

quite so simple as the one here shown, which, to all intents, is little more than a long rubber flexible tube, with a vulcanite funnel at one end. To be more particular, I would add that the stomach-tube is similar, except for increased calibre and length, to those made by Tiemann or Ford for catheterization of the urethra. This one is twenty-eight inches long and about one-third of an inch in diameter. It is connected at its proximal extremity, by means of two inches of glass tubing, with a soft rubber tubing of similar size, five feet in length. This latter piece of tubing is terminated by a funnel.

The stomach-tube may be dipped into warm water before passing it, in order to lubricate its surface or make its passage easier. It is then introduced in the median line beyond the base of the tongue, and the patient is told to swallow. At each repeated effort of deglutition the catheter is pushed further on, until from eighteen to twenty-one inches are introduced. We are then quite sure the tube has penetrated into the stomach beyond the "eyes" by which the food pours into the stomach. So soon as this is accomplished, we raise the funnel to a suitable height—usually the level of the patient's head is sufficient—and pour into it slowly water of about blood-heat, or a little warmer—with the addition of borax. The proportion of the latter may be one drachm to two quarts of water. When we have poured about a pint of fluid into the stomach, or when the patient himself makes a *sign*, or says that his stomach feels distended, we quickly lower the funnel near the floor while *pinching* the soft tube near the funnel with the index finger and thumb of the right hand, so as to retain fluid in the entire length of the tube. So soon as the funnel is lowered into an empty receiving-vessel, on the ground, pressure on the tube is relaxed, and the water containing the washings from the stomach is siphoned off. After repeated washings, or until the stomach is quite clean and the water comes away clear, we pour in the alimentary substances in the same manner we did the hot water for washing. In withdrawing the stomach-tube we should do it quite rapidly, in order to avoid possible rejection of the food. We should also pinch the tube near its proximal extremity in withdrawing it, so that none of its contents will fall upon the carpet or floor.

Of course it is understood that the daily washing of the stomach should take place in the early morning or at a time when it is comparatively or entirely free from food; otherwise, the tube is liable to be choked up by bits of undigested food. Besides, such pieces may be rejected alongside the tube, and possibly become impacted in the larynx or trachea, causing symptoms of asphyxia. Whenever it is inconvenient to perform the washing at a very early hour in the morning, the patient may be allowed some peptonized milk, and the washing may then be delayed for an hour or two. After a certain number of washings, the

patient himself may be able to accomplish this little feat quite as well as the doctor. As regards the mere passage of the tube, he frequently learns how to introduce it with greater ease to himself than the physician can command, and, while introducing the tube is perfectly able to make a passing intelligible remark or two.

We now come to the second part of our lecture, viz., the subject of *Continuous Antiseptic Inhalations*. This, gentlemen, has been a subject which I have studied very attentively during the past two or three years. I have examined many different kinds of oro-nasal inhalers, but I know of none so simple, so cheap and so effective as the one I have in my hand. These inhalers were originally made in London, and sold by Squire. I imported a large number of them for use at the New York Hospital, in the out-patient department, and within a brief period, finding them so useful, I have requested Mr. Ford, of Caswell, Hazard & Co., to manufacture a lot for sale to the public generally. The inhaler itself is nothing but a simple sheet of light zinc perforated with numerous small holes and bent into a somewhat pyramidal shape of suitable size to cover the nose and mouth. The apex of the pyramid—which is the part of the inhaler furthest separated from the mouth and nares—contains a small sponge, held in place by thread upon which the inhalant is poured. The inhaler is held fixed before the nose and mouth by two light elastics, which go around the ears.

I have employed, at different times, a large number of inhaling fluids, and many different combinations. The fluid and combination to which I now give the preference is creasote and alcohol, equal parts, to which I also frequently add a like proportion of spirits of chloroform. This combination is certainly very useful in allaying cough and modifying the quantity and quality of the sputa in pulmonary phthisis. I therefore recommend it very warmly. The alcohol is added to the creasote for the double purpose of diluting it and making it more volatile; the spirits of chloroform are added, in view of the experience of Dr. Cohen, of Philadelphia, to diminish local irritation and excessive cough. The inhaler must not be worn too long at first, nor should too much fluid be poured on the sponge at any single time. In either event, instead of giving relief, disturbance is caused; the throat is rendered more irritable and the patient complains of increased soreness and tightness in the chest. Properly and judiciously employed, the creasote inhalant relieves symptoms notably, and in the beginning, at least, of pulmonary phthisis is, I believe, a means of decided utility so far as the possible arrest of the disease is concerned. It is important that beechwood creasote be employed. At first the inhaler should be worn ten to fifteen minutes every two or three hours; afterward, it may be worn half an hour or an hour at a time, or even longer. When the length of time is gradually increased, only positive benefit will result. From ten to twenty