THE CHEWSTICK.—In the *Journal of Applied Science* for June, we find a reference to a Jamaica plant, known as Chewstick, specimens of which are shown at the Paris Exhibition, in the form of herb, powder, and tincture.

The Chewstick, though not indigenous to Jamaica, is perhaps better known there than in other islands, where varieties of it are known. It is named by botanists *Gouania Domingensis*, and is a very beautiful and thick bushy vine, with a profusion of foliage climbing upon the trees growing in its neighborhood, and with a stem varying in thickness from that of a walking-stick to that of a pen-holder. The stem is very fibrous, and when these fibres are detached at the end of a section of the stem by *chewing*, becomes a rude but most perfect tooth brush, giving out in the mouth, when rubbed over the teeth, a saponaceous froth of a pleasant aromatic bitter taste, which remains in the mouth for some time, and which not only serves the purposes of a tonic bitter when used in this way, but also whitens the teeth and hardens the gums; on this account it is extremely popular in Jamaica as a dentifrice amongst all classes, and has attracted a good deal of favor in foreign countries. It also possesses another peculiar property. If a quantity of the bruised vine be steeped in water, wort, beer, or any kind of watery infusion, there is communicated to it a warm, bitter, aromatic taste, and if the fluid so treated be poured out from one glass into another, it will be found to have acquired all the appearances of beer (minus its alcoholic flavor) in a high state of fermentation; on this account the chewstick ought to be very useful to brewers and others of this class, since stale or immature beer would be much improved by its use, giving to such fluids a warm aromatic bitter taste, more agreeable than that given by hops, though certainly it does not possess the narcotic principle which makes hops so indispensable to the brewer and others.

If our pampered civilization should object to the use of the rough kind of tooth-brush which Nature has herself provided, the virtues of the Chewstick can be secured either in the form of powder or tincture; either, applied with a tooth brush, will fill the mouth with a thick saponaceous froth which, at the same time, cleanses the teeth and leaves a sense of warmth and an agreeable flavor which lasts for some hours.—*Chemist and Druggist.*

BALATA is the name of a product resembling caoutchouc or gutta-percha, occupying a rank in usefulness between these, and is already in great demand in Europe for manufacturing purposes. It is derived from the South American "Bully-tree," Chrysophyllum Cainito.

SEA-WATER SOAP consists of common soap containing phosphate of sodium. This addition enables it to form a good lather with almost any natural water. The oldest form of marine soap was made of cocoa-nut oil, and required nothing additional to enable it to be used with sea-water.

NEW KIND OF GLASS.—Mr. Sidot, of Nancy, is the discoverer of a new kind of glass, which is prepared by heating acid calcium phosphate to a white heat. It may be cast like ordinary glass, and may therefore be used for the manufacture of lenses, prisms, eye-glasses, etc. It can also be used as an enamel for crucibles and other earthen vessels. Hydrofluoric acid does not attack it.

A SUPERIOR PASTE.—Mr. Charles A. Durfee, in the *Library Journal*, makes the following remarks regarding a paste which will remain firm through years of handling, and at the same time not stain the page by striking through, as is often the case with gum arabic: After years of experiment, he finds that a paste made of seven parts of gum tragacanth and one part of gum arabic, with a few drops of oil of cloves, or diluted carbolic acid, will be found most reliable. Bookbinder's paste is excellent, but needs renewing every few days to avoid souring. The following receipt for starch paste he says is very good: Two ounces of starch, one ounce of white glue, half an ounce of acetic acid, a few drops of oil of cloves. Dissolve the glue in cold water and then boil. Dissolve the starch in cold water, and pour into the glue while boiling.

PACKING PAPER may be made water-tight by dissolving 8.82 lbs. of white soap in 1 quart of water, and dissolving in another quart 1. 82 ozs.—troy weight—of gum arabic, and 5.5 ozs. of glue. The two solutions are to be mixed and warmed, the paper soaked in the mixture, passed between rollers and hung up to dry.

[A much simpler and equally efficacious mixture can be made by the addition of a small quantity of bichromate of potash dissolved in water, to the solution of glue alone.]

TO PROTECT FURS FROM MOTHS.—The best protective for this purpose is said to be naphthalin, which is also supposed to be the basis of various commercial moth-destroyers, such as "antiputrin," "antirirein," "tineol," etc.

ANTIDOTE TO CARBOLIC ACID.—The *Pharmaceutisch Zeitung für Russland* says that on the recommendation of Professor Baumann, Dr. Sanftleben has used sulphuric acid in several case of poisoning by carbolic acid with the best success, the phenol combining with the acid to form phenyl-sulphuric acid, which is not poisonous. He administered it in a mixture composed of diluted sulphuric acid 10.0, mucilage of gum 200·0, and simple syrup 30.0, grammes, in doses of a tablespoonful every hour.