

given every twenty-one days to every child over three years of age, and 250 units at the same period to those of three years and under, and on the recommendation of Dr. Rudolf records of all cases were minutely kept. This was started at the time the serum was first given, and in these records were placed the name of the patient, the age, the disease, amount of antitoxin, and any remarks which might be made as to eruptions, elevations of temperature, etc. This, however, was discontinued, and all remarks were made on the history chart, of which there is one for every child in the hospital. These charts, as well as the temperature charts, were subsequently gone through, the medical cases separated from the surgical, the surgical again subdivided into suppurative and non-suppurative. Baby ward cases were classed by themselves. By this means we are able to find out accurately what reactions, as evidenced by eruptions, etc., occurred, and what were the variations of temperature, and what relation they might bear to these eruptions and other disturbances.

Use was also made of a record of all cases sent to the infectious ward, for which I am greatly indebted to Dr. Rudolf. In it are notes on all cases of diphtheria from January 1st, 1902, until the present time. Before that time we had no records, but on inquiry from the hospital authorities, I find that the number of cases which occurred the six months previous to the time when systematic use was made of the serum, could be taken as the number occurring in an average six months for that period of the year, the remaining six months being somewhat freer from diphtheria.

As regards the records that have been compiled, they are complete in the cases of 384 patients or 1,056 injections, but incomplete as regards some 200 more patients or about 600 more injections. All percentages are struck from the 384 patients, the records of which I am absolutely certain, but as regards the incomplete histories, I imagine they are so, simply on account of the fact that there was nothing noteworthy to record. The object of this paper is to try briefly to prove that the systematic use of antitoxin produces immunity to diphtheria, and that the bacilli, though present, were inert; but more especially to show what disturbances were produced by its constant administration. From the records of Dr. Rudolf of the cases of diphtheria occurring from January, 1902, to July, 1902, and taking that as an average six months, I find that there occurred forty-two cases of diphtheria—which, in all but five, gave true clinical symptoms, marked rise in temperature and increase in the pulse rate, with formation of membrane, etc., and not cases as has been suggested, simply of tonsillitis in which a swab was taken and in which diphtheria bacilli were inci-