

These precautions are necessary, because more or less well-marked chilliness almost always follows the operation, varying, usually, with the previous degree of dyspnoea and the amount of blood lost in the operation. The external opening should be covered by a bit of stiff gauze, to protect it from extraneous matters, as employed by Andree in the very first operation; best applied above the wound, straddled upon a strip of adhesive plaster. In addition to this Trousseau strongly recommended "covering the neck with a knitted comforter, or a large piece of muslin, so arranged as to compel the child to respire into its folds, and thus inspire air warm and impregnated with the warm vapor furnished by the expiration. In this manner several untoward circumstances are avoided: drying of the cavity of the canula and of the trachea, irritation of the mucous membrane, and the formation of coriaceous crusts, which, becoming detached in complete tubes or fragments of tubes, cause terrific fits of suffocation, and sometimes death by occlusion of the canula." Before Messrs. Trousseau and Paul Guersant had adopted this practise, they lost many of their patients by catarrhal pneumonia; but this accident had become rare since, and they thought it probable that the introduction into the bronchi of a warm and humid air was a very favorable circumstance.

The use of this woollen cravat renders less essential another practice much in vogue for the same purpose of warming and moistening the inspired air; and that is keeping up an evolution of steam from boiling water, so that its vapor can be mingled with the inspiratory current, either by means of some special contrivance for conveying a current of warm vapor of water directly in front of the opening, or by allowing it to be generally diffused in the patient's vicinity. From personal experience of this practise in the medicinal treatment of croup, I would not feel disposed to forego it even with the use of the cravat. It appears to replace, in part, the moisture evaporated or absorbed from the exudative products in their transformation into the semi-solid or membranous form, and thus to keep them in a condition favoring their detachment and expulsion. Some operators keep the temperature of the room about 65° F., others, as Sayre, of New York, as high as 90°. That a high temperature is well borne in croup I have had ample evidence at a temperature of 80° to 85°, with an evolution of steam sufficient to cause the paper to loosen from the walls. Some of the German authors recommend keeping a sponge wrung out of hot water in front of the opening so that the air shall pass through its pores; a plan also recommended by Gerdy and Nélaton.

If the patient does not react well from the chill, warm aromatic drinks should be freely given, and flying sinapisms be applied to various parts of the skin; the evidence being that under these influences the face gradually resumes its normal color, the pulse increases in force, and the respiration becomes quieter so that the vesicular murmur can be heard in all portions of the lungs, except, perhaps, anteriorly, where intervesicular emphysema has taken place. At the

end of a few minutes the child usually sinks into a calm, sweet sleep which lasts sometimes for several hours. In some instances indeed the child goes to sleep on the operating table, within a few minutes after the introduction of the tube.

The essay concludes by summing up the various points which he has discussed, and from them the author believes that the following conclusions may be safely drawn:—

1. That there are no insuperable contra-indications to tracheotomy in croup;
2. That the administration of an anæsthetic for the purpose of controlling the child's movements is admissible in performing the operation; but that it should be used with great caution;
3. That a careful dissection should be made down to the windpipe, and hemorrhage be arrested before incising it, whenever there is at all time to do so;
4. That the incision should be made into the trachea as near the cricoid cartilage as possible, to avoid excessive hemorrhage, and subsequent accidents which might occasion emphysema;
5. That a dilator should be used, or a piece of the trachea be excised, whenever any difficulty is encountered in introducing the tube;
6. That the tube should be dispensed with as soon as possible; or altogether if the case will admit of it;
7. That assiduous attention should be bestowed upon the after treatment, especially that of the wound; and that a skilled attendant should be within a moment's call for the first twenty-four or forty-eight hours immediately following the operation.

*The Breath, and the Diseases which give it a fetid odor, with directions for treatment,* by JOSEPH W. HOWE, M.D., Clinical Professor of Surgery in the University of New York. D. Appleton & Co., New York; Dawson Brothers, Montreal.

This volume, of a little over one hundred pages, will be read with much interest by many members of our profession who in the course of their practice have met with cases of fetid breath which have severely tried their patience and exhausted their *Materia Medica*. Marked changes in the breath have received but little attention from authors of text books—these large and usually comprehensive volumes seldom containing an allusion to their existence. That they form an important item in practice is evident from the numerous cases which are constantly presenting themselves for treatment. The first chapter treats of the Physiology of Repair, Decay and the composition of the inspired and expired air. The second chapter treats of emotion as a cause of