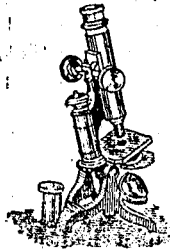


Medical Matters.

THE MOSQUITO IN YELLOW FEVER.



Major W. C. Gorgas, of the Medical Corps of the United States Army and Chief Sanitary Officer of Havana, Cuba, read an interesting paper on the "Results in Havana during the Year 1901 of Disinfection for Yellow Fever" before the International Sanitary Congress held at Havana, the hypothesis being that the stegomyia mosquito is the only means of transmitting the disease. Major Gorgas states that from the time he was appointed Chief Sanitary Officer of Havana, in February, 1900, he knows from personal observation that the regulations with regard to yellow fever were carefully carried out. Reporting was compulsory, and upon the report of a case it was promptly isolated and quarantined by guards employed by the Sanitary Department. No one was allowed inside the quarantined area except the visiting physicians and the sanitary inspector. All supplies had to pass through the sanitary guard. The isolation was as complete as military authority and liberal expenditure could make it. If the case terminated by death, the body was buried with the usual sanitary precautions adopted in highly dangerous diseases. In all cases the quarantined area was thoroughly disinfected. It was thus hoped greatly to decrease yellow fever, and in the course of a few years to eradicate it from the city. Notwithstanding these precautions, however, though the general sanitary measures adopted rapidly decreased the general death-rate, the work of the Sanitary Department had apparently no effect on yellow fever. During the year 1900, 1,244 cases of yellow fever with 310 deaths occurred, and the Sanitary Department was much discouraged.

At that time, Dr. Gorgas says, he then considered mosquitoes only a possible and exceptional means of transmitting yellow fever, but he was authorised to go to any reasonable expense in providing for the destruction of mosquitoes, and, having undertaken this, the Department bent every energy to carrying it out thoroughly. It concluded that for practical operations three fields of work had to be considered:—

1. To destroy all the stegomyia possible, so as to limit the number of insects capable of conveying the disease.

2. To prevent the stegomyia from biting the yellow fever patient, because, if the mosquito could be prevented from becoming diseased, yellow fever would be prevented.

3. To destroy all mosquitoes that had bitten yellow fever patients and so become infected. With the object of reducing the number of mosquitoes, an ordinance was issued requiring all people within the limits of the city to keep receptacles containing water mosquito-proof. This was enforced by constant inspection, and people having larvæ on their premises were fined under municipal ordinances, pools and low ground were drained, and, where this was impossible, oil was poured into such places.

In connection with the second proposition, all hospitals where yellow fever was received were ordered to be thoroughly screened, and where cases of the disease occurred in private houses they were screened by the Sanitary Department at the public expense. Ordinarily, after the report of a case of yellow fever the quarantined area was thoroughly screened within two hours.

To meet the third proposition, namely, to kill the infected mosquitoes, the infected building was gone over from the top to the bottom with pyrethrum powder, 150 lb. being usually used in each case. This powder has the advantage that it causes no injury to fabrics, but it does not kill all mosquitoes—some are only intoxicated, and will revive if exposed to fresh air; they have therefore to be carefully swept up and destroyed. Contiguous houses to the one infected were treated in the same way.

The result of the measures was most remarkable; yellow fever at once almost disappeared, and disappeared entirely in the last three months of the year, notwithstanding the fact that October and November have always been months when yellow fever was rife in Havana.

An important point insisted upon was to have all cases reported so as not to let a focus get started and spread, and the co-operation of the public is therefore desirable.

Further proof of the efficacy of the system was afforded by the fact that an epidemic of yellow fever at Santiago de las Vegas was at once controlled when it was applied. Major Gorgas, in concluding his paper, submitted that the results attained are evidence of the practical demonstration of the mosquito theory.

[previous page](#)

[next page](#)