

EXPERIMENTAL TEA CULTIVATION IN THE UNITED STATES.

From a report recently furnished to the Agricultural Department at Washington, and communicated to the Foreign Office, it seems that Tea-growing in South Carolina has been successfully carried on of late, the seat of the operations being situated at Summerville, some 20 miles from Charleston. It is stated that many attempts have been made to grow Tea in America, in little patches, and in some instances in large gardens, but that the results from these attempts, though producing Tea of fine flavour, have been generally devoid of that strength of infusion which appears to constitute a desirable quality for many Tea-drinkers. It may be presumed, however, that the failure to produce this quality was largely due to defective curing, and especially to inadequate rolling of the leaf, in consequence of which, its qualities were not fully developed. So far as is generally known, it remained for the National Department of Agriculture to begin about ten years ago the first serious attempt to produce American commercial Tea on a scale sufficiently large to arrive at a decisive result. Many circumstances, however, followed to cause the total abandonment by the Government of the gardens which it had established at great expense on a plantation at a place called Newington.

The present experiment owes its undertaking to the belief that the previous trials to produce Tea in the United States were arrested before reaching definite conclusions, that more careful cultivation and preparation might be the result of a lengthened local observation, and that the subsequent production of a higher class of Teas might reverse the generally-entertained opinion that, as an industry, the cultivation of Tea in America must always prove a failure; and that, if successful, this new field for agricultural enterprise would furnish a wide and comparatively easy out-door employment for many who are unequal to those rougher operations, whose accomplishment under a summer sun can be borne but by few.

For the purpose of giving Tea cultivation a thorough trial in South Carolina, it seems that no trouble has been spared. The Department of State is used orders to its consuls at the Tea ports to obtain samples of seeds, and the foreign representatives of the United States government did all that was possible to secure the best quality of seed.

During the summer of 1893 some of the plants in the Pinehurst Tea plantation were sufficiently advanced to warrant picking the leaf. The great majority of the plants had been raised from seed in 1889, and planted out that autumn, but a limited number were a few months older. They are described as belonging to the Assam hybrid variety, namely, a cross between the Assam and Chinese sorts, and came from stock that had been thoroughly acclimatised by probably thirty years' growth in America. The plants had been systematically "topped" with garden shears, and afterwards carefully pruned with a knife. During the winter of 1891-92, and throughout, the plants had been carefully cultivated, and generously manured. They covered small areas on various soils, namely, under drained pond and high swamp, the slope of a clay hill, and a flat sandy Pineland. So free had been the artificial enrichment of all these plants that no material difference in the quality or quantity of yield was observed. It was designed to test by these experiments whether commercial Tea could be raised at all. The report on the quality of this Tea says: "A sample was sent to a travelling agent to a large Tea firm in Detroit for his judgment, advising him as to where the Tea was produced. He took the Tea to his store, and without giving them any previous information, it was tested by two of the leading members of the firm, each making a separate test. They pronounced it very excellent English breakfast tea, and when the information was given them as to the place of production, they

were very much surprised, and wished to know if any considerable amount could be purchased."

From the gardens now being established at Pinehurst, and in consequence of the great care bestowed on their composition, it is hoped to obtain much finer Teas in the future.—*Gardeners' Chronicle*.

THE LIFE OF SISAL HEMP PLANTS.

There are numerous species of *Agave* (popularly called Aloes) belonging to the natural order *Amaryllidaceae*. They are almost all monocarpic perennials. That is, they grow on for a number of years producing leaves only; finally they flower, and this they do but once in their life, and that period is apparently determined by the nature of their environment. Usually *Agaves* under cultivation in this country live to a great age. On this account they are sometimes called century plants. In their native country they live for seven to 15 years. When once the monocarpic species have flowered and produced seeds or bulbs (pole plants) they die. The following notes refer to the Sacqui (*Agave rigida* var. *elongata*) and to the Yaxci or Bahamas Pita (*Agave rigida* var. *sisalama*):—

(a) Mr. Stoddart says, "the plant (the Sacqui of Yucatan) lasts.....for at least 25 years in a cutting state, ceasing on the soil and treatment." To renew a plantation after the original plants have become exhausted, "it is usual to plant at proper distances, by the sides of the old plants or between them, young shoots which three years afterwards (and upon the failure of the old ones) will be fit for cutting." A new field will thus "be kept up without any loss of time or suspension of work." (*Sisal Hemp, its adaptation to Jamaica, p. 4.*)

(b) Mr. Stoddart describes the poling as follows: "This happens when the plant has arrived at cutting age and the plants are not cut."....."When the pole begins to come out and gains a length of about three or four feet, it is customary to cut it off close without injuring the leaves. These leaves will then mature and be fit to be taken off before the plant dies." (*l.c. p. 7.*)

(c) Poling appears to be accelerated (1) by the leaves not being cut when they have arrived at maturity, (2) by the plants being exhausted by numerous suckers allowed to remain around their base, (3) by careless cutting of the leaves. Stoddart, on this latter point, says: "If the stump (or base) of the leaf be left of any length on the trunk it seriously injures the plant, spoils its vigour, and makes its existence a short one." (*l.c. p. 7.*)

(d) Mr. Pierce says: "A hemp plantation in Yucatan lasts for some 15 years...on good land the crop commences in four years or earlier, whilst on rocky ground from six years or more." (*F. O. Report, 1892, p. 2.*)

(e) Mr. Dodge, discussing the Pita or Yaxci plant of Florida and Bahamas, remarks that in one instance, on very poor soil, he noticed that "a long row of plants set out 10 years ago to form a boundary line had hardly made any growth." (*Report of U. R. Dodge on "Fibre Investigation in the United States." Washington, 1893, p. 21.*)

Mr. C. T. McCarty of Ankona, Florida, says: "With us *Agave sisalama* sends up its pole at seven years on our best lands.....So far as the plant is concerned the 'poor land' theory has no foundation in this locality. Our strongest and finest plants are on our best land." (*Dodge, l.c. p. 15.*)

(f) Mr. Merrick Shaw, Polk County, Florida, describes a Sisal Hemp plant under his observation as follows: "The original plant growing on the soil, of which a sample was sent, poled at seven years old. Twenty layers of leaves had been cut from this plant, and the lowest of those remaining measured 5 feet 9 inches in length by 5 inches in width at the broadest part. About 100 suckers had been removed from (the base of) this plant and planted elsewhere." (*Dodge, l.c. p. 17.*)

(g) Mr. Dodge figures and describes a plant with leaves barely a foot long, which had thrown up a