THE KOLA NUT.

BY NICOLAS PIKE.

Mankind through all time has sought for stimulants, but what were used in earlier ages we know only from very meager records, outside of wine and fermented drinks. It is quite certain that the aborigines of all nations were aware of the medicinal and stimulant properties of most of the plants in their vicinity. It would make an interesting book to describe all the plants used thus by various nations. Though doubtless many would be rejected, some might benefit the present generation, and be simpler and more efficacious than the deadly drugs so constantly prescribed. Nature often provides us with remedies at our doors better than those we seek with so much trouble far and wide. The one I am about to write of is well known, probably has been for centuries to many colored nations, but not much outside of them, though, from the attention it is beginning to excite among medical scientists, it may possibly play a more important part in future among the white races of the earth.

The kola or cola is a large tree, native principally of Guinea, the Soudan, Mozambique, Abyssinia, and various regions in India. It is a *Sterculia*, and the seeds of two species, the *acuminata* and *tomentosa*, go by the name of kola nuts. There are two trees in the Brazils with fruit of the same name, the *S. chica* and *S. lasiantha*. The Asiatic ones are of several species, but I only know of the *S. nobilis*.

The whole family of the *Sterculiads* contain much mucilage, and many of the trees and plants are very valuable, the leaves, bark, fruit, and seeds being used as medicinal agents in different parts of the world. All contain a fixed oil which can be burned in lamps. The fibers of some are made into cordage, and others serve in the weaving of cloth. There is only one I know of in North America, the *S. platanifolia*, introduced into the Southern States from China and Japan. In the Soudan the name kola changes to *jaru*.

The nuts are very extensively used and very highly valued by various African tribes, who chew them for their agreeable effect on the system, their peculiar properties in causing wakefulness and their general stimulating results. They are said to contain no tannin, and in this respect differ from caffeine. In form they are rounded, compressed, somewhat resembling the European chestnut, and of a bitter taste.

It is affirmed that the kola has the power of arousing persons from their maudlin and idiotic condition when suffering from intemperance, and is used by the natives of Mozambique to cure drunkenness. (Pity it could not be applied here for the same purpose.)

In many parts of Africa, where water is scarce and the supply is impure from any cause, the natives are said to purify it with kola. Some experiments have been made recently by scientists in the old world, and particularly by Professor Haeckel, of Marseilles, showing that the kola nut possesses extraordinary stimulating powers. He states that the colonel of a regiment at Perpignan dosed with kola made the ascent of the Canigou mountain, 9,137 feet, and felt quite fresh after his twelve hours' climb. He only halted once for twenty minutes, and ate nothing. The 124th French regiment, by means of kola, marched for fifteen and a half hours, from Laval to Rennes, a distance of forty-five miles, or at the rate of three and three-quarters of a mile an hour, and were fresh at the finish. Kola is said to have the same effect on horses.

Professor Haeckel urges the use of kola instead of caffeine for a muscle bracer. It is also stated that the members of a certain Alpine club who perform unusual mountaineering feats without experiencing any fatigue employ it in the preparation of their food. Possibly the members of all our athletic and baseball clubs might benefit by the use of the nut in their long and fatiguing sports. Many a good game has been lost from breaking down of the players when under unusual strain.

Surgeon Hamilton, R. N., appears to have found a use for the kola which, if it is really a fact, will prove a "boon and a blessing to man," and woman also. He says that he has tried it in cases of sea sickness, and in many instances there was complete relief from nausea in about 40 minutes from chewing 50 to 60 grains of kola seed, but it must be good and fresh. Is not this grand news for all those "who go down to the sea in

ships," and who have to pay a severe penalty when they invade old Neptune's domains?

During my visit to the Seychelles Islands, when on an excursion to the Black Forest, in the island of Mahe, I had an opportunity of seeing the stimulating powers of kola tested. The Morne Blanc mountain is the highest in the island, and rises over 2,000 feet above sea level. This elevation is not great for a mountain climb, but the difficulties of the ascent made it equal to one of double the height. My Scotch friend and myself, laden with our vasculums and other impedimenta, had all we

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could do to surmount the obstacles in our way. It was steep and rugged for a good way up, but when we came to sheer masses of rock, often a hundred feet high, with only a foothold in the numerous interstices or up the crossed ropes of the great lianes that covered the boulders, it was no easy matter. So many ferns and other rarities grew from every crevice, which we had to snatch at haphazard, and we were thoroughly exhausted when we reached the first plateau.

Our three Mozambique men, each with a heavy load on his head, had still harder work than ours. Yet, strange to say, they climbed up like monkeys, and were not half so tired as we were. After leaving the tableland, we had to cut our way at every step through the jungle, with a tropical sun overhead, which made it terribly oppressive and fatiguing to us, but our men bore it well. We were so surprised that we questioned them about it. One of them spoke Portuguese fairly, so through him I could converse with all of them. They told us that the day before their departure they had prepared for the climb by having the whole body well rubbed with certain oils,

SUN FISH - MOLA, MOLA.

SCALE OF FEET

KILLING SUNFISH FOR SPORT OFF THE FLORIDA COAST.

and just before leaving had mixed kola seeds with their food. These men had been made slaves by the Arabs, and, after being put on board one of their dhows, they had been captured by a British man-of-war and landed at Mahe. They said the slave dealers gave the kola nuts to their prisoners on their long forced marches to the coast, as without them so many would succumb from cruel treatment and fatigue.

While making a tour round Mauritius with some friends, we encamped in a forest, at a distance of 16 miles from Port Louis. I had my photographic apparatus with me, which was carried on the head of an Indian servant. When I had finished with it I decided to send it back to Port Louis with other traps, before resuming our route. I packed the whole up as compactly as possible, but it weighed full 22 pounds. He took his rice and curry for supper, mixing a paste with it made from kola nuts, and started off at sunset with the package on his head and a stout staff in his hand. He arrived in Port Louis at midnight, after traversing a devious road of hill and dale and swampy land. He remained long enough in the city to procure a saddle and some other things for me, which took him about an hour, and he returned with them to our camp about five P. M., fresh and in good condition, and was quite willing to go back again if he got paid. He trotted most of the way, and the number of miles was not remarkable, but that it should have been traversed over rugged paths and with a heavy weight on the head.

The Brazilians eat the nuts of the chica, but if with the same results as from the kola nuts I do not know. The trees and fruit of the African and Asiatic *sterculias* greatly resemble the chica.*

I will here say a few words on the areca nut, principally credited with being an intoxicant. The nuts are largely procured from the palm *Areca catechu*, and, when mixed with lime and enfolded in the leaves of the *Chavica betle* or *Piper betle*, are chewed by hundreds of thousands of both men and women. All the ingredients are said to be stomachic. They stimulate the salivary glands and digestive organs, and counteract the effect of the large amount of rice they eat. The Indians tell you it preserves the teeth and gums, though it is a disgusting sight when the chewing is going on, making the gums and lips appear to be bleeding. Physicians who have resided long in India say that in the damp, pestilential regions of that country, where the natives live on miserable food, the chewing is really conducive to health.

KILLING LARGE SUNFISH WITH FIREARMS.

Our illustration presents a spectacle sometimes seen at the present time along our southeastern seaboard. Since many parts of Florida and other sections of the South have become popular as resorts for pleasure seekers during the more inclement portions of the year, the fishing in the harbors and off the coast has received a degree of attention formerly unknown, tarpon fishing, particularly, having become quite an object with sportsmen. It is a long distance, however, from the virile and game tarpon, sometimes called the "silver king," and weighing up to nearly 150 pounds, to the sluggish, clumsy, and ungainly sunfish, shown herewith, notwithstanding the great size of the latter.

As represented, the sunfish has the appearance of being tailless, due to the extreme shortening of the tail, which is supported by only a few short vertebrae, and reduced to a broad fringe of the trunk. Directly in front of it rise dorsal and anal fins, high and broad, and nearly triangular in form. The head is completely merged in the trunk, the boundary between them being indicated only by a small and narrow gill opening and a comparatively small pectoral fin. The mouth is small, and the teeth adapted for bruising sea weeds and soft-bodied animals. The fish propagates its species in the open sea, and only occasionally approaches the coast, living at some depth in the stormy season, but in calm, bright weather rising and resting on the surface, with its dorsal fin high above the water. It is this habit which is said to have given the fish its name. It is sluggish in its motions, and is often seen asleep at the surface of the water.

The usual size of the sunfish is from three to five feet in length, though many exceed seven feet long, with a weight of nearly a thousand pounds. The flesh is tough and very elastic, unfit for eating, while the liver is very fat, its oil being sometimes used for lubricating purposes on board ship, and for

sprains and bruises among fishermen. In color, the fish is grayish above and whitish below, with a silvery luster when alive, and phosphorescent at night. In some seasons it is frequently seen in Massachusetts and New York bays. It is said there is probably no other fish more infected by parasites, internally and externally.

* The natives of Brazil call the nuts *balaughas*.