sential for proper mosquito control. It covers such points as will be of practical use to health officers and others contemplating anopheles control and reduction of malaria; explaining difficulties encountered and the methods of overcoming them; advantages and disadvantages of the different methods of procedure. The subject covers the training of natural streams and water courses, open ditches and intercepting ditches, installation of permanent lining in ditches, sub-surface drainage, filling, maintenance of ditches and supervision.

Clinical Observations on Asiatic Cholera in Manila in 1914. By A. P. Goff, and Oswald E. Denney, Manila, P. I. *Journal of the American Medical Association*, April 3, 1915, pp. 1148-1151.

This paper is based on observation of about 1,100 cases, suspects and "carriers" admitted to San Lazaro Hospital. The mortality was 27.5 per cent; 61 per cent of cases treated were very sick. The diagnosis in most cases was easy, but among children, as usual, presented some difficulties. The treatment consisted principally of intravenous injections of saline solution, the amount given depending entirely on condition of patient, the average being perhaps 2.5 liters. The routine use of proctolysis was found to be beneficial, particularly in children, and also in accompanying nephritis. Sixty-two per cent of the cases occurred between the ages of 15 and 39 years, with a mortality of 22 per cent. The average time of illness among patients dying in hospital was 72 hours, and the average time of convalescence thirteen days. Particular efforts were made by the bureau of health towards the isolation of vibrio carriers, and about 570 were quarantined until two consecutive negative stool specimens were obtained. The average time of detention of carriers was seven days, and the longest period for which vibrios were found was forty days. Of the carriers isolated but one developed clinical cholera. It would seem that the epidemic was of about the usual severity and was composed of numerous sporadic outbreaks. The slow introduction of solution intravenously with continuous proctolysis would at present seem to be the preferred treatment. Vibrio carriers should be isolated.

Plague. Its Geographic Distribution and Its Menace to the United States. By W. C. Rucker, U. S. Public Health Service. *Public Health Reports*, May 14, 1915, pp. 1428-1435.

Plague follows main travelled roads. Plague is found where lines of travel converge. The disease now exists in Seattle, California, Yokohama, Hongkong, Shanghai, Ecuador, Peru, Havana,

New Orleans, Pernambuco, Bahia, Rio de Janeiro, Tripoli, Greece, Egypt, Port Said, practically all of the great ports of British India, Singapore, Surabaya, Mauritius, Zanzibar, Queenstown in South Africa, and Dakar in Senegal. Directly or indirectly our country is in commercial communication with all of these places, and must consider itself as seriously menaced by bubonic plague.

Plague is a rodent epizootic. Preventive and eradication measures are directed against rats. The first line of defense is maritime quarantine; second line of defense, rat-proof wharves; third line of defense, human immunization; fourth line of defense, rat-proofing human environment.

Rat-proofing is a necessity, not a luxury. Permanent rat-proofing by the use of stable and impervious material the only type to be considered.

Interstate Migration of Tuberculosis Persons—Its Bearing on the Public Health, with Special Reference to the States of Texas and New Mexico. By Ernest A. Sweet, U. S. Public Health Service. *Public Health Reports*, April, 1915.

The indigent consumptive problem, as it affects the residents of resort cities, receives extensive consideration. It is demonstrated that the number who have become objects of charity has been overestimated. The records of such cities as San Antonio and El Paso were investigated. At San Antonio 57 per cent of all indigents cared for during a period of four years had citizenship legally, and the annual per capita cost to the taxpayers of the remainder did not exceed 3 cents. The custom of shipping consumptive paupers from one community to another receives strong condemnation. Emphasis is placed upon the uselessness of patients seeking climatic relief when they are improperly supplied with funds.

Indigenous tuberculosis in the Southwest receives attention. Among the native white American population of the arid region tuberculosis, as all physicians testify, is an exceedingly rare infection. The morbidity rate of this class shows no startling increase, as would be the case if the infection were spreading. Moreover, the ratio of tuberculosis deaths to deaths in general is unaffected. Secondary cases in households are likewise less common than in other sections. Altogether it is concluded that certain restraining influences are at work, and that, so far as this particular section is concerned, the dangers arising to the healthy in resort cities are negligible.

Attention is called for the first time to the ravages of tuberculosis among the Mexican population. The writer considers that the poor class is much more susceptible to the disease than either negroes or Indians, and that recovery is almost unheard of.