THE GEOGRAPHICAL JOURNAL

VOLUME LXXVIII

JULY TO DECEMBER

1931

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL

EDITED BY THE SECRETARY

THE ROYAL GEOGRAPHICAL SOCIETY

KENSINGTON GORE LONDON S.W.7

EDWARD STANFORD LTD. 12 LONG ACRE W.C.2

AND 29 CHARING CROSS S.W.1

ROYAL GEOGRAPHICAL SOCIETY.

Patron.

HIS MAJESTY THE KING.

Vice-Patron.

H.R.H. THE PRINCE OF WALES, K.G., F.R.S.

Honorary President.

H.R.H. THE DUKE OF CONNAUGHT, K.G., G.C.B., G.C.S.I.

THE COUNCIL

(Elected 22 June 1931 for the Session of 1931–32.)

President : Admiral Sir William Goodenough, G.C.B., M.V.O.

Vice-Presidents.

Field-Marshal the Viscount Allenby, G.C.B., G.C.M.G.
Colonel Sir Charles Close, K.B.E., C.M.G., C.B., SC.D., F.R.S.
Brigadier E. M. Jack, C.B., C.M.G., D.S.O.
Lieut.-Col. the Right Hon. Sir Matthew Nathan, G.C.M.G.
Dr. A. Hamilton Rice.
Lieut.-Col. Sir Francis Younghusband, K.C.S.I., K.C.I.E.

Treasurer—The Lord Biddulph.

Trustees—Douglas W. Freshfield, D.C.L.; The Most Hon. the Marquess of Zetland, G.C.S.I., G.C.I.E.

Honorary Secretaries—Dr. T. G. Longstaff; W. Lutley Sclater.

Foreign Secretary—The Right Hon. Sir Maurice E. de Bunsen, Bart., G.C.M.G., G.C.V.O., C.B.

Members of Council.

L. C. Bernacchi, O.B.E.
Sir Harcourt Butler, G.C.S.I., G.C.I.E.
Air-Vice-Marshal C. S. Burnett, C.B., C.B.E., D.S.O.
Gen. Sir Alexander Cobbe, V.C., G.C.B., *decd.*
Maj.-Gen. Sir Percy Cox, G.C.M.G., G.C.I.E., K.C.S.I.
Colonel H. L. Crosthwait, C.I.E.
Professor F. Debenham, O.B.E.
Professor C. B. Fawcett, D.SC.
Admiral Sir Cyril Fuller, K.C.B., C.M.G., D.S.O.
Maj.-Gen. Lord Edward Gleichen, K.C.V.O., C.B., C.M.G., D.S.O.
Sir William Himbury.
C. W. Hobley, C.M.G.
The Rt. Hon. Lord Howard of Penrith, G.C.B., G.C.M.G., C.V.O.
Lieut.-Col. C. K. Howard-Bury, D.S.O., M.P.
The Rt. Hon. Sir Halford Mackinder.
Dr. H. R. Mill.
Mrs. Patrick Ness.
Professor E. G. R. Taylor.
Bertram Thomas, O.B.E.
The Rev. Walter Weston.
J. M. Wordie.

Dr. Henry Balfour, F.R.S. (appointed Nov. 2 in place of the late Sir Alex. Cobbe).

Secretary and Editor of Publications—Arthur R. Hinks, C.B.E., F.R.S.

Librarian.	*Map Curator.*	*Chief Clerk.*
Edward Heawood.	Edward A. Reeves.	G. R. Mobberley.

Bankers—Martin's Bank Ltd. (Cocks, Biddulph Branch), 16, Whitehall, S.W.1.

CONTENTS

NO. 1 *JULY* 1931

The
GEOGRAPHICAL JOURNAL

Vol LXXVIII No 4 R.G.S. *October 1931*

THE HIGHLANDS OF PERSIAN BALUCHISTAN: *A paper read at the Evening Meeting of the Society on 4 May 1931, by*

C. P. SKRINE

THE Persian sub-province of Baluchistan, formerly a part of the Kerman *Ayalat* but now administered by a military governor under the Eastern (Meshed) Command, is not as a whole one of the more favoured portions of the Earth's land surface. It contains a large proportion of arid, uncultivable land including both true desert and "semi-desert." In the regions adjoining the Lut Desert and the inland drainage basin of the Jaz Murian Hamun, as well as along the coast of the Arabian Gulf, it is low-lying and boasts a climate as hot and unhealthy as anywhere in the world. The eastern half of the province however is very much less unattractive than the western. Here there are two fairly well-defined mountain regions, divided by the valleys of the Bampur and Mashkel rivers. To the south of this line are the hills of Champ, Sarbaz, and Bampusht, rising to 7000 feet and more; to the north is the plateau of the Sarhad, which has an average elevation of about 5000 feet and contains several different ranges rising to 8000–10,000 feet and one great volcano, the Kuh-i-Taftan (13,034 feet). I am concerned in this paper with this latter region, which may not unaptly be described as the "Highlands" of Persian Baluchistan, both because of the pre-eminent height of its mountain masses and because of the traditional wildness and ferocity of the hill tribes which inhabit its fastnesses.

The Sarhad is an exceptionally interesting region from more than one point of view. Geologically, it is notable for the volcanic massif mentioned above, the Kuh-i-Taftan, which is the middle (and only active) one of three volcanoes lying in a slightly curved line 182 miles long from the Kuh-i-Bazman (11,475 feet) in the south-west to the Kuh-i-Sultan (7660 feet) in the north-east. The geologist Vredenburg* draws a very interesting parallel between this volcanic chain, at the western extremity of the great Himalayan arc, and the Burmese volcanoes, Barren Island, Narcondam, Puppa, etc., at the eastern extremity. Not only is its geological age, he says, similar to that of the Burmese volcanoes, but the andesitic lavas of which they are built are of similar constitution. Apart from the volcanoes, the region is an ideal one for the geologist

**Memoirs of the Geological Survey of India*, vol. xxxi, pt. 2, pp. 286–7.

in the field; it shows everywhere "that rudimentary and unfinished sculpturing of the Earth's surface characteristic of regions of extreme dryness."

From the point of view of the naturalist, the interest of the Sarhad lies in the small and completely isolated Alpine region formed by the high and (relatively) well-watered valleys of the Kuh-i-Taftan and adjacent peaks. Apart from the lonely sister-volcano Kuh-i-Bazman 72 miles to the south-west, you have got to go 230 miles westwards to the mountains of Kerman, 400 miles north-north-west to those of Herat, and a similar distance west-north-west to the Quetta highlands to get elevations over 10,000 feet; and the flora and fauna of this practically virgin field would thus repay close study.

Ethnologically, the district contains some curious elements. In Arsacid and Sasanian times it appears to have formed part of the kingdom of Sakistan (Seistan), on the importance and extent of which recent researches by Professor Hertzfeldt have thrown light. Sakistan reached its zenith under King Gandafar (A.D. 29–70), a potentate who ruled from Kerman to Muttra and from Kandahar (which owes its name to him) to Broach. Professor Hertzfeldt was greatly interested not long ago in certain place-names of the Sarhad which I brought to his notice, particularly Tamindan, the most important valley on the south side of the Kuh, which he thought must be identical with the "Damindan" mentioned in the Avestic hymns. This place is described as being near sulphurous smoke-holes and sal-ammoniac springs, a description which certainly applies to Tamindan, right under the cone of the Kuh with its solfataras and sal-ammoniac deposits. Hitherto the only geographical feature identified with any certainty in the Avesta is the curious table-island in the Seistan Hamun known as the Kuh-i-Khwaja, the position of which is described with unusual fullness and accuracy with reference to the four rivers which flow into the Hamun. In Seistan the population is now so mixed that there would be little hope of linguistic researches revealing survivals of the Avestic tongue, but the curious dialect of Persian still spoken by the Tamindanis and other inhabitants of the high valleys of the Kuh may well contain such relics. The local tradition is that these people, alone among the inhabitants of Baluchistan, are descended from the Gabrs or Zoroastrians, though, unlike their "Zardushti" cousins in Kerman and Yezd, they have long since embraced Islam.

The Sarhad has been neglected to a remarkable extent by properly equipped and qualified explorers. A glance at its recent political history will help us to understand the reason for this. The sub-province of Persian Baluchistan was until about 1908 administered by deputy governors seated at Bampur (now Iranshahr) and responsible to the Governor-General of Kerman. Even under powerful Governors-General such as the Zill-es-Sultan or the Farman-Farma, Persian control of Baluchistan in the time of the Qajar Shahs was loose and ill-defined. The terror inspired in the settled districts of Kerman, Bandar 'Abbas, Seistan, and the Qainat by the ferocious nomad Baluch tribesmen of the Sarhad was for generations second only to that caused by the Turkoman raiders from Transcaspia, whose exploits they emulated. Bameri, Damani, and other raiding gangs used to strike districts 300 miles or more from their bases, carrying off not only goods and livestock, but women and children in large numbers for use and sale as slaves.

Nevertheless, a Governor-General would occasionally tour in Baluchistan;

Sunrise over the Gwar Kuh, from Baluch encampment at Shandak

Sulphur springs at summit of SE. cone, Kuh-i-Taftan

Kosha, with Persian Military Governor's new summer residence

The Kuh-i-Taftan from Khan Shambeh

a fraction at any rate of the revenue demand was collected, and there was some sort of machinery for the settlement of Perso-Baluch cases. The Sarhad tribes were dealt with through their Kurd headmen, whose ancestor is supposed to have been settled there by Shah Abbas in the sixteenth century, just as Sib, Jalk, Magas, and other districts to the south were ruled through their Buzurg-zada headmen, who claimed descent from a Tehran nobleman exiled from the capital six or seven generations ago. The Kurd chiefs are first heard of as paying revenue in 1838, when Mir Maddat Khan was Sarhaddar or Warden of the Marches; as we shall see below, part of the revenue they paid was in sulphur from the Kuh-i-Taftan. As a result however of the Constitutional agitations and the weakening of the Qajar dynasty from 1908 onwards, Persian authority in Baluchistan disappeared altogether. An able Baranzai adventurer, Bahram Khan, seized Bampur and other strategic points and became to all intents and purposes ruler of Baluchistan. Bahram Khan managed the unruly Sarhad tribes by the time-honoured method of playing off their headmen against each other, while encouraging them as a whole to raid in any direction but his own.

The occupation of the Sarhad and the defeat of the Damanis by General Dyer in 1916, as part of the operations of the East Persian Cordon Field Force, put a stop to lawlessness in this part of Persian Baluchistan and paved the way for the reassertion of Persian sovereignty when in 1924 our temporary occupation came to an end and we handed over the Sarhad as a going concern to the strong and progressive government of the present Shah. Meanwhile the redoubtable Bahram Khan had died and been succeeded at Bampur by his nephew Dost Muhammad, a ferocious tyrant with neither the courage nor the sagacity of his uncle. This man persisted in defying the Persian Government and intriguing with the Sarhad tribes, with the result that in 1928 the Persian Government were obliged to send a strong expeditionary force to the Sarhad under Sarhang (Colonel) Muhammad Khan Nakhjawan. After a remarkably rapid and well-organized campaign, this officer defeated Dost Muhammad's lashkars (tribal forces) in detail, captured Magas, Dizzak, and Bampur, and eventually took the Baluch leader prisoner. The Sarhad tribes have now been to a great extent disarmed and pacified, and Colonel Nakhjawan rules the sub-province as Military Governor with his headquarters at Iranshahr (the old Bampur) in the cold weather and Khwash in the hot.

Political insecurity has thus until quite recently been the chief reason for the comparative neglect of the Sarhad by explorers and scientists. The central and southern portions of Persian Baluchistan and Mekran, through which passes one of the main Indo-Persian highways, have indeed been described by Pottinger (1810), Conolly (1839), Blandford, and St. John (1871–2), and one or two other explorers, as well as in the reports of the Afghan–Baluch and Perso–Baluch Boundary Commissions. None of these authorities however give the Sarhad more than a passing mention, and no attempt appears to have been made to penetrate and explore the plateau until 1893. In December of that year, with the assistance of H.H. the Farman-Farma who was touring in the Bampur neighbourhood, Captain (now General Sir Percy) Sykes and Major Brazier-Creagh entered the Sarhad from the south, camped at Khwash and in the Tamindan valley, climbed the Kuh-i-Taftan from the south, and

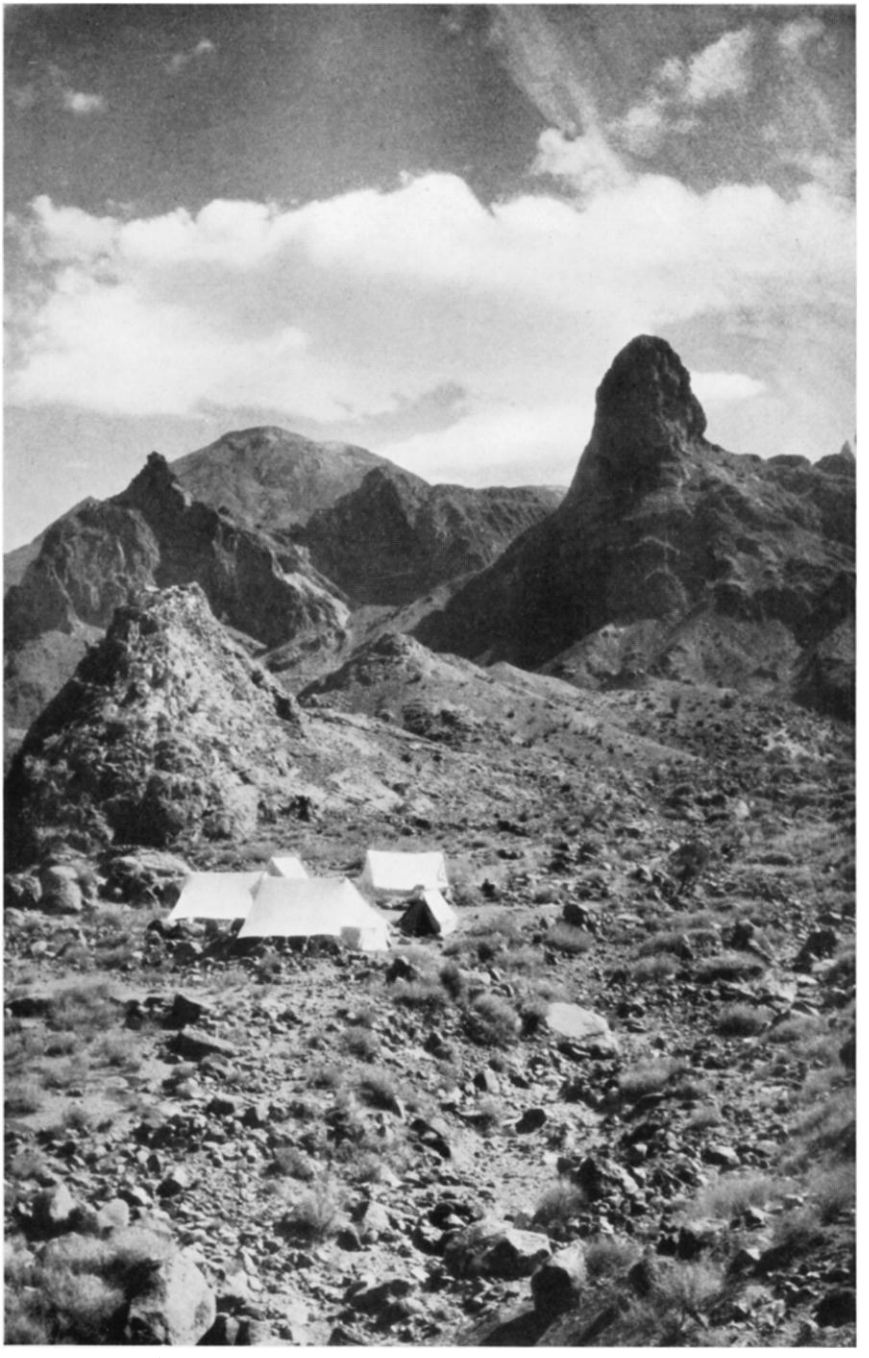
found their way thence *via* Gwarkuh to the Kuh-i-Bazman, which they also ascended. Sykes paid another visit to the Kuh in January 1899, when in the course of a journey *via* Bazman and Khwash to Kacha post on the Nushki–Seistan trade route he camped at Sangun and attained a height of over 12,000 feet in an unsuccessful attempt to climb the Kuh from the east.* Apart from a flying visit by Vredenburg in 1899 to Tamin (which he calls Timi) on the north side of the volcano, described by him in the paper quoted above, no scientific examination of the district seems to have been undertaken—at any rate, no results of any such researches are on record.

The Kuh was climbed at least twice during our occupation of the Sarhad (1916–24) by parties of British military and political officers from Khwash, including, to my knowledge, Major (now Lieut.-Col. Sir T.) Keyes, Captain (now Major) E. T. Wickham, and Captain Shute. In 1918–20 Captain (now Lieut.-Col.) W. G. Hutchinson, then Political Agent of the Chagai Agency of British Baluchistan, toured widely in the Sarhad, which was in his political charge, and compiled an interesting official report on it. In the summer of 1929 Captain Sikandar Khan of the Persian Eastern Army and Dr. Rice of the Bible Churchmen's Missionary Society at Duzdap† climbed the Kuh-i-Taftan from Sangun; a detailed account of this ascent by Dr. Rice may be found in *Blackwood's Magazine* for March 1931.

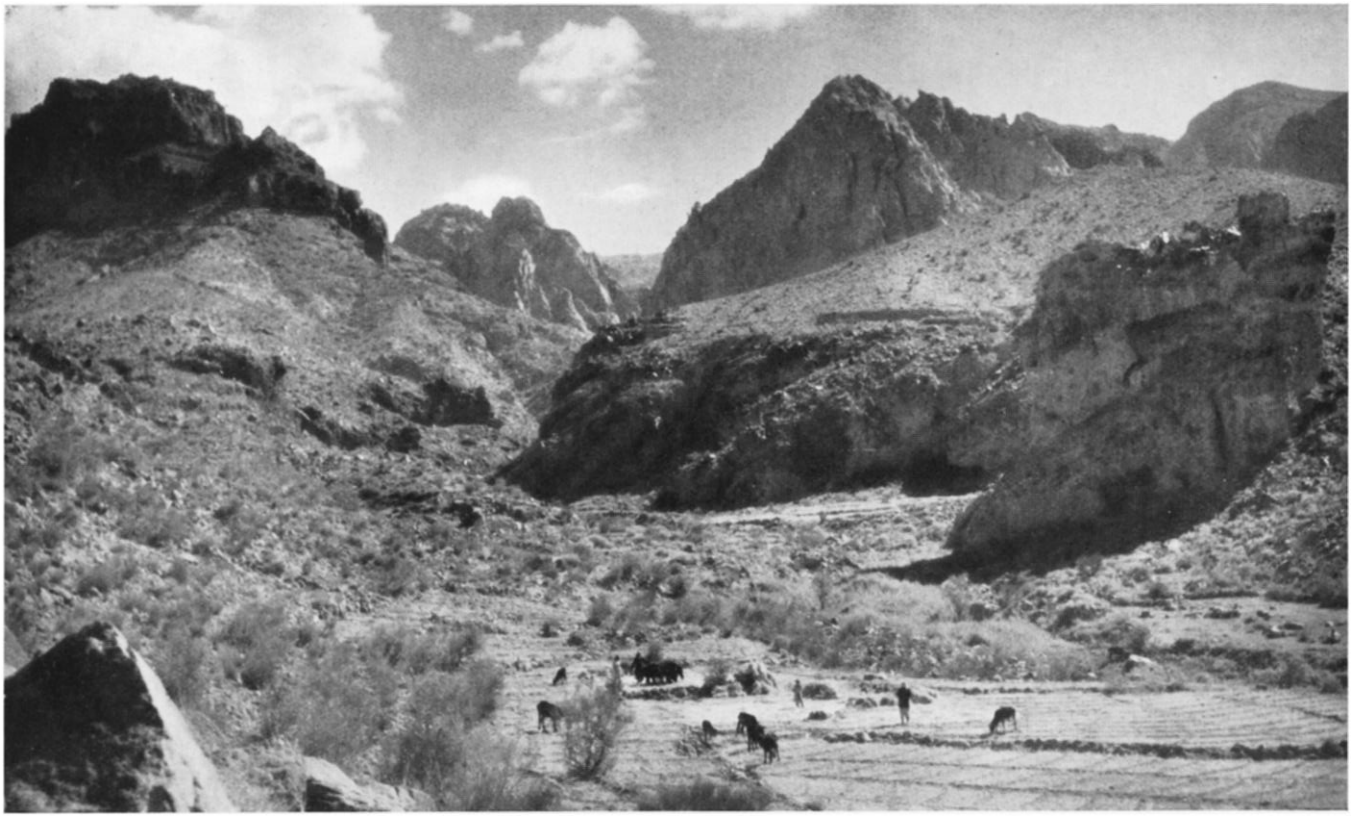
My first glimpse of the Sarhad was in March 1918, when, in the capacity of H.M.'s Consul at Kerman, I accompanied the late Major G. L. Farran, of the South Persia Rifles, by car from Kerman across the Lut Desert and back. We took six days to do the trip *via* Tahrud, Bam, Shurgaz, and Sipi to Dehana-i-Baghi in the north-west of the Sarhad, an isolated post of the East Persian Cordon Field Force. This was the first time that the Lut Desert had ever been crossed by car from west to east. What with a duststorm which is still talked of in South Persia as the worst within the memory of man, flooded streams, heavy sand, rock-strewn tracks, narrow passes through the hills, and the ever-present danger of raiders, we had few opportunities for scientific observation, but I felt for the first time the curious fascination of the Sarhad and made up my mind to revisit it. Three years later I found myself for a few months Political Agent at Chagai, in succession to Major Hutchinson. The Chagai

*A brief account of this first visit to the Sarhad and ascent of the Kuh-i-Taftan is given in *G.J.*, 10, 586–8, and rather fuller descriptions of both trips are to be found in 'Ten Thousand Miles in Persia,' pp. 132–4, 354–5.

†The P.C.G.N. have adopted the spelling Duzdab, which is a correct transliteration of the words from which the place derives its name (*duzd* = thief, *āb* = water). There is no doubt however that Duzdap is locally correct, as the name is really a Baluch one, the word for water in the Baluchi language being *āf*, and the letters *f* and *p* interchangeable phonetically in the Indo-Persian dialects. Duzdap was for this reason the name adopted by the Indian Government when the place was occupied by us in 1917. Its precise spelling is now, as a matter of fact, of merely academic interest as the Persian Government, considering that "Thieves' Water" was not an appropriate name for a Persian Customs post, changed it last year to Zahidan. This is the name of an ancient city, sacked by Tamarlane in 1389, situated on the banks of the Helmand 12 miles east of Shahr-i-Seistan (Nasratabad). Several other changes have been made by the Persians in the nomenclature of towns and districts in this neighbourhood, *e.g.* Seistan to Zabulistan, Nasratabad to Shahr-i-Zabul, and Bampur to Iranshahr.



Jamchin camp and western approaches to the Kuh



In the Tamindan valley

Agency in those days included some 350 miles of the Afghan frontier as well as the Sarhad, and my responsibilities did not permit of more than two tantalizingly short tours in the latter region. In March–April 1921 my wife and I, escorted by a picturesque assortment of Baluch tribal levies, marched south from Mirjawa on the (newly built) Nushki–Duzdap railway to Khwash *via* Ladis and Sangun in four days. We had a Ford car with us, for a rough motorable track had by this time been made and was in regular use by the Khwash detachment; but on this first visit I preferred, as I usually do when breaking new ground, to use animal transport and see the country properly.

It was well worth the trouble. At our second halting-place, Khan Shamba, whence the twin cones of the snowy Kuh stood right opposite us only 12 miles away, we found the Damani Sardar, Jiand, waiting for us with his braves in full panoply. Thanks to the lesson they had received from General Dyer in 1916 and to the presence of a detachment of Indian infantry in their rear at Khwash, the "Lion of the Sarhad" and his brood had by this time a wholesome respect for the *farangi* (European), and though the Damanis outnumbered our armed following by about four to one, there was no danger. Besides Jiand, several other leaders who figure in Dyer's 'Raiders of the Sarhad,' including the redoubtable Shahsowar Khan, were there, and a picturesque show they made with their voluminous pleated Baluch shirts and pantaloons, their turbans wound round high egg-shaped Persian *kulahs* and their long black curls hanging down in some cases to their waists. They positively bristled with arms; one chief carried a rifle, a shotgun, two large pistols in holsters, and an immense hunting-knife in a sheath. Next morning, on the march to Sangun, I asked Jiand if he would like a drive in the car. The Damanis no longer believed, as when General Dyer first appeared at Khwash in a car, that it was an engine of war which poured a stream of bullets out of every one of the holes in its radiator; still, Jiand had never been in one, and it was with ill-concealed mistrust that he took his seat in ours. He proved an enthusiastic convert to motoring.

The *carossable* between Khan Shamba and Sangun climbs painfully up the lower slopes of Taftan to avoid some very broken country through which the caravan track goes, and the old Sardar was not particularly impressed until we had crossed the last col and found ourselves spinning at 40 miles an hour down a long and comparatively smooth slope. "Faster! faster!" he yelled from the back of the car, jumping about so excitedly that half the kit fell out, including my gun, the stock of which was smashed to splinters. When we stopped to pick up the jetsam we were startled to observe a large party of Baluch horsemen galloping towards us in a cloud of dust. They turned out to be not raiders but merely Jiand's own men, who had kept up with us by the much shorter caravan route, and seeing clouds of smoke issuing from the Ford's exhaust had jumped to the conclusion that we were making a holocaust of their beloved chief!

The secluded valley of Sangun, with its orchard of apricots and pomegranates and its pocket-handkerchief wheatfields, is remarkable for a solitary cypress of immense size. This tree measures 33 feet round the bole, 25 feet round the trunk at 6 feet above the ground, and very nearly 100 feet in height; it would be interesting to know whether, as suggested by Sykes,* it is one of the

*'Ten Thousand Miles in Persia,' p. 354.

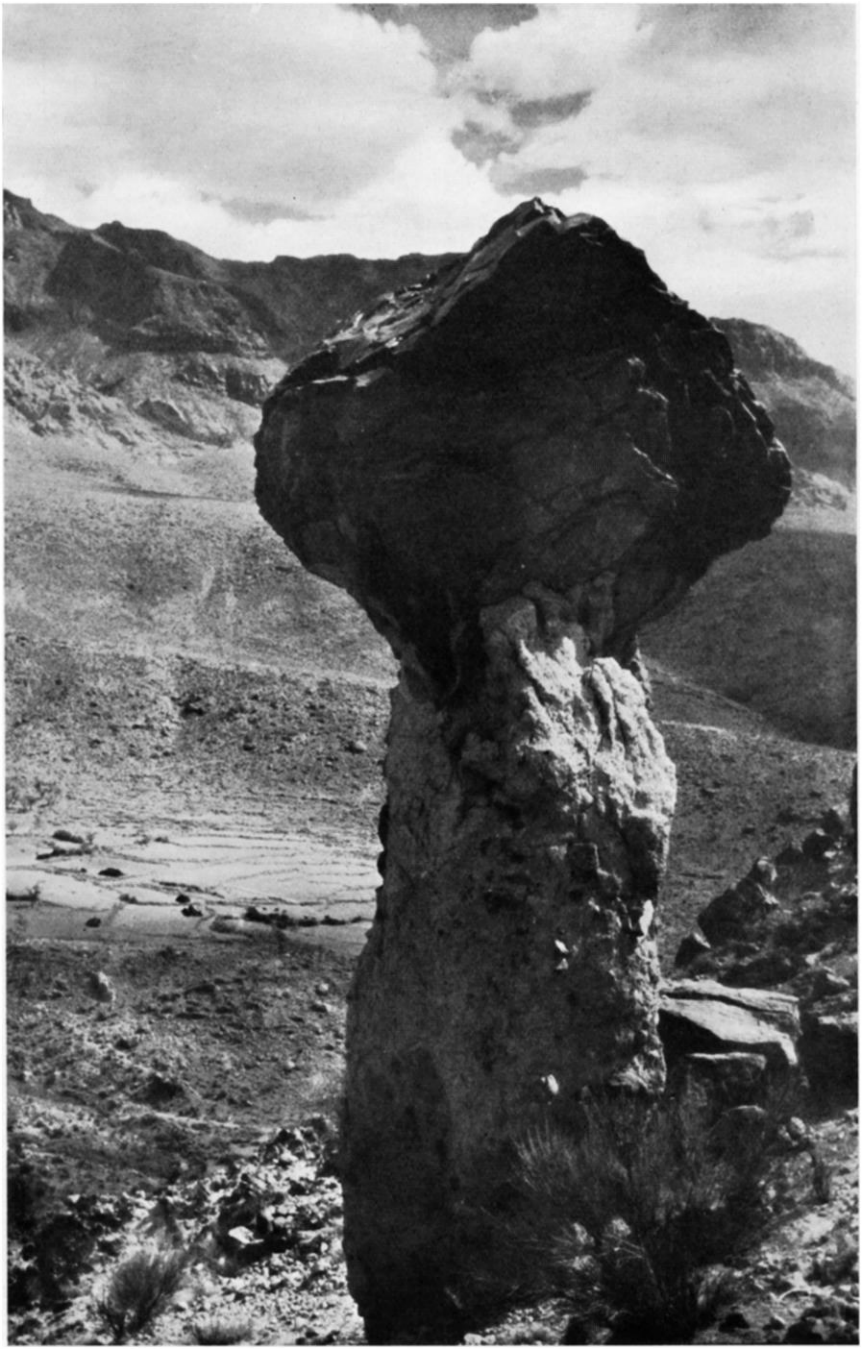
largest cypresses in the world. Fifteen feet above the ground the trunk divides into three or four huge limbs, and the forks between these are used by the local cultivators as a granary or barn. There must have been many hundredweight of agricultural produce stored up that tree when I last saw it in winter. The tree's name, Miromar, denotes that it is sacred to the Caliph Omar, whose *qadamgah* Sangun is; he is reputed to have planted its ancestor, a far older tree of which part of the trunk, hung with votive offerings, lies prostrate on the ground near by. Under the great cypress, in a tiny black tent scarce 3 feet high, lived two extraordinary old women whom we christened the Witches of Sangun. They were reputed a hundred years old, and looked more, being bent literally double, their ancient chins seeming almost to touch the ground as they scuttled about after us with remarkable agility in their voluminous black rags. They can be distinguished in the last of the accompanying illustrations, squatting fifth from the left and second from the right in the front row.

The Damanis are cheerful villains, when not too much on their guard. That evening in conclave I was surprised at being asked suddenly by one of them whether we, the British, had mullahs who told us when it was going to rain? Thinking of my friend the Government Meteorologist at Simla, I replied that we had. "Does he always prophesy correctly?" they asked. I was obliged to admit that even the meteorological experts were sometimes wrong. This reply was passed round in dialect and received with much chuckling by those present. "What are you laughing about?" I asked. Pointing to a sheepish-looking old greybeard in a huge turban, my questioner explained, "This is our mullah. He's always praying for rain and telling us it is coming, and he's *never* right!"

The capital of the Sarhad, Vasht, or, as I believe more correctly, Khwash,* consists of a square fort in the Persian style and a small township of half a dozen Indian *banias'* shops and a few Government buildings, standing in the midst of an immense plain dotted with abrupt jagged hills and ridges. Of these the most striking are the Kuh-i-Panj-Angusht, or "Five Fingers" (8110 feet) which overlooks Khwash from the west, the isolated Kuh-i-Kalhur to the south-east and the cliffs of Murteza Ali with their extraordinary folded strata to the north-east. Beyond the latter, the black serrated ridges of Morpish and Gili Kuh (9000–9700 feet) mark the fastnesses of the once-dreaded Yarmuhammadzai and Gamshadzai Damanis. A small population of aboriginal Khwashis, very dark and of a low racial type, has cultivated the arable lands of Khwash for centuries with subsoil water brought from a considerable distance to the surface by means of two typical Persian *qanats*. The larger of these affords an exceptionally good supply of sweet water and is obviously a legacy from a more settled and prosperous past.

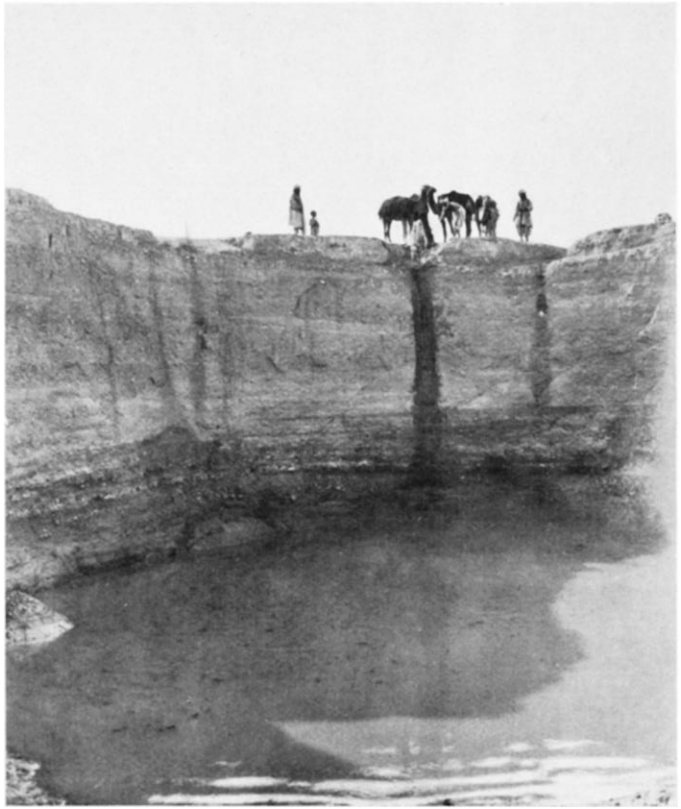
It was on our return journey from Khwash, in April 1921, that we made our first reconnaissance, almost by chance, into the high valleys of the central

*I think there is no doubt that the spelling Vasht adopted by the P.C.G.N. is wrong. The name is an almost exact transliteration of the local Baluch word for "sweet," a corruption of the Persian خوش khvush. The form Vasht which appears in some maps is not, and so far as I can make out never has been, used by the local people. Nor do the Persians in official correspondence spell the name Vasht—always خاش or خاش, *i.e.* Khwash or Khash.



Earth Pillar above Tamindan

Men of the old Persian stock at Tamindan



Possible meteorite hole near Gwarkuh

volcanic massif of the Sarhad. The Baluch told us of a glen called Tamin to the south-west of Siah Jangal with trees and sweet water and a climate cooler even than that of Sangun. Scenting a possible hill-station, we left the motor-track at a spring called Surush, and after a ride of 4 miles along an up-and-down camel-track came to a narrow but cheerful little valley tucked away among the folds of Taftan's lava-apron. A willow-shaded stream watered orchards of apricot, pomegranate, and mulberry, and shaggy, sturdy hill-folk with mops of curly black hair under their *kulahs* were preparing terraced fields for wheat and barley. A mile above the point at which we entered the glen we came upon the black tents of Mir Nur Muhammad Khan Kurd, headman of all the valleys to the north of the Kuh. Close by was a low cliff honeycombed with shallow caverns and grottos, used by the nomad inhabitants for storing agricultural produce. A little farther up, the valley narrows and a copious spring of fresh water, the chief source of the Tamin river, gushes out from the foot of a lava cliff. This spring is known as the Fountain of Moses, that prophet having, according to local legend, struck the rock here just as he did in Sinai. Following the much-reduced stream upwards the track passes on the left bank the remains of a number of small houses on terraces, built in the cyclopean style of large undressed stones without mortar. Traces of an ancient water-channel cut in the rock above are also visible. On a hillside near the Fountain of Moses we found numerous fragments of late mediaeval glazed pottery, and two large pieces of carved stone pillars, one hexagonal and the other circular, which must have formed part of some portico or colonnade. Whether these belonged to the same period as the village is hard to say, but they show at any rate that Tamin was once inhabited by people of a much higher standard of living than at present. A mile farther up there is a remarkable natural arch cut out of a huge buttress of lava which juts out across the valley. The highest cultivation of present-day Tamin is at this point, Sardeh by name. Beyond, the mighty flanks of the volcano rise 6000 feet into the sky.

While in this neighbourhood we had a glimpse of the barbarous methods of Sarhad headmen under the old regime. My wife, when visiting one of the black tents at Tamin, noticed a man lying in a corner covered with a blanket, and asked whether he was ill and if she could do anything for him. The Kurd chief was very furtive about the man and would not at first say who he was. Eventually glances were exchanged between the Kurds and Baluch as my wife was solemnly informed that the man was suffering from a cold. That evening in camp at Siah Jangal our Reki guide, whom I had commissioned to investigate, informed me that the sick man was a thief whom Mir Nur Muhammad had punished by hanging him by the hands, naked and with weights on his feet, from a tree. On receipt of the news of my unexpected and inopportune approach the man had been hastily cut down and hidden. Needless to say, I took steps which effectually prevented a recurrence of this kind of brutality in the Sarhad, at any rate during the remainder of our occupation.

In December of the same year (1921) my wife and I went back to the Sarhad and carried out an interesting though unfortunately hurried tour in the extreme south-west of the region, marching *via* the Gardan-i-Jauri and Shurab on the edge of the Lut Desert to Pansareh, at the foot of the Kuh-i-Bazman. Sending our baggage ahead from Khwash, we went by car as far as

Jauri along the northern edge of the gazelle-haunted Chah Ghaibi Hamun; thence a track possible for animal transport only took us down through a jumble of arid rock-ridges and defiles to the well-named Shurab (Bitter Water) camping-place. From this place the splendid snow-capped cone of Bazman rose 7500 feet above the desert to the south-west; there was not time to climb it, and we had to content ourselves with a night at the pleasant date grove of Pansareh under the north-eastern flank of the volcano. Returning, we marched north-eastwards again and struck the brackish Gajjari stream, which carries the drainage of the south-western portion of the Sarhad plateau down through the Pir Shoran hills to the Lut at Samsur. I found the orography of this region somewhat inaccurately represented in the Survey of India $\frac{1}{4}$-inch sheet concerned (30 D), and was able to correct it in many places by means of a set of compass bearings from those convenient landmarks, the two volcanoes.

From Ab-i-Gajjari we marched to Gwarkuh, an important camping-place of the Reki Baluch. Gwarkuh and the neighbouring Kalmazar valley were very pleasant in the clear air and bright but not too hot sunshine of Baluchistan in December. There are marshes swarming with duck, geese, and snipe; thickets of tamarisk and willow; stony but by no means bare plains frequented by gazelle, lesser bustard, and sand-grouse, and sudden sharp-pointed little mountain ranges roamed by Persian ibex and moufflon. Near the north-eastern foot of the most conspicuous of these ranges, the Gwar Kuh, in the midst of a perfectly flat plain, we found a remarkable pit the appearance of which suggests that it might have been made by an immense meteorite. Sir Percy Sykes appears to have missed this curiosity, but General Dyer describes it in 'The Raiders of the Sarhad' as having evidently been "punched in the ground by some tremendous force," which is exactly the impression it gave us. K. S. Idu Khan Reki, who was Dyer's right-hand man in 1916 and is now Deputy-Governor of the Sarhad under the Persians, an exceptionally intelligent man of about fifty-five, told Dyer that his grandfather heard what may have been the meteorite fall when he was a boy. "Something exploded in the sky," the old man used to describe it. The hole, Idu said, was originally "twice as deep" as in 1916. Measuring it roughly in 1921 I found it to be an oval 250 feet in circumference, 95 feet along its longer, 70 feet along its shorter axis, and 35 feet deep. At the eastern edge a narrow channel or slit had been cut by flood water from the surrounding plain, and the bottom of the pit was evidently silting up fairly rapidly; this impression was confirmed in 1929, when I found the pit at least 3 feet shallower and the slit deeper and wider.*

During the two years (1927–9) of my term as Consul in Seistan and Qain my thoughts continually turned to the Sarhad, but no extended tour was possible pending the Persian military operations against Bahram Khan Baranzai,

*Curiously enough, what appears to have been a large meteorite fell somewhere near Khwash at 8.30 p.m. local time on 22 October 1929, the very day on which, as described below, we started from Mirjawa on our last visit to the Sarhad. From an examination of several independent witnesses, I ascertained that the meteorite passed an unknown distance west of Khwash, travelling from north-east to south-west. It struck the earth with a great noise and caused vibration "like an earthquake." Search was made for this meteorite, but no trace had been found of it up to the time of our departure from the district the following month.

which, as mentioned above, took place eventually in November and December 1928. The following spring I returned to my old province, Baluchistan. At the end of November 1928 however, while the Persian troops were operating farther south and attention was deflected from the strategically unimportant hill-country to the west of the Mirjawa–Khwash road, my wife and I managed to pay an unostentatious visit to the uplands of our desire. Camping in an uninhabited valley called Chilling, 28 miles south-west of Mirjawa, we spent three days exploring the deeply-eroded northern versant of the Kuh-i-Taftan massif and the range immediately to the west and north-west of it. There was a triangular piece of country here, measuring some 1200 square miles, the drainage and relief of which was shown conjecturally in the Survey of India ¼-inch map and had obviously been plotted in from a considerable distance. Only three place-names were given, and all of them were wrong.* My particular objectives on this occasion were two valleys of which I had heard at Tamin in 1921, Ropask and Anjirak, strongholds of the hill people which had never been visited by any European or even (so the greybeards assured me) by any Persian official in modern times.

So much of our very limited time was taken up with working out the complicated topography of the lower slopes and glens that we had to leave Anjirak, of whose wooded entrance-gorge we had a tantalizing glimpse from below, for another visit; but we succeeded in reaching the Ropask glen, some 9½ miles from our camp, and were rewarded by some remarkable discoveries. The track, after threading some difficult defiles past Sar-i-Kahnu, climbed on to one of a series of long, flat-topped ridges sloping from the south, in which direction the view was bounded by a range of lofty and fantastically carved peaks and precipices, of which I learned the local names for the first time—Gezind, Tir, Pachinka, Lejwar, Sineb, Garok, Gaud, etc. The ground was scattered with heavy, porous volcanic stones, blackened by oxidization and of sizes varying from 2 to 6 inches in diameter, and it was evident that the flat-topped ridges were the ash-beds of a volcano. Their dip however was not from the Kuh-i-Taftan, which towered grandly on our south-eastern horizon; it was rather from a point some 5 miles north-west by west from the Kuh's north-western cone, and it has since occurred to me, after a study of Vredenburg's remarks about the Kuh-i-Taftan in his monograph already quoted,† that they may be the ash-beds of another volcano, separate from and much older than the Kuh. Gezind (10,321 feet) and the Tir peaks may be the remains of this ancient volcano.

The descent into the Ropask glen is very steep and rough, and the agility of the donkeys and cattle which habitually negotiate it with loads on their backs is remarkable. As at Tamin, we found the valley full of trees, chiefly poplar, ash, willow, apricot, and mulberry, some of them of considerable size. Wheat, barley, melons, and pomegranates are also grown by the wild-looking but

*The triangle to which I refer is bounded on the south-west by the watershed of the Kuh-i-Taftan range, on the south-east by the Mirjawa–Khwash motor track, and on the north by the caravan track leading due west from Ladis to Dehak on the Duzdap–Khwash road. No "Dudar" valley or settlement exists here; "Tamindan" is on the south side of the Kuh and is obviously a mistake for "Tamin"; the Surush spring is 6 miles east of the stream so marked.

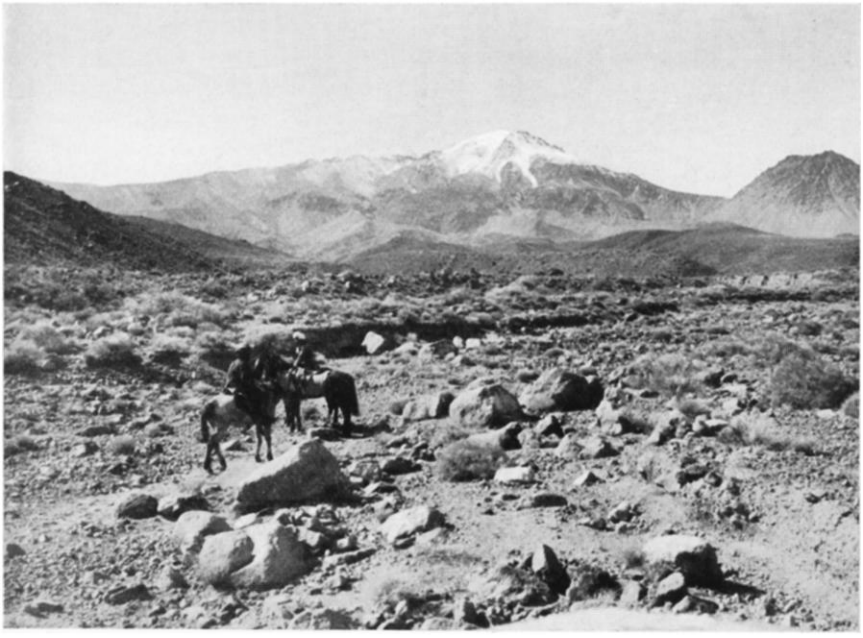
†*Memoirs of the Geological Survey of India*, vol. xxxi, pt. 2, pp. 268–9, 271–3.

quite friendly inhabitants, who informed me that they were of the same race as the Tamindanis on the other side of the mountains, *i.e.* of the ancient Persian stock. They spoke in Baluchi to the Rekis of our party, but among themselves they used a curious dialect of Persian, reminiscent of but different from the Persian spoken by the villagers of Seistan. They told me that they paid one-fifth of their produce as revenue to the Kurd headman of the valleys to the north of the Kuh, the same Mir Nur Muhammad Khan whose acquaintance we had made in 1921 at Tamin. No "sahib," they informed me, had ever been in the valley before, though they remembered (without my mentioning it) Vredenburg's visit to the neighbouring valley of Tamin thirty years before.

The two most remarkable features of Ropask are the Tombs of the Seventy Mullahs and the Cave-Fortress, both situated in natural grottos or shallow caves under the lofty overhanging scarp of lava which forms the south-eastern wall of the valley. The grotto containing the tombs is about 100 feet wide by 15–20 feet high and 20–25 feet deep. It is filled with irregularly arranged superterrene graves of a curious design (see illustration) made of red clay bricks plastered over with *gach* (gypsum) and rudely daubed in quite recent times with black and red designs and Qur'anic texts. The people of Ropask had no tradition about this curious cemetery, except that it contained the bodies of "seventy mullahs who died all at the same time." Human bones, but no skulls, were to be seen in some of the tombs which were in bad repair, as well as in shallow graves hollowed out of the rock with no tombs over them.

The Fort consists of a vast shallow cave about 80 feet high at the mouth and 40–50 feet deep, its back and sides and roof honeycombed with artificially hollowed-out chambers and grottos arranged vertically and connected mostly by rough steps. One of these chambers has a low doorway with a huge beam over it; others, right up under the roof, must have been reached by wooden stairs or ladders which have long since disappeared. The lava bluff overhanging the fortress is at least 100 feet high, and the approach to it from below is pitched at a very steep angle, covered with boulders; there is a spring of sweet water at the entrance, and plenty of room for the women and children of the community and even for the sheep and goats: altogether a useful, if somewhat unusual, type of refuge against marauding enemies.

By the summer of 1929 Persian rule had been firmly established not only in the Sarhad but at Bampur (renamed Iranshahr) and other strategic points in Persian Baluchistan to the south. The Military Governor, Sarhang (Colonel) Muhammad Khan Nakhjawan, was an old friend of mine and had more than once invited my wife and myself to pay him a visit at his hill-station, Kosha, 30 miles north-west of Khwash among the foothills of the Kuh-i-Taftan. Conditions were thus for the first time since the British occupation favourable for that thorough exploration of the Kuh and its vicinity to which I had been looking forward for so long. A kindly Agent to the Governor-General in Baluchistan, Sir Beauchamp St. John, gave me twenty-five days' leave, and the morning of 21 October 1929 saw my wife and myself, complete with car, camp equipage, and an irreducible minimum of retinue, jolting steadily westwards from Quetta on one of the two weekly trains to Persia. Next day, having detrained at Mirjawa and successfully negotiated the car as well as our sporting



The Kuh-i-Bazman from near Pansareh

Primitive husbandry in the Anjirak valley; aiguilles of Pachinka in background

Sardarya Lake and Kuh-i-Lejwar

arms and ammunition, stores, and other baggage through the Persian Customs, we started off up the well-remembered track to Khwash. This had deteriorated since 1921, and it took the rickety hired lorry which followed us more than two hours to cover the 24 miles to Siah Jangal, our first halt. The weather was perfect and the double dome of the Kuh in front of us clear-cut against the blue, with only a few feecy clouds hovering lightly over it. This weather, I may say, continued fine throughout our stay in the Sarhad, and the severe cold which (remembering November 1928) we had expected in the high valleys agreeably disappointed us. Even at Anjirak a fortnight later, over 8000 feet above the sea, the thermometer scarcely went below freezing-point at night.

On October 23 we took five hours to crawl the 50 miles to Kosha. The track was worst between Khan Shambah and Sangun, where little was left of the fair-weather road made during the British occupation; the light Chevrolet and Ford lorries which supplied the Persian troops in the Sarhad had in many places made their own tracks among boulders and bushes, over moors and along torrent-beds, high up on the flank of the volcano. At Sangun, which is the halfway house between Mirjawa and Khwash on the Duzdap–Iranshahr line of communications, we were surprised to find a newly-built, whitewashed rest-house for officers, and lines for the local levies (Amnieh) under construction. From Sangun to Chah-i-Zar, where an ill-defined branch track leads across to the Khwash–Kosha road 3 miles south of Nimdeh, the going, though heavy with sand, was better, and we reached Kosha at 3 p.m. From Nimdeh to Kosha it is 19 miles by the Survey of India ¼-inch map, but my speedometer made it only 14½. As the mountains are approached, traces of ancient terracing for irrigation on a very large scale are visible on both sides of the road.* At Kosha, which is just inside the mouth of the Tamindan valley, we were hospitably received by Sarhang Nakhjawan and his wife in a pretty white-washed Persian house recently built as a summer resort for the officers of the Khwash garrison. The place is only about 6500 feet above the sea, has few trees, and is not nearly so attractive as Tamindan village, only 3 miles up the valley; but it is attainable by car without further expenditure on road-making, and has for this reason been selected as the hill-station for Khwash.

Next day the Sarhang and I, escorted by half a dozen Persian troopers, rode up the valley, shooting *chikor* (red-legged partridge) as we went. Nowhere, except perhaps on the best of the carefully-preserved chikor grounds of British Baluchistan, have I seen so many chikor; there must have been a covey, on an average, every 200 yards. Trees are few and stunted, but shrubs and bushy plants, such as ephedra, artemisia, and prevoskia, clothe the bareness of the hill-sides and stream-beds. Passing Varaj, where Sykes and Brazier-Creagh camped in December 1893 on their way to climb the Kuh, we came to Tamindan. Here for the first time we saw trees in relative profusion. Planes, eleagnus, willows, and poplars, as well as fruit trees of great size, mulberry, quince, and apricot, sheltered the black tents of twenty or thirty families of Tamindanis, whose headmen came out to greet their Governor and his British guest. Very soon what would in India have been called a "durbar" was in

*Sykes mentions these terraces and says that they are called locally *gorbasta* or infidel dams ('Ten Thousand Miles in Persia,' pp. 126, 132).

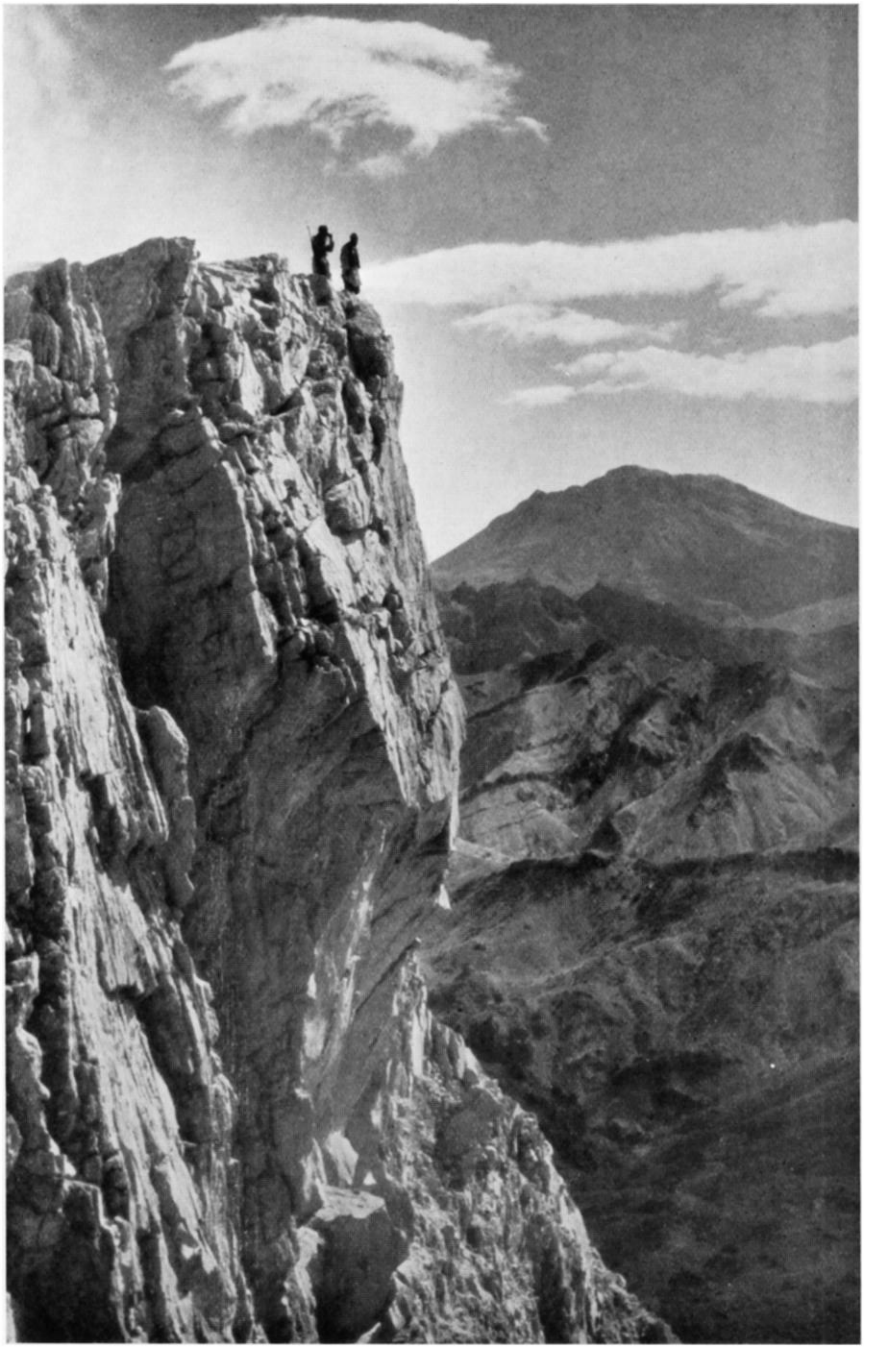
progress under the spreading branches of an immense *chinar*, and the Tamindanis were pouring their grievances and aspirations into my Persian friend's ear. Their chief spokesmen were the grey-bearded Qazi of the valley, Haji Alam, and an amusing old fellow called Lashkari, who was very proud of his ancestral title of *Kuhban* (pronounced Kohpun) or Warden of the Mountain. Most eloquently did the old Kuhban plead for the restoration of the ancient duties and privileges of his family. "I am of the dust of this earth," he said. "My ancestors have been Kuhbans since the mountain was. Their duty was to take forty young men of these valleys twice a year to the burning sulphur springs at the top of the Madar Kuh (the south-east cone of Taftan) and bring down a total annual weight of 100 Narmashiri *batmans* (650 lb.) of sulphur. They used to take the sulphur into Khwash and deliver it to the Deputy Governor, who paid the Kuhban his dues, consisting of three *tumans* (about eleven shillings in those days) in cash and 200 *batmans* of Mekran dates. Now for many years past there has been no one for us to pay the sulphur to, and our rights and privileges are no more."

The old Qazi was quieter but no less pathetic. He said that he belonged to the ancient Mir family, one of the three great Persian families which centuries ago ruled Persian Baluchistan.* As recently as the reign of Shah Nasir-ud-Din the Tamindanis had been comparatively prosperous, but wave after wave of barbarians, Kurd and Baluch and Afghan, had engulfed them, and there were but few left. Perhaps, thought the old Haji, now that the Persians ruled Baluchistan once more, the scattered remnants of the old Persian families would come back from Garmsel and Seistan and Kalat, and the golden age of the Sarhad would return.

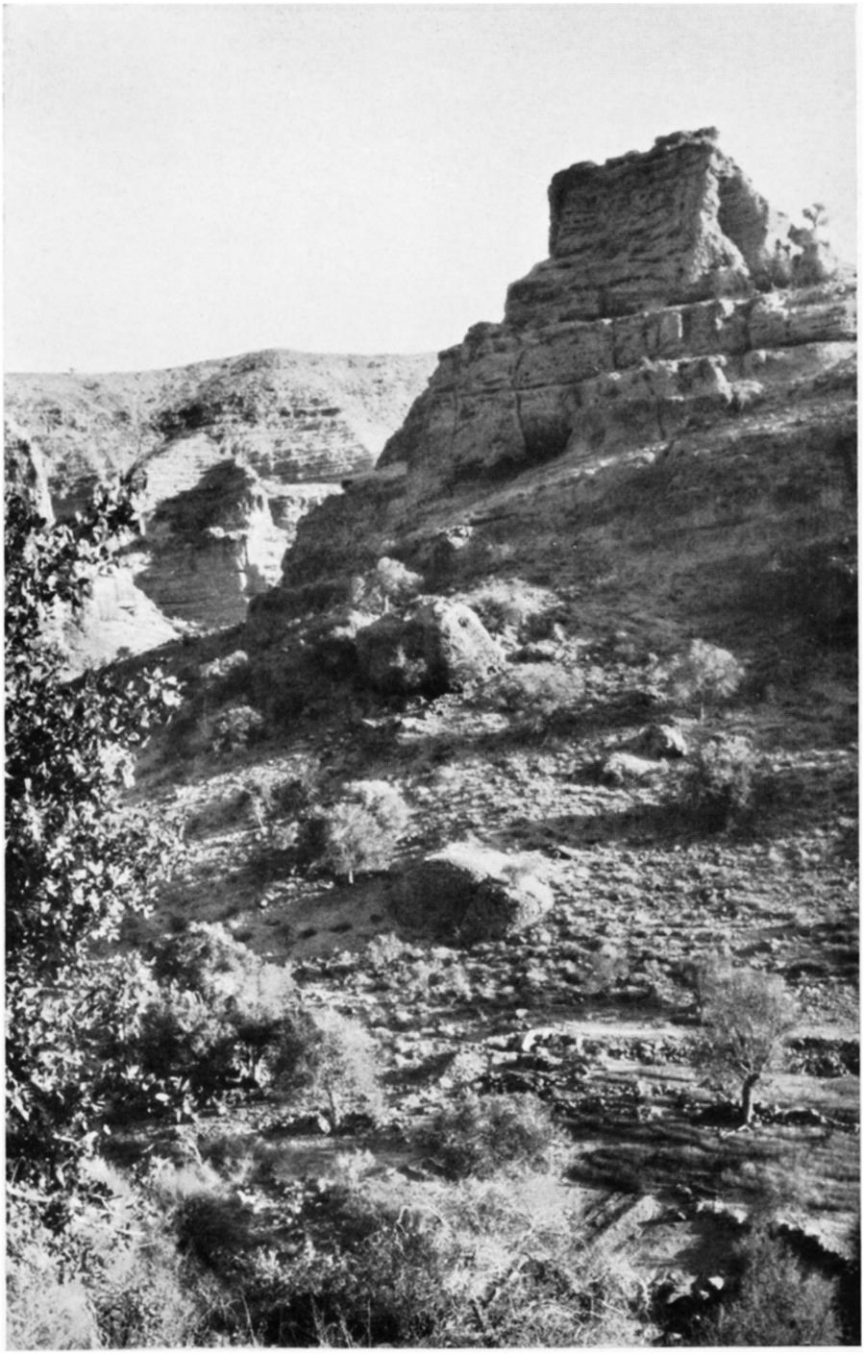
On October 25 we bade farewell to our kind host and hostess and marched 6 miles up the valley to a previously selected camping-place, Jamchin, some 1100 feet higher than Kosha and within 2 miles of the real foot of the volcano. Here we spent five days, devoting two of them to the Kuh, which we climbed on October 27. Moving over to Welan, a western branch of the Tamindan valley, we camped two nights, and on November 1 crossed a very steep pass just under 9000 feet high, to Anjirak, the glen which we had failed to reach from the north side of the mountains in 1928. Four days were spent exploring and ibex-stalking in this previously unknown valley and the surrounding peaks; then, recrossing the pass with great difficulty, we camped two nights at Narun valley and reconnoitred the valley of that name as well as those of Bedistil and Tud-i-Leng. On November 8 we marched down to the plains and met our car and lorry at Poseh. For transport during this fortnight among the mountains we used the very inferior local camels, as well as donkeys, when we could get them. The people were friendly, thanks partly perhaps to recollections of the British occupation, but mostly to fear of our friend the Sarhang, who had kindly issued orders that we were to be assisted in every way.

It is unnecessary to follow our daily movements in detail, and I will content myself with descriptions of the Tamindan, Anjirak, and Narun valleys *seriatim* and a brief account of our ascent of the Kuh-i-Taftan.

*Representatives of this family are also to be found at Bunjar in Seistan, at Dizzak and Magas, and in the Biaban district of South-West Mekran, near Bandar 'Abbas. The other two families referred to were the Khojas and the Raises.



The Kuh-i-Taftan from the cliffs of Lejwar



Natural fortress of Kuh-i-Dig, Anjirak valley

Tamindan is the most important of the five valleys of Taftan inhabited by people of non-Baluch race under the headship of the Kurd family. All these five valleys, Tamindan, Sangun, Tamin, Ropask, and Anjirak, come down either from the Kuh itself or from the adjoining peaks of Gezind, Tir, and Lejwar, which, as mentioned above, appear to be the remains of an older volcano. There are several other valleys to the west on both sides of the range, Tud-i-Leng, Narun, Meluman, Shaikh Ahmad, etc., but they are inhabited almost entirely by Baluch. Fifty or sixty families live at the various camping-grounds of the Tamindan valley and its branch glens, Tud-i-Zer, Welan, Jamchin, Pailak, etc. There are scarcely any houses, the people living in black tents made of wool spun and woven by the womenfolk. This is a case of an originally settled agricultural population giving up houses and taking to tents in imitation of the exclusively nomadic population around them; usually the reverse process is seen, as in the case of the Baluch of the Indus Valley and the Kirghiz of Central Asia, many of whom have taken to houses with disastrous effect upon their physique. Wheat is grown as a spring and barley as an autumn crop in alternate years. Clarified butter, wool, and certain herbs, notably one called *maddo* (very like artemisia, but with small purple flowers), are traded with itinerant Sikhs from Duzdap for tea, sugar, cloth, etc.

Mention has already been made of the elaborate terracing and cyclopean stone villages to be found in parts of the Tamindan valley as well as in Tamin on the north side of the mountain. These remains are always referred to by the local people as pre-Islamic, but it is quite possible that they may turn out to be mediaeval, like the curious brick-and-plaster graves in the cave-cemetery at Ropask. To a later date still, probably seventeenth century, belong the fine old Shi'a Muhammadan gravestones I found in two places, Jamchin and Tamindan. These are inscribed with good Arabic lettering in low relief and are mostly half buried in the ground, though at Tamindan some of them have been dug up and used again as gravestones for quite recent deceased. The old Qazi, Haji Alam, had exaggerated ideas of their antiquity, saying they belonged to the early centuries of the Muhammadan era. This tendency to exaggerate the age of remains made me doubt the genuineness of the local tradition about the "Infidel Dams." However this may be, the differing age of the various remains shows that these high valleys of the Kuh were inhabited by a settled and comparatively advanced community for a very long time.

The scenery in the upper part of the Tamindan valley is very striking. Lofty and fantastically carved precipices and aiguilles of various shades, red, ochre, purple, grey, and black, contrast with grassy meadows and willow-fringed streams. Near Tamindan village, high up on the steep west side of the valley, is a remarkable earth pillar consisting of a large square black boulder perched on the top of a column of red conglomerate 25 feet high and about 8 feet thick. Another such pillar, but with the boulder broken off and lying in pieces on the ground alongside, is to be found low down on the opposite side of the valley, close to the edge of the orchards. At the very head of the glen, 2 miles above Jamchin, is a narrow *tangi* or defile of a type common in South Persia and Baluchistan, 30–50 feet wide with perpendicular sides 200 feet high and a "dry waterfall" in the middle, sloping steeply down from the cone of Taftan. This place is called the Band-i-Gilu, and is supposed to be the site of an "infidel

dam" of great size. I could find no remains however of any masonry or other signs of ancient irrigation works above the gorge, nor of any canal or channel leading from its upper mouth.

In addition to the usual trees and shrubs of the South and East Persian highlands I was interested to find birches on the steep hillside above Jamchin, at a height of 8000 feet. The variety of bushes and small shrubs is remarkable, but though I learned the native names of some of them, such as *maddo*, *turshik*, *khanjak*, etc., I cannot (being no botanist) say to what species they belong or whether they include any varieties not found elsewhere in Persia or British Baluchistan. Some, but not all, of the trees and bushes about Anjirak listed below were found also in Tamindan.

Anjirak is perhaps the most secluded and difficult of access of all the valleys of the Sarhad. On the east and north it is entirely shut in by the perpendicular crags and aiguilles of Pachinka (Home of the Ibex) and Tir, except for its narrow and easily defensible outlet; to the south and east the 10,000-foot peaks of Gezind and Lejwar form a barrier which can be scaled by animal transport at only one point, the steep pass over to Narun and Welan. At the junction of the Anjirak with the short but very fine Deh Ranta glen is a remarkable rock about 500 feet high called the Kuh-i-Dig, probably because its top is shaped rather like an inverted saucepan (Per. *dig*). Just below is a small fort, the Kaleh-i-Gauri, which commands the only track leading up to the Kuh-i-Dig. In 1889, when the Governor of Baluchistan, Abul Fath Khan Turk, led an expedition against the Baluch tribes of the Sarhad, the Kurds of the Kuh-i-Taftan refused to assist him and retired with all their women, children, flocks, and herds to Anjirak, where they defied the Persians from the Kaleh-i-Gauri for over a year.* I was told that there was a spring of sweet water and a pomegranate tree at the very top of the Kuh-i-Dig, but did not have time to verify the fact.

The people of Anjirak are remarkably good husbandmen. The way they brought to the surface and utilized every tiny trickle of water, and grew not only the usual crops but fruit and vegetables, reminded me forcibly of the Qainat, 400 miles to the north. Each of the small branch glens of the main valley sheltered one or more tiny crofts. On one of these I saw young apricot trees 6 feet high which had been raised from seed planted only four years before. The profusion of wild vegetation surpasses anything I have seen elsewhere in Baluchistan or East Persia, due no doubt to the volcanic constituents of the soil and the fact that snow lies late in this steeply-pitched north-facing valley. Among the fruit and other trees we noticed within half a mile of Sarmezil village, just below the Kuh-i-Dig, were wild pistachio (*banneh*), pear, mulberry (*shahtut*), cherry, apricot, quince, grape-vine, pomegranate, poplar, willow (*bid*), eleagnus or Babylonian willow (*sinjid*), wild almond, fig, and plane. Just below the three curious pinnacles known as Big Tir,

*Sykes, 'Ten Thousand Miles in Persia,' p. 107. The Kurds might have held out indefinitely at Anjirak, if in 1890 they had not decided to throw in their lot with the Governor of Baluchistan. The three sons of Said Khan went in to Bampur at the invitation of Abul Fath Khan, who at first treated them well but subsequently executed them. This blow crippled the Kurd family for a generation.

Graves in the cave-cemetery at Ropask

Lava scarp at Ropask, showing Tombs of the Seventy Mullahs and Cave-Fortress

Reki and Damani Baluch chiefs and fighting men

Aboriginal Sarhaddis under the great cypress of Sangun

Mother Tir, and Baby Tir there is a black mulberry tree of great antiquity, with several trunks spreading and twisting over a considerable area of ground.

The Nārūn valley, which should be distinguished from another place near by called Nārūn, was visited in December 1893 by Sykes and Brazier-Creagh from their camp at Varaj in the Tamindan valley.* According to the local people, no other European had been there except Major Hutchinson, who visited the lake and shot duck on it in 1918 or 1919. The valley is not nearly so well wooded as Anjirak, but has plenty of water and is the summer headquarters of quite a number of Reki Baluch families. It contains two most remarkable features, a perennial mountain lake which is the only specimen of its kind I know of in Eastern Persia or Baluchistan, and the biggest rockfall I have seen outside the great ranges of Central Asia. The Kuh-i-Lejwar (10,358 feet) at the head of the Narun valley must long ago have split in two, for its southern face presents a range of clean-cut perpendicular cliffs nearly 1000 feet high, below which an area of at least 2 miles by 1 mile is covered with gigantic boulders, some of them as big as churches, in wild confusion. The local legend, a quaint variant of that of Sodom and Gomorrah and Lot's wife, is that a great and wealthy city lies buried under this rockfall, the people of which became proud and "tried to shoot God with bows and arrows." A prophet came from God and remonstrated with them, but they scorned him. So one day Lejwar split in two and overwhelmed Old Narun. The whole population was wiped out at once except a man called Rajab, who happened to be ploughing his fields farther down the valley. He saw the catastrophe happening, and ran, but one of the boulders came bounding after him. The faster he ran the faster rolled the boulder, till at last it struck him down. The stone, an obvious erratic block from far up the mountain, is pointed out in support of the story.

One of the results of the rockfall was to dam up the drainage of part of the Narun cirque above and form a small lake, called the Sardarya (Head Lake, *i.e.* lake at the head of the valley). This is a pretty little oval tarn of brackish green water, 460 yards in circumference at high-water-level, with tall reeds round the edges and a rim of white salty *kavir*. Judging by the slope of the sides of its basin, the depth cannot be great, probably about 30 feet. It is certainly not a crater-lake as suggested by Sykes, who saw this neighbourhood at a time when its features were masked by snow. There are two smaller basins of the same type, dry except after heavy rain, above and in a line with the Sardarya. All three look exactly like the lateral moraine lakes of a glacier, and were unmistakably brought into being by the great rockfall of Lejwar.

Other features of interest in the Narun valley include the Kuh-i-Ganj or Treasure Hill, reputed to be the repository of the treasure of Udru Shah, and some abandoned lead workings up the well-watered Bedistil branch of the valley. The flat top of the Kuh-i-Ganj is crowned with the ruins of very ancient stone buildings. With its precipices on three sides the hill must at one time have been an important stronghold, of the memory of which only the name and treasure-legend survive.

Next to Narun comes the valley of Tud-i-Leng, so called from a crooked or "lame" mulberry tree in it. A pass called the Tump-i-Suzanan leads over

*The "parallel valley" mentioned on p. 134 of 'Ten Thousand Miles in Persia' must, from the references to the lake and the Kuh-i-Lejwar (spelt Legwar), be Nārūn.

to the inhabited valley of Shaikh Ahmad on the north side of the mountains, where there are said to be abandoned copper mines. Shortage of time prevented our visiting this and certain other valleys inhabited by Baluch farther to the west, Meluman, Garok, etc. I particularly regretted being unable to climb the lofty and rugged Garok, Gaud, and Shah Sawaran peaks, the rocks of all of which showed from a distance a remarkable variety of colours and shapes.

On October 27, after a preliminary reconnaissance to a height of 11,000 feet the day before, we set out from Jamchin camp in the dark at 6.30 a.m. Indian time (4.45 local time) to ascend the Kuh-i-Taftan. Our party consisted of our excellent Baluch levy havildar, Muhammad Isa Reki, two local guides, and two of our house-servants who most sportingly insisted on climbing the Kuh with us. By 7.45 we had scrambled up through the Band-i-Gilu and found ourselves at an elevation of some 8600 feet. From this point we climbed steadily up rocky *nalas* and steep slopes till at 10.15 a.m. and 11,200 feet above the sea we reached a flat grassy *pamir* between the Madar Kuh (the south-east cone of the volcano) and a subsidiary peak called Subha. It was a perfect morning of sunshine and blue skies, neither too hot nor too cold, the air calm and clear. After a fifty minutes' halt for lunch we attacked the sulphur and cinder slopes of the cone. Here the going, though slow, was not as bad as we had been led to expect, and we reached the burning sulphur springs just under the broad top of the Madar Kuh at 12.15, much earlier than I had expected.

A breeze from the south-west was blowing the thick column of acrid smoke from the crater well away from us, and it was possible to approach to the very edge of the orifices,* and even for our men to dig out with their sticks burning souvenirs of orange and yellow brimstone. Every now and again however the wind would change for a moment and blow the smoke towards us, reducing us all to fits of coughing and laughter. From the springs it is about 300 yards with a slight rise to the summit plateau of the Madar Kuh. Here there is a huge isolated boulder which marks the actual summit, and below it a shrine consisting of the usual circular enclosure decorated with upright sticks carrying votive rags and beads and a frieze of ibex and wild sheep horns, none of them of any size.

This is the Shrine (*Ziarat*) of the Chihil Tan or Forty Beings, the Mecca of the Sarhad. Most of the Sarhaddis, women as well as men, have been to it at least once in their lives. The legend attaching to it recalls that told of the similarly named (but not volcanic) mountain Chihiltan near Quetta. Forty mysterious Beings of extreme holiness are supposed to live in forty cells in a row under the dome of the volcano. Their faces are exactly alike, and it was impossible even for the Prophet to distinguish them when he visited the mountain with the Archangel Gabriel. Good Moslems identify the Forty Beings with the mysterious *Rijal-ul-Ghaib*, the forty sons borne at a birth by one of the daughters of Israel; but the legend must be far older than Islam. One cannot help thinking of the Buddhistic doctrine of Bodhisatvas and their pictorial representation in rows of exactly similar figures seated in the vaulted doorways of cells.

While our men performed their devotions we climbed the rock and spent an

*For a description of this crater see Sykes, 'Ten Thousand Miles in Persia,' p. 133.

hour and a half lunching, basking in the sun, and marvelling at the view which was spread out below us in every direction. The chief landmarks were the Kuh-i-Bazman, 76 miles away to the south-west, its long ridge and north-tilted cone rising sheer from the sandy wastes of the Lut; the grim black precipices of the Mountain of the Black Lord—Kuh-i-Malik-Siah—80 miles to the north, marking the point where Persia, India, and Afghanistan meet; Taftan's other sister-volcano, grey-capped Kuh-i-Sultan, 106 miles away on the north-eastern horizon; and, much nearer to the south-east, the Five Fingers guarding Khwash. But minor peaks and ridges of all shapes and sizes stretched away between and beyond these landmarks in every direction, right over the rim of the globe; not jumbled like the waves of a sea as in the Alps or the Himalayas, but spread out upon vast pale brown and purple plains, each range clearly distinguishable. The pre-eminent height and isolation of the Kuh-i-Taftan were forcibly impressed upon us; seldom, even in Central Asia, had I looked at once upon so large an area of the surface of this planet.

On the way down I took one of the guides with me and crossed the 500-foot dip which separates the Madar Kuh from the Nar Kuh or north-western cone. There is nothing to see on this summit, which consists of a single rounded ridge running north and south, quite different from the broad undulating top of the south-eastern cone. My object in climbing it was to complete my set of panoramic photographs of the mountain to the west and north-west, the view of which was blocked from the Madar Kuh by its twin cone. We overtook the rest of the party halfway down the mountain, and 5.30 p.m. saw us back in camp.

On November 8 we said farewell to the mountains, which were becoming too cold for comfort, and four days later, after visits to Duzdap, Khwash, and our 1921 camping-place near Gwarkuh, we were once more jolting and lurching down the steadily deteriorating motor-track to Mirjawa. Though acutely conscious of many lost opportunities and much interesting ground left uncovered, I felt that our three weeks in the Sarhad had not been altogether wasted, for I had a fairly complete set of photographs, including panoramas from intersected points from which Major E. O. Wheeler, R.E., of the Survey of India at Quetta has been able to redraw the map of an area of some 540 square miles to the west of the Kuh-i-Taftan. Apart from topography, I may be permitted to hope that my rough and sketchy observations may attract the attention of better-qualified travellers than myself to this region. The Sarhad's one serious explorer, Sir Percy Sykes, anticipated thirty years ago* that the plateau, with its relatively cool climate and plentiful supply of sweet water, would one day form an important link connecting South Persia with Quetta. This prophecy has to a certain extent come true with the extension of the Indian railway system to Duzdap and the development of rail and motor communications between Quetta, Seistan, and Khurasan. The occupation and pacification of the Sarhad by the Persians in 1928 was a direct result of this improvement in communications, and the strategic importance of the plateau, which brought it into the limelight in 1916–18, may yet bring a measure of prosperity and

*'Ten Thousand Miles in Persia,' pp. 130–1. Since the above was written the weekly train service between Quetta and Duzdap has been curtailed in the interests of economy, and the trains no longer run beyond Nok Kundi, in Indian territory, some 140 miles east of Duzdap.

civilization to its people. So long however as the Indo-Persian trade continues to pass through Mirjawa and Duzdap, bleak uninviting outposts in a barren and thirsty land, the currents of travel will pass by the real Sarhad, and its spacious uplands and secluded glens, so full of interest to the student of the present as well as of the past, will remain unknown to the world at large.

DISCUSSION

Before the paper the PRESIDENT (Admiral Sir WILLIAM GOODENOUGH) said: Mr. Skrine, our lecturer this evening, suggested to me that I should begin my introduction of him with an apology. He said that he had come home from Persia so fast—he drove 520 miles across the desert in twenty-four hours—that he hardly had time to collect either his thoughts or his belongings. But those who remember Mr. Skrine's very interesting lecture on the Qungur Alps and the charming pictures he showed will know that such an apology is quite unnecessary. Mr. Skrine is an officer in the Indian Political Service and has served in many different parts of the East: in Kerman and in other places the names of which I would not dare to pronounce without first consulting him. He was particularly successful when Acting Consul-General of Kashgar, where he brought British influence very much to the front. Since he has been in Seistan and in other parts he has been able to find time during the arduous work which falls to the lot of Political Officers to occupy himself in mountaineering, in exploring, and, what is particularly interesting to us, in geographical survey. To-night he will give a description of the highlands of Persian Baluchistan in a lecture which I will invite him to begin.

Mr. Skrine then delivered the lecture printed above, and a discussion followed.

The PRESIDENT: The services of Sir Denys Bray in India, especially when he occupied the position of Foreign Secretary to the Government of India, allowed him to acquire a knowledge very few possess. Among other things, he did something before which the Registrar-General would have quailed; for I am told that he took a census of British Baluchistan. I ask Sir Denys to be so kind as to say something on the subject of the lecture.

Sir DENYS BRAY: To be asked to speak before such an audience after such a lecture is very flattering. Indeed, the flattery appeals to me so much that I am almost tempted to pose as a man of great geographical knowledge. Your President has invited me to do so. Were I really to fall into that temptation I should hide my ignorance, I suppose, by diving down side-alleys. I should for instance ask the lecturer to develop one or two points in his lecture, not so much geographical as ethnographical or philological in character. I should seek for instance to probe a little deeper into the Damanis, whose origin, like that of the Brahuis, is said to be from Aleppo. The Damanis, we were once told—I do not know whether the lecturer would agree—are first cousins of a Baluch tribe with which he himself is closely acquainted, the Marris of the Sibi district. Does their dialect—for of course he knows the dialect of the Marri Baluch, though he modestly disclaimed all knowledge of the dialect of the Damanis—in any way bear out the cousinship? Again, are those very interesting cave-burials in the Sarhad at all analogous to the Rumi cave-burials in Kalat? And do the Damanis, like the Brahuis, still expose the bodies of their babes in shelves in the caves? And are the Gorbasta of the Sarhad analogous to the Gaur bands of the Brahui country?

By such questions, to which I do not know the answer, I should endeavour to cover up my profound ignorance of matters geographical. For geographical credentials I have none, and I am hard put to it to think of any justification for

Map to illustrate the paper on

THE HIGHLANDS OF PERSIAN BALUCHISTAN

by

C. P. SKRINE

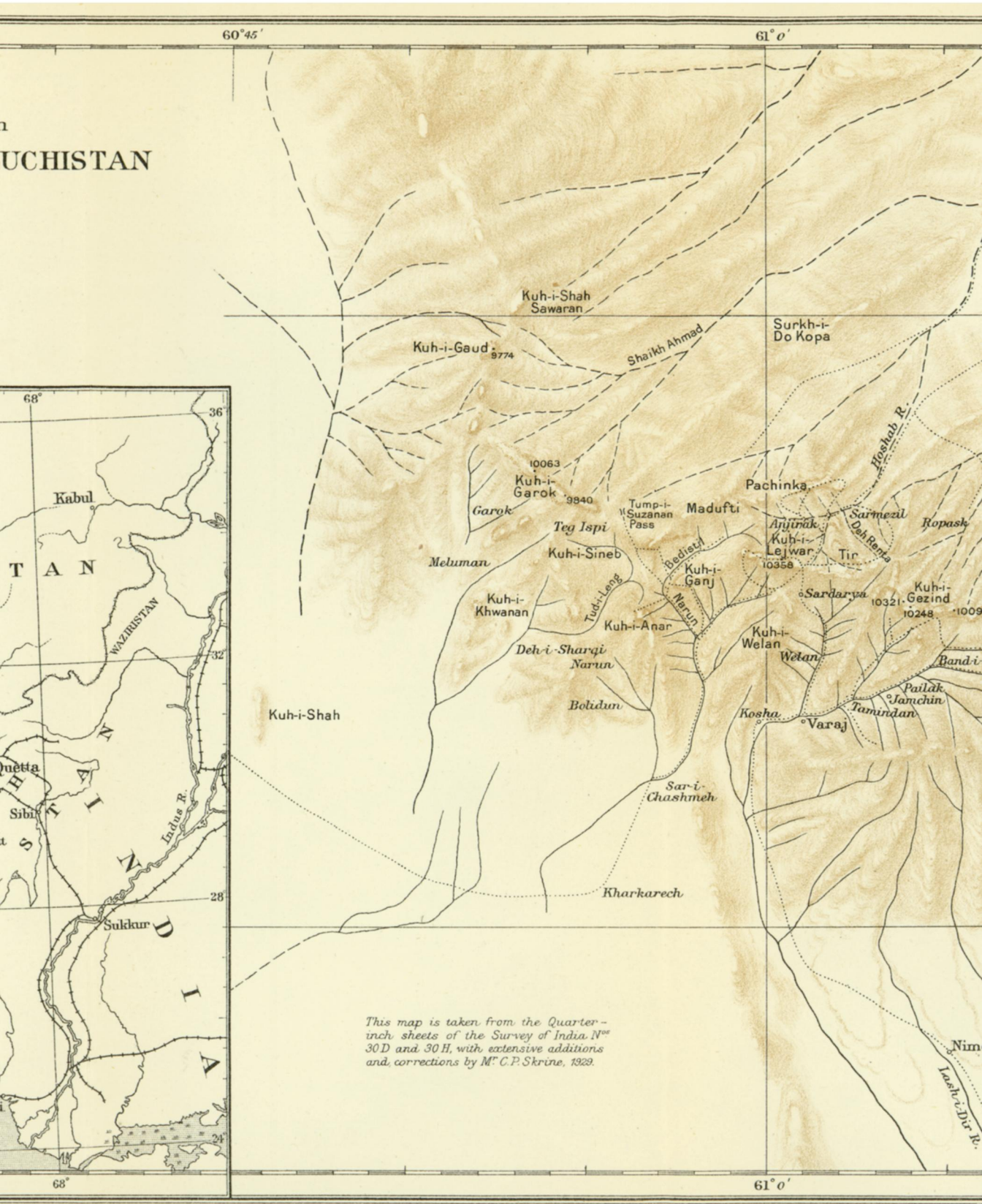
Scale 1 : 250,000

1 0 2 4 6 8

Statute Miles

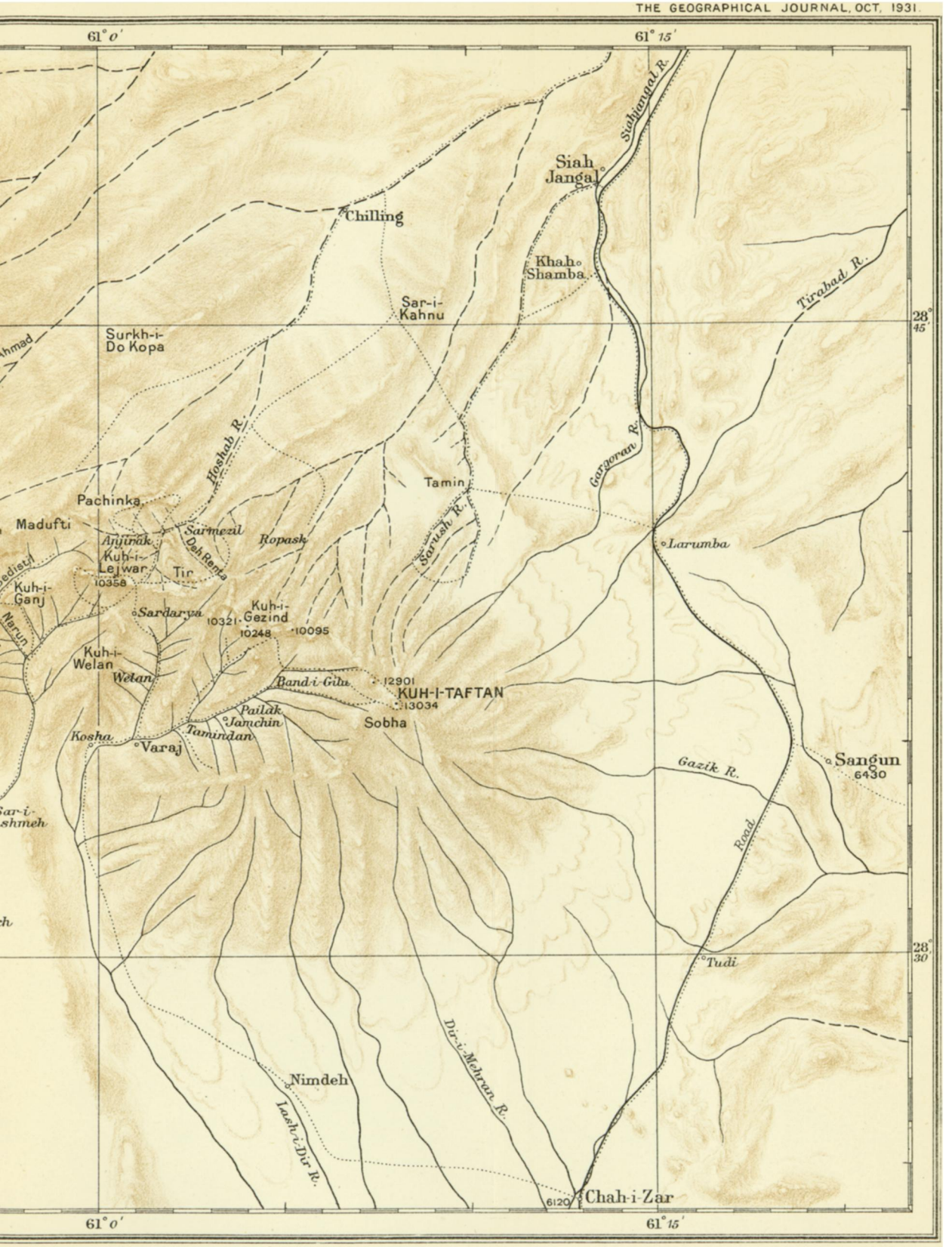
Route .....

Heights in feet



This map is taken from the Quarter-inch sheets of the Survey of India Nos 30 D and 30 H, with extensive additions and corrections by Mr C.P. Skrine, 1929.

Published by the Royal Geographical Society



PERSIAN BALUCHISTAN

Skrine

now standing before you. And yet, an hour ago, when I was enjoying the hospitality of your Society seated next an old friend of mine, Colonel Howard Bury, I was reminded that I have, after all, as it were a vicarious credential. No traveller myself, I have been from sheer force of my official position the cause of travel in others, and in a humble capacity a smoother of the initial stages of some of the great travels in recent history. I am thinking of course of the days when I sat in an easy chair in the Indian Foreign Office, a chair made much more easy by the weight of my predecessors, men like Sir Percy Cox and Sir Harcourt Butler, now present; and in this connection perhaps I might lay more weight on the latter. Seated in the easiness of my Foreign Office chair it was my great privilege in some small way to facilitate some of those great expeditions on the Indian frontier and beyond, the greatest, the most adventurous, the most romantic of which emanated from your Society.

But in a more intimate way it was my lot to give official scope to the ardent exploring spirits in the Indian Political Department, which seem to supply your Society with a ceaseless flow of enthusiastic members. And of these your lecturer is typical. Officially he has been, I think—here I am patting myself on the back—very lucky. He has travelled to many remote and romantic parts, some of them very ill explored. He has been further lucky in his fellow-traveller, a very brave-hearted traveller indeed. It was a disappointment to me to hear that the romantic pair represented not the lecturer and his brave fellow-traveller, but some unknown couple, casual adventurers in those parts, whom as Consul he had chanced to marry. But though the lecturer has been lucky and though you, sir, and your Society have been lucky, the Government also has been lucky. For your lecturer is one of those happy beings who are able to put their scientific and exploring knowledge to a very human purpose. In cultivating knowledge of the peoples and the terrain to which he belonged he has never failed to use that knowledge as a means whereby to get more deeply, more intimately into the minds of the people with whom he had to deal.

The PRESIDENT: It is some years since Colonel Brazier-Creagh was in the part of the country about which we have heard, but he was one of those who climbed to the top of the Kuh-i-Taftan, and we should like him to say a word or two.

Colonel BRAZIER-CREAGH: I find myself in an awkward position, for I cannot add anything more to the very interesting lecture we have heard. I can however say that Mr. Skrine's lot was cast in more favourable ground than mine when I travelled over that part of the country to which my friend has alluded. My travels date back to 1893 and 1894, the years in which I first visited that part of the world, starting from the Persian Gulf and travelling through Makran, Geli, Laskar, and Bampur districts, on through the Sarhad, climbing the Kuh-i-Taftan—locally known throughout the country by the name Chehel Tan—and also climbing the Kuh-i-Bazman. Lieutenant (now Sir Percy) Sykes and I also climbed several other lofty peaks: viz. Kuh-i-Fanoch, the Kuh-i-Ispidan, and the Kuh-i-Hamanth. We also went up on to the plateau of Galangur. In those days travel was different from what it is now and photographic arrangements were difficult because we could not carry anything except plates. I managed however to bring back with me some photographs which were very good indeed, others not so good as those you have seen to-night.

When we went into the Sarhad it was called the Yaghistan (plundering land); it was a forbidden land, and no Englishman had ever been there before. It was currently reported wherever we went all over the country that it was impossible to get there; and that if you did, your bones would be left there. Of course that did not deter us from endeavouring to get into the country by hook or by crook. Actually I do not think we would have got in except by the friendship of the

Governor-General of Bampur. Being a professional soldier I was able to carry with me medical and surgical panniers, and these were an "open sesame" wherever I went. By their aid and a little wooing I could get into the homes and hearts of the chiefs and the people, and even interview their purda ladies. We travelled backwards and forwards right through the whole of the Sarhad except the northern part of the Kuh-i-Taftan which the lecturer has explored. We spent a week in the capital Khwash, and three weeks in the valleys of Taftan. I explored all the southern part of it and shot over it, bringing back with me many important geological specimens, as well as botanical specimens, old pottery, coins, and other things of importance. The botanical collection was classified by Dr. King, the Superintendant of the Royal Botanical Gardens in Calcutta, and published by the Government of India; the coins were also classified by Mr. E. E. Oliver, of the Indian Civil Service.

One further point in regard to the lake Mr. Skrine mentioned. I do not think Sykes could have written very much about that, because unless he went there on his second trip on the other side he could not possibly have seen it. I wish he was with us to-night, because one traveller sees many things another does not see. Many things escaped my notice which I was pleased to see illustrated to-night. The lake I struck by chance. I happened to be laid up with a badly poisoned leg for a week and unable to climb the mountain with Sir Percy, who managed to climb it under very favourable circumstances. I climbed it on New Year's Day 1894—a very nice New Year's trip—after a very heavy fall of snow. I started from Band-i-Gelu, which I left at 7.45 on a very fine and clear frosty morning, and did not get back until ten minutes to ten that evening. Leaving Taftan we went down to Kuh-i-Bazman and climbed that. It was not so difficult to climb as the Kuh-i-Taftan. We spent a month there snowed up, some of our camels died, and we were unable to get more until we communicated with the Governor-General and Commander-in-Chief of the frontier force and Government of Kerman, who sent us transport and enabled us to get away from the place. After that we were his guests and travelled with him daily for two and a half months all through another part of Kerman until we reached the capital, where I spent some time exploring the city and surrounding country. Subsequent travel in 1897 gave me the opportunity of linking up my former trip by crossing the deserts of Baluchistan. Long before the construction of the railway from Quetta to Duzdap, which was Lord Curzon's pet scheme, I explored all that part of the country, and spent eight months in Seistan, so that I know the whole of it as well as I know Piccadilly. I spent the whole of the hot weather of 1897 there, living a nomadic life and climbing, amongst others on the southern fringe of the country, the Chil Duktharan-Kuh, the highest peak of the Palangh-Kuh range.

The PRESIDENT: It rests with me, on your behalf, to thank the lecturer for a most interesting and delightful evening. I intended to ask the Persian *chargé d'affaires* to say a few words to-night. With the wisdom with which *chargés d'affaires* are usually endowed he said he had nothing to contradict and therefore saw no reason to say anything. I would like to take this opportunity of saying how grateful this Society is to Sir Denys Bray for many kindnesses which he has extended to travellers sent out if not actually by the Society at least with its blessing. I am sure from my conversations with our lecturer that when his paper comes out Sir Denys will find a full explanation of the questions which he has asked this evening. I would also like to congratulate the lecturer on his fellow-traveller, whom Sir Denys mentioned so delightfully. I made her a promise not to ask her to say anything at all. I assure you, Mr. Skrine, that we have been most deeply interested, and we look forward with the very greatest pleasure to reading your paper when it is in print.