

with each outfit and these outfits are left at pharmacies conveniently situated for all parts of the city. The fact that the service was a provincial and not a municipal one made it necessary that we should not attempt to do more for Montreal than we were prepared to do for the entire province, and therefore the enforcing of quarantine and local notification arrangements are not attempted, nor is a daily collection made from the depots, as should certainly be done in the case of a municipal diphtheria service.

Unfortunately the absence of permission to use the mails for transmitting samples of throat exudate has made it difficult to get samples to the laboratory in time for sending a report on the following day, and this has often prevented physicians from availing themselves of the facilities offered by the Provincial Board of Health.

*Preparation of the medium*¹—I have employed throughout Loeffler serum, made by adding $\frac{1}{2}$ volume of alkaline, 1 p.c. peptone, 1 p.c. glucose beef broth to ox-blood serum, simultaneously sterilized and coagulated in a water oven. (Hueppes method.) This medium gives a good growth at the end of 12 to 14 hours. The trouble and delay of frequent visits to the abattoir has been avoided by preparing large quantities of the serum at a time, adding with the glucose bouillon as a preservative, 1 to 2 per cent. chloroform and keeping it in self-sealing preserve jars until required for filling the tubes. I have used this method (suggested originally by Koch) since 1892 with very satisfactory results, and have still a reserve supply of serum kept by this means in ordinary corked vials since 1892, which was recently tested and found to yield a satisfactory medium.

It may be well to mention that if the serum contains much blood this will form a compact layer over the chloroform in the bottom hence it is better to shake the jar occasionally during the first few days.

By wrapping tin-foil round the tops of the tubes and dipping them into paraffin, they may be kept indefinitely without drying up. The tin-foil prevents the paraffin from entering the cotton wool. I owe the suggestion to Dr. Adami.

Method of taking samples—A small galvanized iron rod with a piece of cotton wool is twisted round the end sterilized and placed in a sterilized tube, enclosed in a card-board box, with directions for use, forms the outfit of the Provincial Laboratory. In the case of the General Hospital Laboratory, a serum tube, for making the culture at once, is sent with the swab.

¹ Hard boiled eggs have been used as a culture medium from time to time when we happened to be short of serum in the laboratory, but I found they require more time and skill in order to properly make culture than is the case with the serum sterilized in tubes.