A very large proportion of disease and suffering is due to imperfect assimilation and to absorption of toxic substances, on the one hand, and to defective elimination of waste of tissue and of imperfectly elaborated food products, on the other. While it is far from true that all our ailments are connected with, much less due to, derangement of these two functions, yet he is a wise physician who never loses sight of the importance, in every case, of carefully examining the avenues of supply and waste. Besides the diseases due to derangement of these functions, there are many, primarily not in any way dependent on them, through which he can hope to pilot his patient to the haven of health and comfort only by maintaining these functions in the best possible condition. Then, again, there is no disease to which they do not bear, at least secondarily, a close relationship.

It has been said, and with much truth, that "our feelings are the greatest liars in the world." With almost equal truth can this same charge be laid against the general symptoms of nearly all diseases. Of no diseases is this more true than of those of the digestive system.

Until the last decade or two the knowledge of digestion and its derangements was drawn from experiments, from symptoms, and from occasional accidental conditions that exposed the stomach to view, as in the celebrated case of St. Martin, so well studied by our distinguished countryman, Beaumont. The introduction of the stomach tube for purposes of diagnosis by Leube, in 1871, began a new era in the pathology of diseases of the stomach. By its use we place ourselves in direct communication with the stomach. By removing its contents from time to time and examining them, we may satisfy ourselves of the condition of the stomach and its functions with almost as much certainty as of that of the mouth or other visible part. We only need the knowledge to make use of the material at hand. The stomach tube is not a recent invention. John Hunter, more than a century ago, used it to inject irritating substances into the stomach; later, it was used to empty the stomach in opium poisoning. However, it is only in recent years that it has been used for purposes of diagnosis and treatment in ordinary diseases, and even yet its use is much too restricted. A decided step in advance was made when Ewald,* in an emergency, first used a soft rubber tube. A man was brought to his clinic who had poisoned himself with hydrocyanic acid. None of the standard hard tubes were at hand, and, as immediate emptying of the stomach was imperative, a piece of ordinary gas tubing was taken, the end rounded, two eyelets cut in it, and then passed into the stomach. He found no difficulty in passing this soft tubing. Since then the use of the soft rubber tubes has become very general. They vary in size, the larger being about one and one-half inch in circumference, open at the lower end, having one or two large fenestra low down; several small openings also add to its efficiency, as they allow the stomach's contents to filter into the tube from all sides. In the majority of patients these tubes are passed without difficulty; but in some, from spasm of the œsophagus, or other cause, it is necessary to resort to a firmer tube, such as a varnished silk web one. In a case recently even this could not be passed through the cardiac end of the œsophagus on account of the spasm; yet a second trial two days later was quite successful with a soft rubber tube. Such tubes possess the additional advantage of being practically safe, there being little, if any, liability of injuring the stomach or any other soft part, even if in an unhealthy condition. Even aortic aneurisms pressing on the œsophagus should be safe from rupture, as little impediment will arrest the progress of the tube. It is a matter of no little importance that the use of the soft tube is less objectionable than of the hard one, as it is not necessary in using it to pass the fingers into the mouth, the end of the tube being simply passed back into the pharynx, when, on swallowing, it is grasped by the faucial muscles, when it should be pushed onwards rapidly into the stomach. It usually passes on into the stomach easily, but a choking sensation may be produced. Waiting while a long breath or two are taken usually suffices to overcome this strangling feeling, but not always, and the tube may have to be withdrawn. I do not wish to minimize the difficulties, which are sometimes insurmountable, but we need rarely have any fears once the consent of the patient is obtained; that is oftenest the insurmountable difficulty. Quiet confidence on our part usually suffices to overcome all difficulties. In the nervous a cocaine spray to the pharynx may overcome uncontrollable irritability.

* Diseases of the Stomach.