25th Stage to the English Chouki, N. E. 71 cos.

Crossed the Siddhi stream and proceeded  $1\frac{1}{2}$  cos of slight ascent and skirting the mountain bases to Thaplia. Thence half a cos of descent to the small streamlet of Séchideu. Thence a quarter cos over low hills to the Méchi river. The Méchi is the present boundary of Népál and Sikim. It is a small stream which rises in the Singalélah ridge, a spur of Karphók. Crossed it and ascended the hill of Nágri, by a very bad road and severe ascent of  $1\frac{1}{4}$  cos to the top. Thence a severe descent of one cos to the smaller Rangbhang Khóla, a streamlet merely. Thence along the glen to the great Rangbhang, distant one cos. Thence a steep ascent of one cos to Nágri Kót, an old fort in ruins. Thence a painful descent of  $\frac{1}{4}$  cos to the Balason river. It is a moderate sized stream, larger than the Méchi. Thence half a cos of rather uneven travelling to the halting place.

26th Stage to Darjeling, North, 4 cos.

A severe ascent of one cos, and then an easy half cos along a ridge, brought us to the Company's high road, along which we travelled for 2; cos to Jellapahár and Herbert hill at Darjeling.

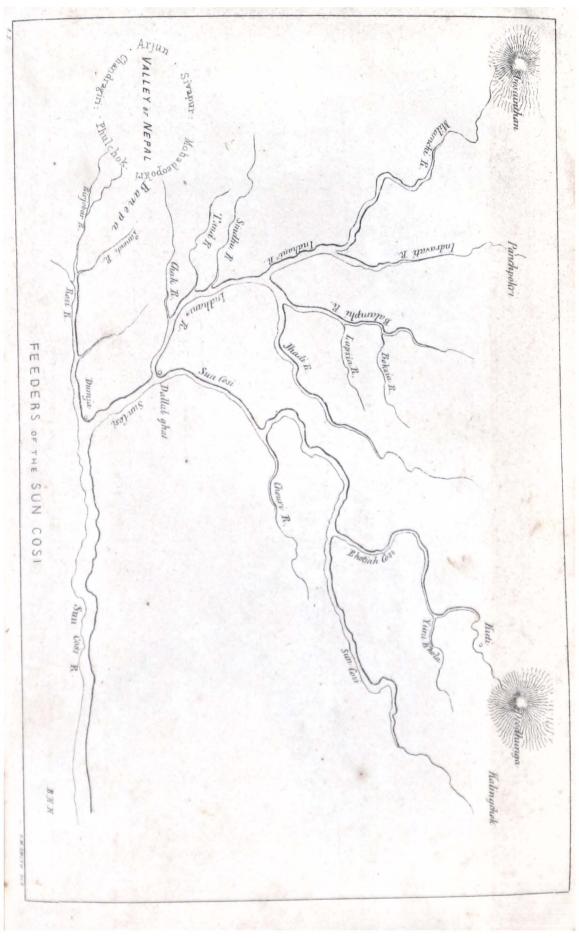
Total cos 109.

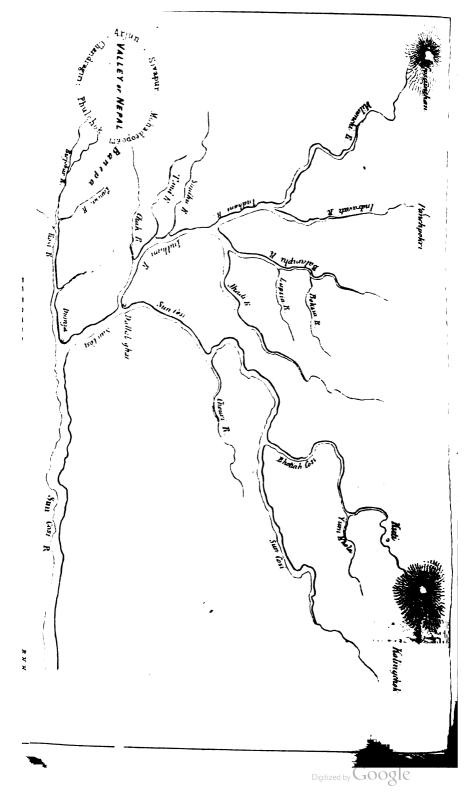
At  $2\frac{1}{3}$  miles per cos=miles 254.

NOTE.—The Nepalcse standard cos is equal to 2\frac{1}{2} English miles, and the travellers had this standard to refer to along a great part of their way, as being coincident generally with the measured military road several times adverted to on the route. Hence their distances from stage to stage may be perfectly relied on, though in the details of each stage the same accuracy cannot be expected.

Memorandum relative to the seven Cósis of Népúl, by B. H. Hodgson, Esq.

The enumeration of the seven Cosis by the Itinerists is doubtless the accredited one, and what I have myself often heard at Kathmandu. Nevertheless names are not always applied in strict correspondence with things in geography. Witness the neglected Jahnavi, the true and transnivean source of the Ganges! Now, if we are to estimate the seven chief feeders of the great Cosi according to the length of their





courses, or their effect on the physiognomy of the country, the enumeration ought seemingly to be as follows:—

1st. The Milamchi.
2nd. The Bhotia Cósi.
3rd. The Támba Cósi.
4th. The Likhú Cósi.
5th. The Dúd Cósi.
6th. The Arún.
7th. The Tamór.

Local series beginning from the West.

This list omits the Barún of the usual enumeration, and substitutes the Bhotia Cósi for the Sún Cósi: and not without Nepalese authority for both changes, for it is very generally allowed that the Barún hardly belongs to the Sub-Himálayas, and that Sún Cósi is rather the name of the general receptacle of the Cósis till joined by the Arún, than that of a separate Cósi. The following remarks on each river will make this apparent.

1st. The Milamchi rises above the Bhotia village of that name, and at or near to the eastern base of Gosainthan, the great snowy peak overlooking the valley of Népál. From the snows the Milamchi has a south-eastern course of probably 60 miles to Dallál ghát. It is joined from the west by the Sindhu, the Tánd, and the Chák, and from the north and north-east by the Indravati, the Balamphi and the Jhari. The three former are petty streams; but the three latter are considerable ones, one of them rising in the snowy region, and another having two subordinate affluents. The Indravati comes from the Hemachal at Panch pokri and flows nearly due south into the Milamchi below Hélmú. The Balamphi and Jhári have only sub-Himálayan sources, situated south-east of Panch pokri, but they have longer independent courses than the Indravati before they unite, after which they presently join the Milamchi not far above the confluence of the Chak. The subordinate feeders of the Balamphi above adverted to, are the Boksia and Lipsia. They have short parallel courses W. S. W. into their parent stream. Thus the Milamchi is a notable river, and it is the more so as forming very distinctly the western boundary of the basin of the great Cosi, of which the equally distinct eastern limit is the Timor.

2nd. The Bhotia Cósi has its sources at Deodhúnga, a vast Himálayan peak situated some 60 or 70 miles east of Gosainthán and a little north and east of the Kúti pass, being probably the nameless peak which Colonel Waugh conjectures may rival Kangchangjunga in height. The river flows from the base of Deodhunga past the town of Kúti, and has a S. West direction from Kúti to Dallál ghát, where it joins the Milamchi after a course about as long as the Milamchi's,—the two rivers, of nearly equal size, forming a deltic basin. In about its mid-course the Bhotia Cósi is joined by the Sún Cósi from Kálingchok. But Kálingchok is no part of the true Hemáchal, nor is the stream thence flowing equal to that coming from the snows at Deo dhunga. Consequently the name Bhotia Cósi should prevail over that of Sún Cósi as the designation of one of the separate seven Cosis, and the name Sún Cosi be reserved for the general receptacle, within the mountains as far east as Tirbéni. The Bhotia Cósi is joined at Listi by the Júm Khóla, whilst from the Manga ridge another feeder is supplied to it, much lower down or below the confluence of the Sún Cosi, from the east. But as the Milamchi below the junction of the Balamphi and Jhári is often called the Indrávati vel Indhani, so the Bhotia Cósi below the junction of the Sún Cósi is frequently styled by the latter name, which others again with more reason confine to the more general confluence below Dallal ghat. There no doubt the name Sun Cosi beging to be well applied, it being universally the designation of the great receptacle of waters running W. and E. from Dúmja to Tirbéni. At Dúmja, which is only a few miles south of Dallálghát, the Sún Cos; receives a considerable affluent from the west. This affluent is called the Rosi. It rises on the external skirts of the great valley under the names Biyabar and Panouti, from the respective dales watered by the two steamlets.

3rd. The Támba Cósi. It rises at Phallák in the snowy region, about two journies east and a little north of Kálingchok, or the fount of the upper and pseudo Sún Cósi. The Támba Cósi's course from Phallák to Sélaghat, where it falls into the receptacle, is nearly south, and as far as I know it has only one considerable affluent, which is the Khimti. The Khimti rises in the Jiri ridge and flowing nearly south, parallel to the Támba Cósi, joins the latter in its mid-course at Chisapáni.

4th. The Likhú. This river is less than the Támba Cósi and seems to rise somewhat beneath the snows, though its place of origin at Kháli Mungali is said to be a ridge connected therewith. Its course is still more directly south than that of the Támba Cósi, to which however its

general direction is very parallel. I know but one of its feeders, the Kháni, which comes from the Cháplú ridge on the east of the main river.

1848.]

5th. The Dúd Cosi. It is a large stream, larger even than the Támba Cósi, though inferior to the Arún or Támor. It rises amid the perpetual snows, but at what exact spot I do not know, and it has a southern course to the Sún Cósi at Rasua. Its feeders are numerous. But I know only those near Rasua, which are the Thotia and the Sisnia on the west, and the Rao on the east.

6th. The Arún or Arún Cósi. It is the largest by much of the whole, and consequently the main source of the Maha Cosi, having several feeders in Tibet, one from Darra on the north, another from Tingri on the west, and a third from the east from a lake. The Arún is not only the greatest of the Cosis but of all the Sub-himalayan rivers. if the Karnáli be not its equal. None other can compete with it. The Barún, often reckoned a separate Cósi, is a mere feeder of the Arún and joins it so high up that there is little propriety in admitting the Barún as a member of the Sapt Kosi. The Barún is lost in the Arún in the Alpine region, at Hatia, the great mart for the barter trade of the Cis and transniveans by the very accessible pass of the Arún. Lower down the Arún receives many tributaries-from the west, the Salpa and Ikhua-from the east, the Sawai, the Héngwa, the Pilwa, the Ligua, and the Mamaga. Its course on this side the Himalaya is generally north and south; but in Tibet it spreads to the west and east also, covering and draining a deal of ground there.

7th. The Tamór Cósi. The Tamór also is a very fine river, inferior only to the Arún. It is alleged to have more than one trans-himálayan source. It passes the snows at Wállúng chúng, or arises there from the snows. Its course from Wállúng to the general junction at Tirbéni is south-west, and it receives many affluents on the way, as the Wállúng, the Chúng, the Yángmá, the Méwa, the Kabaili, the Kháwa, the Nhabo, the Tankhua, the Teliá, the Nava, the Chérwa, the Kokaya.

To this appendical memorandum on the Cósis I subjoin a sketch of the several primary feeders of the so called Sún Cósi, made from my own observations as well as enquiries. I have no personal knowledge of the rest of the "Sapt Cousika." Indeed no European has yet set foot in this region save myself on the western, and Dr. Hooker on the eastern, margin. We may shortly expect much information from Dr. H. as to the latter, or the skirt confining with Sikim.