

IS THERE TO BE A BOOM IN CAFFEINE AND TEA REFUSE?

Mr. T. Christy, the well-known wholesale Drug-dealer, &c., has been asking of trial samples of "tea debris," that portion of the leaf, he says, not used by the planters, in order to make experiments for the extraction of "caffeine." At present this is mainly got from "tea refuse" obtained from the London warehouses; but surely the planters could give something more suitable, if the value be worth their trouble. Caffeine is evidently getting scarce and we find in an American paper the following information of special interest to tea planters:—

THE POSITION OF CAFFEINE.—Caffeine is one of the articles of minor importance in the drug market, and yet it is today receiving considerable attention by reason of its scarcity. It is practically in the control of three manufacturers and yet comparatively little information is obtainable regarding the state of the markets abroad. Last October the price was \$2.10 per pound, but early in January it advanced to \$2.15 at 2.20, and a little later to \$2.30 at 2.40, at which it ruled firmly until about two weeks ago, when our market reports indicated a further advance. That there should be any scarcity of tea sweepings, from which caffeine is made is considered very improbable, inasmuch as Englishmen drink just as much tea as they ever did. It has been suggested that manufacturers have worked up all the crude stock they had and sold heavily against it, and that they will now be obliged to await the next deliveries of the sweepings from the London warehouses, which, according to the terms of the contract they have with the Government, are made at stated intervals. It is understood that the contract is for a year, and that it still has eight months to run. As soon as the next deliveries are made it is thought the scarcity will be relieved. On the other hand, the suggestion is offered, that inasmuch as the bulk of the teas now sold in England are cultivated in Ceylon, dealers are so anxious to maintain the advantages they have thus far secured over the Chinese teas, that they exercise great care in protecting their product, hence there is comparatively little waste. If this view is the correct one, it would appear that the scarcity will become permanent.

Up to about three years ago all caffeine was made in Germany, though the tea sweepings were obtained in England. The British Government, ever ready to protect its revenue, refused to allow the sweepings of the warehouses to be sold in England for fear of their being used for consumption in place of the leaf, and the Exchequer thus defrauded of a certain amount of revenue. All sweepings were shipped abroad and sold, principally to Germany, but English chemical manufacturers protested so vigorously that the Government expressed a willingness to permit their use in England, provided they could be rendered unfit for domestic use. A scheme was hit upon, whereby they were rendered unfit for the making of anything but caffeine through an admixture of asafetida liquor and the manufacture of this very important drug commenced in London, where the bulk of it is now made, but one German manufacturer remaining in the business.

What does Mr. Cochran say to the extraction of caffeine from the large leaves of the tea bush, or from the factory "red leaf" out here; but no doubt the chemical processes required can be far more economically carried out in such large Chemical Works as those of Messrs. Böhringer at Mannheim, and others.

OPENING UP A NEW PLANTING DISTRICT.

THE PALLEGAMA GRANT.—Mr. Ross Wright, who has charge of the Pallegama Grant Association Company's land in North Matale, is opening up what may be called a new district for tropical products. The work he has before him is onerous, as all new clearing work is, and in this case it is doubly difficult

by reason of the fact that he is far removed from other estates, and has to rely solely upon himself. His nearest neighbour is Mr. Fraser, of Brae, goodness knows how many feet above him, and fourteen miles as the crow flies. Mr. Wright lives at present in the Korale's house, in which he has two rooms, but an upstairs bungalow is being built for him on the estates which will make him more comfortable when finished. He has already felled about 300 acres, and they are all burnt off, strips of jungle being left here and there to provide shelter and to keep out too much light. When the North-East monsoon sets in he will plant up the whole 300 acres with cocoa, coconuts, Liberian coffee, and Arabian coffee. Cotton and chillies are to be planted in between the rows of the coconut trees. It will thus be seen that he has a laborious task before him and a very anxious time. Mr. Ross Wright assures us that in all his experience of Ceylon he never saw such magnificent jungle and soil as is to be found on the property of which he has charge. We can only say that we shall watch the result of the experiment which is being undertaken in this new district with great interest, and we hope the success attained by the Association will induce others to take up land in the vicinity—of which there is an abundance—so that in time a large district may be formed on the banks of the Amban-ganga.—Local "Times."

FOREST CONSERVANCY.

We have to acknowledge receipt of the administration report for 1893 of Mr. A. F. Brown, Conservator of Forests, which seems to be of a very complete character. Today we can only quote the following paragraphs:—

SALES OF FOREST LAND.

Considerable alarm has been expressed of late to the effect that Government is allowing forest lands to be sold for purposes of extending tea cultivation. Whether it is advisable to sell more land for tea is a question which it is hardly my duty to deal with, but all applications for large lots of land which are sent to me by Government Agents are carefully considered, and if in my opinion the land should be reserved, I decline to agree to the sale. Thus at the end of the year I requested the Hon. the Government Agent, Central Province, to delay the sale of a block of 1,000 acres of forest land near Laxapana until I had inspected it. My inspection satisfied me of the desirability of reserving the block with the rest of the Adam's Peak forest to which it belongs, and the sale was withdrawn. It is not likely that blocks of forest will be set up for sale unless they are too small for reservation, or unless their position renders them of little use to the Government.

OPENING OF THE HAPUTALE EXTENSION.

The opening of the Haputale Extension has rendered accessible for exploitation the large stretch of forests between Nanu-oya and Haputale. A portion of these forests will yield the fuel for working the trains on the extension, but large areas are available for the supply of timber and firewood to estates. The freights on the railway are unfortunately high, and the prices of produce brought out of the forests must of necessity cover something more than the price of transport. If, however, the rates on freight of timber are reduced we should be able to satisfy all the requirements of the country near the railway.

GAME LAWS.

It cannot be said that the Game Laws are sufficient to prevent the slaughter of wild animals in the low-country. The imposition of an export duty on hides has, no doubt, done some good. It will only be when the game will be able, as in India, to retire within reserved forests that it will have a chance of avoiding the annual butchery. The only portion of the Island where the game is on the increase is in the hills, and there the Game Laws are hardly necessary. Elk and deer are rarely shot in the hills,

and the packs of hounds kept by sporting members of the planting community are hardly sufficient to keep down the game. The open season is now the most unfavourable one for hunting, and some owners have been obliged to sell their hounds in consequence. The Forest Department plantations at Nuwara Eliya and Nanuoya are suffering much from the attacks of red deer and elk. In some places as new parks are put in they are browsed down. I should not be surprised to hear that private properties suffer in the same way. It would be therefore desirable to make some provisions for keeping the game down within reasonable limits.

PROPOSED FORESTRY BRANCH AT THE SCHOOL OF AGRICULTURE.

Owing to the courtesy of the Government of India, some of our superior officers have been able to study at the Imperial Forest School at Dehra Dun, and in 1894 two rangers are to be sent from here. It has, however, struck me that, with the present staff of the Agricultural School, together with some additions from the Forest Department, it would be possible to give to our rangers and guards, and also to candidates for appointment in those grades, a training which, although not equal to that obtainable at the Indian school, would materially help in a proper and careful treatment of our forests. Large sums of money are no doubt spent on the Dehra Dun school; the best professors are obtained from all parts of India, and an experience of thirteen years has now shown the best way to impart a practical knowledge of forestry and its appendant sciences, and we cannot hope all at once to compete with Dehra. But, whereas this Government cannot afford to send more than three or four men at a time for a lengthened period of time to a distant place like the north of India, it may be more practicable to have classes in Colombo and to teach forestry in the very forests in which officers will be called upon to practise it. I have therefore been ordered by Government to discuss the matter with the Director of Public Instruction, who has kindly offered to give all the assistance possible. The final proposals have not yet gone in, but we shall submit them before long.

The receipts for 1893 amounted to R365,758 (as against 462,427 in 1892) and the charges to R404,756 (as against 475,491 in the previous year.)

TEA DRINKING IN JAPAN AND CHINA.

To take a cup of social tea in China and Japan is not only a pleasure, as it is with us, but a solemn duty born of generations of custom. *** The delicate straw-coloured beverage which is consumed in Japan differs very materially from the infusion called tea at home. *** The teapot is heated with hot water before the tea is put in, then hot water, not boiling, is poured over the leaves, and immediately poured on and off, but it is never allowed to stand on the leaves more than a minute.

In most houses a kettle of water is always on the *hibachi*, a sort of portable stove, resembling a brazier, and this is set before the tea-maker, who watches the bubbles and steam with as much anxiety as if the fate of the whole Empire depended upon the water being used at a certain instant. Both men and women make tea so daintily and daffily that it is a perfect delight to watch them. ***

The natives themselves use neither milk nor sugar in their pale, yellow tea, but when they can get a cup of what they call China tea—which is a great treat, for they prefer it to their own—they use "all the trimmings." ***

The Banko teapots, with the plainly visible thumb marks, are much prized by the Japanese, but a tiny teapot of Kaga ware, with ten cups—the Japanese dozen or set—is the one most commonly seen. Some of the fine tea sets cost fabulous sums.

Many of the old families have brass or iron kettles, beautiful and artistic, which they proudly show, and declare that they have come down to them by direct inheritance from ancestors who used them six and

seven hundred years ago. A story is told of one of the Shoguns, who, being very fond of tea, rather unscrupulously gratified his taste for fine kettles by robbing the pagodas of Buddhist temples of the brass rings that surmounted them, and used the metal thus secured for casting a kettle, which he declared gave "no harsh taste to the water." ***

The Chinese are as inveterate tea-drinkers as the Japanese, but they use leaves prepared in a different way. ***

The Chinese keep always a kettle of water boiling over the brazier ready to make tea at a moment's notice, for no visitor ever goes to a house without being offered tea on arriving and departing. They use boiling water, and pour it over the dry tea in each cup. Among the better class, a cup shaped like a small bowl is used with a saucer which is a little less in diameter than the top of the bowl, and is used for a cover when the tea is brewing. When the boiling water is poured over the tea, it is covered for the space of two or three minutes, by which time the leaves have unfolded and fallen to the bottom of the cup, leaving the tea clear and deliciously fragrant. ***

The Chinese have a variety of teapots, most of them much larger than the toy things of the Japanese, and many of them kept in a basket cosy. The handles or halls are often bamboo or metal, similar to the *do-bin* of the Japanese.—"The Lady," Aug. 9.

PIASSAVA FIBRE.

On my way to Cape Coast I noticed a small quantity of Piassava Fibre being shipped from Appam. This valuable fibre is obtained from the palm which is so common and plentiful in this part of the colony, namely, "*Raphia Vinifera*." It is a very important product, being worth from £45 to £60 per ton according to quality.* Great interest is at present shown in England in the discovery of similar fibres to this, and there is a good market for them, but the supply is very small, owing chiefly, I think, to the difficulty experienced in extracting and cleaning the fibre. It is chiefly used for brushmaking. I will make enquiries and endeavour to obtain information respecting suitable machinery for cleaning and preparing the fibre which information, if I am able to procure it shall be published in my next report.—*Mr. W. Crouther's Report, Gold Coast.*

SELECTED ENGLISH PATENTS.

TEA.—No. 15317.—The Waygood-Tupholme Grocers Machinery Co., Ltd., and B Tupholme, Falmouth Road, London.—Relates to apparatus for cutting, equalizing and blending tea. The cutting apparatus consists in a pair of the usual cellular rollers and two knives A in contact therewith, which are fixed on shafts B carrying levers connected by a spring Pawls are pivoted on the levers and are usually supported by the fixed checks, but when nails, stones, or other articles push back either of the knives a little, the corner of the pawl moves in to gear with a cam on the roller shaft, and the lever C is thereby pushed further way, so that the knife A is turned sufficiently to allow the foreign body to pass. The spring D then brings the knife back to the cutting position. From the cutter the tea falls upon a travelling band, to which other tea may also be supplied, and is conveyed to a mixing-cylinder containing three canted wings and two byonet sided trihedrons which during a few revolutions of the drum, effect the blending. The door of the drum is opened and closed by a pair of racks thereon, which can be put into gear with two pinions on shafts above and below, operated respectively by a pulley with an endless rope, and by a hand-wheel. From the mixing drum the tea glides gently into troughs in which scoops fit easily. Or the tea may be delivered into a chest by a travelling belt. For delivery into bins on the floor below a receiver or carriage is used having four triangular

* Written two years ago.—Ed. T.A.