in cremation, I undertook the task of going over the literature which has accumulated upon this subject and have tried to find out from a bacteriological point of view what arguments could be advanced in favor of cremation. The conclusions reached are not at all in accord with my preconceived ideas, and it appears as though it belonged to the chemists and not to the bacteriologists to prove, if possible, that cremation is a hygienic necessity. Of course economical and æsthetic arguments are entirely uninfluenced by the lack of evidence to support any given hygienic argument.

Clinical Department.

DIPHTHERIA: TRACHEOTOMY, PERSISTENT AND INCREASING DYSPNŒA, SYSTEMATIC CURETTING OF THE TRACHEA; RECOVERY.

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A BOY, four years old, ordinarily in good health, had been ill with diphtheria for two days. His brother, one year younger, had died of the same disease one week previously. He was referred to me by Dr. T. M. Rotch, of Boston.

Very little disturbance of the tonsils and pharynx existed at the time of the first examination, the end of the second day's illness. The breathing was slightly difficult. The *alæ nasi* dilated a very little, the retraction of the supra-clavicular and epigastric regions with each inspiratory movement was just beginning to be apparent. In short, breathing was slightly embarrassed. The lungs were normal. The heart was in good condition. The temperature was low. The indication *par excellence* for operating was present, namely, increasing difficulty in breathing.

Tracheotomy was done. The relief, of course, was instantaneous. The boy was kept in a cot-bed covered by a hood of sheets, which was constantly filled with steam from two boilers.

All went well until the second day after the operation, when the secretion from the tube became a little sticky and slightly diminished in amount. The character of the secretion improved upon the use of a spray close to the tube, and the boy had a comfortable night. The third night, however, there was serious trouble. The secretion became very slight, the respiration rapid and labored, and the child cyanosed and extremely tired by the tugging for air.

In spite of the removal and cleansing of the inner tube and the removal, cleansing and replacing of the outer tube; the removal of both tubes and the dilatation of the wound; the use of the catheter through the wound, and the introduction of a feather, and later a pair of properly-curved forceps, — notwithstanding all of these ordinary manœuvres for the relief of obstruction below the tracheotomy wound, no relief was afforded. The child was fast losing strength, and was becoming rapidly asphyxiated. It then seemed necessary to resort to a very radical procedure. Having at hand a dull wire intra-uterine curette, this was introduced into the wound, gently carried to the bifurcation of the trachea, and all sides of the trachea — its whole circumference — systematically and thoroughly curetted. As the curetting continued, pieces of membrane, one of which made a complete cast of the circumference of the trachea, were withdrawn through

the wound. The hæmorrhage was slight. The relief to the dyspnœa was immediate.

The tube was replaced; and the boy made an uninterrupted recovery. One or two pieces of membrane came away the following day.

Two years have elapsed since the tracheotomy and curetting of the trachea. The boy is well and strong.

This case is recorded to emphasize the importance of systematic curetting of the trachea for obstruction by diphtheritic exudation. The manœuvre was suggested in a conversation with Dr. Wheeler, of Chelsea, Mass., regarding a case which he had likewise curetted. A careful search of medical literature fails to find a similar case recorded.

In the case in hand the diphtheritic inflammation was probably quiescent. The product of that inflammation was separating from the walls of the trachea. Resolution had begun. It was an opportune time to curette.

No general rule can be deduced from a single instance, but it would seem wise to resort to thorough curetting, if, after tracheotomy, dyspnœa increased in spite of all the ordinary procedures, and if the patient is in good general condition.

Intubation would have been of little aid in this instance.

It has been my experience that these cases operated on early in the course of the disease and when the laryngeal symptoms are slight, even though progressive, do better than the cases operated on when the child is exhausted by difficult breathing and by sepsis.

HINC ILLÆ LACHRYMÆ.

BY DAVID COGGIN, M.D., SALEM, MASS.

TEAR-PASSAGES that are by no means thoroughfares are, as is well known, frequently encountered in our latitude and especially during cold weather. It is likely that more females than males seek advice because of this trouble — whose victims range from infancy to age.

When seen early, the epiphora ordinarily yields to treatment, as by dropping a lotion within the conjunctival sac (such as acid zinci sulph. 0.10, acid boric. 0.50, aqua menth. p. 10.0, aqua camph. 20.0).

Naturally, if the sac is distended, its contents should be squeezed out before using the lotion. Large shade glasses worn out of doors afford relief in some instances.

Rarely the catarrhal trouble is located at the inferior extremity of the nasal duct, and it may subside on applying within the naris a solution of Seiler's tablets, or the like.

Frequently the lower punctum is so small as to be barely visible. In such a case, and also when it is somewhat everted, it is often sufficient to dilate it, as well as the canaliculus, with a small conical probe, and then to inject an astringent lotion with a Meyer's syringe (which has a bulbous tip and is therefore less liable to injure the mucous membrane than is Anel's).

If the fluid passes through the corresponding nostril it is most reassuring to the patient. The country practitioner, who is frequently forced to extemporize apparatus, can make blunt the points of a large darning-needle and of a hypodermic syringe and he will thus have instruments that will be of material aid in treating this trouble.