THE LAKE FOREST HOSPITAL FOR
CONTAGIOUS DISEASES

ALFRED C. HAVEN, M.D.

LAKE FOREST, ILL.

The treatment of contagious diseases in private homes is very unsatisfactory. Every community should provide a hospital for such cases. What are the requirements of an ideal isolation hospital?

The location ought to be secluded, and the grounds spacious, allowing convalescents out-door exercise. The building should be planned for the purpose, and not

"dirty" room, and after disinfecting, removed from the boiler into the "clean" room, or the "dirty" room alone may be used for the formaldehyd process. A laundry and a store-room should also be provided in the basement. The floors in the wards should be of cement with no angles or corners, to collect dust, and there should be hose connections in each room for cleansing.

The caretaker should occupy a separate cottage to the rear of the hospital. This should contain not only a living-room, chambers and bath, but also a good-sized kitchen where the meals for the entire hospital may be prepared and carried to the wards on simple wooden

Fig. 1.—Front elevation of the Lake Forest Isolation Hospital.

remodeled. It should have, preferably, an east frontage, securing sunshine morning and afternoon. The building should be one story in height and fire-proof. It should be adapted for isolating not only the two sexes, but also for separating several different diseases simultaneously, and keeping them so. The physicians should have rooms for

plates, which are never returned, but burned. Each ward should have its own dishes and outfit. The cottage should also contain in its basement the steam heating plant for the entire hospital with arrangements for heating any ward separately.

The caretaker need not then be quarantined, as he does not have to enter the main building when it is

Fig. 2.—Floor plan of the Lake Forest Isolation Hospital. The caretaker's residence in the rear contains also two bedrooms, a bath and a storage-room above.

exchanging clothes prior to visits, and facilities for bathing afterward. Rooms must be provided for office, laboratory, dispensary and supplies. Groups of wards, or private rooms, in units, viz., a ward with six beds, a diet kitchen, with gas range and sink, a bathroom, preferably with shower baths and movable iron tubs, and, if possible, a small nurses' private room should be included in the plans. These units may be multiplied to meet the demand. The basement should contain two disinfecting rooms, the "dirty" and the "clean" rooms. In the partition dividing them should be placed the steam boiler for disinfecting purposes. All goods to be treated are brought, in suitable sealed bags, to the

occupied by patients. The entire hospital should be surrounded by a cement terrace ten feet wide. The wards are entered from the terrace on the outside.

Suppose the hospital is in active use. The physician enters the main hall and the physician's room, puts on his duck suit and rubbers, passes out on the terrace and enters the ward or wards he wishes to visit. He returns by terrace to the physician's room, has his shower bath, dons his former clothes, and passes out. The patient is brought in the ambulance, which backs up to the terrace door of the desired ward.

The grounds about the hospital should be attractively laid out, and planted with shrubs. The terms "con-

tagious" or "pest house" should be replaced by more euphonious terms.

These are the ideals that have inspired the trustees and architect, Mr. Charles S. Frost, in planning an isolation hospital for Lake Forest, as shown in the accompanying plans. It will be noted that the end wards in each wing have no connecting nurses' retiring rooms. This arrangement was made in order to save space. These wards are intended for female patients and the nurse in each will occupy one of the beds in the ward. The terraces are not covered by porches in order that as much sunshine as possible may reach the wards. The grounds cover three acres. The exterior of the building will be of rough plaster on metal lath. The estimated cost, including furniture, is about \$20,000. This is the only hospital on the North Shore for the treatment of contagious diseases exclusively. Lake Forest also has a hospital, Alice Home, for emergency cases.

ACUTE POLIOMYELITIS IN CALIFORNIA

F. F. GUNDRUM, M.D.
SACRAMENTO, CAL.

Acute poliomyelitis has been existent in California for a good many years, appearing sporadically, and in occasional epidemics. The disease has not until recently been considered contagious and the public health reports are, therefore, extremely unsatisfactory sources from which to obtain data concerning the history of this malady in the state.

The first case of which I have been able to get an accurate account occurred in Eureka, California, in 1875. The case was a typical one, in a child, aged 2 years, with acute onset followed in a few days with paralysis in the lower extremities. This patient tells me that another child had the same disease at "about the same time." A search through the California journals on file in the state library, and through the *Index Medicus*, has failed to give me any further cases recorded between 1875 and 1896. In 1897 appeared a report by Sherman¹ of eight cases occurring in the state during the summer of 1896; of these, seven were in San Francisco, and one in Napa. Newmark² reports four cases occurring in Merced County in the summer of 1898. Woods³ describes an epidemic, "about fifty cases," occurring in and about San Francisco in 1901, with a recurrence of "several cases" in 1902. Since 1902, no literature of the disease in California has appeared that we could find.

During the summer of 1910, however, the most extensive epidemic yet seen in this state presented itself. Under the auspices of the state board of health I had an opportunity to obtain all the available records and to see a considerable number of these cases. The San Francisco Medical Society appointed a commission to investigate the epidemic as it prevailed in that city. A copy of this excellent report has been sent to the board by Dr. E. C. Fleischner,⁴ chairman of the committee, and has been incorporated into the data of the epidemic of 1910 in the state. On account of the fact that in the beginning the disease was not a reportable one to the board, a good many cases are doubtless unrecorded. It has been some time since we have had many cases of this

disease, and a diagnosis may have been occasionally overlooked, especially in abortive or rapidly fatal cases. It is certain, therefore, that our reports are incomplete and the deductions drawn from them must, of course, be more or less faulty. The epidemic of 1910 did not differ in clinical features from the characteristics of the ordinary type of the disease. We were able to collect a complete record of 125 cases; 120 in 1910, and five before October, 1911. Of these cases, 75 per cent. occurred from May to September, 1910. The number of males attacked was practically double that of the females; 63 to 37 per cent. Seventy-three per cent. of the cases were under 8 years. The onset in 88 per cent. was given as sudden, and in 12 per cent. slow. The type of onset for the sake of classification was divided into:

1. The classical, or gastro-intestinal type, in which gastro-enteric disturbances, with fever, predominate. This group included about 67 per cent. of all cases.

2. The meningitic type, in which symptoms of meningeal irritation were most prominent, such as the retraction of the neck, etc. This group comprised about 25 per cent. of the cases.

3. The abortive, which practically does not appear in this investigation as it was thought impossible, in the

Map of California showing geographical distribution of acute poliomyelitis from January, 1910, to October, 1911. Dots indicate localities from which cases of the disease were reported.

absence of facilities for doing any serodagnostic work, to draw definite conclusions from so indefinite a symptom-complex. No cases were included in the report unless paralysis occurred. Of the paralysis, 23 per cent. occurred in the upper, 73 per cent. in the lower extremities, the remaining 4 per cent. being cases in which trunk and respiratory muscles were involved causing death. There are seven deaths recorded, making a mortality rate of 6 per cent. in the epidemic. It is very probable that this death-rate is too low. Eighty-two per cent. of the cases began with fever; 54 per cent. with gastro-intestinal disturbance; 46 per cent. without marked gastro-intestinal symptoms.

Since the work of Flexner,⁵ who has shown that poliomyelitis is a transmissible disease, we have been particularly anxious to trace, if possible, the mode of transmission in order to work out some practical sanitary method for the limitation of the infection. In the field, however, it has been unbelievably difficult to demonstrate direct transmission. In the 125 cases I was able to elicit a history of exposure in eleven only, or 9 per cent.; in

1. Sherman, H. M.: *Occid. Med. Times*, August, 1897, p. 445.
2. Newmark, Leo: *Med. News*, 1899, lxxiv, 101.
3. Woods, A. M.: *Occid. Med. Times*, March, 1903, p. 77.
4. Fleischner, E. C.: *Cal. State Jour. Med.*, September, 1911.

5. Flexner, Simon: *THE JOURNAL A. M. A.*, Sept. 24, 1910, p. 1105.