another on the 12th, and still another on the 15th. Here, too, I think we are justified in saying that the disease had obtained a foothold.

Anti-toxine immunization is, I understand, supposed to last from 14 to 25 days, but in this instance 6 or 7, and in a few others, 8 and 9 days elapsed between the injection of the serum and the development of the disease. From this I would argue that either anti-toxine is of doubtful benefit as an immunizing agent, or the dose given was too small. The latter, I think, the more probable conclusion.

Now a serious state of affairs was present. Here were about 100 sick children, the majority of whom were surgical cases, grouped under one roof and among whom, some had diphtheria. Should the disease spread in its usual manner, the result might be terrible. The question again arose, will anti-toxine protect those not yet affected? From the previous experience one would be inclined to say no. However, it was decided to use it again, but *in increased doses.* So by order of the visiting staff I began the injection of serum in 35 patients who were more especially exposed to the contagion, and it occurred to me that some interesting matter might be found in a table showing the effect of the anti-toxine in the temperature, pulse, and respiration, so I append it below.

On January 13th, p.m., I injected serum into seventeen patients, using P. D. & Co.'s anti-toxine and in doses of 1,000 units. On the 14th I concluded, having injected in all thirty-four patients.

Now, the last case of diphtheria occurred on the 15th January, 1897, in a throat the swab of which was taken previous to immunization on the 14th. Since this case occurred there had not been a single case of diphtheria, though every throat was examined morning and evening and every congested one bacteriologically. From this it seems reasonable to give the credit to one of two things—injection of 1,000 units of anti-toxine, or prompt isolation. Local applications were not used, so no credit can be assigned to them.

I am not correct in stating that all the patients had 1000 units, as one little girl, 1½ years of age, suffering from suppurating tubercular cervical glands, was given 500 units, as I was somewhat timid about using a larger dose, yet, unthinkingly, I gave a boy of 2½ years suffering from ectropia vesicæ 1,000 units without any grave results, though he was in a far lower state of health than the previous case.

Deductions from foregoing statements:

1. 250 units is not enough for immunization purposes.
2. 1,000 units is a fairly reliable immunizing dose, and not a dangerous one.
3. Age and physical state of the patient do not require proportionately small doses.
4. Whenever practicable, anti-toxine in doses of 1,000 units should be used for purposes of immunization.

Method of making the injection:

I arranged the patients in groups, injecting a number in the thigh, a number in the pectoral region, others in the loin, and still others in the abdomen. The spot for injection having been selected, the area immediately around was thoroughly scrubbed with 1-20 ac. carbolic, and a com-