XI. Memoir on the natural history of the coco-nut tree and the areca-nut tree; the cultivation of them according to the methods of the Hindoos; their productions, and their utility in the arts and for the purposes of domestic economy

M. Le Goux de Flaix

To cite this article: M. Le Goux de Flaix (1805) XI. Memoir on the natural history of the coco-nut tree and the areca-nut tree; the cultivation of them according to the methods of the Hindoos; their productions, and their utility in the arts and for the purposes of domestic economy , Philosophical Magazine Series 1, 21:81, 77-80, DOI: [10.1080/14786440508676674](https://doi.org/10.1080/14786440508676674)

To link to this article: <http://dx.doi.org/10.1080/14786440508676674>

Published online: 17 May 2010.

Submit your article to this journal [↗](#)

Article views: 2

View related articles [↗](#)

XI. *Memoir on the Natural History of the Coco-nut Tree and the Areca-nut Tree; the Cultivation of them according to the Methods of the Hindoos; their Productions, and their Utility in the Arts and for the Purposes of domestic Economy. By M. LE GOUX DE FLAIX, an Officer of Engineers, and Member of the Asiatic Society at Calcutta.*

[Continued from our last volume, p. 332.]

THE usual product of one coco-nut tree in India, a country where provisions of every kind are extremely low, is about six shillings per annum. This produce is no doubt considerable. There is no tree in any part of the world which in this respect is equal to it, if we reflect on the small space which the coco-nut tree occupies: if it be considered also that various kinds of leguminous and gramineous plants, and even fruit-trees, can be cultivated under its shelter; that it scarcely requires any care or expense; and that all its parts are useful, as will be shown in this memoir.

It is well known that the fibrous covering of the coco-nut is converted into good ropes, which are useful in navigation, and for various purposes on shore. Cables for anchors made of this substance are much better than those made of hemp. They are exceedingly elastic, stretch without straining the vessel, and scarcely ever break; inappreciable advantages, which are not possessed by those of hemp. They are also lighter, and never rot, in consequence of their being soaked with sea water. They never, like those of hemp, exhale damp miasmata, exceedingly hurtful to the crews of ships who sleep on the same deck where these ropes are kept when ships are under sail. To all these advantages must be added, that ropes made of the *kaer** float like wood, that they are much easier managed, and run better in the pulleys during nautical manœuvres.

The utility of the second covering of the coco-nut is so well known in Europe that it is needless for me to speak of it here.

The palms of this tree, when entire, are employed to make mats for sleeping upon. When split through the middle, according to the length of the foot-stalk, they are wove into mats for covering sheds and houses. The use of these mats, even for the largest edifices, is general on the coast of Malabar. Such roofs are more agreeable than those made

* The name given by the Hindoos to the fibrous covering of the coco-nut.

of straw. They do not attract rats and reptiles like the latter; and they are lighter, equally strong and durable, and much less exposed to danger in the case of fire. If fire happen to fall on a roof of this kind, which consists of two leaves placed one over the other, it can burn only a small surface, and is prevented from spreading for want of aliment. It may therefore be said that the coco-nut tree, which in the fields defends the wearied Indian by its shade from the scorching rays of the sun, protects the peaceful farmer in the night from the long and heavy rains of the monsoons.

The liquor of the coco-nut, when it is yet tender, is an agreeable and cooling beverage; its kernel, when newly formed, is sweet, and exceedingly pleasant to the taste. Both of them are salutary to persons afflicted with the scurvy. It would be dangerous, after long sea voyages, to make immediate use of them: instead of being beneficial, they would produce pernicious consequences.

When the coco-nut has attained to maturity, it detaches itself from its stalk and falls spontaneously; but its fall might be dangerous, and to prevent accidents the bunch is cut by the chana some days sooner than the period at which it attains to complete maturity. When the nut is rasped with a circular-teethed piece of iron, there is extracted from it a kind of milk or emulsion, by mixing with it a small quantity of boiling water and then straining it through a piece of thin cloth in the same manner as those do who extract milk of almonds.

This emulsion is employed for different purposes: it is used for preparing saloop and sago. When put into coffee, instead of cream, it gives it an exquisite taste: that of our almonds produces nearly the same effect. This emulsion is employed also in the art of painting chintzes; to remove stains of the colours, and scour the cloth after the colours have been applied. The milk of the coco-nut, though oily, effervesces with an acid extract of that plant called by the Hindoos *colechi*, and the acid then precipitates it into a grayish lime, which becomes of a rich violet colour by the addition of fixed alkali; it is with this colour that cotton cloth and chintzes are dyed. When this emulsion is mixed with quicklime the alkali becomes rose-coloured. It is by these means that the Hindoos prepare the rose-coloured lime which they use with betel.

The dyers employ this milk with great advantage for silk, cotton, and woollen stuffs, which they dye black. It prevents that colour, which is generally caustic, from burning the stuffs, and the dye becomes darker and more beautiful.

tiful. I suppose that emulsion of almonds would produce the same effect as that of the coco-nut; our black stuffs then would not be burnt, as is generally the case: this observation may be of use to dyers.

If the milk of the coco-nut be concentrated by ebullition over a moderate fire, a sweet oil, agreeable and fit for the table when fresh, is obtained from it. The physicians of the country compose with this emulsion a gentle purgative, which is not nauseous: it produces no cholic or violent pain. It is administered in cases of plethora, gonorrhea, and other diseases; it is also an excellent vermifuge. It is composed of half a pint of emulsion in which three or four heads of garlic have been dissolved, by boiling over a slow fire, to the consistence of marmelade: it is given to the patient fasting, while warm, with the addition of a little sugar.

The oil of this nut is extracted by pressure; it is fit only for being burnt in lamps; it is of a drying quality, a little acrid, white, and so light that it becomes fixed even in the torrid zone; when burnt it gives a clear bright flame without exhaling any odour or smoke. It is employed by rich people and in the houses of the Europeans in preference to any other kind. The substance from which this oil has been squeezed is given to beasts of burden mixed with their forage; this food when given to cows and goats increases the quantity of their milk.

Such are the properties and different uses made of this palm. If the wood could be employed for building or for domestic purposes, it might justly be said that the coco-nut tree alone would be sufficient for the use of man. It is, however, a useful vegetable production, a valuable gift of Providence to the peaceful inhabitants of that fine country where it has been placed.

It was the coco-nut tree which gave the Hindoos the first idea of inventing the allegory and ingenious fable of the phoenix, as may be seen in the fifth chapter of the *Poronia*, one of the commentaries of the *vaides*, a sacred book of these people, which contains the principles of their religion, the history of the country, their sciences, and in general all their knowledge, as well as the practical knowledge of all the arts which are cultivated in it.

The coco-nut tree does not renew the buds of its flowers after an interval of two months, but in April, a period at which the year of the Hindoos commences, it is produced only from its fruit, which are their children. This is exactly

actly the idea which the antients had of the phoenix; that is to say, that it nourished and reproduced itself. It is seen in the Indian mythology that these people deified the coco-nut tree in the same manner as many other trees and small vegetables; useful animals, such as the ox; the sea, and all rivers. The Egyptians and all the neighbouring nations adopted the mythology and fables, as well as the arts and sciences, of these people, as is fully proved by researches made for more than half a century: the Egyptians, the Tyrians, and the Greeks deified therefore, like the Hindoos, animals, useful vegetables, and rivers. Hence the ox became the god apis, and the date-tree the phoenix.

[To be continued.]

XII. *Experiments to ascertain whether there exists any Affinity betwixt Carbon and Clay, Lime and Silix, separately or as Compounds united with the Oxide of Iron forming Iron Ores and Iron Stones.* By DAVID MUSHET, Esq. of the Calder Iron-Works.

[Continued from our last volume, p. 235.]

3d, *Siliceous Ironstone.*

THE varieties of this ironstone are in general much poorer in iron than the common qualities of ironstone: from 15 to 25 per cent. seem to be the medium contents in metal. Some specimens have been obtained as high as 35 per cent. and 38 per cent. At first sight this class of ironstones resemble sandstone; but, upon minute examination, there appear other characteristic features, of which density is always one, to distinguish them from each other.

The varieties of this class are, like the argillaceous and calcareous, found both in balls and in regular strata, and subject to the same general rule, *i. e.* the thicker the band or stratum, the less metal will be found in a given quantity of the ore. Siliceous ball ironstone is generally rich in iron, and is commonly found with a fracture more or less granulated resembling a coarse variety of freestone. What distinguishes it from sandstone is the calcareous earth that is found in the state of chalk, and which appears in some measure to be the seat or bond of union of each individual granule of ore.

The poorer varieties of siliceous ore are sometimes found
1 from