statement relative to tuberculosis in France and England which clearly demonstrates the results accomplished by special hospitals for consumptives. That journal states: "That there are three times as many deaths in Paris as in Great Britain, and that in 1870 the mortality in England and Wales was 2,410 for each 1,000,000 inhabitants, but since consumptives have been treated in special hospitals this number has fallen to 1,468, in 1893. In Paris there were 4,158 deaths from tuberculosis during 1894, or almost three times as many as across the Channel." If the foregoing statement is correct, England saves the lives of 20,000 of her inhabitants yearly by wise sanitary measures in maintaining special hospitals for her dependent class of consumptives; on the other hand, Paris loses several thousand of her citizens yearly from defective sanitary laws and deficient hospital accommodations for her indigent class of tuberculous patients. The city of Paris has recently built a hospital at Agincourt, some fifty miles from the city, with a capacity of one hundred beds, for her dependent class of tuberculous patients, and there are some half dozen more located in different parts of France. Many of the larger cities of Germany have recently built special hospitals for consumptives, as Berlin, Cologne, Hanover, Breslau, Dresden, Frankfort-on-Main, Worms, Würzburg and Bremen, besides there are two institutions located in the Hartz Mountains, and one in the Black Forest. German statistics have shown a marked decrease in the death rate from tuberculosis within the past few years. They are building an institution near Vienna for the tuberculous indigent, and even the "unspeakable Turk" has built a consumptive hospital for children on the banks of the Bosphorus.

The success attending the treatment of tuberculous patients in private hospitals is certainly an encouragement for States and municipalities to build and support hospitals for the dependent class. At Gorbersdorf in Silesia a private sanitarium was built in 1854 which in the course of eighteen years has had under treatment about 958 consumptive patients, of which 20 per cent were permanently cured; and in the private institutions located in the Alpine regions there have been reported cures in 40 per cent. of tuberculous cases. The city of Bâle, Switzerland, has lately pledged herself to build and maintain a sanitarium for her tuberculous poor.

In our own country a number of private hospitals have been built by philanthropic persons and societies, and it becomes necessary to mention them, and the success attending them, in order to ascertain in a measure what may be accomplished by public institutions built for the treatment of the tuberculous poor. One of the most widely known is the Cottage Hospital, situated in the Adirondacks, which will accommodate eighty-four patients. This hospital during the past ten years of its existence reports a cure in from 20 to 25 per cent. of their cases. In the Adirondack Mountains, about 1800 feet above the sea, a hospital for consumptives is being built named the Sanitarium Gabriels.

The Sanitarium at Ashville, N. C., has an accommodation for 100 patients, and reports that of 600 ceding portion of the report I may say it deals patients treated in that institution 45 per cent. have directly with the operations of the Marine-Hospital near Philadelphia, it is stated, discharge each year of the merchant marine, about 53,000 being treated

The Progrès Médical in a recent issue makes a city is the Rush hospital for consumptives; both of these are institutions of small capacity. vicinity of Boston is a small institution called the Sharan Sanitarium, and in Colorado there are three private sanitariums for tuberculous patients.

In all these institutions above named there are only about two hundred free beds, while England has over seven thousand free beds for her tuberculous poor.

Massachusetts probably has the largest death rate from tuberculosis of any State in the Union, but she has recently adopted measures which will doubtless lessen the death rate from this disease, her legislature having appropriated \$150,000 for building a hospital for her tuberculous poor. Dr. F. I. Knight, who was before the Finance Committee of the Massachusetts Legislature, states that the question was asked him: "Have the medical societies of the country made any formal declaration which has been put on record, in regard to the establishment of such hospitals?" Fortunately he could reply that "Some societies had made such a record." "I was astonished to tals?" see how readily these men-most of them politicians —favored the hospital idea, not only showing sympathy with the homeless patients, but with the idea of preventing the spread of a disease which is communicable. To our surprise on our first effort, both houses passed an appropriation of \$150,000, which was signed by the Governor, for the establishment of a hospital for the consumptive poor.'

The above is a brief sketch of the first successful effort to build a State hospital for this purpose. A question was asked by the Massachusetts Legislature which would undoubtedly be the question propounded by State legislatures everywhere when requested to build hospitals for the consumptive: Have the medical societies of the country placed themselves on record relative to building these hospitals? Finally, has the AMERICAN MEDICAL ASSOCIATION made a formal declaration relative to States and municipalities building and and maintaining hospitals for the consumptive poor?

REMARKS RELATIVE TO THE UNITED STATES MARINE-HOSPITAL SERVICE.

Delivered in the Section on State Medicine.at the Forty-seventh Annual Meeting of the American Medical Association, held at Atlanta, Ga., May 5-8, 1896.

BY WALTER WYMAN, M.D.

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I had hoped that I could prepare a paper in response to the invitation of the Chairman, but was uncertain whether I could attend this meeting, and was too hurried to prepare a formal essay. However, the day before I left Washington I received from the Public Printer the Annual Report of the Marine-Hospital Service, 1895, which had been in his hands four or five months, and as the material therein is new, I thought it might be of interest to bring it with me, and explain to this Section that portion of the report which relates to the public health service.

If you will turn to page 249 you will see a résumé of the operations of the service in the interest of publie health during the last year. Referring to the pre-The Home for Consumptives located Service in its care of the sick and disabled seamen about 30 per cent of their patients cured, and in that annually. It seems to me that any service in behalf of the seamen of the merchant marine, is public health service in the broader sense. But returning to this section, you will find in this résumé an account of the danger of the introduction of yellow fever from Cuba, and operations to prevent the same.

You will find also an account of the threatened introduction of smallpox by the return to the United States of some four hundred negro colonists who had been to Mexico, where a colony had been attempted and failed, there being 178 cases of smallpox among The bureau took charge of these colonists, established a camp, fed and held them under observation until the last case disappeared, when their clothing was either disinfected or burned and replaced with fresh clothing and they were allowed to go on

While these operations were in progress reports came from Japan, China and the Sandwich Islands with regard to cholera that created considerable alarm. The special measures adopted to meet the unusual danger are detailed in the following pages.

The national quarantine stations are described on pages 252-304 inclusive. I will not go into details as they are fully set forth in the reports of the medical officers.

An account of the division of sanitary reports and statistics is given on pages 305-310 inclusive. will call your attention to a table prepared in this division, showing the yearly mortality of 199 cities in the United States.

The operations of the hygienic laboratory are found on pages 311-343 inclusive. In this report of the medical officer in charge of the laboratory will be found a complete discussion of the serum therapy of diphtheria. There will be found also an interesting account of some experiments which have been made in the serum therapy of variola. Also, an account of the examination of drinking water in the District of Columbia, and reference to experiments made with a view to practical disinfection of mails and school and library books.

The sanitary inspection service you will find described on page 344, showing results and giving a description of the inspections which were instituted by the bureau for the purpose of keeping out epidemic diseases.

I will not take your time by attempting to summarize the pages on cholera, smallpox and vellow fever. but I believe you will find them very interesting.

Since the date of this report I have prepared a circular letter addressed to the mayors of the cities and towns of the United States making inquiries relative to the water supply of the several cities, and the disposition also of the sewage. We have sent out these circulars to a few cities at first, but we propose to send them to all the cities in the United States, collect the information and publish it in a condensed form. The blank form which I have here has place for answers to the several questions relating to the source of water, its storage, purification, distribution, control and its disposition. The blank also relates to sewage and garbage disposition. In addition to the above the bureau has recently enlarged the scope of the health reports and improved the records pertaining to diseases of all classes throughout the United States.

DISCUSSION.

Dr. Valentine—It seems to me one matter has been entirely

the women, which destroys the health of 80 per cent. of the children who are born healthy. I will not speak of the particular cases directly due to gonorrhea. I am not speaking of it as a disease, but as a sequel; but I desire to ask whether the disease is not one of importance, and whether it does not merit closer consideration and some active measures for the prevention of its spread. In many cities an effort is made requiring the prostitutes to be registered. In the city of Berlin there are more than twenty thousand registered. Without adequate methods of inspection the efforts are almost unavailing, and the disease is being propagated at from six cents up. This matter naturally belongs in this Section, but I think the Department which has rendered such signal service in the matter of public health should take it up also. It is my hope to show on Friday the manner in which 60 per cent. of the cases of gonorrhea are curable in ten days, 30 per cent. within one or two weeks at the utmost, and 5 per cent. within two weeks, leaving 5 per cent. as yet without the reach of the new method. Why should not the Marine-Hospital Service adopt the method which requires no expense, obviates all danger of contagion and numerous other things which could be prevented.

Dr. Kellogg-I just want to enter a protest against this country adopting any such method for the supposed prevention of the disease named as that described in Europe. A recent investigation made in Berlin, even, shows that not one in ten of these diseases are discovered; and this method, while it gives a sense of security to every cautious man, at the same time really promotes the disease which it intends to prevent.

SERUM THERAPY IN DISEASE.

Read in the Section on State Medicine, at the Forty-seventh Annual Meeting of the American Medical Association, at Atlanta, Ga., May 5-8, 1896.

BY GEORGE TULLY VAUGHAN, M.D.

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From the time of Jenner's discovery that the dried serum of cowpox prevented or modified smallpox when introduced into the human system, has existed the hope that remedies would be discovered somewhat of the same character which would cure or prevent all diseases.

But this bud of promise was slow in developing, and the bright expectations thus aroused were doomed to wait a century before they were even partially realized. As the ovum of the cicada septemdecem requires seventeen years to bring forth the mature insect, so the germ of Jenner's discovery after an incubation of one hundred years has blossomed into the science of bacteriology, which, through the labors of Pasteur, Koch, Behring and others, has already brought forth a wonderful harvest of relief from suffering and disease, and the day seems now at hand when, with a cure or preventive for every disease, cholera, yellow fever, diphtheria, leprosy, syphilis, and tuberculosis will be as rare as smallpox now is among those who are properly vaccinated. The ideal treatment of disease is to prevent it.

The fact that certain animals are immune from certain diseases, e.g., that the lower animals do not have syphilis, has long since excited curiosity as to the reason, but nothing satisfactory was offered until the bacteriologists had established the existence of toxins and antitoxins, and that immunity can be induced or acquired by the proper use of the specific entity, its products, or effects, which causes the disease.

The theory of natural immunity now most in favor is that the blood serum contains in solution a germioverlooked. I refer to the disease which kills 80 per cent. of cidal proteid, alexin or nuclein, whose source is the