

THE CLOVE INDUSTRY OF ZANZIBAR*

STEAMING down the East Coast of Africa at the season of the year when the south trade winds blow it is possible to smell Zanzibar long before one actually sees it, for the scent of cloves lingers in the air many miles out at sea. This perfume promises romance in sun-flooded surroundings and the traveller, be he government official, commercial representative, or pleasure cruiser, will not be disappointed. Coming up out of the sea mist there is the Island itself, resembling a light blue, floating cloud, and after a while the shaggy heads of tall palms appear, dotted on an uneven coast-line. From a sea of turquoise blue a strip of white beach appears, and with the glasses it is possible to see the clove plantations, or shambas, on the slopes of the low hills in the interior of the Island.

Zanzibar, and its adjacent smaller island of Pemba, practically supply the whole world with cloves, considerably more than 90 per cent. of the total crop coming from these two British Dependencies. But while the clove is indigenous to the tropics, it was only about a century ago that it first began to be cultivated in the islands. Its first home was in the East Indies, in the Molucca Islands, and it was said to be brought to Zanzibar by the Oman Arabs in the early nineteenth century. Since that time it has gradually become a flourishing industry. Soil as well as climate makes for success in a clove plantation. The former has to be of a rich red loam and well-drained. In Zanzibar and Pemba, the soil is the most suitable for consistent crops, and both islands, being of coralline rock the drainage is mostly perfect. In the larger islands, the plantations come to within four miles of the city of Zanzibar, whose streets during the long harvest always smell of the clove.

The plantations extend over a considerable portion of both islands. A visit to one of these "spice factories" is a memorable occasion, on account of the unique olive green beauty of the serried ranks of the trees. Some call them bushes, for they have only about from four to five feet of trunk, before the branches begin, which rise from 25 to 40 feet in height. They might be called giant perfume bottles, and during some seasons the perfume given off from both clove and leaf is overpowering.

The clove trees are planted in long lines about twenty feet apart, running east and west, so as to ensure the crop having the maximum sunshine. Two crops a year are gathered from each tree. The trees are raised from seed or from seedlings, and great care has to be taken with them for the first two years, especially to guarantee their being watered regularly. The fifth year brings a first harvest, but from the seventh year on the trees bear well. Their average life is approximately eighty years, with constant care.

The cloves are found in bunches of from ten to fifteen, hidden beneath the leaves, and are ready for picking after about four months' growth. The clove as we know it is really the unexpanded flower-bud, which, if

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allowed to flower, would be of no use afterwards for the article of commerce which is so valuable. Usually the harvest begins in July and may continue in a favourable season to the end of the following January, or even into February. The cloves are gathered when they are a pinkish colour. It is a unique sight to see a tree in full bud, the delicate pink against the varying greens of the clustering leaves. The yield from the trees vary in weight, but a good average crop would be about from $4\frac{1}{2}$ to $5\frac{1}{2}$ lb. of dried cloves per tree. But some trees on well-kept estates have been known to yield in a good season from 10 to 12 lb.

Arabs and Indians are generally the owners of the clove shambas; but unfortunately many of the Arabs, through dilatory business methods, have their farms heavily mortgaged to Indian money-lenders. The cloves are gathered by Swahilis, who, unless they are well supervised, are careless pickers. They climb the trees and gather the bunches of cloves into a bag which they carry around the neck. Often, branches are broken by their weight, or tender branches are deliberately broken off, so that the cloves can be gathered at ease on the ground. On many plantations I visited, dozens of trees were spoiled by neglect to supervise the pickers. Instead of climbing, I should have thought a telescopic ladder could have been used to far greater advantage, and that it would have easily paid for its introduction after two harvests. Major Pearce, when he was Resident of Zanzibar, tried to induce the owners of clove plantations to use more care in gathering the crops, and to think of the great loss caused through broken branches and trees. By using ladders, the native would actually earn more pay (they are paid for the amount of cloves they gather per day, and can earn as much as three shillings a day), and with greater ease. Considering that Government takes so much in taxation from the clove plantations it might by benevolent autocratic means induce the owners to use suitable ladders. In olden days a kind of scaffolding was rigged round the tree at harvest time, but obviously this is a cumbersome process and not worth the labour it would entail.

After picking, the cloves are taken to open spaces, drying grounds cut in the bush, where for several days they are dried in the sun. On some shambas, the cloves are allowed to dry on mats raised a little above the ground. The better managed have a concrete or cement platform made about a foot above the ground, and the cloves are placed on the mats there to dry and can be stirred about far more easily. This drying process is necessary to the clove of commerce. The clove depreciates about two-thirds in weight during drying. In these drying grounds hundreds of native women are employed to make the grass mats. At night just before sundown, the cloves are gathered into the drying mats and covered from the heavy dew which falls, which they would re-absorb if allowed to stay all night in the open air. When completely dried, ready for commercial use, the clove loses its pink colour and becomes the dull brown we see in the West.

During the drying, the cloves and stems are kept apart; both have their separate and special uses. The stems produce a small quantity of oil and the Germans used to extract a valuable dye from them. When thoroughly dry and passed by the inspector, the cloves are packed for shipment in bags made of matting and weighing either 35 lb. or 140 lb. These

bags are stacked in native carts, drawn by bullocks, and taken to Zanzibar beach where they await shipment from the passing steamers to all parts of the world. The average harvest in the two islands is about 10,000 tons of cloves of marketable quality, and might be worth anything up to a million and a quarter pounds sterling, according to the market price.

Every civilised country takes cloves from Zanzibar and Pemba, but the three biggest buyers are Great Britain, the United States, and India, the latter taking more than double the quantity of the others. In India, where spice is used with every meal, the clove figures very largely in the preparation of foods and cooking.

Oil of clove is the most valuable extract from the clove. It is used in all lands, and in numerous industries, especially in pharmacy and confectionery. The quantity of oil obtained from an average clove is about 16 per cent., and it is estimated that the stems contain about 5 per cent. Commercially oil of clove is also used in the preparation of some perfumes, and of the finest liqueurs.

Cloves were not looked upon not long ago as a splendid antiseptic, and one used to chew one to keep the teeth clean and as an aid to digestion. Cloves are efficacious also in the wardrobe, and besides being more pleasant to the senses than moth balls, they keep all manner of insects away. While on the East Coast of Africa I always kept cloves among my clothes and the scent gave a freshness to the air and acted as a stimulant in the hottest hours.