

Routes from Darjeeling to Thibet, by A. CAMPBELL, M. D. Superintendent of Darjeeling.

In March last, I had the pleasure to forward to the Society an Itinerary from Darjeeling to Lassa, which appeared in the April No. of the Journal; I would not so soon again be a contributor of conjectural information regarding this portion of the Himalaya if any thing at all was known to the Society of its geography: or if circumstances did not preclude the obtaining of precise information by the travels and observations of competent geographers. So it has been however, and the Sikim division of the mountains, with the contiguous border of Thibet, is as yet almost unknown to the public. This will, I am sure, be accepted by the Society as a sufficient excuse for the presentation of these Routes.

They have been compiled with a good deal of trouble from native travellers. The rude diagram annexed, exhibits the line of 7 routes from Darjeeling towards Thibet. Five of these pass all the way through Sikim to the Thibet frontier, and cross the Snowy range to the east of Kunchinjinga.* The remaining two run through Sikim to the north and westward of Kunchinjinga, and uniting at Yamgatcha in the Nepal territory, cross the frontier of that state into Thibet by the Kanglacha Pass.

Boundaries of Sikim.—Sikim is continuous with Thibet on the north and east from the western shoulder of Kunchinjinga to the Peak marked Notolah. Its south-east boundary is formed by the Rungoh river, which rises from Notolah and falls into the Teesta, dividing it from Bootan; on the north-west the boundary with Nepal is formed by the Kanglanamoo spur of Kunchinjinga and the continuous ranges of Singalelah, Phuglout, Jonglah and Myong, to the head of the Mechi river; on the west by the Mechi river and on the east by the Teesta river. The southern boundary is on the plain and continuous with our Province of Purneah.

Mountains.—The grand feature in the geography of Sikim is Kunchinjinga; it towers over all the neighbouring peaks of the Himalaya, and is I believe, one of, if not, the highest mountain in the world. The highest peak is about 40 miles north by west of Darjeeling, and is a

* For "Chola route," see Journal As. Soc. for April 1848.

stupendous object from every part of Sikim. Besides the highest peak of Kunchinjinga, and forming portions of this glorious mountain, are the subordinate ones of Pundeem, Kubroo, Nursingh, &c. covered with perpetual snow. To the north-east of Darjeeling and at no greater distance are the snowy peaks of Chola, Gangri and Yakla. These latter mountains, with the giant Kunchinjinga, form the great barrier between India and Thibet in this direction, and lying under their mighty shadows is the sub-Himalaya, which forms the principality of Sikim.

Rivers.—All the rivers of Sikim noted in these Routes have exit in the plains by the Teesta, or the Koosi. The Teesta is the great drainer of Sikim, and receives all the waters of its upper regions. The lower hills being drained on the west of the Darjeeling Tract by the Balasun and Mechi, and on the east by the Mahanuddi. The feeders of the Koosi which occur in the route viâ Kanglachema No. 1, all rise in Nepal to the north and west of the Kanglanamoo spur of Kunchinjinga, and by a south and westerly course fall into the Tambur or most eastern branch of the Koosi, the principal feeders of the Teestah. West of Kunchinjinga are the little and great Rungeet, the Rum-mam, the Kullait, Ratong, Chooroong and Rungbee. From the east of Kunchinjinga the Rungbo, Lachoong, Lachen, and the Teesta proper so called, which rises in the eastern face of Kunchinjinga itself. The Rungbo is sometimes called the little Teesta, and divides Sikim from Bootan above its junction with the Teesta, whence to the plains the Teesta is the boundary between these two countries.

The Tashirukpa and Choomachoo of the Route No. 1, rise in Thibet and are feeders of the Arun which is, I believe, the greatest branch of the Koosi.

The Machoo noted in the Yakla and Chola routes runs through Bootan and reaches the plains I believe by the Gudada, which falls into the Burumpootra at Rangamutty.

I hope by and by to furnish the Society with a protraction of these routes by Major Crommelin.

No. I.

Route from Darjeeling to Digarchi (Shigatzi) by Jongri and the Kanglachema Pass of the Snowy Range.

1. *Seriong vid Tuqoor.*—Cross the little Rungeet, ascend to Goke,

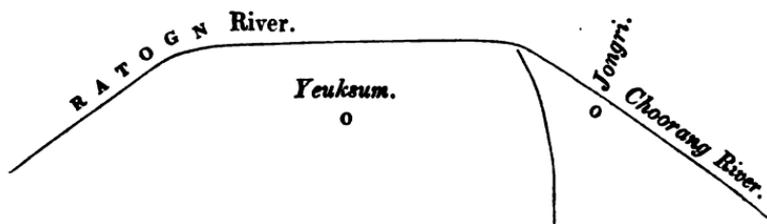
cross the Rumam and then ascend to Seriong, which is a village inhabited by Limboos and Lepchas. Direction north.

2. *Hee*.—Ascend to “Murmium Lah,” then descend to encamping ground—a village of Limboos. Direction north.

3. *Pemiong Chi*.—Descend about a cos cross the Kullait river; ascend gradually to Linchong in an easterly direction, thence to Tigzhuk still in an easterly direction and by a gradual ascent. From Tigzhuk the direction is north and the ascent steep to Pemiongchi. The Kullait rises at Singalelah or Tolimbo. Old Sikim is about 2 miles from Pemiongchi to the east. The Lepchas name the Old Durbar “Pheoong Ghurry;”—the Bhotiahs “Rabdengching;”—Limboos “Lapteuchi.”

4. *Yoksum*.—Descend to “Chongpoom;” cross the Ringbi Nuddi ascend to Tingleng, a village of Bhotiahs, Lepchas, and Limboos. Descend to and cross the Ratong river, whence ascend all the way to Yoksum where there is much level ground and which is a place of ancient note. Before there was a Raja of Sikim, there were three Goompas here, and it was the head Lamas of these who agreed that it would be desirable to have a king for their country, and they accordingly despatched Agents to Gantoke, whence the first Raja of Sikim was brought and installed. This individual had previously come from Thibet, was a Khamba, and the ancestor of the present Raja. “Yeuk,” in the Lepcha language, means a chief; “Yeuksum” is three chiefs, hence the name of this place as the residence of the three great men above alluded to. Direction north by west.

5. *Jongri*.—Ascend gently in a westerly direction from Yeuksum. Descend a very little and cross the Ratong river, whence you ascend all the way to “Jongri.” The Ratong rises from Kunchinjinga, takes a westerly course, where it is crossed in this march, and then turning round Yeuksum runs east to the Great Runjeet, which it joins at Tassiding, thus—



“Jongri” is at the west foot of Kunchinjinga and half a day’s journey or less from the perpetual snow. The snow lies at Jongri for two or three months in severe winters and is continuous with the snow of Kunchinjinga, which descends a long way below Jongri and lies there in severe weather.

6. *Yalloong*.—Descend to the Choorong Nuddi, which is about 4 or 5 miles in a north-west direction, then ascend to the Kanglanamoo ridge, which is a spur of Kunchinjinga; thence descend to Yamgatcha, and go along the Yamgatcha choo due west to Yalloong, which is at the confluence of the Yalloong choo and the Yamgatcha choo. The Choorong rises from the east face of the Kanglanamoo, and falls into the Rantong, half a journey below Jongri. The ridge of Kanglanamoo is the boundary of Nepal and Sikim, and always has snow on it. The Yamgatcha choo rises from the north-west side of Kanglanamoo, and runs into the Yalloong river, which falls in the Tambur river two journees below Yalloong.

The Tambur is the great eastern feeder of the Koosi. Yalloong is a village in the Nepal territory, through which passes the trade from Thibet with Nepal and Sikim by the Walloongchoong and Kanglachema passes. Singalelah is about three journees from the crossing of Kanglanamoo above described, in a south and west direction. The ridge is continuous to Singalelah. Laden Yaks, sheep and goats, travel from Jongri to Yalloong and onwards by Kanglachema and Walloongchoong to Thibet. Direction N. W.

7. *Kanbacheu*.—Cross the Yalloong and ascend to the ridge of Choomjerma, whence descend to Kanglachen, which is a village of Bhothiahs on the river of the same name. Opposite the village—and across the river—is the Tassichooding Goomba, which belonged to Sikim when the Raja occupied the old Durbar, but since then it is in the hands of the Nepalese. The Kanbacheu river is a feeder of the Tambur, into which it falls one day’s journey below Tassichooding Goomba. Direction N. by W.

8. *Nangola*.—An easy journey, the usual stage for unloaded travellers being “Yangma.” Cross to the Tassichooding Goomba and ascend gradually to Nangola. Direction west by north.

9. *Yangma*.—Descend to the encamping-ground, which is on the Yangma river. On the opposite bank is “Mending Goomba.”

The Yangma and the Walloong river unite half a journey below Mending Goomba and their united waters fall into the Tambur one day's journey from their confluence, whence the course is southerly. You may go on from Mending to Thibet by Walloongchoong, but the thoroughfare is to

10. *Kanglachema*.—Direction west by north. The route lies along the Yangma for half a journey, then leaving the river ascends to Kanglachema, which is the boundary of Nepal and Thibet, and is always under snow. The descent from Kanglachema to the Choomachoo is about 5000 feet; road good. No trees on north face of Kanglachema, nor any on this side above "Yangma"

11. *Choomachoo*.—Descend to this river, which runs west by south and into the Arun. It is the source of the Arun. At the crossing is the Tashirukpa Chaiten (Chaitya) a very fine and large one. Here 4 roads meet, viz. the Yangma road just described. 2. The Walloongchoong road. The Tokpay road, leading from Duncoota by the Arun river. Shingsha is at the junction of the Choomachoo with the Arun; there is a gola here. I have been to it from Tashirukpa all the way; the bed of the Choomachoo is the route for the greater part of the way; after leaving the bed of it I crossed the Kakula Pahar to Shingsha. It is too far round to go by the river all the way. From Tashirukpa to Kakpla is nearly level; quite a plain, but very cold; Shingsha is in Nepal and here it is mountainous.

The Tashirukpa choo is a small stream which falls into the Choomachoo at the Chaitya.

12. *Koodoojong*.—Along the Tashirukpa all the way. The direction is north, country level and pretty well inhabited by Bhotiahs. No cultivation, it is too cold for anything to ripen. The people live by trading and get their supplies from Shingsha on the south: and also from the north. They keep Yaks, make butter from their milk and sell it. There is a Thibetan officer stationed here. He is styled "Neabo."

13. *Chankpook Goomba*.—The route lies all the way in the bed of the Tashirukpa river, which has still a southerly course. The country is level, and at the Goomba there are about 40 houses. There is cultivation here and wheat ripens; also pease, radishes and turnips. Koodoojong is like Phari; nothing ripens at either place. They are too near the snowy mountains. The country along this march is quite level.

14. *Sarrh*.—Direction north. The Neela range is crossed on this march. The ascent is commenced about half way from Chankpook, and is not above 500 feet. No snow on Neela in August, or till the cold weather.

15. *Badong*.—Direction north, country level, but not cultivated; thinly inhabited by herdsmen who keep herds of Yaks and live by the sale of the butter, which is very fine. There are no trees nor shrubs even. The Yaks browse on short grass, and people use their dung as the only fuel.

16. *Dobtah*.—A hundred houses here or more. The people are all Bhotiahs, and cultivate a good deal. They are subject to the Sikim Raja and pay their rents at Choombi, which is 4 horse journey to the east viâ Phari, 6 on foot. The country is quite level from Badong to Dobtah, but very bare and stony. There is a large lake close to Dobtahjong and east of it. It takes more than a day to walk round it. It is very deep and has sweet water. The Tashirukpa rises from it. The name is "Tsomootethoong," which means the "Lake the mule drank of,"* and the origin of this is as follows. "There was a well here originally, but a mule one day knelt down and drank out of it. No sooner it did so than the waters rose and formed this large lake." The neighbouring lands are irrigated from it; the banks are grassy, and it is well stocked with good fish. There are no trees to be seen here and the cultivation is confined to wheat, pease, turnips and radishes.

17. *Kochoochen*.—About 5 cos over a level bare country, but thinly inhabited. There is a hot spring here which is used medicinally; it rises out of the level ground, not from a hill. The Sikim Raja visits it when he comes to Dobtah from Digarchi. When at Choombi he uses the hot springs of Kamboo Sahoo, which are near the Phari road at Bukcha. Kochoochen belongs to the Thibetans, not to the Sikim Raja. Direction north.

18. *Shejong* or *Bhejong* on the She river. This is the residence of a Soubah, and has about 100 houses. The route is due north and over a level country, i. e. there are but small hillocks scattered over a plain. No trees except the willow, which however is not indigenous but brought from a distance—Lachen-Lachoong. The only crops grown are wheat, pease, radishes and turnips; grass is abundant; rains

* Tso, lake; te, mule; thoong, to drink.

fall but seldom. There is more rain at Phari and Choombi than here. The "She" choo, which runs close to the village and the Soubah's residence, has here a westerly course, and I believe it falls into the Yaroo. The "Jong" or Shoubah's dwelling is on the top of a small hill, and this is the general usage in this part of Thibet.

19. *Looghri*.—Direction north; cross the Shechoo, which is fordable; at 2 cos further on ascend the Lassoom ridge, which is 2 or 300 feet high, and descend to your ground, which is on the plain.

20. *Digarchi*.—About 5 miles due north over the level land, which is very bare, nothing to relieve the eye except a few willows and the "Shaboo," a large tree brought from a distance and much liked in Thibet. Around Digarchi there is a good deal of cultivation, which is irrigated from the Painomchoo, which falls into the Yaroo about 2 cos below Digarchi. This is a good-sized river, not fordable in July, August and September; "it runs from the eastward, being close to Giangtchi, where it rises I do not know. It is as large as the great Rungheet; the ferries are served by leather boats. There is a bridge over it at 4 miles above its confluence with the Yaroo. The Yaroo comes easterly and takes a northerly turn at Shigatzi."

The Tingri road from Nepal is joined by this route a cos from Looghri.

No. 2.

Route from Darjeeling to Yamgatcha by Yangpoong Gola and Doomdonglah.

This route runs through Sikim to the west of the Jongri one, and by Tuqvor and Seriong to Hee, and thence to

Lingcheet.—Cross the Kullait river and ascend to Lingcheet; direction north by west.

Talet.—Ascend to the top of the Tengchok Yongchek ridge, cross it and ascend to this stage. Direction north-west.

Phiongdang.—Descend to the Rungbee-nuddi and go along its banks to this encamping-ground; direction north. The Rungbee falls into the Ratong below Yoksum.*

Choonjom.—Along the Rungbee all the way and due north. The Rungbee rises from the Singalelah ridge.

* See Jongri route.

Yangpoong.—Leave the Rungbee to the left and ascend to this place, where there is a customs chokey of Sikim. Salt is brought into Sikim by this route from Thibet, but the trade is liable to interruption from the Nepalese, who stop its passage in the portion of their territory through which the road runs beyond Choolongkook.

Gomothang.—Ascend the Pekionglah; cross the ridge and descend to this stage, which is on a small stream of the same name.

Chodomdong.—Cross the Gomothang stream and ascend along it to this place. There is a lake here which is the source of the Gomothang; it runs easterly and falls into the Ratong below the junction of the Choorong with that stream.

Choolangkeok in Nepal.—Ascend to the crest of Domdonglah, cross it and descend to this ground. The Domdonglah ridge forms the present boundary between Nepal and Sikim, and is a continuation of Kunglanamoo. There is a small stream at this stage; it is a feeder of the Tambur Koosi.

Yangatcha.—Ascend and cross the Giroonglah, whence descend to this stage, where you fall into the Jongri road.

No. 3.

Route vid Lachen and the Latong Pass.

From Choongtam, at the confluence of the Lachen and Lachoong rivers to

Dema.—All the way along the Lachenchoo, direction north-west.

Latong, on the plain of Thibet.—About 5 cos from Dema ascend to the ridge of Latong, cross it, and without any descent you are on the Table-land of Thibet. On either side of the pass there is a high peak. You can go round by the bed of the Lachen, but the pass is the better route. Talong is on the Lachenchoo, which rises to the eastward from a lake near Cholamoo.* The Lachen cuts off Kunchin from the range to the eastward.

Geeroo.—Over the level land in a north by west direction, and here you join the road from the Dankia pass. There is a fifth route to Thibet east of Kunchinjinga and west of this Lachen one, of which I have no particulars. It strikes off at Garrh† on the Teesta, whence the

* See Lachoong routs.

† See route by Lachoong.

next stage is "Barfok," thence Lingjah "Ba;" at Taloong, the confluence of Taloong and "Ba" streams there is a Goomba. The Teesta proper is left to the west at Lingjah, where it is crossed to the east bank. The road beyond Taloong is not known to my informants, but it goes along the stream of this name and over the Tekonglah into Thibet; Takong is a continuation or spur of Kunchinjinga.

No. 4.

Route from Darjeeling to Choombi by the Yakla Passage of the Snowy Range.

1. *Darjeeling to Sumoong.*—Via Lebong-Ging and the guard-house above the Rungeet. Cross the Rungeet at the cane bridge, and ascend in an easterly direction to the encamping-ground, which is about 1000 feet above the river.

2. *Chadam.*—Direction easterly, with a good deal of ascent; Chadam is about the same elevation as Namgialatchi, from which it is one day's journey.

3. *Namten.*—Direction northerly and easterly. The road skirts the base of Tendong, and there is little ascent or descent. The Ting, a small feeder of the Teesta, is crossed on this march.

4. *Took on the Teesta River or Changchoo.*—Descend all the way from Namten to the Teesta. The Rungbo river falls into it 2 cos below this ferry.

5. *Nadok.*—Cross the Teesta on a bamboo raft (Sa pan) and ascend in a northerly direction to this place, which is inhabited by Lepchas and Bhotiahs.

6. *Dikeeling.*—Ascend almost all the way in a northerly direction. Dikeeling is a permanent village of Bhotiahs, with a good deal of cultivation in wheat, barley, maize, rice, kodu, buckwheat, &c.

7. *La Ghep.*—This is not the "La Ghep" on the Tumloong and Chola route, but it is the same name for the same thing; it means, *the other side of the mountain*, and it is here so called by the Thibetians, and means the other side of Yakla or the Pass. It would be quite correct in a resident of this side of Chola to call Tangzoo, La Ghep.* Ascend all the way from Dikeeling. There is snow here all the winter,

* See route from Tumloong to Phari, Journal As. Soc. for April, 1848.

and no permanent habitations onward to Choombi. Yak herdsmen however frequent La Ghep and Yakla in the summer and rains.

8. *Bangrong*.—Direction west by north with very little ascent; cross the Bangrong Choo, a small stream which falls into the Rungbo.* The forest continues to Bangrong and beyond it. The Doom Shing (yew) is abundant and so is the Kema, a large flowering tree which is peculiar to the snowy regions. It is common at Jongri.† “There are seven sorts of Kema distinguished by the colour of the flower.” The Kema is neither *Rhododendron* or *Magnolia*; flowers in May and June, is strongly scented.

9. *Yaten*.—Direction east by north; a gradual ascent. The forest ceases before reaching this place, which is bare and rocky. Snow in winter, no inhabitants. The pass of Yakla is close by; travellers put up in caves at Yaten.‡

10. *Charafook*.—Ascend about 100 feet to the Yakla passage, which is over a narrow ridge; cross it and descend all the way in the bed of the Yakla Choo to Charafook. From Yaten to Charafook is not more than 4 cos. Above the Yakla passage on the left is the peak of Gangri, not more than 600 feet high. It is not covered with snow during the rains, is visible from Darjeeling, and is a peak of some note, and venerated by the Lepchas; it is second however in this respect to Kunchinjinga, but annual sacrifices are made to it, and a festival held in honor of it. To the right of the Yakla passage there is no peak or elevation of the ridge. The Yakla Choo falls into the Chola Choo (Tangzoo Nuddi, of printed Itinerary to Phari§) a cos from Gangajong, at which place their united streams fall into the Machoo. The course of the Machoo is east and into Bhootan. Gangajong is 3 or 4 cos to the east of Charafook.

11. *Choombi*.—Direction north; a short way from Charafook you leave the Yakla Choo, and at 2 cos you cross the Chola Choo;—about a cos further on and beyond E-tok you fall into the Chola road from Tumloong. There is forest at Charafook and onwards to Choombi, principally of pines and yews.

* The Rungbo divides Sikim from Bhootan to the east of the Teesta; its course to the Teesta is westerly.

† See route to Digarchi via Kanglachema.

‡ There are two lakes to the east of the road near Yaten.

§ Journal As. Soc. for April, 1848.

No. 5.

Route from Darjeeling to Digarchi by Lachoong and the Donkialah passage of the Snowy Range

The stages from Darjeeling to the Teesta are the same as those noted in the route to Tumloong, viz. by Namgialatchi and Temi to the Samphoo or Sanadong Ghat, whence keeping the west bank of the river the next stage is

Kedong.—The road is difficult and runs for the most part parallel to the river, and about 500 feet above it. General direction north by west.

Garrh.—West of the Teesta, ascend from Kedong to Singdam, which is a Lepcha village, thence descend to Garrh. Road difficult.

Balla Samdong, on the Teesta.—Direction due north; descent all the way to the Teesta.

Rungoon.—Cross the Teesta at the Balla Ghat* by a cane suspension bridge, and ascend to the encamping-ground; direction north, road good, and habitations along it.

Singtam.—Ascend a short way, cross the Singtam ridge, then descend to this stage, at which there is a village; there is a small stream which runs west to the Teesta.

Miangh.—Ascend the Miangh hill, cross it, and descend to the encamping-ground, direction north-west. The united streams of the Lachen and Lachoong fall into the Teesta below Miangh.

Namgah.—A good road, north by west, moderate ascent to Namgah.

Tongh.—About half way from Namgah you come to the Lachen Lachoong Choo, along the east bank of which lies this place. The Lachen choo rises from a lake beyond the snowy range, and after running west, penetrates the range at Latong, where there is a passage into Thibet, to be presently described. It unites with the Lachoong Choo at Choongtan, one day's journey above Tongh, and forms the Lachen-Lachoong feeder of the Teesta. The Teesta proper rises from the east of Kunchinjinga. The Lachoong rises from the Donkia mountain and runs down the passage that bears that name and to which this present route appertains.

* Sandong is Thibetian for ferry. Samphoo, the Lepcha word. Changchoo is the Bhotiah name of the Teesta; Lepcha, Runew; Limboo, Toongwama.

Choongtan.—At and just above the junction of the Lachen and Lachoong. There is a Goompa here, and a few houses of Lepchas; rice grows at the riverside.

Lachoong.—The road, which is pretty good, lies all the way along the riverside, west bank. The river is as large as the little Rungeet.

Yeumtang.—All the way on the west bank of the Lachoong, and close to it; direction north, road good, no inhabitants, and forest heavy.

Momay Samdong.—Still along the west bank of the Lachoong. There is a warm spring here; no forest, some Juniper bushes only.

Cholamoo.—Leave the Lachoong at Momay, and after proceeding some distance ascend the Donkia Lah for about 300 feet, when you cross the ridge through a pass or depression in it, flanked by two high peaks, which are not snowed before September. The pass itself is not snowed before November, and may generally be crossed till December, if the winter is not severe. The Lachoong is formed at Momay, by numerous small rills from the Donkia mountain.

From the pass to Cholamoo the descent is very steep and may be about 800 feet. Here begins the plain of Thibet. No inhabitants at Cholamoo.

Geeroo.—Direction west, road good and all the way over level land, which is quite bare of vegetation, and generally stony. The Lachen road over the Latong pass falls in at Geeroo.

Kambajong.—Direction west, road good and over level land, which has occasional hillocks rising from it. A village of Bhotiahs here, and some cultivation. The station of a Soobah.

The road from Choombi to Dobtah and this place is by Phari, which is three journeys to the east.*

Uchee.—Direction west and over level ground. Hot springs here of some celebrity, they deposit a white salt, called Peu, which is I believe carbonate of soda. No inhabitants here, country very bare and barren.

Koorma.—Direction north, cross the Tagilah, a ridge of 3 or 400 feet high, within a short distance of Uchee, then along a sandy plain to Koorma, which has 100 houses or so. The people are pastoral and traders, no cultivation.

* The stages are Dokshala, Mendingbooding, Phari; the road is easy and over the plateau of Thibet.

Potheet.—Direction north, road good and over level ground, no houses, a “Dennkang” or rest-house.

Rhejong.—Cross the Kiongola, a range of 300 feet or so. Direction north. Here you fall into the road from Dabtah to Digarchi. The Rhe Choo, which runs to the west, flows by the village.

Lassoom, and thence to Digarchi, as by the Kanglachema route.

Report on the Salt Range, and on its Coal and other Minerals.

By ANDREW FLEMMING, M. D. Edin., Assistant Surgeon,

7th Bengal N. I.

On approaching the salt range from the Jhelum opposite Jelal-pore, a traveller is at once struck with the brick-red tint and barren appearance which the strata forming the principal part of its steep southern escarpment present to view, and with the peculiar white color of the rock, which particularly to the westward, seems to cap the range, resting on the inferior red strata, with which it forms a striking contrast.

Height and course of salt range.—Its height as stated in Malte Brun and Balbi's Gazetteer is 2100 feet above the level of the sea, and from Jelal-pore the hills stretch W. S. W. until within about 20 miles of the Indus, when they take a turn to the north, crossing that river at Maree and Kalibag in a N. W. direction, from which latter place they divide into two or three branches.

The part of the salt range which first came under our observation was in the neighbourhood of Pind Dadud Khan, where we arrived on the 19th March 1848. From thence, after examining a locality 10 miles to the eastward called Baghanawalla Davee, we crossed the hills to Choe and Kutass, marched down along the foot of their northern declivity to Noorpoor, crossed over the low hilly district towards Mok-hudd, on the Indus, came down that river by water to Kalibag, which we reached on the 14th April, and from whence we returned along the south side of the range to Pind Dadud Khan, where our labors closed on the 28th of that month.

By adopting the above route, we were enabled to obtain a general idea of the structure of both sides of the range, and though, on account