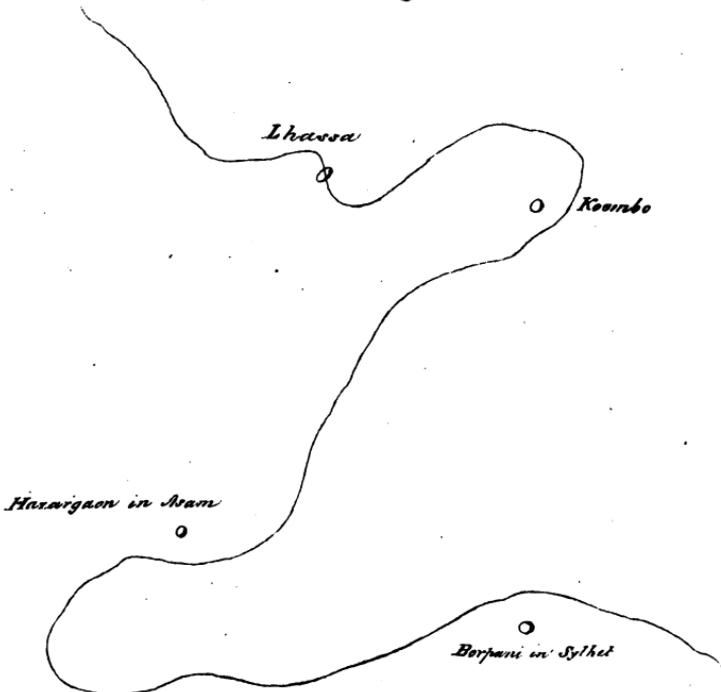


VIII.—On the Identity of the Sampo and Irawadi Rivers.

In our first number we gave a short notice of a controversy which has originated on the subject of the identity of these rivers between our Calcutta geographers and M. J. Klaproth, editor of the *Journal Asiatique* of Paris. In that notice we hinted at the contemplated publication of some details on the subject, which bid fair to satisfy M. Klaproth's doubts, and convince him that the Sampo is not the Irawadi but the Brahmaputra. The details in question form part of a paper on the Geography of Assam, by Lieut. R. Wilcox, lately employed there as Surveyor, and of whose researches and joint travels, with the late Lieut. Burlton, there appeared some very interesting accounts in the *Oriental Quarterly Magazine*. The paper in question, which was presented to the Asiatic Society, is now, we believe, in course of publication, and will, doubtless, ere long, put the finishing stroke to this controversy, and add another to the many proofs we have of the sagacity of the father of our Indian Geography, Major Rennell, whose very guesses appear better founded than the laboured erudition of other men.

In the mean time we have much pleasure in laying before our readers the following note and enclosure, for which we acknowledge ourselves much indebted to a gentleman whose contributions to the various branches of natural science have been so often recorded in our work.

My dear Sir,—I got the enclosed an hour ago from a fine young Chinese priest, who for the last 10 years has been visiting all the holy places of his religion. I gave him no hint as to what I wanted, but merely asked his route from Lhasa to Bengal; and when he named the Eri-changbo, or river of Tibet, I desired to know what its course was from Lhasa to Assam. He asked a pencil, and instantly drew the sketch I send you. He was not learned, but seemed ingenuous and candid, and I am inclined to think his sketch not bad evidence of the course of the river at the point controverted.

Course of the Eri-changbo

Sketched by Kho-shang Lama, of the monastery of Oni-on-si, in the town of Thin-ta-phoo, 20 days W. of Peking.

He travelled from Lhassa to Koombo, from Koombo to Deva Dharma, from Deva Dharma to Assam, from Assam to Bengal. Says the road from Lhassa to Koombo lies occasionally on bank of river, occasionally over mountains.

IX.—On Boring for Overflowing Springs.

To the Editor of Gleanings in Science.

SIR,

Some doubt may perhaps be entertained of our being able to command never failing supplies of fresh water in the central parts of Bengal by means of boring, as practised now so largely in London and elsewhere in England, from the great distance of the hills, and the supposed depth that it may consequently be necessary to bore to reach the stratum of rock or diluvial clay retaining springs capable of rising to the surface, or nearly so. But there could be no doubt, I imagine, that on the confines of the valley of Bengal and Behar many spots would afford abundant springs of fresh water capable of overflowing; and I have pleasure in being able to send you the accompanying extracts from unpublished papers of Dr. Buchanan, which, if I err not, point out such situations, where the process of boring would be attended with the most successful results. As no precautions were taken to prevent the hole perforated in the bottom of the tank (mentioned in the first extract) from choking, it is not surprising that the spring appeared to have failed; it may, I conceive, be considered as quite certain, that wherever the water rises in the wells with a gush, on the clay at the bottom being tapped, unfailing springs of water may be commanded, by securing the hole with a metallic or other case, and that a necessary consequence will be that a higher level for the water will be obtained, that it will rise near the surface or even above it (if the tube be carried up), as the sources of the springs may be more or less elevated above the situation of the wells.

Throughout the greater part of Behar, Patna, and Shahabad, it seems probable from these extracts, that boring would be attended with the most successful results; and I recollect having read that the digging of wells in most parts of the Rungpore district was attended with the same sudden rise of water, as described in these extracts, the wells being finished in precisely the same manner, by tapping through the last layer of clay with a sharpened stake, and that district may, therefore, be added to the others, in which, from the facts recorded of the phenomena of the springs, little doubt can be entertained that experiments of boring, from the little depth at which the springs are met with, will, if properly conducted, completely succeed and repay the adventurers with ample supplies of water, and on a level much above that of the present wells.

C. I.

Of Springs and Wells in the Bhagalpúr District.

“Near the Ganges, in most parts the wells are deep, and their water is often hard and very indifferent, especially if found in red sand or clay.

At Gopalpúr, near Surayagarha, (Suragegurra, Rennell's atlas,) about seven years ago, a tank was dug 45 cubits deep, and no water having been found, a well was sunk 4 or 5 cubits further. A stake was then driven 2 cubits into the ground, when the water gushed out, and in about 3 hours filled the tank. It was expected that the water of this tank would have been uncommonly good; but the spring seems to have failed, as in the dry season the tank does not contain above 8 or 10 cubits of water, and that, as usually, exceedingly dirty.”

Behar and Patna. “At a little distance from rivers, the water of the wells, in these districts, is in general very good, although often found in clay even of a loose black nature. It very often happens, that after digging far through clay, the people neither procure water nor come to any change of substance. In this case they expect that the water will rise with a rush (bhur); and in order to escape the inconvenience of this, a stake is driven into the bottom, and pulled up by a rope when the workmen have come from the well. This sudden gush is expected whenever the workmen have dug, somewhat below the depth at which water is usually found in the vicinity, especially when the whole substance dug through has been a clay of one kind.”

Shahadabad and Arah. “In this district also, the water in wells often rises with a sudden rush (bhur); and this is here expected, either when a well has been dug to the usual depth at which water is found in the vicinity, without coming to any substance but clay, or when after passing a bed of sand without procuring water,