

are resident in the United Kingdom, and can be readily got to join for the purpose of pushing their interests. In Ceylon also the Government takes a more active and wisely benevolent interest in the industry.

While the honours of prompt action must thus be given to Ceylon, the results of the exhibits of British teas at Chicago have been satisfactory alike to Ceylon and to India. Indeed, the East India pavilion formed one of the features of the World's Show. In this imposing building, draped with the rich textures of the East, a staff of Indian servants distributed little pots of tea to all comers, for a time free of charge. Dainty cups, sugar bowls, and cream in small jugs were placed in readiness on the tables. By degrees the crowd of visitors became so unmanageable that it was found necessary to charge a price, which gradually rose to a shilling a pot, as the only means of keeping the demand within limits.

The result has been to bring Indian teas for the first time within the knowledge of the American consumer. Next to Great Britain the United States are the largest tea purchasers in the world. But unfortunately the 90 million pounds which they take are almost entirely obtained from China and Japan. Indeed the American taste for tea has been formed upon the coarse leaf of those countries, and the fine flavoured India and Ceylon teas were a new revelation to most of the visitors at Chicago. Over seventy awards of merit or honours were carried off by Indian plantations, and before the close of the Exhibition 1,500 American tea firms had stocked Indian teas. The Indian Tea Association determined to make the most of the opening thus obtained. It has arranged to advertise and display Indian teas at the various food shows, which form a feature in parts of the United States during the coming winter and spring with a staff of Indian servants at each. Until the show season begins, the Indian servants in their picturesque costumes are lent to leading American tea firms, being moved on from store to store and from city to city as required. The Ceylon planters have been even more energetic. They won a still larger measure of success, and have opened a central permanent depot for Ceylon teas in Chicago itself.

Fortunately the interests of India and Ceylon are in this matter identical. It is the interest of the British tea planter as against the Chinese tea grower. The amount of British capital invested in tea plantations is about 20 millions sterling. The contest is for the largest tea market in the world next to Great Britain. The trade in British teas has hitherto followed the flag. Can it now establish itself on a great scale in countries outside the British Empire.

#### ECHOES OF SCIENCE.

Professor McAdie states that an average thunder-cloud contains about 300 horse-power of electric energy. A flash of lightning a quarter of a mile long practically means an electromotive force of millions of volts. A flash occurs when the electrical strain on the air is 1.37 pounds per square foot, so that the total electric energy in a cubic mile of the strained air just on the point of flashing is about 70 million foot-tons, that is to say, the energy required to raise a ton 70 million feet high. In these days of "transformers" and "home-made lightning," Mr. McAdie, as others have done before him, asks whether we can use this immense store of electricity in the higher atmosphere. It might be brought down by a modification of Franklin's kite. Professor Trowbridge shows that a discharge keeps in the same path for 300-1000-part of a second, and imagines that a "step-down" transformer might be able to render it fit for the service of man.—*Globe*.

**JAPANESE LABOUR FOR GUAEMALA.**—It is reported from Guatemala that President Barrios has sent M. Langier as special emigration agent to Yokohama, with instructions to contract for 10,000 Japanese labourers for six years, to work on the Guatemala coffee plantations.—*Siam Observer*.

#### VARIOUS PLANTING NOTES.

**PRICE OF COCONUTS.**—We draw attention to the note appended to a letter elsewhere, (see page 245) giving the approximate value of coconuts per thousand since 1840 for each decade and at the present time. It will be observed that there has been a steady advance, until the price has more than doubled in the past fifty years, that is in local currency. At the same time coconut oil in Europe is by no means so high as it was—in the time of the Crimean war for instance.

**"KEW BULLETIN."**—The June issue of the Bulletin of Miscellaneous Information from the Royal Gardens, Kew, contains, as usual, several important papers devoted to the following subjects: "Treatment of Diseased Sugar-canes in the West Indies," "The Citron in Commerce," "New Orchids, Decade 9," "Cold Storage of Fruit," "Sisal Hemp at the Bahamas, and Gambia Pagne, or Native Cloths." Last, but not least, are the "Miscellaneous Notes," which are interesting to general as well as to scientific or technical readers.—*Gardeners' Chronicle*.

**COFFEE PLANTING in the Caucasus** appears to have been started on a very small scale, and to have prospered amazingly in its early infancy. A tobacco grower in the Kusban district last year sowed four grains of Mocha coffee which he had procured from Poti, where it had failed to realise expectations. Two grains died, but the other two gave eight hundred berries. These eight hundred being planted out have produced seven hundred fine healthy bushes, from which an excellent little crop is expected shortly.—*Madras Times*.

**COFFEE PLANTING BY MALAYS.**—Forty-one applications for customary land were received in June by the District Officer, Ulu Langat; most of these profess to be for coffee planting. Mr. Aldworth however confesses that he has but little faith in coffee planted by Malays. The Malay coffee gardens at Klang are very poor compared to the Japanese-owned gardens, but the Malay gardens in Ulu Langat are still less cared for than those in Klang. Of course there are a few noteworthy exceptions in which Malays do their best to cultivate coffee, but these are few and far between, and are generally men who have a little capital.—*Pinang Gazette*.

**"STRONG POSITION OF QUININE"** is the heading of an editorial in the latest *New York Drug Reporter*; "not for many months has quinine occupied so strong a position as it does at the present time; the price in London is advancing"—nevertheless, we read:—

The stock of quinine in London must not be overlooked as a factor in the situation. It is large, but a good deal of it is said to be old, lacking in the water of crystallization, though suitable for making into pills. Some pill-makers, however, claim that they cannot use quinine when in this state as it will not work up well in their mass. Be that as it may, the mere fact that it is still in the old cases would deter many dealers here from purchasing it. So, holders of old quinine may find trouble in realizing: how about very old bark, such as has been kept in a Colombo store for several years—does it deteriorate?—The paper already quoted, shows that in Amsterdam, quinine has risen per unit from 3.95 (Dutch cents) in January 1894 to 4.50 in July.—With the scarcity of produce to freight steamers, the present should be a good time for getting rid of any cinchona bark stocks in Colombo if the price is likely to improve further in Europe.