

It is fully as efficacious, incomparably more soluble, and can be manufactured at much less expense. It is given in decided doses until there is abundant evidence of constitutional impression. When deglutition is painful or difficult, it may be given by enema, with proper augmentation of the dose. Under similar circumstances, it is better to persevere in giving the iron and potassium by the mouth, as their topical effect upon the throat is of certain significance.

Alcohol, in the form of strong wine, or as brandy or rum, is of the utmost importance when the system begins to give way; and its free administration should not be delayed after the earliest manifestations of decided loss of vigor. At this stage it is of more importance for the time being than any other remedial agent. From half a drachm to an ounce of brandy, or its equivalent, proportionate to the age of the patient, may be given at suitable intervals to keep up the effect, be the intervals three or four hours or but fifteen minutes. Indications for its continuance or suspension will be promptly afforded by the general condition of the patient. As long as it is well borne, it may be given to any extent appearing necessary, short of producing actual alcoholic intoxication, especially so when sufficient nourishment cannot be taken. Children readily take a sort of syrup of brandy made by burning it beneath a lump of sugar which becomes melted in the process.

Though other internal remedies are often valuable in diphtheria, especially under varying circumstances, I feel like stopping with the short list just commented on. It is proper, however, to mention a new treatment, highly lauded of late years in Teutonic Europe, but not sufficiently endorsed at present to justify unqualified approval. It consists in the administration of large doses of benzoate of sodium, the use of which is based on the opinion that it arrests the development of the diphtheritic cryptogamia. As considerable attention has been directed to this subject, which has not yet become incorporated into general professional literature, it may be well to mention the formulæ used by Letzerich, the promulgator of the method. Five grammes of pure benzoate of sodium are dissolved in forty grammes each of distilled water and peppermint water, to which are added ten grammes of syrup of orange peel. To infants less than one year of age, two teaspoonfuls of this mixture are given every hour; to older patients the mixture is given in tablespoonful doses, the amount of benzoate of sodium being increased from five to seven or eight grammes for children from one to three years of age; still further increased to from eight to ten grammes for children between three and seven years of age; still further increased to from ten to fifteen grammes for children above seven years of age; and increased to as much as from fifteen to twenty-five grammes for adults. In addition to this internal administration of the drug, the false membranes are dusted over with powdered benzoate of sodium, two or three

times a day in mild cases and every three hours in severe ones. The drug is also administered in gargles; a five per cent. solution being sufficient for older children. I have no experience with this treatment, nor any personal knowledge of it whatever.

I may add, too, a few words as to carbonate of ammonium, sometimes a remedy of great value at moments of sinking. From two to ten grains may be given in syrup of acacia, or other vehicle, to be repeated whenever indicated; and in case of difficulty of swallowing, it may be administered by the bowel in quadruple quantity. In cases of threatening accumulation of fibrin in the right heart, large doses are indicated theoretically on the basis of observations which have shown that its admixture with blood preserves the fluidity of the latter for some time. It is possible, too, that intravenous injections of the solution of ammonia may be resorted to with temporary, if not with permanent benefit at moments of collapse; but I have no data in illustration of the value of the inference.

What shall be done for the sore throat? what for the swollen and painful glands? Pellets of ice placed in the mouth, and renewed more or less continuously, are as grateful and soothing a means of local relief as lies at our command. Iced compresses are used externally by some prominent practitioners; but they cannot always be employed with impunity; and their use should be discontinued if not promptly serviceable. It is often better to apply warm cotton-bating, spongio-piline, or an actual cataplasm. Inunctions with oil, lard, cosmoline, are often useful; care being taken to use nothing which might favor abrasion of the cuticle, lest local infection further complicate the disease. Great pain requires the use of morphia in effective doses by stomach, bowel, or skin, as may be most available. Prompt discharge of the morbid products as they accumulate has been indicated as an important object in the management of our case of diphtheria. How shall this be secured? Shall it be by removing them bodily whenever they are favorably located for detachment and withdrawal? To those who regard the local product and its extension as the more important feature of the disease, such a method seems highly desirable. If there be a circumscribed patch undergoing spontaneous detachment, there can be no objection to its extraction. Indeed its removal is indicated, as getting rid of effete material, the decomposing elements of which are being drawn into the lungs at every inspiratory movement; thus adding additional contamination to the blood.

It is quite possible, in favorable cases, to keep the morbid product diffuent by maintaining a warm and equable temperature in the sick-room, which should be well ventilated without exposing the patient to direct currents of air, and provide an excess of humidity of the atmosphere by hanging wet cloths around, or keeping up a moderate evolution of steam near the patient. The moister the products, the more readily they can be expecto-