has been a common belief that the black races were insusceptible to yellow fever, but Professor Boyce shows that this is not the case, and he believes that the only reason why the black races have as a rule suffered little in the past from the severer forms of yellow fever is that they have had milder forms of the same disease either in childhood or early life, and have thus become immune to later attacks. In order to prove this point, he states that in places where yellow fever has been practically eradicated by the destruction of the stegomyia, the mosquito which carries the disease, and where yellow fever again reappears, the black races are attacked in the same way as the white. He quotes the following instances; he writes :—

"Last year, 1909, during the yellow fever epidemic in Barbadoes, *out of a total of* 86 *cases*, 54 *occurred amongst the black inhabitants.* Yet these same blacks were the descendants of the African immunes. They had, therefore, in the meantime become non-immune and susceptible, owing to the fact that yellow fever had ceased to be endemic in Barbadoes.

"In the Martinique epidemic of 1909, the blacks were likewise attacked. The fact that the poor native black inhabitants of Barbadoes were more susceptible even than the whites, proved, in my opinion, that yellow fever was not endemic."

There are obvious difficulties in deciding this point, seeing that the specific causes of yellow fever have not yet been identified, though its propagation by means of the stegomyia mosquito is universally recognised. Consequently it is very difficult to prove this point one way or the other, but Professor Boyce's views are most suggestive, and they should be most carefully investigated.

Prophylactic Measures.

We now come to the practical steps which the Professor would advocate for dealing with this terrible disease. This may be summed up in one sentence, employed by the Professor in a paper recently read on this subject before the Society of Tropical Medicine and Hygiene. He says :—"There is but one remedy, and that is stegomyia destruction; and there is but one result to expect, namely, a most marked increase in the health and prosperity of West Africa."

How this was applied on the Gold Coast in the recent epidemic is shown in the following description, given by the senior sanitary officer :—

(1) "The evacuation of every infected bungalow. These bungalows were sealed up, and each of them was fumigated with sulphur, and afterwards Claytonised.

(2) "The evacuation of the infected area by Europeans between the hours of 5 p.m. and 7 a.m. This continued for a month, and no European was infected after the evacuation order was put in force on the evening of the 17th May. It was a drastic measure, which, however, I submit was justified by the prompt checking of the outbreak which followed its enforcement.

(3) "The fumigation with sulphur gas of every house in the business area and of every European bungalow outside it.

(4) "The perforation of all gutters, a hole being punched in each lineal yard of guttering. It is a matter of common experience to find a mosquito-proof barrel or tank full of mosquitoes on the wing, a fact which is explained by the supposition that they lay their eggs in the gutters, and that these or their larvæ are subsequently washed down into the tank or barrel. If the tank or barrel be mosquito-proof, no harm results, as the mature insect is unable to find an exit, but if the receptacle is not mosquito-proof, it is otherwise. I believe if this simple precaution were generally adopted, it would be the means of destroying the potential breeding places of innumerable mosquitoes.

(5) "Gangs were sent round collecting all tins, bottles, or other receptacles liable to breed mosquitoes.

(6) "The whole town was divided up into mosquito brigade areas, each of which was in charge of a European, who went round with a small gang. At first the people were warned, and the larval breeding vessel was merely oiled or upset, but afterwards full advantage was taken of the special anti-larval powers—the power to destroy—passed in Council on the 17th May, and any vessel found to contain larvæ, when no honest attempt had been made to screen it, was destroyed. Barrels were emptied, turned over, and their ends were staved in with an axe. It may be argued that this is a drastic treatment, but it is the only way. If it is carried out, people will soon begin to take trouble and make an effort to keep their water receptacles free from larvæ; and when they are found to be so doing, they should be assisted by carpenters employed by the Government, as was afterwards done in Secondee.

"I am convinced that we shall never be able in this Colony to free the coast towns of stegomyia until this power to destroy larval breeding vessels has been conferred upon every medical officer and district commissioner in the Colony."

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