

since leaving Tiedemann Glacier and the most difficult part of the climb lay ahead of them. They roped down into a bergschrund for the night and returned to Tiedemann Glacier the second day thereafter.

A Vancouver party made up of Alec H. Dalgleish, Neil M. Carter, Alan Lambert and Eric Brooks came in by Knight Inlet, camped at Icefall point 2 miles above our subsequent base camp, and made their attempt by way of the Buckler Glacier and S.E. ridge on June 26. At about 10,500 ft. the leader, Dalgleish, an experienced and daring climber, for some reason never explained, fell. The rope broke over sharp rocks; he went down some 800 ft. after striking head first on the rock and was dead when the others reached him. The attempt was abandoned, and later a party came in to give the body permanent burial on the Buckler Glacier; a memorial cairn was erected at Icefall point.

Further attempts will doubtless be made until this amazing peak succumbs.¹⁰ We can only hope that enthusiasm will be tempered with the sound judgment so far prevailing and that no further lives will be sacrificed.

There is still much exploration remaining to be carried out in the Coast Range and of course only a small proportion of the more important peaks have been climbed. The glistening snowfields between the Kliniklini and Bella Coola Rivers and at the heads of Rivers and Kingcome Inlets and the S. Bentnick arm of Dean Channel are virgin territory. The Lillooet and Homathko snowfields are hardly touched. No mountaineers to my knowledge have investigated the coast N. of Bella Coola. Unless one enjoys the hard work of reconnaissance and approach as a preliminary to all climbing and is prepared for frequent disappointments along with occasional successes, the Coast Range is not to be recommended; but to some of us an eventual triumph is worth everything that precedes it.

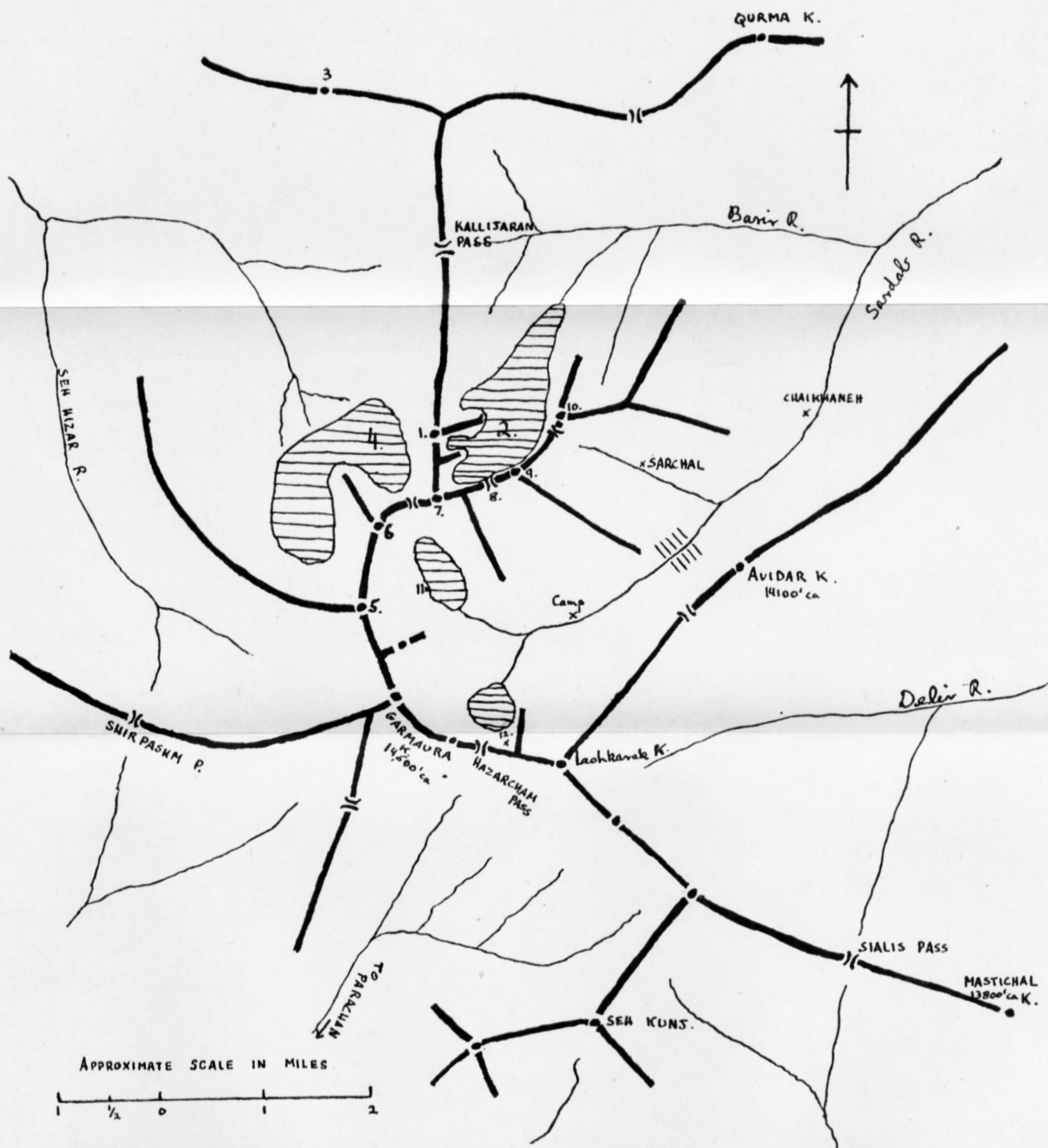
CLIMBING IN THE TAKHT-I-SULEIMAN GROUP, N. PERSIA.

By D. L. BUSK.

IN an earlier number of the *ALPINE JOURNAL*¹ some account has already been given of an attempt to unravel the intricate topography of the central Elburz. On the first occasion we had recoiled

¹⁰ A Californian party of good rock climbers led by Bestor Robinson made the third ascent of the N.W. (snow) peak of Mt. Waddington in 1935, bivouacking only a few hundred feet below the actual summit, whence they were driven down by a blizzard. The weather was bad, as I understand it was generally on the B.C. coast this summer.

¹ 45, 334-41, with map.



ROUGH SKETCH MAP OF THE TAKHT-I-SULEIMAN GROUP

☐ = GLACIERS

FOR NUMBERS SEE NOTES ON MAP.

1. Takht-i-Suleiman, 15,750 ft. ca.
2. Largest glacier.
3. Qal'ehchal ridge.
4. Another glacier.
5. } Zana peaks, 15,500 ft. ca.
6. }

7. 'Alam Kuh, 15,850 ft. ca.
8. Col from which photos Nos. 1 and 4 were taken.
9. Siāh Sang, 15,300 ft. ca.
10. Siāh Kamān, 15,200 ft. ca.
11. Spot from which photo No. 3 was taken.
12. Spot from which photo No. 2 was taken.

defeated, but, while we had not reached our objective, we had at least found a way to the foot of Solomon's Throne.

The legend of the name is perhaps worth repeating.² Put into modern language, the story tells that when Solomon and the Queen of Sheba were travelling in these parts, the king was infinitely distressed at the refusal of Her Majesty to share his tent o' nights. She, it appears, was unprovided with a tent of her own, but nevertheless preferred to sleep on the stones outside. The wily old king, having used all blandishment in vain, moved higher up into the hills and finally camped on the loftiest summit of all. Here the wind was so keen and the cold so bitter that the shivering queen was forced to beg for shelter. Ever since the peak has borne the name of Takht-i-Suleiman, the Throne of Solomon.

Our first attempt to reach the scene of Queen Sheba's submission had been in 1932. Next summer we reopened the attack with wider knowledge and greater confidence, but hampered as always by lack of time. Throughout our difficulty had always been the time question. A party with a month at their disposal could explore the whole group, but I could not manage more than ten days or so at a stretch, and much of this was needed for the journey to and from the peaks.

The party in 1933 consisted of Mr. and Mrs. A. C. Trott of the British Legation and myself. We followed the 1932 route for two marches as far as the village of Joistan, but on the third day turned up the Parachan valley, leaving on our left (W.) the Shir Pashm valley, in which we had so fruitlessly struggled the previous summer. It was a long day's march, including some 5000 ft. of climbing, and in places the path was brutally steep for our heavily-laden mules. The way led steadily northwards, past four upland villages, near the highest of which (Parachan) we lunched. Here, too, after much argument we secured a local guide, who guaranteed to lead us to the foot of the mountain, though, with most unusual modesty, he admitted that he was too old to attempt the ascent.

Above Parachan the path twisted precariously through a steep gorge and then up a grassy ridge, which, until my sense of values had been refined by the next day's march, I felt to be the last word in drudgery for ourselves and a positive impossibility for the mules. However, the gallant beasts struggled up at last, the unwieldy, home-made plane-table causing considerable anxiety on the top of one load, and towards evening we were rewarded by our first close view of the peaks we had striven so long to reach.

We stood on this Pisgah at the meeting-point of three grass ridges at a height of about 11,250 ft. The rocky peaklet, which bears the name Seh Kunj ('Three Corners'), is a perfect view-point. Behind sinks the long ridge up which we had laboured with the

² Miss Freya Stark, in her admirable book *The Valleys of the Assassins*, gives a different version of the story. I tell it here as it was related to me.

afternoon sun hot upon us, and we could look back across all the country we had traversed during the last four days, marking the familiar passes and the course of the valleys, though the rivers themselves were invisible in the depths of the twisted gorges which they have graven for themselves. But it was naturally towards the new country to the N. that our eyes turned most eagerly. We looked across rolling upland pastures, seamed with deep gullies and running up to a long, level ridge nearly 14,000 ft. in height. The voices of the many streams came to us clearly in the still air and we could hear the bleating of the flocks of sheep and goats, as they were driven down to the evening milking in the black tent encampments of the nomads, which could be distinguished dotted here and there across the slopes. Due N. of us the containing ridge dropped slightly to a level saddle and beyond it rose big mountains—not the rounded, eroded hills to which the traveller in Persia is accustomed, but a bold rock ridge. This was still not the elusive Takht, which our guide told us lay just behind. The peak we were looking at appears³ to be called 'Alam Kuh. ('Alam, among other things, means a banner or a mark.)

At last we were on the verge of the promised land, and it was with elation that I set up the plane-table and clinometer and took a round of angles, while Trott noted the bearings of outstanding points with a prismatic compass as an additional check.

We had hoped to reach the foot of the pass that night, but it was already late in the day and the mules were tired out, so we slid down the slopes towards the nearest water and a group of black tents, which gave promise of milk, cheese, possible eggs and certainly a succulent lamb.

We pitched our tents within twenty yards of the porous, gaping, black erections that so shake one's faith in the efficiency of native tribes. The height of the camp was perhaps 10,500 ft., and it was bitter, biting cold when we ate a hasty meal in one of the tents. Soon after, I contorted myself into the welcome warmth of an

³ One of the difficulties experienced by the topographer in Persia is that the local inhabitants have no qualms about inventing names when they do not know the real ones. This can be attributed to an extreme form of politeness. At various times I have heard 'Alam Kuh called Takht-i-Suleiman, Syalan Kuh, Hazarehal Kuh and Lanah Kuh. Miss Stark sticks to Siah Kaman Kuh, while Dr. Bobek struck further variations. I have chosen 'Alam Kuh only after much discussion, but I feel certain that Siah Kaman Kuh is definitely wrong, though I shall never be able to persuade Miss Stark to agree with me. We only heard the name Siah Kaman applied to a lower peak to the E.

In general, the situation is not unlike that obtaining in the Alps in the 'sixties. The local inhabitants are not interested in the bleak and inhospitable peaks and among themselves give names only to alps, but they will never confess ignorance to a stranger and will obligingly produce a name for anything. It remains for travellers to baptize the summits, as I believe Lord Conway did the Wellenkuppe, with suitable names. Dr. Bobek insists, and I agree with him, that the nomenclature of this region will never be fixed until maps have been published and are fairly widely known. The great thing, though this is perhaps a cynical suggestion, is to fix a name and stick to it.

eiderdown bag, to listen, until sleep came, to the low bleating of the sheep and goats, which ever and anon tripped with alarming suddenness over the taut tent ropes.

Morning brought a disappointment. Mrs. Trott had but recently recovered from an illness and the height had caused such fits of coughing that it was obviously essential that she should return at once to lower altitudes. After an anxious council it was decided that I should go on alone with two mules and one muleteer, while the others returned to Joistan to wait. Our equipment was not designed to be split up and I have rather hectic recollections of the division. However, it was accomplished at last, and about 9.30 Theodore⁴ and I started off.

We contoured the slopes in a westerly direction for perhaps an hour to the foot of the Hazarcham⁵ Pass, over which we had glimpsed the peaks the day before. This pass lies on the main backbone of the chain and is probably the loftiest (about 13,300 ft.) regularly traversed by the local muleteers. It must also be one of the most difficult. The S. slope is a rounded crest about 2500 ft. high, up which the path climbs in a series of very short zigzags, even more tiring to the eye than to the legs, for there is often only ten yards between turnings. The N. side is defended by a large snowfield, or more probably glacier,⁶ the final slope of which is sufficiently steep to be extremely awkward for mules.

We halted for a good hour on the top to make observations, and I was lucky enough to be able to persuade a local man, one Seyed Mirza Muhammad, who was crossing the pass, to send his donkeys down with a friend and join me as guide and porter.

Owing to the steepness of the northern slope we could not descend directly, but were compelled to traverse out to the left to where the snow was less steep. A narrow ledge had already been trodden out, but while we were on the summit a mule had fallen off the traverse, which was rather iced, and it required twenty minutes' hard work with an ice axe before Theodore could be persuaded to attempt the passage. We made the crossing safely, but with some anxiety, and our mules were soon slithering suspiciously on the less steep snow below.

We worked downwards until the snow became sparser, and finally pitched camp by four ruined walls which gave some protection from the wind. I spent what remained of the afternoon in photography

⁴ We called our head muleteer, the faithful companion of many journeys, by this nickname, because his real name was Ni'matullah, which means 'Gift of God' in Arabic, as Theodore does in Greek.

⁵ Miss Stark contends that this pass is called the Házārchāl (= thousand corries), not the Házārchām (= thousand windings). I have only heard the former name applied to the region, never to the pass, and since our parties had the advantage of crossing the pass, which Miss Stark could not, I think Hazarcham is to be preferred, though both names would be equally appropriate. Dr. Bobek concurs in this.

⁶ Dr. Bobek has now confirmed that this is a glacier.

and in writing up my notes, but by sundown the wind was so chill that I was glad to cook and eat supper and go to bed. A Whympier tent is about as draught-proof as a tent can well be, and in a double sleeping-bag I was very comfortable, but the howling wind made me credit the local legend that Takht-i-Suleiman has never been and could never be climbed, because the rash mountaineer would certainly be blown off it, while the bitter cold led me to sympathize with the Queen of Sheba: if she stuck out a night in the open in this spot, she must have been most unusually virtuous.

I was up before dawn and, after cooking a hurried breakfast, started off in the first light with Seyed Mirza Muhammad. We were rather heavily laden, since we were burdened with clinometer, aneroids and other survey instruments, in addition to the usual mountaineering equipment, but we were compelled to leave behind the plane-table, which was exceedingly cumbrous and of vast weight.

My porter had indicated a col from which he claimed that Takht-i-Suleiman was accessible, and we climbed up to this—I by a steep snow gully and he, since he was wearing the local rag-soled ‘giveh’ or *Kletterschuhe*, which are not much good on snow, by the crumbling rocks on its edge. When we reached the col we found that not only was Takht-i-Suleiman invisible, but that the other side was a precipice. The porter’s calm announcement that he had made a mistake and that we should have climbed the next col to the W. led to considerable recrimination on my part, which was, I think, justifiable, since our false start involved a particularly unpleasant traverse on rotten rock and a long descent to the foot of the correct pass.

This was, however, reached at last, and for the first time I saw Takht-i-Suleiman. It was maddeningly close, but obviously inaccessible from where we stood. The other side of our pass dropped in terrific cliffs for five or six hundred feet to a snow-filled basin beyond which rose the peak. There were, however, two features of interest. First, the snow basin was obviously a glacier, with well-marked bergschrunds and small crevasses. This was exciting, because, so far as I am aware, the existence of glaciers in Persia has always been denied. Secondly, it was obvious, even to the naked eye, that we were already higher than Takht-i-Suleiman, though we were only on the shoulder of the ‘Alam Kuh.’⁷ This was surprising, since we had always supposed that Takht-i-Suleiman was

⁷ ‘Alam Kuh (15,850 ft.) is probably the second highest mountain in Persia, coming after Demavend (18,549 ft.). Savalan Dagh in Azerbaijan, which for years has been credited with 15,800 ft., was proved by Dr. Bobek during 1934 to be not higher than about 14,000 ft. The next highest group is probably the Zard Kuh and Kuh-i-Dinar range in the Bakhtiari country. This was visited by an Italian expedition in 1933. It rises to the neighbourhood of 14,000 ft., and is said to have some very small glaciers, though Mr. Falcon (*A.J.* 46, 355) states there is no permanent ice and no relics of any former glaciation.

We understand that Mr. Falcon’s views have now been modified.—*Editor.*

the highest peak of the group, and I was encouraged to think that, even though the Takht was inaccessible, we could at least bag the culminating point.

The ridge from the col to this summit was interrupted by several gendarmes and obviously presented some difficulty, but the first bit was only rather steep scrambling, so we took our heavy rucksacks with us. On the top of the first gendarme, however, we were compelled to abandon most of our load and I tried to persuade the porter to rope. He refused with horror and at first would go no further, but once I started he followed all right to the next gendarme, down a steep little wall into a gap and along to the final summit.⁸

It was quite obvious that a much easier way⁹ existed down the other side, but we had reluctantly to give up the traverse, as we could not abandon the aneroids, rope and other articles we had left on the ridge.

There was a superb view out over the luxuriantly wooded slopes of the coastal plain to the Caspian, only thirty miles away but nearly 16,000 ft. below us, and all the peaks of the central Elburz from Demavend to the gorge of the Qizil Uzun stood clear around us. Though we were in full sunlight the wind was bitter, and my hands were frozen after an hour's work with prismatic compass, clinometer and notebook. The porter was much intrigued by the clinometer, and when I had set it on Takht-i-Suleiman I showed him how one could see whether it was higher or lower by whether the cross-wire was above or below the zero mark. In this case the wire was perhaps a quarter of an inch below. This had amusing results after our return to camp, when I heard Seyed Mirza Muhammad explain to a group of admiring friends that the Sahib had a wonderful machine which proved that Takht-i-Suleiman was precisely one-quarter of an inch lower than the peak we had climbed. Evidently my halting explanations of the principles of trigonometry had not got home.

When we could stand the cold no longer, I beat some feeling into my hands and we climbed rapidly back along the ridge to the col and down to the tent. If I was not to outstay my leave, I had to reach Joistan, where the Trotts were waiting, on the next evening, so, tired though we were, we moved camp that night over the Hazar-cham Pass and round to the pastures below Seh Kunj, where we arrived at dusk after 15 very strenuous hours.

Next day I rejoined the Trotts and we trekked back to Tehran by the Asalak Pass.

During this climb I formed the impression that it would be possible to descend to the glacier to the S. of Takht-i-Suleiman from the col to the W. of 'Alam Kuh; from this glacier Takht-i-Suleiman was certainly accessible.

⁸ The culminating point of 'Alam Kuh is about 100 ft. higher than Takht-i-Suleiman.

⁹ It was this route that we followed in 1934.



FROM N.E. RIDGE OF
'ALAM KUH.

1. Takht-i-Suleiman.
2. Largest Glacier (note Bergschrund at its head).
3. Qal'ehchal ridge (behind).
4. Another glacier (moraine covered) behind the depression in the ridge.

Photo, D. L. Busk.]

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Photo, D. L. Busk.]

N.E. RIDGE OF 'ALAM KUH. TAKEN FROM S.



Photo, C. H. Topping.]

BELOW THE HAZARCHAM PASS.

During the winter we were busy with plans and work on the map, and early in 1934 I was delighted to receive a visit from Dr. Hans Bobek of the Geographical Institute of the University of Berlin, who had come from Germany especially to map the Elburz and to examine the glaciology and geology of North Persia. As he was a competent surveyor and was proposing to map the Takht-i-Suleiman group photogrammetrically, I eagerly handed over my immature plane-table sketch and sat back to enjoy life. Plane-tableing is pain and grief to me, and it was a joy to find someone more competent, who could take over work at which I fear I shall never shine.

Our 1934 party consisted of Trott and an American engineer, C. H. Topping; we were to meet Bobek by appointment at Parachan. We decided this time to use new routes both in going to and returning from the Talaghan valley.

We drove out 55 miles from Tehran towards Kazvin, where our mules met us, and that evening camped at Abiak, a few miles up in the hills. Next day we crossed the watershed by the Ibrahimabad Pass, from which we had fine views of the Takht-i-Suleiman group rather veiled by cloud, and dropped down to the Talaghan valley at Shahrak, where we spent the night. Shahrak, it is worth noting, is on the edge of the mosquito country, and travellers are well advised not to go lower down the Talaghan into the malarial region. From Shahrak we turned upstream to Joistan, where we found Bobek, and the same day reached Parachan. Next day, by the route of the previous year, we climbed to the foot of the Hazarcham Pass.

The following day was devoted to a reconnaissance. We crossed the pass and, sending the mules down to the camping place, explored the route up the valley to the S. of 'Alam Kuh, finding that it presented no difficulty as far as the foot of the great snow and rock wall that leads up to the peak.

The only memorable incident of the day was an astonishing *tour de force* by one of the villagers we had with us, a garrulous and tiresome old greybeard. For the benefit of Topping's ever-ready cinema camera I had glissaded down the extremely steep snow slope at the top of the pass. Having arrived safely at the bottom, I dared the old gentleman, who had talked much (we thought overmuch) of his mountaineering skill, to follow. The joke was, however, on me. Not only did he come down in fine style, but he removed his shoes first and glissaded barefoot, lest his precious footgear should suffer.

That evening it was decided that Trott, who loudly, but with undue modesty, proclaims that he is no mountaineer, should take the garrulous greybeard and try the pass to the S.W. of Siah Kaman, which would give him opportunities for botany, at which he is an expert, and would enable him to clear up the topography still further. The rest of us, with two porters for Bobek's survey instruments, would make for the col to the W. of 'Alam Kuh, which Bobek would climb, while Topping and I tried for Takht-i-Suleiman.

We made an unhurried start next morning and reached the foot of the final wall without difficulty by the line we had reconnoitred the previous day. For the ascent we chose a rather steep rock rib, which Topping, who dislikes precipices, professed to find somewhat alarming. We were rather delayed here, but eventually arrived at the col to discover, to our regret and to my shame, that I had grossly underestimated the difficulties of the crossing when, the previous year, I had caught a glimpse of the route from the E. ridge of 'Alam Kuh. The rocks immediately below were very steep and out of the question for our party. To the left, W., the angle was less steep and there was a long snow slope with bands of ice in it, but this would have meant much downhill step-cutting, which was also not to be thought of. Once again, but this time largely through my own fault, we had to renounce Takht-i-Suleiman.

Topping decided to remain where he was while I continued up the ridge to the summit, where Bobek was already at work. From this side the last bit is merely a fatiguing scramble over vast boulders with ankle-trapping cavities between them; a very different proposition from the steep eastern ridge which I had climbed the year before.

From the surveyor's point of view we were not so lucky in the weather as I had been the previous year. The Caspian and the coastal plain were hidden under a cloud bank, but the views northwards were nevertheless of striking beauty, and even Bobek, looking eagerly for future stations, did not grumble much. The clouds were up to the 10,000 ft. level and at times would send out invading arms which threatened to sweep up and engulf all but the highest peaks. Twice, as I watched, an arm of cloud crept up the valley to within half a mile of our camp, which was at about 12,000 ft., and I became a little anxious for Trott, who was down below on the edge of the cloud surf and who might find it difficult to work his way back if the mist submerged the valley completely. Fortunately, however, the clouds held off while we were in that camp, though Bobek had a difficult time after we had left.

It was still early in the afternoon when I climbed down to rejoin Topping, leaving Bobek at his work. We decided not to descend the head wall of the valley by the route we had come up and, after a little reconnoitring, I found an easier line and with one of the porters we scrambled warily down, ending with a magnificent glissade to the almost level snow-basin. We stuck to the snow as long as possible and enjoyed several more glissades, the last bringing us to a little island absolutely carpeted with gentians. We filled our hats with these for the botanically-minded Trott and ran down in five minutes to the tents.

Some hours later Bobek appeared, but Trott did not return till dusk, by which time we were becoming somewhat anxious. He had had a successful but exhausting day. 'Old George,' as we called the talkative old native (to distinguish him from his son, 'Young



Photo, C. H. Topping.]

HEADWALL AND SUMMIT OF 'ALAM KUH (7), SHOWING 1934 ROUTE.



Photo, C. H. Topping.]

TALAGHAN VALLEY.

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George,' who was also with us), had taken him down the valley to where a side stream came in from the N., and up this to an alp called Sar Chal, which would be a good camp-site. They reached without difficulty the col at the head of this valley and looked down easy slopes to the broad glacier-filled basin which leads up to Takht-i-Suleiman. From Sar Chal it would be possible to climb the peak in a long day. Trott had, however, not enough time and, as he was threatened by the ever rising clouds, he merely reconnoitred the route for another year.

'Old George' then became enterprising and suggested a return along the ridge to Siah Sang, which would obviously save considerable time. Unfortunately the ridge proved impracticable and they were compelled to make an unpleasant traverse on its southern flank. In crossing one of the frequent snow gullies, which overhang unpleasant depths, Trott slipped and was only saved from a fall that would have been at least dangerous by 'Old George,' who grasped him by the arm and pulled him in to the rock verge of the gully, to which he contrived to adhere in a somewhat nerve-shattered condition.

The sequel was not unentertaining. On his return Trott announced with becoming gravity that 'Old George' had undoubtedly saved his life, and we debated anxiously what form his reward should take. Trott finally presented him with that prized delicacy the liver of a lamb we had had killed and 10s. in cash. This proceeding for days provided the more irreverent members of the party with jokes about the paltry value he set upon his life, but it is only fair to add that, judging by 'Old George's' gratification and surprise, the latter considered he had been, if anything, overpaid; after all, one *Farangi* more or less could make very little difference.

Since we wished to follow a route that was new to us on the return journey and were very uncertain as to exactly how long it would take, we felt compelled to start back next day, though it turned out subsequently that we could have managed another day's high climbing, which might with luck have enabled us to bag the elusive Takht after all. I did not, however, feel that we could risk the delay, so we regretfully left Bobek to his work and crossed over to the S. side of the range down the now familiar route to Parachan. On this occasion we did not traverse the lowest depression of the Hazarcham Pass, but climbed almost to the summit to the E. (Lashkarak Kuh), which was easier for the mules than the steep snow wall of the col. The advantage of the route lies in the magnificent views that are to be had of the central group.

Next day we started in new country. We crossed a slight pass to Narian and then had a long climb over grassy uplands to a col from which we looked back to 'Alam Kuh and down on one of the side valleys of the Talaghan. The descent was precipitous and extremely difficult for the mules, one of which fell off the path and was only saved by Theodore's resolute grip on its tail, which swung

it round neatly on to the next zigzag 10 ft. below. This was the only misadventure, however, and the rest of the route down to the track leading to the Anguran Pass and by this to the village of Dehdar calls for no comment. From here we followed the stream down to its junction with the Talaghan at Doab and then on familiar ground up to the village of Gatideh, where we camped.

On the morrow we again left our old route and took the track to the Sirabash Pass (10,410 ft.), just below which we camped near a ruined castle known as Qal'eh Dukhtar. I had chosen this route primarily because it was obvious that the views of the now distant Takht-i-Suleiman group would be magnificent, and it was therefore a great disappointment to find that the peaks were veiled in cloud and that it was not worth while exposing the infra-red film I had been carefully keeping for this view. The weather was obviously breaking on the Caspian coast and determined cloud armies were pouring over every pass down into the Talaghan valley. We had rain that night and when we crossed the pass next day it was under gloomy skies, which accorded well with my depression as I threw a last glance at the peaks which had given me so much pleasure and which I was never likely to see again.

We camped that night at the highest village on the other side, and next day, the last of our leave, dawdled down the valley to Sirah, where our cars awaited us, and so back through the usual dust and heat to Karaj and Tehran.

The Takht-i-Suleiman group contains no high mountains¹⁰ in the Himalayan sense and there is little of outstanding difficulty, but many fine peaks remain to be ascended—notably the Throne of Solomon itself—and on not a few of these there is good rock-climbing, while on some considerable snow and ice work is to be found. In particular, the man who makes the first ascent of 'Alam Kuh from the N. or W. will have his work cut out.

Moreover, the range still has much of the charm of new country. Captain Fortescue was, I think, the first to visit it, just after the war, and, while he did not, as far as I know, do any climbing, he produced a route book which is still of unsurpassed value and interest. This is unfortunately not available to the public. Miss Stark followed ten years later and has given us a charming description of her travels in her book *The Valleys of the Assassins*.¹¹ Now that the group has been adequately surveyed by Dr. Bobek, the traveller's way is smoother and it is to be hoped that, as soon as tourists are made more welcome in Persia, other parties will visit the range to climb and shoot (Trott saw a herd of no less than 39 ibex on Siah Sang).

During the three summers I was in Persia I spent about a month altogether in the Takht-i-Suleiman group, and on looking back I am

¹⁰ There are some eight peaks over 15,000 ft., and certainly four glaciers, one over a mile in length.

¹¹ The map is still in preparation.

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Photo, D. L. Busk.]

'ALAM KUH GROUP FROM THE SOUTH; TAKHT-I-SULEIMAN HIDDEN BEHIND 7.

5. } Lanāor Hazārchal peaks, *ca.* 15,500 ft.
 6. }
 7. 'Alam Kuh, *ca.* 15,850 ft.

8. Col from which photos Nos. 1 and 4 were taken.
 9. Siāh Sang Kuh, *ca.* 15,300 ft.
 10. Siāh Kamān Kuh, *ca.* 15,200 ft.

11. Point from which photo No. 3 was taken.
 — · — · — · 1934 route.
 1933 route.

↑ Direction of Camp.

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rather appalled that we should have accomplished so little; but, if the physical and mountaineering results were small, the hills had still given us with open hands their unfailing gifts of friendship, health and pleasure. It was this thought, rather than the feeling of frustration that would perhaps have been more proper, which struck me on the last occasion on which I saw the peaks. We were driving along the Caspian shore some two months after the events I have just described and, after a day of unrelieved gloom and rain, the weeping clouds parted suddenly to disclose, immeasurably high above us, the familiar mountains of our longing. They were alight with new fallen snow and brilliant under a sun that blazed somewhere above the clouds. For a few minutes they stood clear, framed by streamers of driving mist with a faint hint of blue sky as a background, and then the clouds closed down again. It was a kindly farewell to a most constant worshipper, but I like to think that there was also something of an invitation to return.

NOTES ON THE PLANTS SEEN AND COLLECTED DURING TWO JOURNEYS
TO TAKHT-I-SULEIMAN, IN 1933 AND 1934.

By A. C. TROTT.

In the 1933 journey the Talaghan valley was approached from its eastern end. In the course of the journey down the valley the following plants were noticed: *Cephalaria Syriaca* (Schr.) near Garab; a beautiful dark rose-coloured pea (*Lathyrus rotundifolius* (Willd.)); and the curious yellow *Rhyncocorus elephas* (L.). At Gatideh *Cirsium Arvense* (L.) was common in fields, and lower down the valley the spiny yellow *Chondrilla juncea* (L.) was one of the most conspicuous plants. *Carthamus oxyacantha* (MB.) was also prominent. *Eryngium creticum* (Lam.) with beautiful dark blue flowers was also common higher up, in company with *Acantholimon echinus* (L.). *Juncus glaucus* (Ehrh.) was collected near the top of the valley.

In the 1934 expedition a start was made from near Abiak on the Tehran-Kazvin road, and the Talaghan valley approached from the S. Plants noticed before reaching the valley were: *Paliurus aculeatus* (Lam.) (Christ's thorn), ubiquitous bushes; *Xeranthemum squarrosum* (Boiss.) (var. *unicolor*), a pretty pink composite; *Alhagi camelorum* (Fisch.); and a number of huge thistles, not yet identified except for *Jurinea macrocephala* (DC.). *Trigonella Teheranica* (Bornm.), a pretty little yellow flower, was also collected.

During the ascent from Parachan to the top of the Hazarcham Pass *Phlomis Orientalis* (Mill.), a conspicuous yellow labiate; *Senecio Paucilobus* (DC.) with drooping yellow heads; and an interesting plant identified as *Leonurus persicus* (Boiss.) with hairy pink flowers were collected.

The flowers at the top of the Hazarcham Pass, at a height of

about 13,300 ft., included some interesting alpine of local interest : *Cerastium elbursense* (Boiss.), a little white flower ; a ranunculus which is probably *Ranunculus persicus* (DC.) ; and *Dianthus crinitus* (Sm.) (var. *crossopetalus* Fenzl.) all formed patches of colour. *Oxytropus persica* (Boiss.), a little leguminous plant which makes pretty patches of reddish-purple, well set off by silvery leaves, appears to have been collected only once before, by Kotschy in about 1843 at the same place. *Alsine juniperina* (Fenzl.) (var. *lineata* Boiss.) formed patches of green and white ; and two little veronicas (*Michauxii* Lam. and *Kurdica* Benth.) were also seen. *Thymus Kotschyanus* (Boiss.), *Erysimum Nanum* (Boiss.), and *Dracocephalum Aucheri* (Boiss.) were collected. A patch of a beautiful gentian (*Gentiana verna*, var. *obtusifolia* Boiss.) was found about 1000 ft. below the top of the pass, on the Mazanderan side. Further down towards Mazanderan a pretty little allium (*Allium capitellatum* Boiss.) grew in abundance ; and a yellow crucifer with such a beautiful scent that the local guide said it was called 'nargis' (narcissus) : it has been identified as *Anchonium elichrysifolium* (DC.). Other plants near by were *Lotus Gebelia* Vent., *Vicia persica* Boiss., and a curious dark purple composite *Asyneuma amplexicaule* (Hand. Mazz.).

On the way back towards the Chalus road a species of *Michauxia* and a curious bush, *Cynanchum funebre* (Boiss.) (otherwise *Vincetoxicum medium* (Boiss.)), were collected.

I am indebted to the authorities at Kew for identifications.

HOHE TATRA.

By H. E. L. PORTER.

THE idea of a visit to the Hohe Tatra this summer owed its inception to a bad investment. A goodly sum of 'Blocked Pengoes' had been accumulating to my credit in a bank at Budapest, not transferable to this country by any fair means, but theoretically able to be withdrawn for use in Hungary itself. To judge by the official rate of exchange, my fund should have been ample to cover the cost of a mountain holiday. We decided to fly to Budapest by the new Imperial Airways route, and dissipate the pengoes to the last filler. Having thus resolved, we consulted the map and the new volume of the Lonsdale library to discover what mountains Hungary could still boast. The search was vain ; modern Hungary appears to have no attractions but historical ruins, spas and bathing resorts. Disgusted I flung the pengoes on the market at a ruinous loss, and so severed the only link but sympathy, which bound me to that unfortunate country. Our search of the map¹ had brought the Hohe Tatra to our notice. Study of the rather scanty information

¹ *A.J.* 37, to which reference should be made.