

effects of oxidation from common causes, is a sufficient reason for the presence of this mineral, unaccompanied by others*.

With regard, however, to the Náhun and Rámungga gold, we are perfectly decided on one point, viz. that the rivers bearing the dust have no connection whatever *now* with the great Himáláyan chain, and therefore, that if the mineral exists in abundance at any one point, it will be found in the hills from which these rivers derive their sources; and it is to be hoped, that we may even look forward to the ultimate discovery of gold in comparatively as great abundance as the present fossils, the existence of which, six months ago, would have been as much doubted as the possibility of finding gold now may be.

Northern Dudd, April 10th, 1835.

VI.—*Notice of the Nipdlese Spirit Still. By A. CAMPBELL, Esq. M. D. attached to the Nèpal Residency.*

The accompanying (Pl. XVII.) is a rough sketch of the still in universal use throughout the valley of Nèpál Proper, as well as its neighbouring hilly country; and so far as I can learn in the portions of eastern Thibet, usually visited by Nipálese traders, on the beaten commercial routes, by the Kerún and Kuti passes of the Himálaya, to Digarchi and Lhássa. I believe it to be as different from that commonly used in the plains of India, as it assuredly is from any with which I am acquainted as existing in European countries, and as its use is confined here chiefly to the Newár population, it needs no apology for intrusion on the public attention.

In India, (so far as my recollection is faithful,) Nipálese men, manners, and things are regarded, as pertaining exclusively to the ruling class of the community, yclept Gúrkhás; this arises partly from want of better information on, or curiosity regarding, Nèpál affairs; partly from the common habit of identifying the whole people of a country, with the few, who may for a time direct its destinies, but chiefly from Nèpál being best known to us, as the theatre of a two-years' war between one power and the afore-mentioned tribe.

The Newárs, as is well known, were down to the Gúrkhá conquest the rulers of this valley, and were, as far as at present ascertained, its

* In the specimens from the alluvial soil of the Brazils, the particles of gold are much larger than those found in the Náhun sand, appearing like little boulders, or rounded masses of the mineral. In my cabinet the Brazilian alluvium is clay, or argillaceous matter, with rounded pebbles of white quartz. Mr. MAWSE having provided the specimen.

original inhabitants*. At the present time they form the great mass of the agricultural and artisan population, and the ruins of their well-built temples and towns painfully manifest the giving place of their civilization to the rude and barbarian horde of mountaineers who now consume in military idleness the fruits of their fertile fields. Like other tribes of the human race, the Newárs have lost their day of progress, and little remains to them now, save their eminently industrious habits, and a skill in agriculture far exceeding in efficiency that attained and practised in the neighbouring plains of Hindústán.

The fate of the Newárs, and the many good qualities by which they are distinguished, renders all connected with them of much interest. Their original country, previous to their advent in Nèpál, remains as yet undecided. The decidedly Tartarian cast of their physical form, and monosyllabic structure of their language, makes Thibet claim them as her's. The most popular fabulous traditions of the race point to India as the source of their existence, while the religious creed as a means of arriving at a correct knowledge of their origin has, as yet, I believe, proved defective†.

The manners and customs of a people, when known, go far to shew the intimacy of connexion with neighbouring countries; and, I believe, that were those of the Newárs (in such purity as they existed before the Gúrkhá conquest) taken as an index to their original country, few links of close connexion would remain to bind them to India, while many and strong ones would shew their Bhoteah origin.

The still, then, as an instrument of universal use, supposing it unknown in India, and to be the only one used in neighbouring Thibet, will go for something (trifling enough it is true) in the enumeration of domestic usages; and I now return to it.

The furnace on which the still is represented as resting, while at work, is commonly the clay *chula* of India, or made of unburned bricks. The body of the still (*phúsi*) is of copper, and is seldom made to contain more than 15 or 20 gallons, and costs from 30 to 40 mohurí rupees‡. Over the open mouth of the *phúsi* is placed the portion marked (3) named *putasi*; it is of burned clay, about the same size as the body of the still, and has a circle of round perforations, each the size of a crown-piece, flanking the large opening at its base, as represented in (7) of the sketch. The junction of the *phúsi* and *putasi* being secured by a luting of moist clay, the receiver nam-

* See Mr. HOBSON'S paper on the Aborigines of Nèpál Proper, in the Journal of the Asiatic Society, for May, 1834.

† It is calculated that about two-thirds of the Newár population of Nèpál are Buddhists, the remainder Brahminical Hindus.

‡ One mohurí rupee is equal to 12½ annas sicca.

ed *dúbli*, and marked (6) is put into the *putasi*; its base, corresponding in circumference to the large opening in the latter, fills it up completely, and leaves the circle of smaller holes free, for the passage of the spirituous vapour, to ascend into the still head, or *putasi*.

The receiver being placed as above noted, within the portion marked (3), the vessel (5), named *batta*, or condenser of copper, is filled with cold water, and placed over, and into the mouth of the *putasi*, or still-head, fitting so close, as to prevent the escape of any portion of the spirituous vapour from the latter. Thus fitted, the distillation is accomplished, care being taken to remove the condenser so often as is necessary to replace the water become warm, by colder, fit for the condensation of the spirituous steam.

The shape of the condenser suits the performance of its office; the vapour rising through the smaller holes around the receiver comes in contact with its entire surface, and being there condensed, runs towards the apex of it, and thence falls into the sub-incumbent receiver.

The still is charged, of necessity, previous to the fixing of the receiver and condenser, and these portions are removed at each fresh charge; the receiver being either emptied of its contents and replaced, or a spare one introduced.

At each removal of the condenser there is of course some loss from the escape of vapour, but it is trifling, as there are usually two of these vessels attached to each still, and thus the time occupied in replacing a warm condenser, by a cold, is very inconsiderable.

It must be admitted, that this process is rather rude, and it will be seen, that the construction of the still has not reference to the most approved principles for economising fuel. It is deep and narrow, instead of broad and shallow, yet it is very efficient; and it must be remembered, that the shallow broad still even in Europe is of very modern date, and the result of the severe excise laws, existing in our own, and more civilized countries.

There is one peculiarity in the working of this still, worthy of remark, and the advantages of which in saving fuel compensate in some degree for its rudeness. So soon as the still is in full play, and a portion of vapour has been condensed, and reached the receiver, a fresh distillation commences.

The receiver heated from below causes the spirits to be converted into vapour, which is again condensed, and thus a constant round of distillation is carried on between the receiver and condenser, in addition to the proper distillation of the contents charging the body of the still. Alcohol, at the specific gravity of 863, can be produced from this still, and I have used it with complete success, in making the

Gold washers in the Beds of the Rivers under Mahun, with the apparatus used.

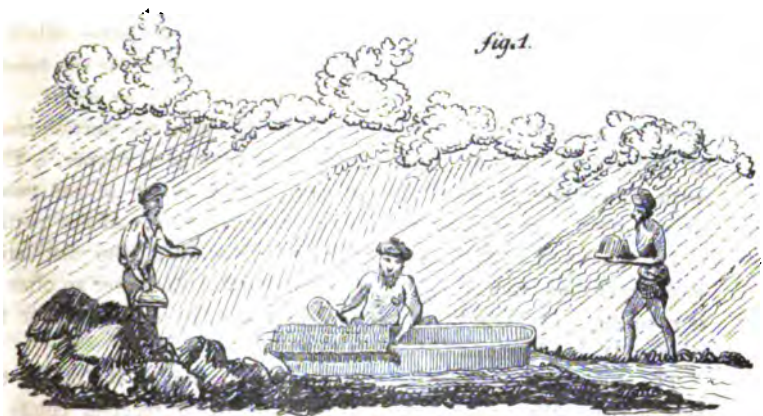
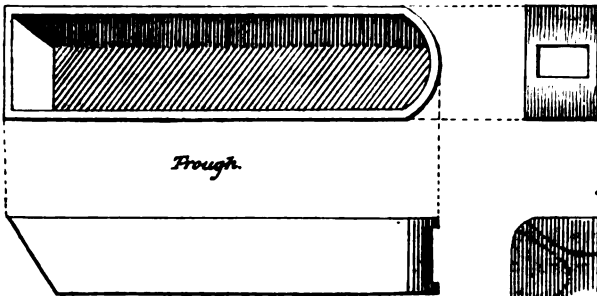


fig. 1.

fig. 2.



Trough.

fig. 3.



Spoon or Ladle.

fig. 4.

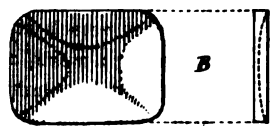
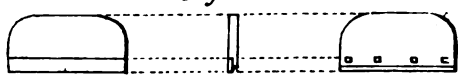


fig. 5.



Nipalese Still and component parts.

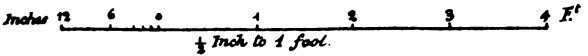
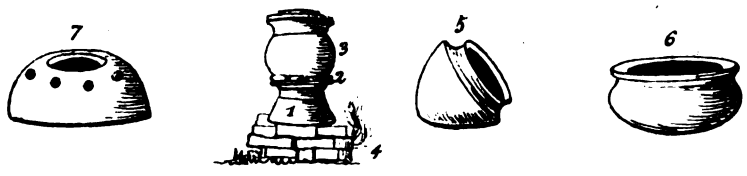


fig. 6.

Inscription on a piece of sculpture found near the Keeiah mound.

ॐ शिवः श्री गणेशाय नमः शिवाय कथञ्चन शिवो देवाय नमः सुप्रभाः की किरि टी

spirits of turpentine, and the residuum of yellow resin from the *Ganda Firoza* of Nèpál*, both of these articles, being equally good for medicinal and other purposes, as that to be had in Calcutta, and, I believe, much cheaper.

The ubiquity of this still throughout the valley arises from the freedom of distillation sanctioned by the rulers. Excise laws for whiskey-making are as yet unknown here, and were their executives to appear among the peaceable Newárs, I fear the fate of some of them might resemble that of ROBERT BURN'S man of this craft.

Every Newár, who can afford it, distils his own Rakshi (spirits from rice), and all the lower orders of this people, and many of the respectable ones, are greatly addicted to the use of spirits. They are not by any means given to habitual drunkenness, but they indulge for the good of their healths, regularly and moderately. In the rice-field, cold and wet as it is, the bottle is a great and ever present comfort; while at a religious meeting, or on the celebration of a birth or marriage, it goes merrily and rapidly round; males and females, young and old, alike partaking of it, to the increase of social happiness and joy in all.

Few sights in Nèpál are more grateful to the foreign visitor, than the feasts and merry-makings of the Newárs: on such occasions they congregate on some green and sunny spot, near a temple, or old image, with a running stream of limpid water passing through it, and there, for the live-long day, in the idle seasons of the year, do they sing, play on the musical instruments of their tribe, often dance and ever laugh, enlivened by the *rakshi* stoup it's true; but the main-spring of their joy is the cheerful and happy temperament they possess, to an eminent degree, in strong and pleasing contrast with the sour looks and arrogant demeanour of the Gúrkhás, or the melancholy and apathetic countenances of the inhabitants of Hindústán, who sojourn for a time among them.

Reference to Plate of Still, and its component portions.

Names in Newári language.	English synonymes.
1 Phúsi,	1 Body of still.
2 Sachi,	2 Luting (of clay).
3 Putási,	3 Still-head.
4 Bhúta,	4 Furnace.
5 Batta,	5 Condenser, (copper.)
6 Dubli,	6 Receiver, (earthen.)
7 Putasi, (section of,).....	7 Section of Still-head.

* Commonly called Ganda Biroza; it is well known to be the exudation from the denuded trunk of the different species of the pine throughout these mountains.