breakfast at 7.30. Very steep walls high above us on south and of principal peak forming end of valley, easier slopes with snow on glacier top on the north side connecting with main wall of Rongbuk valley. Our aim was to reach col between two first mentioned peaks, both of which were continually dropping stones. Col itself protected by berg schrund, and steep ice and shaly slabs—rotten looking. We made for gap in schrund some distance E of col. Height at schrund by aneroid 20900. Snow had been soft in places, due to small pinnacle formation covered by newer snow, but good on the whole. M. proposed to cut up or across large snow or ice slope to rock buttresses immediately E of couloir leading to col. Tying two ropes together he cut over schrund and out about 100 ft. to a rock, party then followed until only one man left at starting point; I was 4th, man behind me slipped out of steps, and M. was prevailed on to decide that ice traverse was unsafe for party, return was made to schrund 12.5 without much difficulty. Lunched at lower end of upper field at 1 o'clock. Slight headache, and felt very tired remainder of way home, and arrived at

camp with headache which lasted for about an hour. On the whole we went very well at high altitude, and M's step cutting good performance. Our peak must be about 22000. Shower after return, but cleared again.

Monday, July 4th. Bury and Heron arrived about 9.30. Bury's aneroid 14000: Chöyling camp 16300: upper camp 18000: and mine 17600. Bury and Heron going to Kharta and back to Tingri, expect to move about July 20. Report of an old trade route to Kharta this way. Left 2 P.M. Black rock here is hornblende schist. Lower is granite.

Tuesday July 5th. Started at 4.15 up boulder and shale slope on other side of pond, 2500 ft. to top. M. crossed to S arête to take photos. Breakfasted on top about 7.10-7.50. Fine morning. Crossed upper glacier to foot of ridge leading to N end of peak whose black and white wall blocks the end of the valley and glacier. Aneroid at starting 17650, on rocks at foot of ridge about 20650. There is an easy col here to the glaciers under Mary.¹ We left 2 coolies here as they were tired. Halted 9.40-10.10. The ridge is in three parts, first a long snow shoulder, slightly corniced in places, then a snow ridge going up a little more sharply at first to snow rocks followed by a flatter bit, finally a short stretch of rocks leading to the first summit which is snow capped, and about 50 yards of snow or ice which lead to the final peak a few feet higher. Leaving rocks at 10.10 with 4 coolies, these all dropped out before 12 or 12.30, the last just before end of long shoulder. Reached top at 2.45 thoroughly exhausted, and anxious about return. Storm clouds to southwest, and storm down the valley. The sun was hidden and kept snow in a good state, and very luckily we had no wind and the bad weather did not touch us. We got down a good deal more easily than we expected in our exhausted condition and reached coolies at 4.40. Had something to eat and left at 5. No water all day until 6 o'clock. M. led all way up and came last down most of the first rocks. I came last rest of way. The rocks of the ridge were black hornblende and very rotten, quite horizontal. Luckily no difficult climbing. Crossed glacier and reached col at 6.10. From there long descent down boulder and shale slopes 2500 ft. I reached camp at 7.30 (the others earlier) very tired. I was fairly all right descending ridge, but got tired again crossing glacier. Aneroid at starting and on return to camp 17650. Height at top 23100. If correct means a rise of 5450 and if camp is really 18000, this gives a height of 23450!! quite a thousand feet higher than we had expected. I saw a handsome black

¹ 'Mary', a name later disallowed by the Survey of India and R.G.S., was given, apparently, to the peak shown on new R.G.S. map of Everest Region as 22,730 ft., lying about 28° 5' N, 86° 48' E, to the west of the Rongbuk glacier. W. H. Murray, *The Story of Everest*, p.19, uses the name Ri-ring—see also *A. J.* 34, 231.

butterfly with red markings at 21000 feet. M. saw a fly near the top. Owing to presence of clouds and our exhaustion, we did not get very clear ideas of jumble of surrounding peaks. A connecting ridge, very low in places joined us to Mary. A few hundred yards S on our ridge, which turns here, is another peak B a few feet lower, curving W to the col the ridge rises from there sharply to another peak a little lower than us which is the culminating point of the steep black rock face forming S side of our glacier. From peak B a big ridge runs W also, continuing W barrier of the big W glacier. The W. barrier of the Rongbuk glacier also rises to a fairly high peak, curious rock pillar, a few miles to the S. Mary seemed too close to us. Perhaps our distance from Everest is greater than allowed for. The W ridge apparently joins the S or SE peak, and to the W terminates abruptly, with another big peak just beyond. Further to the W is another very high and impossible looking egg shaped peak, with ice cliffs on top, and steep face but no noticeable ridges, continuing the same general direction is an ice peak, then two pointed peaks close together, the first icy, the second rocks, further round is another big rocky peak.

Wed. July 6th. Rested and Gyaljen arrived in the evening with rations from Tingri, but without our new stores. These will be brought tomorrow. Chitayn and party return to Chöyling. Nyima anxious to go on the snow, but had better recuperate down below. Began to snow after dark, and was quite stormy for a while.

Thursday July 7th. Snow on the ground, but soon melted, nearly all gone by 9 or 10. Aneroid showed no sign of bad weather; but had risen this morning, and everything seemed to point to clearing up. But in afternoon weather looks bad again. Morning aneroid 17500. 5 P.M. 17550. Preparations for 3 days in Mummery tents.

Friday July 8th. Started up the shelf with heavy loads. Rounded the second side glacier and turned up to the right along a very good shelf. Weather distinctly bad. Camped on upper shelf, by stream, just beyond where lower shelf ends.

Saturday July 9th. Owing to unpromising weather M. decided to descend to Chöyling, and move coolies to point near where stream has to be crossed. And to bring up base camp tent etc. to upper camp, while I moved whole upper camp here. M. off about 8, and I at 9 with G. and 5 coolies. Arrived camp II later, found only 3 coolies there. But at 1.50 started off with 5 heavy loads. Beastly weather, cold sleet and snow, wind in our faces. Arrived about 5 to 5.30. Coolies went well. Changed tents in driving snow. Coat and trousers wet. Water in pockets of waterproof. Cold night, snowing at four (alarm).

Sunday July 10th. Woken up at 6.30 to sun and fine morning. Began to cloud at 8.30 Showery during day. Dried clothes and put things in order. M. arrived at tea time; cold and snowy evening.



BULLOCK AND PORTERS WEARING SNOW SHOES (JULY 10, 1921).



CHANG LA (NORTH COL) FROM THE WEST (MAIN RONGBUK GLACIER).

Monday July 11th. Bad morning; snowed intermittently during day. Several inches of snow early, but all melted during day. Men unable to make fires, and no goba [yak dung] arrived during day. Two men fetched up a sack from last camp, leaving 4.55 and returning in 3½ hours. Weather cleared after tea; prospects for tomorrow.

Tuesday July 12th. Started at 5.45 across glacier², and got right across, but were held up by the final drop of the séracs. Tried other route but lost nearly three hours. Continued to corner of glacier, and then partly across to island and to right again to central moraine, reached after some wandering through séracs. Home by bad route diagonally across glacier 3.40. 50 min. from breakfast place across glacier to corner. View from corner obscured by mists, but we noticed that Ev. coombe turns sharp to left to turn 1st separate peak of west ridge (W2) which juts far out. A comparatively easy snow col leads to ridge to right of W2. Some snow on upper glacier. Arrived home tired. Came down considerable sérac wall to get off glacier in morning. Mail from Tingri. (Letter No 13) Return mail leaves tomorrow morning. Is snowing.

Wed. July 13th. Started at 4.20—fine morning. Followed previous route across glacier but by avoiding turn to right among *penitents* accomplished crossing with a single easy up and down wall, 85 min. Followed moraine as before to corner, and from there to pass A [i.e. the pass between Pumori and Lingtren] at 9.30 in mist, after 35 min. halt at 8. We had thought the main glacier turned sharply to east. This error was due to thinking the peak NE of the col was W2, as seen in mist the day before. It is however a smaller peak connected by continuous rock ridge with the peak whose foot we had just circled, although wrapped in snow and mist, the other side of the col evidently fell very steeply and must descend to Nepal. (This peak was what we called W2 which is however part of group C and not on true W ridge).³ This disposes of a natural approach from that side. After 15 min. returned to rocks in one hour. Snow fairly good for descent, and firm on the flat. But ascent had involved laborious work for M. I went through completely on way up, but landed on firm snow or ice about 4 feet below surface. Back to camp from rocks in just under two hours. About 55 minutes along moraine, 10 minutes across séracs, and 55 minutes across glacier to camp. I went better today. Sunny on arrival at camp, but later turned to rain or snow.

Thursday July 14th. Rested. Caught a number of butterflies and bees in the morning. Wandered around the camp. There are a

² The West Rongbuk glacier: they were aiming for the col between Pumori and Lingtren, in the hope of reaching the West Cwm of Everest.

³ Group C comprised the peaks south of what is now called the West Cwm—the Lhotse-Nuptse peaks.

number of little streams and shelves watered from the small glacier above us. Coolies went down and only three came up. Luckily we retained two of the descending lot. Appears to be a shortage of rations, must be Gyaljen's fault.

Friday July 15th. Started at 6. Reached central moraine in $\frac{1}{2}$ hour, and walked up to its upper end in ? 45 min. to 1 hr. Here we had interesting view of Ev., especially N buttress, later visible to col. Proceeding along further moraine up NW branch of glacier and across to more central moraine, could see peak south of Everest, somewhat obscured by clouds. Photographs at both places. M. remained here. I proceeded with coolies and snow shoes over soft snow towards Nepalese col.⁴ Did not reach it, and owing to clouds could not see anything. After waiting an hour, returned quickly by a third moraine, on which M. joined us; and followed this all the way home. $2\frac{3}{4}$ hrs. from this turn. Mystery of west coombe still unsettled.

Sat. July 16th. M. off at 2.20 up little peak in middle of glacier to take photographs. He went as far as snow shoulder, perhaps half way up. I climbed 2000 feet up behind camp, starting at 5.15 with kodak, forgot to put on screen for 1st two, and tore film of 2nd lot, consequently got no photos, except two vest pockets. Both back at 9.

Sunday July 17th. Sirdar should have come up in morning with coolies and rations. Only two coolies arrived at 2 with goba, total rations 2 days for 4 men. Raining and snowing steadily. Decided to wait till tomorrow when sirdar is to arrive with coolies and rations. Two men from the gompa came up to encamp. Continued wet all the evening.

Monday July 18th. Fairly fine morning. Sirdar arrived early in this afternoon. Caught a few butterflies in the morning. Moved up to a camp round the corner of the Cs and close to W2. Aneroid 18600. As the coolies were loaded we went east or below the *penitents*, this proved rather laborious, as the lower moraine across the glacier was rather rough going. Carried a rucksack and consequently felt rather slack. Levelled a very comfortable space for the Mummery tent, but rather confined inside. Splendid evening effects on snow.

Tuesday July 19th. Started at 2.45 by glorious moonlight, but we unfortunately soon got into shadow. Although freezing hard, snow was quite soft, and we put on rackets at once, reached col⁵ into west coombe at 5 o'clock. Light clouds over Everest. We found the west coombe was quite 1500 ft. below, with an extremely difficult descent. From the col at the foot of the NW buttress [i.e. the Lho La] was also a

⁴ The Nup La is meant; *cp.* Murray, *op. cit.*, p.23.

⁵ This is the same col as they had reached in mist on July 13, between Pumori and Lingtren. They were looking down on to the Khumbu Glacier, some 2,000 ft. below.

very steep descent over little glacier, quite difficult. Also by both these routes the lower and not the upper coombe is reached, the latter being guarded by a steep and broken glacier.⁶ So that any attack from this side would need very elaborate organisation for a lengthy expedition. Practically out of the question. Took some photographs. Fine steep mountains visible to the south in Nepal with a deep valley running straight S 20 W. Fine sunrise view of Everest, and of George and Mary [see Note under July 4]. Returned to camp 6.30. At 8.30 raised camp, and returning by same route, diverged diagonally down glacier and round the corner by lower route to lake camp at 3.20. Coolies went well. Both M. and I rather slack, especially M. Doubtless partly owing to rucksacks. We are now fairly cognisant of this side of Everest, as M. thinks feasibility of N peak col could only be tested by actual trial. We shall move down to base, and our next effort should be on the 23000 ft. peak to the NE which will probably give a good general view of the E side. So far the N buttress of the E ridge seems the only possible means of ascent.

Wed. July 20th. A good deal of snow during night. 9 men heavily loaded reach new base camp about one. Nicely placed behind old moraine hillocks by clear spring. About 10 minutes from cross stream below glacier. Quite a path between camps in places. Boxes and some rations from Tingri, mail and men's rations expected today or tomorrow. Gyaljen goes down to buy sundries and tsampa. Ang Pasang sent post back to Tingri for spirit.

Thursday July 21st. Rained practically all day and snow through the late afternoon, but did not lie much. Cold and damp. Nothing but milk arrived. Read Spurrell's *Modern Man and his forerunners*. First part very interesting anthropological summary—Neanderthal, Cromagnon and modern man:—Mediterranean, Alpine and northern (also earlier Piltdown = Mediterranean). Makes three divisions present day white, yellow, black, white including Australian and Ainu of Japan. Second part, a study of civilization as created by subjugation of a large peaceful population in fertile country by war-like invaders from barren lands: civilization inevitably decays, as luxury holds the seeds of weakness. Discovery of New World gave a great new lease of life. Peculiarity of present situation is that practically whole world is now civilized. But symptoms of decay are most apparent, especially labour unrest.

Friday July 22. Gyaljen arrives early with insufficient supplies, which he says are difficult to get. Dubious weather, clouds but some sunshine. Took some observations. Position of N2 seems wrong. Packed butterflies for Prof. Poulton.⁷ Rain and snow.

⁶ This is the first sight of the great ice-fall, first climbed in 1951.

⁷ Prof. E. B. Poulton (1856–1943), Professor of Zoology, Oxford.

Saturday July 23rd. A lot of snow fell during night; M. said 8 in. ? But melted rapidly and weather clearing, we started at 2 P.M. with 6 coolies and Gyaljen for a camp on glacier edge round corner of main right glacier and not far below 2nd upper camp. M. took one coolie and pounded up shoulder beyond 1st upper camp for photographs, as apparently all his quarter plates had been taken on the wrong side of the plate. Reached camp about 6.15 and after Mummery [tent] pitched on nice soft sand, explored suitable start for crossing glacier in the morning. Returned about 7. when M. also arrived. M. set alarm for start at 2. Fine views from near camp on arrival.

Sunday, July 24th. Alarm failed to go off. M. woke about 3 and got off at 3.30 to take photographs from shoulder of peak in centre of glacier and returned to base camp about 5, having succeeded well. I got off at 3.45 with Kitat and Thagpa, and crossed the glacier diagonally to the corner of the Rongbuk very successfully in 45 minutes. From here we pounded up the moraine over moderately good ground with one short halt until 6.15 (without hurrying) when we stopped 20 minutes for breakfast. Until then a pall of mist had been over us, and no peaks had been visible except one or two low ones far down the valley. Just before halting for breakfast, the nearest snow ridge above us began to show through, looking immensely far above, and presently the whole coombe began to clear. After breakfast we took to the ice—at the foot of the first big ridge which comes down to the glacier after the corner peak, where there is a small marginal lake, and just before the edge of the glacier and the moraine rises comparatively sharply. Passing through some small séracs without difficulty we got at once onto excellent crisp snow, and proceeded in a straight line for Everest over the very gently rising and practically uncrevassed middle of the glacier: passing beyond the north peak and arriving at a point very near the NE end of the NW buttress of Everest at 8 o'clock, (19000) just as the last mists were fading away. From here there was a full view of the col between Everest and the north peak. A crevassed glacier led up to the col at a perfectly practicable angle. One or two large crevasses seemed to spread pretty well from side to side: but I have no doubt that a way could be made without too much difficulty to the foot of the final slope. The bergschrund seemed to offer no difficulties, as there were several gaps in it. But the final slope of perhaps 800 feet is very steep, and about 400 feet in the middle of it looked particularly severe. On each side of this smooth slope were channels of snow slides. This was doubtless due to the recent snow fall, and could also be to a large extent avoided by keeping as much as possible to the middle of the slope. The best angles would, I think, be utilized by starting from the true left of the slope and crossing gradually over to the top right hand corner: The N. ridge of Everest from the col looked very promising all the way.

I took a number of photographs of the col and several of the surrounding peaks, including the NW buttress. The latter was composed of a light grey slabby rock, apparently quite different from the hornblende and reddish granite of the whole N ridge. This rock was intermingled with the stripy hornblende across the middle of the face of Everest. The light red granite is, I think, also present in the upper part of the face. This face is formed of smooth slopes separated by practically vertical bands: I estimated the angle of the smooth slopes at 45.

The upper part of the NW ridge looks more practicable from this point than from anywhere else. But the end of the great buttress presents a very steep angle for several thousand feet.

At 10.45 we proceeded in 35 min. to the col into Nepal⁸ north of the NW buttress. 19500. There was a good view of the crinkly west ridge, and the bottom of the valley was just visible but both the distant view and the col immediately to the NW were obscured by rising mists.

Just before 12 we started down, but the snow was now very soft, and though we put on snow shoes, it was a hard grind, especially on the last most level part, and it took two hours to get off the glacier. After a halt of half an hour, we started off again at a rapid pace and reached the corner of the cross glacier just under the hour. We crossed this by a bad route in 50 minutes and from here proceeding steadily reached base camp in 2½ hours more just before dark.

(To be concluded.)

⁸ The Lho La: *cp.* Mallory in *Mount Everest; the Reconnaissance*, p. 220 and Murray, *op. cit.*, p. 26.