



Photo. J. R. Young

ELBRUZ FROM THE DONGUSORUN POST, VALLEY OF BAKSAN.

THE ALPINE JOURNAL.

MAY 1914.

(No. 204.)

SOME NEW CLIMBS IN THE CAUCASUS.

By W. N. LING.

(Read before the Alpine Club, November 4, 1913.)

FOR ten years there is no mention in the JOURNAL of any of our members visiting the country of which the possibilities and charm were first brought to the notice of the mountaineering world by the enterprise and activity of Mr. Freshfield and his companions. The Himalaya, the Canadian Rockies, the Peninsula of Sinai, the mountains of Africa and of New Guinea, even of far-away Japan, bear witness that the enterprise and activity of our members are not exhausted, but the mountains of the Caucasus have meanwhile been left to our Continental brethren, and they have not been idle, as the records in the Austrian, Italian, and German-Austrian Journals show. True, the highest peaks have been climbed, but there is still an amplitude of not unworthy summits awaiting the foot of the conqueror. The Caucasus had always exercised a great fascination for me, and when, early in the year, I learnt that my friend and companion in many an Alpine ascent and adventure, Mr. Harold Raeburn, would have two months free this summer, it was quickly decided that an expedition should be organised. The length of time required prevented many from joining, and the party finally consisted of four :—Raeburn, our leader and organiser ; W. G. Johns, our fellow-member ; J. R. Young, of the Scottish Mountaineering Club, photographer to the expedition ; and myself, the unfortunate historian.

We were much indebted to Mr. Woolley for most valuable counsel and help with regard to equipment and topography, and our leader had assimilated all that had been written about the districts we proposed to visit. He went on three days in advance to make arrangements and to buy stores. We took with us from England tents, jams, and soups, in addition to our usual mountaineering outfit. The tents and jams caused some fluttering in the custom-house at the Russian frontier, but a cheerful ignorance of the language brought us through without any disbursement of roubles. We travelled by Flushing, Berlin, and Warsaw to Moscow, where we spent two days, then on to Vladikavkaz, our railhead, a thriving city of some 90,000 inhabitants, where it is possible to buy all the ordinary articles and stores required. The journey from London can be done in five days, which compares favourably with the time required to reach the Rockies.

Here we were fortunate in enlisting as a member of the expedition a young Russian gentleman, Mr. Rembert Martinson, eighteen years of age, and full of enthusiasm for the glaciers, some of which he had visited the previous year. He spoke French and German fluently, and some English, to which he added before the end of the expedition. He was able to make, with a Scottish intonation, the necessary remark when he larked his shins!

He proved an admirable companion and a capable climber, and his powers of endurance were remarkable for one of his years; he had no light task as interpreter and bargainer with the natives.

At Vladikavkaz, too, we secured a cook, Melitan by name, who spoke the dialects. His inability to cook was only equalled by his laziness in the many other jobs for which he was engaged to help us, and an unfortunate taste for vodka led once or twice to his fall, when he managed to escape our vigilance.

Our plan of campaign was to camp at the head of the Tsaya* glen and explore the Adai Khokh† group and attempt the many unclimbed peaks there for two or three weeks, and then to travel along the chain through Suanetia, over the Dongusorun Pass to Elbruz and so back to the line. As this was over three hundred miles and a good portion of it difficult travelling, in addition to the peaks we wished to assault, we had our work

* Tsaya = Mr. Freshfield's Zea.

† The word "Khokh" is pronounced "Choch" (strong guttural), which is the spelling used by the German authorities.

Adai Chock.
↓

Longuta Chock.
↓



J. R. Young, photo.

Swan Electric Engraving Co. Ltd.

*Adai Chock and Longuta Chock,
from S.E. ridge of "Double Peak."*

cut out ; but, thanks to the admirable weather, we were able to carry everything through and reached London only one day later than we had intended ; but we had to work pretty hard for it. We climbed seven peaks in all, five of them new. There was a sixth which we considered we were entitled to count, but our stern leader held that it was not a separate mountain. We were extremely fortunate with the weather, only two days being really bad. The natives said they had not had such a summer for seventy years.

We left Vladikavkaz on July 8 and drove to the small town Alagir on the Mamison Road, where we stayed the night. Starting early next morning we continued our journey along the Mamison Road—busy with traffic, especially with ore from the mines of Misur—to the Cossack post S. Nicolai. Here we had to leave our carriages, and after much bargaining secured six packhorses to convey our baggage up to our proposed camping site in the Tsaya glen, 2500 ft. above. We had a charming walk up azalea- and rose-covered slopes, past the ancient shrine of Rekom, where many heads of tur and deer had been laid from olden times,—and past the new Chalet inn to a pleasant glade by the glacier stream.

The shades of night were falling when we unloaded the baggage and paid off the horsemen, so we contented ourselves with the small tents for the night.

Next day, a lovely sunny day, we chose our site and put up our big tents, one for ourselves and the other for the cook and the baggage.

Wood and water were plentiful, and the views were superb, in front the wooded valley and behind us the glacier and the gleaming snows of Adai Khokh, the White Mountain.

We were able to buy eggs, chickens, and sheep from the natives in the neighbouring village, while milk and bread could be procured from the inn. Our camp was 6300 feet above sea-level.

We were eager to start work, and next morning left camp at five and walked through the woods and up the left moraine of the Tsaya glacier. We then turned up towards the Tsaya Aiguilles, and by scree, grass slopes, and a snow couloir gained a col on the ridge, where the aneroid gave 13,100 feet and the clock 2.30. The descent to the Karissart glacier appeared to be easy. We turned S.W. along the ridge, and by excellent snow and a rock ridge we gained the summit, 13,500 feet, for which we propose the name Tur Khokh, on account of the many traces of the *Capra Caucasica* we saw. The view

was superb, Kaltber and its chain, and the fine cirque at the head of the Tsaya glacier, the glittering snows of Adai Khokh and Songuta, but most of all were our eyes riveted on the towering form of Tschantschachi Khokh, a veritable Dent Blanche, and then and there we decided that an attack must be made on its virgin summit. Reluctantly we turned from this vision of splendour and returned to the col.

A glissade of 1300 feet down the couloir and easy snow helped to a quick return, and by seven we were back at our tents.

After supper, as we sat in the moonlight outside our tents, we descried three figures who proved to be Dr. Ronchetti, Herr Burdanski, and their guide, returning from a night out on the summit of Adai Khokh, where they had been overtaken by a snowstorm, with the unfortunate result that Dr. Ronchetti had got a foot frostbitten and had to return home the following day.

Our appetite was whetted, and next day we started out in the early afternoon with our two light tents, carried by our cook and a porter. We retraced our steps of the previous day, but followed the moraine higher before turning to the Aiguilles. Steep grass slopes took us up to 9800 feet, where we decided to camp. We sent back the porters. The only level spot we could find afforded space for one tent, so three members of the party had to emulate the conies and find shelter in holes in the rocks, but with sleeping-bags we were quite comfortable. I speak as one of the conies. The moon shone brightly when we rose at two, and was succeeded by a lovely dawn. Snow, moraine, then more snow took us up to a rock ridge where the aneroid gave 11,200 feet. Thence we traversed by slopes of scree and snow to a couloir which led to the main ridge, 12,000 feet. This was steep and gave us some good climbing, especially where gendarmes were to be surmounted or turned. The ridge was long, and finally the rocks merged into a steep ice-ridge which led us to the summit, 14,170 feet aneroid, at 3.20 p.m. We had again a splendid view, and made out Dych Tau and Koshtantau, and in the far distance a hazy outline which may have been Elbruz. We were again much impressed by Tschantschachi Khokh. On our ascent we saw many ptarmigan, and propose to call this peak (Ullar) Ullargh Khokh, the local name for the bird. We returned along the ridge and found a lucky escape down a couloir, descending in an hour and forty minutes what had taken us eleven hours to ascend. We had heavy loads from

Skatikom Choch.
↓



J. R. Young, photo.

Swan Electric Engraving Co. Ltd.

From the summit of Tur Choch, looking West.

the bivouac, and reached our main camp at 9.15 P.M., seventeen hours from the start. A thunderstorm the following evening turned to steady rain, and extended the day of rest we had allotted to ourselves into two. It was still misty the morning after, but we set out with two porters and the light tents to camp as high as possible on the Tsaya glacier.

The following day, in fine weather, we went up the icefalls of the Tsaya glacier and climbed the ridge dividing the two branches of the glacier, to a height of 13,800 feet. The ridge was difficult and the rocks very loose, so we did not persevere to the summit, but returned to our bivouac and later descended to camp. When we arrived there at 9.30 we found an uproar. Our camp had been broken into the previous night, one of the tents cut, and a large basket containing precious jams and soups, an Eastern bag belonging to Johns, and several other articles, including the ground-sheet of our tent, had been stolen. The cook alleged that he had been driven off by four men armed with revolvers, but we never got the full story. Next morning the Starshina or Mayor of the village, with a retinue armed to the teeth, came and took the particulars of our loss and then started out to hunt the robbers, but from that day to this we have seen nothing of our belongings.

We went up to our bivouac again the next day, and spent the following one in exploration of the glacier.

On our return to camp we decided to move on to the Kalaki Kasarma, near the summit of the Mamison Pass, to try some of the peaks from there.

We bivouacked between the moraines of the Mamison and Western Saramag glaciers, and leaving at 3.30 A.M. we ascended the moraine to the foot of the first icefall, where we turned to our left and by a snowfield gained the ridge at a height of 12,000 feet. The ridge ran S. to a top which from the valley masks the higher peaks to the N., but we turned N. and followed an easy rock ridge to a great tower, which looked very imposing but was not difficult. The aneroid gave 13,300 feet, but as the ridge continued to rise after a dip we decided to follow it. The weather was misty and it was difficult to get our bearings. There was another gendarme, which we cut, then we came to a snow ridge which led us up to a sharp rock ridge whence the summit of the mountain W. of Freshfield's Pass, which we had seen and admired from the Southern Tsaya glacier a week before, was gained in a few minutes. The time was ten, and the height of this, the real Mamison Khokh, was 13,800 feet. We built a cairn and left

our cards, then went along the ridge to make sure there was no higher point.

We returned by the side ridge until we could take to the snow, which gave us an easy highway back to our bivouac at 1.30.

The following morning was misty, with heavy rain and thunder, so we delayed our start till 5.45, when the weather began to mend. We went up the moraine to the glacier, turned the icefall by the side, and gained the ridge by some loose rocks. The ridge was interesting and not particularly difficult; we reached a minor summit at 11, and the actual summit at 12. The aneroid gave 13,850 feet. We had expected to add another virgin peak to our bag, Saramag Tau, but to our disappointment there was a cairn already there, evidently the work of surveyors. It was cold and we could see very little, so we did not wait. We returned by the ridge till a convenient couloir gave access to the glacier. We skirted below the bergschrund back to the col and down to our camp. After a rest we packed up the tents and made our leisurely way back to the Kasarma, heavily loaded.

With some difficulty we secured an ox-cart the next day, to transport our *impedimenta* over the Mamison Pass to the Kasarma on the other side. The road near the summit was barely clear of snowdrifts. We had a splendid view of Tschantschachi Khokh, the next object of our desire, and from this side too it looked as impregnable to attack as it had done from the other side from which we had already seen it. We hoped to find a weak spot on the western face. There is a shelter at the summit of the pass, inhabited in the summer, and here we were able to buy a precious loaf of bread. We rather rashly left our ox-cart, in charge of the cook and the son of the Cossack, to follow while we took the straight descent to the Kasarma below. Hungrily we waited at the Kasarma till at last the equipage arrived. The cook had got some vodka at the pass, and had lost our bread. We loved him less than ever. Next day was wet and stormy and was spent in cooking, sleeping, and repairs. When it cleared later we saw the peaks white with new snow.

The day after was better, and we left the Kasarma at ten, crossed the ridge to the Twilisa glen and followed the moraine. Then up steep grass slopes and rocks to a point 10,500 feet up by the side of the glacier, where we decided to stop the night. We were a party of four, Young staying below to photograph. We had not brought the small tents, but had our sleeping-bags.



J. R. Young, photo.

Swan Electric Engraving Co. Ltd.

*Tschantschachi Khokh (L.) and The Curtain (R.)
from the Hazarma, Mamison Pass (L. side.) (July 1913.)*

We each chose a shelter, then Raeburn and I went up the glacier to reconnoitre the start for the morning. On our return we had a heavy shower of snow and rain, but it passed off and we had a comfortable enough night. We were up at two and away at four, wearing crampons, which proved to be a great help in the icefalls. They were complicated and required considerable care to negotiate. Above the second fall, at 11,900 feet, we halted for half an hour for second breakfast. After this we had some difficult work through the next icefall to the foot of the steep slope leading to the col on the ridge, which we had marked from the other side as a possible route, 13,050 feet. The weather, which had been fine early, with mist in the valleys, began to deteriorate; the mists followed us up, and it became much colder. We ascended the steep slope to the bergschrund, 13,500 feet, which we crossed with difficulty, and then had some very severe snow and ice work in endeavouring to force a route to the col. It was too icy, however, and after two and a half hours' work we turned to the rocks. There was a horrible couloir of ice and steep slabby rocks, which gave us very hard work, especially the leader, and provided one or two thrills. The first was when an axe came flying down the ice, fortunately within reach of cover-slip, who was able to field it, and the second when the youngest member of the party, who was coming last on the rope, announced that he was feeling unwell and might collapse. The strain of the angle and the cold from inadequate gloves were probably the cause, but heartened by encouraging words, backed by a sip from the flask and the promise of warm dry gloves as soon as we got to the easier ground above, he pulled himself together manfully and came on well. We took again to the slope and our leader had plenty of cutting. More than once we thought we were at the end of our tether, but our leader was indomitable, and by judicious traverses from steep rock ridges to strips of snow where foothold was obtainable we struggled ever upwards and finally came to a snow ridge which led us to the wished-for summit. The height was 14,500 feet and the time 3.45, twelve hours from our bivouac.

Of view there was none and it was very cold, but with the summit of Tschantschachi Khokh under our feet we cared for none of these things. The sun made an effort to break through the mist and light snow which was falling, but soon was lost. We built a cairn and hoisted a miniature Union Jack and a Scottish Lion, which our leader produced, and then

turned to the descent. This required the greatest care on account of the icy conditions, and our progress was slow. We were overtaken by darkness in the icy couloir, and after considerable manœuvring we were able to gain with difficulty a small rock platform at its side (10 p.m.), where we spent the night, at 13,700 feet. The wind had dropped and the snow ceased, but it was cold enough. We kept ourselves awake by singing choruses, and the night passed wonderfully quickly. We started again about five, descended a difficult chimney to the glacier, and regained our bivouac at 8.30. Here welcome food and an hour's rest put us in good trim for the walk back to the Kasarma. The crampons had proved invaluable, but were probably the cause of slight frostbite for two of the party.

To our great regret, Johns now had to return home and the party was reduced to four. We sent the baggage on to Gebi with the cook, while we descended to the small town Oni to replenish our stores. The trees were magnificent, and we had a fine view of Bubis. Next day we got our shopping done and reached Gebi after a six hours' drive. This was the last we saw of a driving road or a wheeled vehicle till we were well down the Baksan Valley, near Urusbieh. We were welcomed by the Starshina and housed in the school.

Our next objective was Ushkul, in the Ingur Valley, where we wished to attempt the ascent of the virgin Nuamquam in the Shkara group. A day was spent bargaining for horses to take the baggage, and it was only after two of the party had gone off to the neighbouring village of Schiora that the men of Gebi came to terms. The next morning, after much talking and delay, we got away and had a delightful walk up the Rion Valley. We were much impressed with the beauty of this valley and the side glens running into it. We pitched our tents near the junction of the streams, with a fine view of Edena Tau. Next day we crossed the Vaziszhvari Pass, 9280 feet, and dropped down to the Skenis-skali, where we had a most adventurous time, crossing and recrossing the glacier stream and taking the horses over some very difficult ground. In many places there was one man at the head and one man at the tail. We hoped to have got over to the Zeskho Valley that day, but the going was too difficult, so we camped near a kosh below the pass crossed by Mr. Freshfield.

A heavy thunderstorm came on before we could get the tents pitched, and we and our baggage got wet, and when we had them pitched the fond attentions of the goats prevented much sleep.



J. R. Young, photo.

Luan Electric Engraving Co. Ltd.

*Edena Tau, from Rion Valley.
(Aug. 1913.)*

The following morning we crossed the pass with difficulty, the horses had to be unloaded, the baggage carried over by the men, and the horses roped down steep slopes and a gully. It took four hours to do the 600 feet over the pass and down to the easier ground on the other side. The valley of the Zeskho was very beautiful, and the vegetation sub-tropical. The track wound round the hillside, with many ravines which were difficult for the horses. At nightfall we reached the hamlet of Zena in a beautiful valley, and the following day crossed the Zagar Pass to Ushkul, getting a magnificent view of Mr. Woolley's peak Ailama. We had earned a day's rest after our exertions, and spent it basking in the sun and gazing at the splendid icefall of Shkara.

We set off with two porters next morning to bivouac for our attempt on Nuamquam. We walked up the valley of the Ingur on its right bank, and when the time came to cross one of our porters waded the stream, caught a horse, and took each of us in turn across behind him. The porters would not go further than the top of the moraine, so we had to carry everything ourselves from there up a gully and steep slopes to the edge of the glacier. We put up the two small tents. In the evening it was very wet, with a strong wind, but improved later.

We were up at one and away at three, roping and putting on our crampons at the bivouac. The glacier was fairly easy, with occasional trouble from seracs. At six we had a short halt for food on the rocks, with a fine view of sunrise on Shkara; half an hour took us above the icefall. Then steep slopes of snow lying on ice led us up to the bergschrund, 13,350 feet. The angle above this was steep—we measured 51° and 54°—and cutting was necessary. After this a rock-and-snow arête, steep, but not particularly difficult, brought us out on the main ridge at 9.45, the aneroid reading 13,980 feet, which was rather high.

A snow ridge, corniced in parts, was our path to the highest rock summit, 14,100 feet aneroid, where we had a short halt for food; then on to the highest point, which was a snow summit, 14,200 feet.

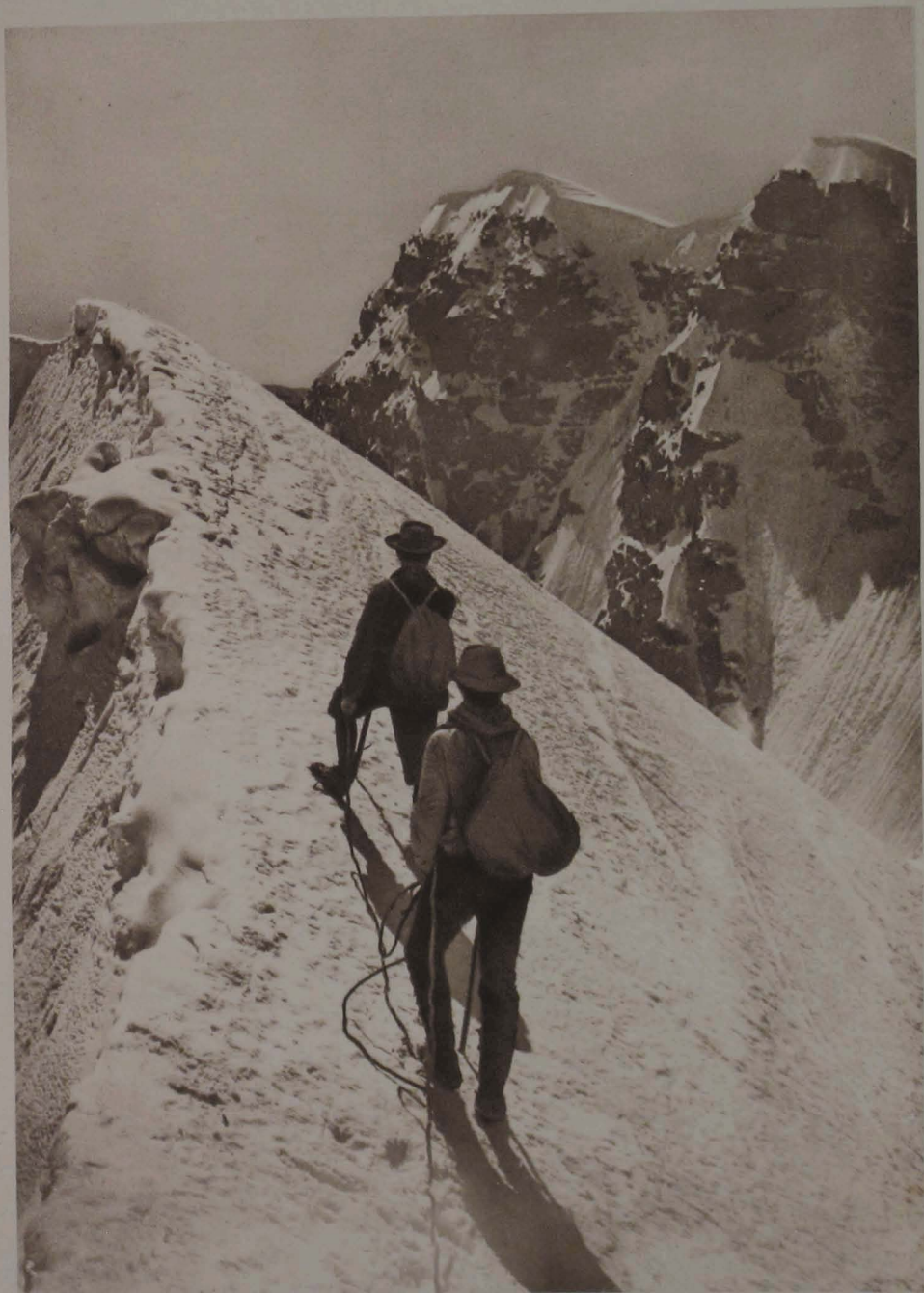
We had a magnificent view of the giants above the Dych-su glacier, Koshtantau, Dych Tau, Mishirgi Tau, and the graceful Ailama, while on the other side Shkara raised its stupendous crest. We went on to the third summit and started down the S. ridge, which consists of broken rocks and gendarmes. This was slow work, so we turned our attention to a couloir which

looked feasible. The snow was in treacherous condition and great care was necessary, the bottom bit being particularly difficult. We got on to the glacier at 7.30, and half an hour brought us back to our bivouac. Next morning we returned to Ushkul and arranged for horses to continue our journey to Betsho. We had the usual difficulty in getting away the day after. There was a fine row between the priest, who had procured horses for us, and the chief of the horsemen. It appeared that the priest was intending to pocket part of the price for himself, and after they had nearly come to blows the priest returned the money we had advanced to him, and left us to deal with the horsemen ourselves.

The track runs high above the mighty gorge of the Ingur, and after two hours' going, as we rounded a corner on the hillside, there burst upon our wondering gaze the tremendous twin-towered Ushba. Further on, Gestola and Tetnuld claimed our admiration. Young stopped to photograph while we, thinking he followed, went on to Chalde in search of food. Unfortunately the track divides here, one going by the banks of the Ingur, while the other mounts high up past the village of Adish. We waited an hour and a half and then concluded that he would join the track farther on. By meadow and wood on the banks of the Ingur we went on to Bogesch, where the track turns up to the Ugur Pass over to the Mestia Valley.

We waited till nightfall, but there were no signs of the wanderer, so early next morning three of the party, mounted on the packhorses, rode up to Adish and there learnt that he had passed through the previous afternoon. Losing us and having no means of asking questions, the brilliant idea struck him of drawing four packhorses. The natives smiled and said 'Karacho' ('All right'), which he took to mean that we were ahead, whereas their approval was merely testimony to the excellence of his drawing. We finally overtook him at Betsho.

We put up at the resthouse the first night, then pitched our tents as a base for an attack on Ushba. The beautiful birches and other subjects attracted the photographer more than the mountain, so Raeburn, Martinson, and I, with Muratbi, the trusty porter of previous expeditions, took the Mummery tent up to the moraine of the Gul glacier. Our scheme was to cross the pass to the Western branch of the Chalaat glacier and to attack the Eastern face of the N. peak from the highest point we could reach on this glacier. We sent back the porter.

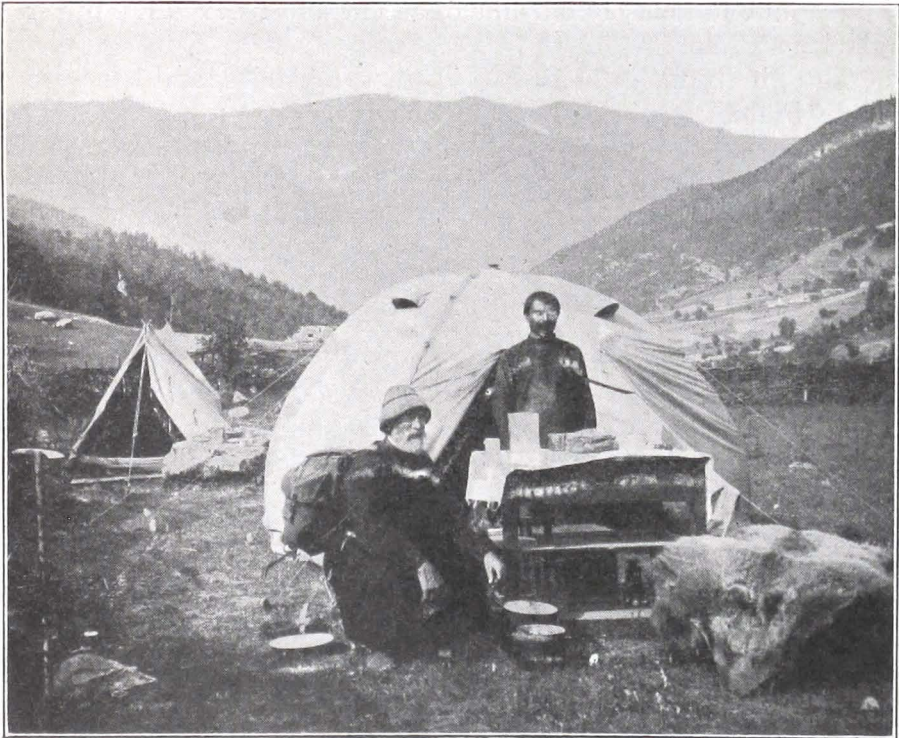


J. R. Young, photo.

Loan Electric Engraving Co. Ltd.

The two snow tops of Nuamquam.
(Aug. 1913.)

Next morning we crossed the ridge S. of Mr. Freshfield's Gulba, where we saw six tur, and descended 1200 feet to the glacier. The seracs gave us some trouble and the icefall was most complicated, but we worried through by the skilful work of our leader and gained the rocks. Above the fall, easy snow slopes took us up to the schrund and we got on to the Eastern face at a height of 11,100 feet at noon, and halted for our mid-day meal. The sun was hot and our loads were heavy,

*J. R. Young, Photo]*

MURATBI (PORTER) AND MELITAN (COOK), CAMP BETSHO

but the rocks, though steep, were sound and we made height rapidly. We got short stretches of snow, but for the most part were on rock. At 13,000 feet we found a suitable place for a gîte, an overhung shelf by the side of a couloir, where water was running. It was five o'clock and the sun was off the face, but while we prepared our meal an enormous avalanche roared down the couloir with a rushing wind which powdered us with snow. We had a fairly comfortable night in our eyrie, with brilliant moon and starlight. At 4.45 we were on the way again, crossed the couloir, and ascended by difficult rocks and

snow. A sensational crack brought us up to a vertical face of rock, which was quite impossible. Before us lay a couloir, which would have brought us to a ridge, very steep and icy, but perhaps possible, but down the couloir roared avalanche after avalanche and to persevere would have meant certain destruction. It was ten o'clock and the height 14,000 feet. It was a sore disappointment, but we had no choice. The descent was difficult, and we had to rush the couloir back to our gîte.

We followed closely our line of ascent and reached the upper glacier at 7.45.

The kindly moon helped us down the glacier, and we were lucky in finding a bridge over one huge crevasse ; but the next one beat us, and we had to find a way down the rocks at the side. As we passed at a safe distance below some huge boulders on the glacier, there was a tremendous fall of rock, while vivid flashes and a pall of smoke floated over the glacier, temporarily obscuring the moonlight. The 1200 feet up to the col was a heavy grind, and it was 3 A.M. before we regained our tent. The faithful Muratbi was there, and when we had had some sleep we decided to send him down to Betsho for more provisions while we rested above, and then made an attack on the S. peak. Martinson, content with the attempt on the N. peak, went down with him. Raeburn and I had a restful but hungry day till Muratbi returned at six with ample supplies. The party, now reduced to two, started at five with heavy loads, and crossed the moraine to the glacier, where we put on our crampons to go up the big couloir ; the top of it was steep and hard. Then some steep, loose rocks and a stiff chimney brought us to the foot of a narrow couloir, which ran steeply up to a small col. This was difficult, loose snow on ice and treacherous rocks at the side, while the top was overhanging. We gained the col, 12,820 feet, at 11.35. Here we got our first view of Elbruz, its mighty flanks almost primrose colour in the bright sunlight. From the col we went down to some very slabby rocks covered with scree. Beyond this there should have been a snowfield to take us up to the rocks where Mr. Rickmer's party spent the night, but after the fine weather this was bare ice, down which stones were falling constantly, so that route was barred. We tried a sensational ledge, which we hoped might lead above the ice, but this failed us.

We returned to the col, and Raeburn tried valiantly to get up the ridge, but the overhang was too great. Near the col we found a tin with Schulze's card and a note of his first ascent.



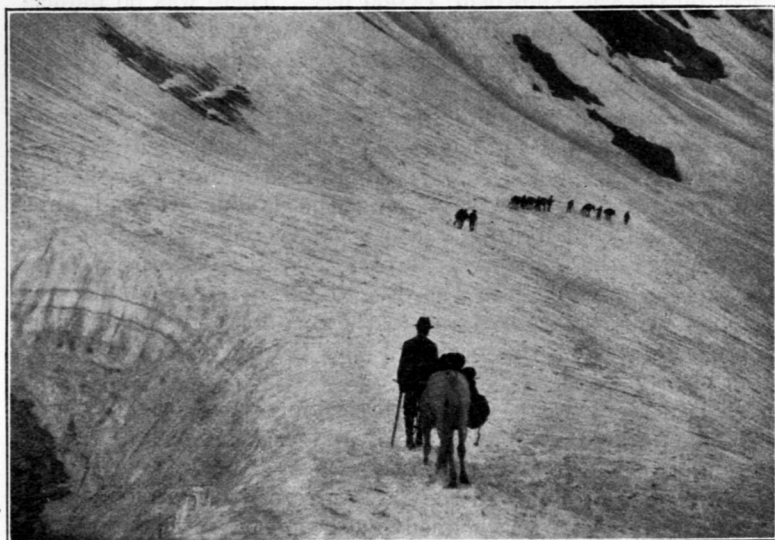
J. R. Young, photo.

Swan Electric Engraving Co. Ltd.

*Ushba, S. W. Peak, (R.) and Mazeri Tau (L.)
from above Betsko. (Aug. 1913.)*

The conditions were impossible and there was nothing for it but to retreat as philosophically as we could. We found a ledge near the col and had a fair night, though it could not be called warm. Sunset and the dawn on Elbruz were wonderful. A little over four hours, most of it spent in the icy couloir, took us back to our tent next morning, and later we descended to Betsho.

Time was flying and we had to push on to Elbruz, so after leaving our two big tents to the care of the Russian Resident



J. R. Young, Photo]

BAGGAGE TRAIN CROSSING THE DONGUSORUN PASS

for future travellers, we started next day for the Dongusorun Pass with four riding and three pack horses. After enjoying the kindly hospitality of Prince and Princess Dadesh Kilian at Ezeri, we reached the village of Lakuri after a heavy thunder-and-rain storm.

Next day we had some fine scenery, the great gorge of the Ingur and the Nakra Valley, where we nearly lost a horse in the glacier stream. We bivouacked high up in the glen, and next day, after some strenuous work, got the horses over the Dongusorun Pass and glacier and down to the Cossack post below Elbruz. Next morning Young went on to Urusbieh with

the horses and baggage, while Raeburn, Martinson, and I, with two porters, started for a bivouac on the Terskol ridge. We had not gone far before the porters, poor-spirited men, struck, and we had perforce to return to the post. We cut down the loads, and, carrying them ourselves, started again at 2.30 in the afternoon. It was a heavy grind up to the ridge, but after that the going was easy. We stopped at 7.30 for food, made a fire with wood which we had brought from the last trees, and rested till midnight. Starting again by bright moonlight, we scrambled up the broken lava and, at one, set foot on the vast snowfield, 12,000 feet. There was no inducement to stop, for the wind was cold, so we made good progress. We had a lovely dawn, and sheltered behind a rock to admire it and to have some food. Then a heavy grind up snow, which deteriorated as we mounted. The wind was very cold, and the sun was well up before its warmth was felt. Above 15,000 feet we found it very laborious, the rarity of the air, the condition of the snow, and the labour we had gone through all contributing, but we persevered and gained the summit of the Eastern peak at 12.25, 18,370 feet. We had a wonderful view from the Black Sea to Kasbek. It was cloudy over the Steppes and to the S., where we should have seen Ararat, but the peaks of the Central Caucasus stood out clearly.

The descent was easy, and three hours saw us back at our bivouac, where we had a meal, and then three hours more brought us to the Cossack post.

Next day we followed the Baksan river to Urusbieh, where we were almost overwhelmed by the generous hospitality of Prince Naurus. The fifty miles' ride and thirty miles' drive to the railway at Naltschik probably saved our lives after the gorgeous feast with which he started us on our way.

Thus ended the expedition of 1913, and the members of it will ever retain pleasant memories of many interesting experiences amongst the beautiful valleys and noble peaks of the Caucasus, and to our fellow-members, who wish for novelty and the joy of ascending unclimbed peaks, we can only say—Go and do likewise.

[The discussion on this paper is to be found on pages 122–124.]