friends without any formality. It will be extremely difficult to fill his place and the sense of loss on account of his early death will be very widespread.

J. A. PARKHURST

YERKES OBSERVATORY

## REPORT ON INFANTILE PARALYSIS

THE conference committee of pathologists which met in New York City on the invitation of the city authorities has made the following report to Dr. Haven Emerson, commissioner of health.

Having been called to New York at your suggestion, and for the purpose of consulting with you concerning the practical measures employed in dealing with the present epidemic of poliomyelitis, we offer the following statement.

We have spent two days in studying the situation and investigating prevailing conditions.

On Thursday morning we went over with you the history of the origin and spread of the epidemic of this year. We made a careful study of your maps and diagrams showing the number and distribution of cases in the different boroughs of the city. This was followed by a discussion of the methods that have been employed, both here and elsewhere, in attempts to control the spread of the disease.

In the afternoon of the same day we visited Willard Parker Hospital and made a careful inspection of the treatment and care given by the city to the children afflicted with this disease.

Thursday evening we had a discussion concerning the methods being employed and the possibility of making these more efficient.

On Friday morning we visited cases quarantined in their own homes, and in this way were able to compare the hospital care with the home care of the sick. We also made a survey of certain crowded infected districts, and, with a diagnostician, we visited certain homes in which cases have been recently reported.

Friday afternoon we gave to a more formal discussion and the suggestion of definite recommendations.

We have given special attention to the methods now employed by you and your depart-

ment, and we approve of the measures you have taken.

The weight of opinion favors the view that infantile paralysis is mainly spread through personal contact, and measures have been directed chiefly from this point of view. Cognizance, however, has been given to additional methods of transmission, among which is the bite of insects. For sanitary purposes it is proper to consider that this disease is transmissible directly from the sick to susceptible persons, or indirectly from the sick through carriers.

Even with our incomplete knowledge of the dissemination of the disease, it is evident that, in seeking to abate the epidemic, stress must be especially laid upon two things, as is now being done:

- 1. The early recognition and notification of the disease, and
- 2. The immediate isolation of patients and cases of suspicious illness.

Furthermore, on account of incomplete knowledge concerning the disease, measures known to be effective in checking the spread of other infections should be applied and these are, particularly, personal hygiene, cleanliness of person and surroundings, and care of food, which should be thoroughly cooked.

In order to secure the earliest possible recognition and notification of cases and their prompt isolation, we wish to direct particular attention to the appeals that have been made by the department to the physicians of the city and to the public generally that they cooperate with the department in all these measures.

We strongly recommend that you inaugurate a house-to-house inspection of as large a part of the city as is practicable, twice a week, for the purpose of education and of securing the early recognition, notification and isolation of the disease.

We are of the opinion that satisfactory isolation is secured only in hospitals. Moreover, not only is more thorough protection secured for the public by the hospitalization of patients, but it is also better for the individual patient. There is still much to be learned concerning the period of incubation, accurate methods of early diagnosis in non-paralytic cases, modes of transmission and the length of time persons continue to carry the infection, and, in view of these factors, a scientifically adequate method of control is impossible at the present time.

The committee recommends the closest cooperation possible among the different laboratories and investigators that may enter upon investigation of problems connected with epidemic poliomyelitis.

The committee would suggest the following problems as especially desirable for investigation at this time.

- 1. Methods of culture of the virus of poliomyelitis, with especial reference to corroboration of previous work, to simplification of methods, and to the distribution of the virus in the body of patients.
- 2. The immunologic reactions of patients, supposed carriers of the virus, and others.
- 3. The virulence for animals, of the crude virus, in order to determine if possible whether there are any differences in the virus causing outbreaks in different parts of the country as well as to discover, perchance, more susceptible animals for experimental purposes than are now available.
- 4. The microscopic study of the secretions of the nose and throat and of the intestinal contents of patients suffering from poliomyelitis, persons who have come in close contact with such patients, and others.
- 5. The transmission of the disease by insects and domestic animals and other possible modes of transmission.
- 6. The study of practical methods of disinfection.

## SCIENTIFIC NOTES AND NEWS

DR. WILLIAM H. WELCH sailed from New York on August 6 for England to make studies in connection with the organization of the school of hygiene and public health established by the Rockefeller Foundation at the Johns Hopkins University. Dr. Welch will also study, as president of the National Aca-

demy of Sciences, the manner in which England has been organized in scientific lines for the war. He is accompanied by Dr. George Ellery Hale, chairman of the committee of the academy on scientific organization.

The Cartwright Lectures for 1916 of the Association of the Alumni of the College of Physicians and Surgeons, Columbia University, will be given by Dr. Richard M. Pearce, professor of research medicine, University of Pennsylvania, on October 24 and 25. Professor Pearce's subject will be: "The Spleen in its relation to blood destruction and regeneration."

Dr. J. Howard Beard, Urbana, has been appointed health officer of the University of Illinois.

Dr. Gustavus Mann, until last year professor of physiology in Tulane University, has been appointed consulting chemist for the Freeport Oil Company of Texas.

Dr. Donald B. Armstrong has resigned as director of the department of social welfare of the New York Association for Improving the Condition of the Poor, to become assistant secretary and director of the community tuberculosis experiment of the National Association for the Study and Prevention of Tuberculosis.

Dr. Herbert J. Spinden, of the American Museum of Natural History, has been given charge of the archeological survey of Porto Rico undertaken by the New York Academy of Sciences, and has been in the field. In the early part of the season he visited Venezuela for a preliminary archeological reconnaissance.

Professor A. L. Kroeber, of the University of California, has returned to Zuñi for further investigation of their social and ceremonial organization.

Dr. James J. Mills, instructor of ophthalmology at the Johns Hopkins Medical School, has sailed for France, where at Biarritz he will assist in the treatment of injuries to the eyes of the soldiers.

The Antarctic relief ship *Discovery*, which has been placed at the disposal of the British Admiralty for use in the effort to rescue the