

possible there were other ways in which the children came together—in parties or meetings.

In July there were 54 cases, in August but 29. This I account for by the long vacation from July 21 to September 4. When the schools opened (September 4) the line rises to 54 cases in September, and then rapidly rises to 142 cases in October, when it drops off suddenly to 90 cases in November and to 64 in December. This drop in the number of cases may be accounted for as follows: During the month of August, during a vacation, the school committee passed the following order: "Ordered that no pupil shall be allowed to attend school from any house in which small-pox, varioloid, scarlet fever or diphtheria prevails; and no pupil having been affected with either of these diseases shall be permitted to return until convalescence is complete and attested by a regular practising physician." It is reported that this order, for some reason, perhaps from being issued during vacation, when children could not readily carry the news home, was not obeyed in every instance, perhaps not generally, and on November 28 the school committee issued a circular to the physicians asking them to help enforce the order by urging parents to keep their children away from school while diphtheria or any contagious disease was in the family. The increased effort for the enforcement of the order probably contributed much toward the decrease in exposure and consequent decrease in cases, by keeping away from school children liable to spread the disease. Another reason for the less number in November than in October may be that the attention of the parents

was strongly called to the subject by the alarming number of cases reported in October, after which many may have kept their children away from school, even when diphtheria was not present in their families, and thus lessened the number exposed to contagion at school.

The further decrease in December is but a continuation of the result of the action in October. It should be noticed, however, that the disease had become general, a large number of the children of the city had then had the disease, and consequently there was a much less number among whom it could spread. In other words, some part of the final decline of the disease must be attributed to a comparative exhaustion of the number of susceptible children.

Some of my reasons for believing that diphtheria was spread in Lynn in 1876 by the contact and association of children in schools may be summarized as follows:

1. The disease is known to be communicable from person to person; the cause which I assign is, therefore a "true cause," capable of producing the effects observed in this instance, if it was present and acting.
2. We have reason to believe that this supposed "cause" was "present and acting," there being no rule or order to forbid the attendance at school of those from families where the disease prevailed or of those affected with the disease until during the vacation in August.
3. A thorough search through all the ordinary meteorological conditions, influences connected with season of the year, the conditions of nativity, locality, sanitary surroundings, occupations, etc., failed to reveal any other as-