

tions, 5-10 per cent. After discussing the subject as to whether diphtheria is or is not primarily a local disease, he gave his reasons for not liking the tube in tracheotomy: (1) The tube never accurately fits; (2) When the tube is in place, the incisions into the trachea cannot be kept under observation; (3) Occasionally the tube from not being in the middle line, and being left too long in the trachea, ulcerates through, and an artery may be opened; (4) When the tube is in the trachea, there is difficulty in expelling through it pieces of membrane; (5) The tube causes sometimes exuberant granulations and warty growths. In place of the tube Dr. Bell has devised an instrument which he thinks does away with the objections to the tube. It consists of a pair of "clips," which catch the edge of the trachea and hold it apart. They are held in position by a tape which goes round the neck. He had experimented with the clips on a number of dogs, and found that they held well and no ill results followed.

In the after-treatment of cases in which the "clips" are used, he withdraws the mucus, etc., from the trachea by means of a glass pipette. After operation he plugs the trachea or larynx above the wound with antiseptic sponge; this absorbs the discharges and helps to localize the membrane. Over the wound he keeps a piece of gauze and he occasionally introduces vaseline into the trachea. When the tube is used, after two or three days the breathing becomes dry, and the end of the tube becomes coated with inspissated mucus; below this, in the trachea, is a cone of dried exudation, which helps to block up the passage.

Dr. Bell gave the histories of two cases of diphtheria in which he had operated and used his "clips." One case died, and the other—aged twenty-five months—recovered. In nine cases of tracheotomy in which he had used the tube, all, with one exception, died.

Dr. A. L. Smith believes that the "clip," introduced by Dr. Bell, will prove of the greatest possible benefit and will in all probability reduce the mortality after the operation.

Dr. Kerr did not think that tracheotomy is a good operation, and had seen most desperate cases recover without it. If Dr. Bell's treatment without a tube reduced the mortality, it would be a great gain. His last tracheotomy case lived three weeks and died of paralysis, so that it is not always the extension of the membrane that kills after tracheotomy, and the best after-treatment will fail to produce a good result. He was very doubtful about the good that would result from plugging the trachea above the wound.

Dr. F. J. Shepherd said that he had performed tracheotomy a number of times both in hospital and private practice. His first ten or a dozen cases were all fatal, but during the last two and a

half years he had performed tracheotomy in private practice sixteen times, and had had five recoveries. In hospital practice his results were not so good. He thought that the kind of instruments used did matter much; it was important that the wound should be kept aseptic. He removed the tube as early as possible, never later than the fifth day, in one successful case he removed the tube on the third day; they were all cases of diphtheria. Dr. Shepherd believed that after operation it was useful to have a warm room (75°-80° F.), and that the atmosphere should be saturated with moisture. He always used a croup or closed bed, and the steam of the kettle was conveyed into it by a huge spout. The inner tube was removed every hour and the outer one on the second day; lime-water was occasionally dropped into the tube. He thought that the tube favored expulsion of membrane.

Dr. Russell was formerly opposed to tracheotomy but now thought early operation advisable; if the operation did not cure, it always relieved. He had performed tracheotomy six times with two recoveries. He thought Dr. Bell's instrument a very ingenious one, and likely to prove very useful.

Dr. Fenwick, of Montreal, said that he preferred the high to the low operation. Dr. Bell's instrument appeared to answer very well.

Dr. Fenwick, of Montreal, read a paper on "Treatment of Tuberculous Glands of the Neck." He believed that scrofulous glands are intimately connected with tubercle. After giving a sketch of the history of tubercle and Koch's discovery of the tubercle bacillus, he said that there must be some predisposing condition in the individual so that he can contract tubercle—the proper soil must be present. The glands of the neck are specially liable to infection, especially the submaxillary and those over the large vessels. Enlargement is rarely single and occurs generally at first on one side of the neck only. In scrofulous enlargement of the glands of the neck the author strongly advised early removal of enlarged glands. After removal the general health of the individual improves; if they are left, the patient runs the risk of general tuberculosis, and if he recovers it is with impaired health and a number of disfiguring scars on the neck.

Dr. Kerr, of Winnipeg, was not satisfied with the results of operations and did not now operate so often as formerly; he found the operation not only very tedious but difficult and dangerous, and the results were not always so good as represented.

Dr. Shepherd, of Montreal, confessed that the results of operation were not always so perfect as were described by the enthusiastic advocates of the operation, but in many cases the results are entirely satisfactory. After incising the deep fascia, he prefers removing the glands with the fingers, with an occasional cut with a knife. He