

THE TECHNOLOGIST.

THE IVORY TRADE OF ZANZIBAR.

BY CAPTAIN R. F. BURTON.

Zanzibar is the principal mart for perhaps the finest and largest ivory in the world. It collects the produce of the lands lying between the parallels of 2° N. lat., and 10° S. lat., and the area extends from the coast to the regions lying westward of the Tanganyik Lake. It is almost this only legitimate article of traffic for which caravans now visit the interior. The elephant has not wholly disappeared from the maritime regions of Zanzibar. It is found especially during the rainy monsoon, a few miles behind Pangani town; it exists also amongst the Wazegura, as far as their southern limit, the Gana river. The Wadoe hunt the animal in the vicinity of Shakini, a peak within sight of Zanzibar. Though killed out of Uzaramo, and Khutu, it is found upon the banks of the Kingani and the Rufiji rivers. The coast people now sell their tusks for thirty to thirty-five dollars' worth of cloth, beads, and wire, per frasilah. In Western Usagara the elephant extends from Maroro to Ugogi. The people, however, being rarely professional hunters, content themselves with keeping a look out for the bodies of animals that have died of thirst, or wounds received elsewhere.

As the chiefs are acquainted with the luxuries of the coast, their demands are fantastic. They will ask, for instance, for a large tusk—the frasilah is not used in inland sales—a copper caldron worth fifteen dollars; a khesi, or fine cloth, costing twenty dollars; and a variable quantity of blue and white cottons: thus, an ivory, weighing perhaps three frasilah, may be obtained for fifty dollars. Ugogo, and its encircling deserts, are peculiarly rich in elephants. The people are eminently hunters, and, as has been remarked, they trap the animals, and in drougthy seasons, they find many dead in the jungles. Ivory is somewhat dearer in Ugogo than in Unyamwezi, as caravans rarely visit the coasts. It is generally bartered to return caravans

for slaves brought from the interior ; of these, five or six represent the value of a large tusk. The ivory of Unyamwezi is collected from the districts of Mgunda Mk'hali, Usukuona, Umanda, Usagozi, and other adjacent regions. When the "Land of the Moon" was first visited by the Arabs, they purchased, it is said, ten frasilah of ivory with one frasilah of the cheap white or blue porcelains. The price is now between thirty and thirty-five dollars per frasilah in cloth, beads, and wire. The Africans, ignoring the frasilah, estimate the value of the tusk by its size and quality ; and the Arabs ascertain its exact weight by steelyards. Moreover, they raise the weight of what they purchase to 48lbs, and diminish that which they sell to 23½lbs, calling both by the same name, frasilah. When the Arab wishes to raise an outfit, at Unyanyembe he can always command three gorahs of domestics (locally worth thirty dollars) per frasilah of ivory. Merchants visiting Karagwah, where the ivory is of superior quality, lay in a stock of white, pink, blue, green, and coral beads, and brass armlets, which must be made up at Unyanyembe, to suit the tastes of the people. Cloth is little in demand, for one frasilah of beads and brass wire they purchase about one and a half of ivory. At Khokoro, the price of tusks has greatly risen ; a large specimen can scarcely be procured under forty doti of domestics, one frasilah of brass wire, and 100 fundo of coloured beads. The tusks collected in this country are firm, white, and soft, sometimes running six frasilah (210 lbs.) The small quantity collected in Ubena, Urori, and the regions east of the Tanganyika Lake, resembles that of Khokoro. The ivory of Ujiji is collected from the provinces lying around the northern end of the lake, especially from Urundi and Uvira. These tusks have one great defect: though white and smooth, when freshly taken from the animal, they put forth, after a time, a sepia-coloured or dark brown spot, extending like a ring over the surface, which gradually spreads and injures the texture. Such is the "jendai" or "gendai" ivory, well known at Zanzibar ; it is apt to flake off outside, and is little prized on account of its lightness. At Ujiji, tusks were cheap but a few years ago, now they fetch an equal weight of porcelain or glass beads, in addition to which the owners—they are generally many—demand from four to eight cloths.

Competition, which amongst the Arabs is usually somewhat unscrupulous, has driven the ivory merchant to regions far west of the Tanganyika, and geography will thrive upon the losses of commerce.

The process of elephant-hunting, the complicated divisions of the spoils, and the mode of transporting tusks to the coast, have frequently been described. A quantity of ivory, as has appeared, is wasted in bracelets, armlets, and other ornaments. This would not be the case were the imports better calculated, to suit the tastes of the people. At present the cloths are little prized, and the beads are not sufficiently varied for barbarians who, eminently fickle, require change by way of stimulants. The Arabs seek in ivory six qualities ; it must be white, heavy, soft, thick—especially at the point gently curved—when too much curved it loses from

ten to fourteen per cent., and it must be marked with dark surface-lines, like cracks, running longitudinally towards the point. It is evident from the preceding details that the Arab merchants gain but little beyond a livelihood in plenty and dignity by their expeditions to the interior. An investment of 1,000 dollars rarely yields more than seventy *frasilah* (2,450 lbs.) Assuming the high price of Zanzibar at an average of fifty dollars per *frasilah*, the stock would be worth 3,500 dollars, a net profit of 1,050 dollars. Against this, however, must be set off the price of portorage and rations—equal to, at least, five dollars per *frasilah*—the enormous interest upon the capital, the wastage of outfit, and the risk of loss, which, upon the whole, is excessive. Though time, toil, and sickness, not being matters of money, are rarely taken into consideration, by the Eastern man, they must be set down on the loss side of the account. It is therefore plain that commercial operations on such a scale can be remunerative only to a poor people, and that they can be rendered lucrative to capitalists only by an extension and a development which, depending solely upon improved conveyance, must be brought about by the energy of Europeans. For long centuries past, and for centuries to come, the Semite and the Hamite have been, and will be, contented with human labour. The first thought which suggests itself to the sons of Japhet is a tramroad from the coast to the lake regions. The subject of ivory, as sold at Zanzibar, is as complicated as that of sugar in Great Britain, or of cotton in America. A detailed treatise would here be out of place, but the following notice may serve to convey an idea of the trade. The merchants at Zanzibar recognise in ivory, the produce of these regions, three several qualities. The best, a white, soft, and large variety, with small “bamboo,” is that from the Banadir, Brava, Makdishu, and Marka. A somewhat inferior kind, on account of its hardness, is brought from the countries of Chaga, Umasac, and Nguru. The Wamasai often spoil their tusks by cutting them; for the facility of transport, and like the people of Nguru, and other tribes, they stain the exterior by sticking the tooth in the sooty rafters of their chimneyless huts, with the idea that so treated it will not crack or split in the sun. This red colour, erroneously attributed at Zanzibar to the use of ghee, is removed by the people with blood, or cowdung, mixed with water. Of these varieties, the smaller tusks fetch from forty to fifty dollars; and, when they attain a length of $6\frac{1}{2}$ feet long, fetch 60*l*.

A lot of 47 tusks was seen to fetch 1,500*l*; the average weight of each was 95 lbs., 80 being considered moderate, and from 70 to 75 lbs. poor. The second quality is that imported from the regions about the Nyasoa Lake, and carried to Kilwa by the Wabisa, the Wahido, the Wangindo, the Wamakua, and other clans. The “Bisha ivory” formerly found its way to the Mozambique, but the barbarians have now learned to prefer Zanzibar; and the citizens welcome them, as they sell their stores more cheaply than the Wabisa; though white and soft it is generally small, the full length of a tusk being 7 feet. The price of the “bab kalasi”—scrivelloes or small tusks, under 20 lbs—is from twenty-four to twenty-five dollars, and the value

increases at the rate of somewhat less than one dollar per pound. The "bab gugrati, or kaahshi," the bab kashi is that intended for the Cutch market.

The tusks must be of middle size, little bent, very bluff at the point, as it is intended for rings and armlets; the girth must be a short span and three fingers, the bamboo shallow, and not longer than a hand. Ivory fulfilling all these conditions will sell as high as seventy dollars per frasilah,—medium size of 20 to 25 lbs., fetches fifty-six to sixty dollars. The "bab wilaiti," or "foreign sort," is that purchased in European and American markets. The largest size is preferred, which, ranging from 45 to 100 lbs., may be purchased for fifty-two dollars per frasilah. The third and least valued quality is the western ivory, the Gendai, and other varieties imported from Usagara, Uhehe, Urori, Unyamwezi, and its neighbourhood; the price varies according to size, form, and weight, from forty-five to fifty-six dollars per frasilah. The transport of ivory to the coast, and the profits derived by the maritime settlers, Arab and Indian, have been described. When all fees have been paid, the tusk, guarded against smuggling by the Custom House stamp, is sent to Zanzibar. On the island sciveloes under 6 lbs. weight, are not registered. According to the late Lieutenant-Colonel Hamerton, the annual average of large tusks is not less than 20,000. The people of the country make the weight range between 17,000 and 25,000 frasilah. The tusk is larger at Zanzibar than elsewhere. At Mozambique, for instance, 60 lbs. would be considered a good average for a lot. Monster tusks are spoken of. Specimens of 5 frasilah are not very rare, and the people have traditions that these wonderful armatures have extended to 227 lbs., and even to 280 lbs. each.

ON THE AMOUNT OF TANNINE IN SOME ASTRINGENT
SUBSTANCES, AND THE COMPARATIVE RAPIDITY
WITH WHICH THE TANNINE IN SEVERAL OF THESE
SUBSTANCES UNDERGOES DECOMPOSITION.

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We have examined the following substances in order to determine their value as tanning materials; we are indebted to the kindness of Mr. Simmonds, the Editor of this Journal, for the specimens. The tannine was estimated in a manner similar to that pursued by our late fellow-students, Messrs. Mulligan and Dowling; the process is a modification of that first