

root by the owners, but are sprouting up fresh again. The offer has been accepted with thanks. The cinchona company Melatic, more fortunate than some of its competitors, is able to pay its shareholders 5½ per cent dividend as a result of last year's trading. It has been decided to amalgamate the company with three other estates, and to increase the capital to 650,000 florins (54,000£). The directors of the Java coffee and cinchona-plantation Tomba report that last year owing to a disease in the cinchona trees, they were compelled to harvest nearly 51 tons of bark which under ordinary circumstances would have been left on the trees for some time. The cinchona disease continues to spread in the grown trees on the company's estates, and no fewer than 111,630 young trees have therefore been planted last season.—*Chemist and Druggist*.

### CINCHONA CULTIVATION IN BRITISH INDIA.

In a recent report of the Indian Government it is stated that on the Government plantation of the Darjeeling district in Bengal there were, at the end of the year 1892-93 4,331,000 cinchona trees, or 100,000 less than in the preceding year. During the year 466,000 trees were uprooted for their bark or died, while 184,000 were planted out. The harvest of dry bark was 304,000 lb. The factory produced during the year 3,481 lb. of cinchona febrifuge and 4,242 lb. of sulphate of quinine. The sales and issues of medicine during the year yielded a profit, after meeting all charges for maintaining the plantations, renewing plant, and working the factory. As soon as the remaining million of red-bark trees are used up, it is intended to manufacture only quinine, and to cease making cinchona febrifuge at the Darjeeling factory. The capital cost of the plantation has been repaid by the sale of cinchona drugs in previous years. Ample ground has been reserved for extending the Darjeeling plantations. In the Government plantations on the Nilgiri hills, in Madras, the cinchona trees are almost all of the quinine-yielding varieties. Drought, and the absence of sunshine, made the year 1893 unfavourable for cinchona cultivation on the Nilgiri hills. The produce of the factory at these plantations during the year was 4,933 lb. of quinine and 3,139 lb. of cinchona febrifuge; 3,204 lb. of the former and 2,600 lb. of the latter were sold or issued to Government and municipal or local departments. The area under cinchona on private plantations outside Bengal is returned at 10,862 acres, nearly all of which are in Madras. The exportation of cinchona bark from India by sea, which was 3,074,000 lb. in 1888-89, and 2,693,000 lb. in 1891-92, amounted to 2,814,000 lb. in 1892-93.—*Chemist and Druggist*.

### MARAGOGIPE COFFEE IN S. INDIA.

A. S. E. Wynand correspondent writes as follows:—'Maragogipe' and 'Santos' Coffee are both doing grandly here. The 'Mara' clearing planted in July 93 is a sight, many trees being over 5 feet high. There was a little sprinkling of fruit on them which I have had picked off but they will give a crop in '95 only 2 years old them! The 'Santos' were planted in '92 two leaved seedlings and were watered through the first hot weather, to keep them alive. They are now grand plants and had fruit on them this year, which I have had removed. I look for good results from my 'Mara' and have planted out some 30,000 more plants this monsoon. I think the Hybrid between Arabica and Mara will be good." Rather a different story, this, from what we have been told of Mara' at Kulhatty.—*South of India Observer*.

### COFFEE CULTIVATION.

BANGALORE, Sept. 22.—Lord Wenlock this morning, accompanied by Colonel Handerson, British Resident, and Major Ravenshaw, Assistant Resident, rode out, under an escort of Lancers, to

Roshdale Park, the property of Mr. Meenachaiya, Legislative Secretary, Mysore Service. His Excellency inspected his coffee plantation under irrigation. Twenty thousand plants are in flourishing condition, specimens of which took a special prize at the last Horticultural Show at Bangalore. The Madras Government may possibly introduce coffee cultivation similarly in the low country.—*Times of India*.

### COFFEE AND TEA ON DIGESTION.

BY DR. ANDREW WILSON

Some interesting experiments on the influence of tea and coffee on digestion have lately been undertaken by Professor Schutzenstein. It is fairly well known that both tea and coffee retard the digestion of meat. The practice of taking coffee after dinner can only be explained, I presume, on the theory that the coffee acts as a corrective to any alcoholic effects; otherwise one can hardly find a justification for adding it to the menu on physiological grounds—unless, perchance, it may be regarded merely as an agreeable adjunct to pipe or cigar. "Meat teas" have long been the abomination of physiologists, for the reason that the combination is an indigestible one, although experiment has shown that salt foods digest more readily alone with tea or coffee than fresh meats. Certainly, a "high tea," much as it may be thought of popularly, is an unphysiological meal. Professor Schutzenstein showed that while gastric juice (the stomach's own secretion), which is specially destined to dissolve and digest nitrogenous or meat foods, of itself was able to digest 94 per cent. of egg albumen (or white of egg) in the space of eight hours, it could only affect 66 per cent. when tea was added. With coffee the effects were of even more strongly marked character, for then only 61 per cent. of the white of egg was assimilated. Another point elicited by these researches was that which showed the difference produced by a strong and weak infusion of tea and coffee respectively. The weaker the infusion, as might have been expected, the less disturbance was noted in the work of the gastric juice. The Professor inclines to think that it is the tannin of the tea and coffee which is chiefly responsible for these results. He exempts the active principles of tea and coffee (theine and caffeine) from the charge of delaying and hindering the digestive work.—*Science Jottings*.

### CEYLON TEA IN MACAO.

The trade of the tea merchants in the Portuguese Indian settlement of Macao is, according to our Vice-Consul's report, in anything but a flourishing condition, owing to the increasing tendency of the Indian and Ceylon teas to drive out the China-grown product in the Australian colonies and elsewhere. One exception, however, is noted, and this is said indeed to be the only sort that has brought in any return to the Macao dealers of late. This is a new 'blend,' which goes under the old familiar designation of "lie tea." It is manufactured from exhausted tea leaves, which are dried, refired, and mixed with a certain preparation of genuine tea and of seeds and dust. Most of this preparation proceeds, we are told, to Hamburg, but is often packed in chests labelled "Best Congou," and shipped to India for popular consumption.—*British Daily Mail*.

### TEA AND SCANDAL.

It would take up too much of your space, and be foreign to the object of my contributions were I to reproduce any of the delightful chats "Over the Teacups" by Oliver Wendell Holmes, but I give a few sententious remarks that occur directly connected with the 'cups that cheer.' At page 6 he says:—'The morning cup of coffee has an exhilaration about it which the cheering influence of the afternoon or evening cup of tea cannot be expected to reproduce. The toils of the forenoon, the heats of midday, in the

warm season, the slanting light of the descending sun, or the sobered translucency of twilight have subdued the vivacity of the early day. Yet under the influence of the benign-stimulant many trains of thought which will bear recalling, may suggest themselves to some of our quiet circle, and prove not uninteresting to a certain number of readers."

Again at page 21:—"Tea cups are not coffee-cups. They do not hold so much. Their pallid infusion is but a feeble stimulant compared with the black decoction served at the morning board. And so perhaps, if wisdom like yours were compatible with years like mine, I should drop my pen and make no further attempts upon your patience."

And at page 71.—"If the reader thinks that all these talking teacups came together by mere accident, as people meet at a boarding house, I may as well tell him at once that he is mistaken. Does he suppose we want to be known and talked about in public as 'Tea cups'? No: so far as we give to the community some records of the talks at our table our thoughts become public property, but the sacred personality of every Teacup must be properly respected. If any wonder at the presence of one of our number, whose eccentricities might seem to render him an undesirable associate of the company, he should remember that some people may have relatives whom they feel bound to keep their eye on; besides, the cracked Tea cup brings out the ring of the sound ones as nothing else does. Remember also that the soundest teacup does not always hold the best tea, nor the cracked teacup the worst."

I borrowed from the Library of the Royal Asiatic Society a book by G. C. Scent called "Entombed Alive," and other songs and ballads, from the Chinese," as I thought there might be something about Tea, and I was not mistaken. There is a long poem on an earthen teapot that was made out of a murdered man's ashes, and that considerably startled its purchaser; for he was just going to use it "when a voice from within, Roared out 'Don't begin! That's my nose! What the deuce are you doing?' I may give you the whole of it some day, but at present I merely give the tea-extracts from another funny poem called "Inverted Facts," which tells you that "Killing a man is not considered a crime—so long as you kill him but once at a time." The following refer to tea:—

When a person gets tipsy it's always on tea;  
The favourite perch of a mule is a tree.

The tiger's an insect it lives in the sea,  
Its chief occupation is gathering tea.

If you wish to make tea, that is easily done,  
Boil your water at night in the shade of the sun.

A cat is a dog, and young kittens are pups;  
Plates are tea-pots and kettles, but chopsticks are cups.

I have already sent you many slang terms connected with Tea. Here are some more. *Black tea pot*, A Negro footman. *Bun-struggle*, *bun-worry*, (military). A tea-meeting given to soldiers. And in Studenten-Sprache (German student's slang) *kondition* is Café, *Thee-Gesellschaft* (Coffee or Tea-meeting) *Auf den Thee kommen*, *Von einer sache übel weg kommen* (to come off badly from an affair.) The following instances of the use of *cat-lap* and *cold tea* are quoted from J. S. Farmer's 'slang and its analogues.'

CAT-LAP. 1824. Scott. Redgauntlet. Ch. xiii. "We have tea and coffee aboard. You are at the age to like such *cat-lap*." 1864. M. E. B addon. Aurora Floyd. Ch. xvii. "I've washed the tea for tea" said the 'softy,' I thought you'd like a coop. "The Tariner shrugged his shoulders." "I can't say I'm particular attache to the *cat lap*," he said laughing.

COLD TEA. 1890. Diet. Cant. Cr. w. Cold Tea-Brandy. 1893. Remonstrance of the bachelors in Harl. Misc. (ed. Park) iv. 505. "Since their sex has been so familiar with brandy (blasphemed by the name of *cold tea*.) 1898. O. J. Dauphine. The Chameleon. 235. It is worthy of remark that cold tea was a slang name for brandy in the 18th century."

Even as the Chinese have their Lie Tea, so I shall, I fear, under cover of my title smuggle in many a paragraph that has little resemblance to tea, but it may be taken as the sugar or milk, which some people cannot take their tea without. In Crowther's Yoruba (West African) Vocabulary the word OYA is said to mean "The wife of Thunder, a goddess to whom the river Niger is dedicated, which therefore is called Oddò oya." Doesn't it remind one of our lovely Nanu Oya, which is the name by-the-bye, wherewith I have called our new house in Hampstead.

A. M. FERGUSON.

### ECONOMIC PLANTS IN SOUTHERN INDIA.

From the latest Report of M. A. Lawson, Esq., Government Botanist and Director of Government Cinchona Plantations, &c., Nilgiris, we quote as follows:—

POLYGONUM SACHALINENSE.—This has been cracked up in many quarters as a fodder yielding an enormous crop. It is said that it will yield 95 to 190 tons of green stuff an acre per annum. But these figures cannot be taken seriously. There are many *Polygonums* on these hills, such as *P. ruda*, *P. Nepalense*, *P. Chinense*, &c., which cattle eat freely, either fresh or when converted into silage; but they are all said to have a tendency to scour the animals when fed solely upon them.

CASSIA AURICULATA.—Messrs. Cooper, Allen and Co., of Cawnpore, asked for information respecting the cultivation of the *Cassia auriculata*, and were told that, so far as was known in this department the plant was never cultivated, but was obtained as a minor forest product; but that if they wished to cultivate it, it was believed that it would not need irrigation, as in a wild state it grows in hot dry places. It was also pointed out to Messrs. Cooper, Allen and Co. that if they undertook its cultivation, they should allow it to grow for several years before barking the shrubs; as Mr. Cooper's analyses had conclusively proved that the bark taken from old stems was many times richer in tannin than that taken from young stems or branches.

IPOMŒA CYMOSEA.—The District Forest-officer, Chingleput, sent specimens of a plant which was identified as the *Ipomœa cymosa*, called in Tamil *Pundi kodi*, and the fibres of the roots of which are said to be used extensively in the Chingleput district for making brushes used in white-washing.

RUBBER.—In January last Messrs. Raja and Co., a Madras firm, wrote for information respecting India-rubber. They wanted to know where it could be obtained in large quantities for commercial purposes. They were informed that beyond the production of an inferior kind which could be had from the Wynnaad and Malabar, no rubber was produced in the Madras Presidency; and that their best plan was, therefore, to address the Conservator of Forests, Asam, where the better sorts are produced from the *Ficus elastica*. A specimen of the rubber from trees in the Wynnaad was forwarded to them to experiment upon. They sent this sample to their agents in Europe, who reported that it was not a desirable article, and the utmost it might fetch in the London market was one penny a pound, so that for the present at least this inferior commercial product of Southern India may be regarded as lying outside the pale of all markets.

COFFEE HYBRIDS.—In July last a gentleman interested in coffee planting in the Wynnaad asked if the Arabian coffee (*Coffea Arabica*) and the Liberian coffee (*Coffea Liberica*) when planted side by side would produce a hybrid that would be more likely to resist the attacks of *Hemelia vastatrix* than either of the parents. It is not likely that this would be the case but it is a point which experiment alone could settle. Further, in the long run it is not likely that the Liberian coffee will prove any more immune to the attacks of the *Hemelia* than the Arabian coffee.

RUBBER-YIELDING TREES.—In February last the *Ceara* and *Castilloa* trees growing in the Barliyar Gardens were again tapped, but with the most dis-