

no antitoxin from November 3rd until December 14th. This was neglected on account of his precarious condition.

This case is interesting on account of the fact that the nurse who cleaned up the post-mortem room before it was fumigated, developed diphtheria four days later, but none of the children in the ward from which he was taken—the baby ward—were infected. This helps to show, I think, that the germs were inert in so far as the immunized children were concerned, but not so in the case of those who were not rendered immune. This is small ground to go on if one had not additional proof, for which I am indebted to Dr. Goldie. The year before the systematic use of antitoxin was employed swabs were taken of all children, nurses, domestics, etc., in the hospital, and of 121 swabs, Klebs-Loeffler bacilli were found in 11.56 per cent. The following year I took swabs of the children alone, and so that there might not be any variation in the classification of germs, Dr. Goldie again examined the smears, and it is his report I use. Klebs-Loeffler bacilli were found in 12.9 per cent. of these cultures, 8.6 per cent. of which came from one ward.

Again, let us take the case of Dr. Wright, who developed nasal diphtheria in May, 1903, and who went about the hospital for a week or so with nose discharging, before a diagnosis was made on nasal examination, and yet no child developed diphtheria.

This, I think, will prove beyond a doubt that the bacilli were present, but inert on account of immunization.

I will not attempt to make any further remarks on this part of the paper, but rather let the cases reported speak for themselves, except to say that from January 15th, 1903, until the third week of November, 1903, no case of diphtheria developed. I shall now speak of the eruptions and other manifestations of disturbance.

#### RASHES.

The eruptions of antitoxin may be classed with those produced by toxins, such as drugs, ingestion of poisonous foods, anto-intoxications, etc., under the head of erythema, and, like them, due to a toxemia. This may be described as a local and a general reaction, the local being often accompanied by a general reactive disturbance of vasomotor tone. This in the majority of instances is not the case, so that in the statistics which follow these local reactions will not be included.

*Local.*—The local reaction, consisting of a circumscribed edema or wheal on an erythematous base, the centre of the wheal being the site of injection, is seen from three to four hours after serum has been introduced, and lasts from eight to twelve