many cases are remarkably benefited by it. This, of course, can be accounted for in many ways without referring it to the blood—the healthy outdoor exercise of a walk, or ride, to the abattoir, or diversion of the mind by so novel a remedy—but it cannot be denied that defibrinated blood is rich in the elements of nutrition, and the resulting benefit of its use is out of proportion to the novelty of the medicine, or healthy exercise in obtaining it.

To utilize, therefore, what appeared to be a valuable product, a process was devised for drying it quickly to prevent decomposition, and at a low heat. After shipping a large invoice of this desiccated blood to Detroit, to be used as an aliment, I discovered that Dr. A. H. Smith, physician to St. Luke's Hospital, New York City, was also at work with defibrinated blood, and had proved its therapeutic worth in more than sixty cases. At my request, Dr. Smith substituted the dried article at St. Luke's, where it is now on trial and appears to be of equal worth to the blood before preparation.

This, then, will explain the reason why desiccated blood is brought to the notice of the profession as a new article for rectal alimentation.

There are three ways by which blood can be introduced into the system—per orem, by transfusion, and per rectum. The last named seems, for many reasons, the least objectionable. Naturally enough, drinking blood is disgusting to patients. Transfusion, even in the most careful hands, is not devoid of danger. But injection per rectum is an easy and safe operation, which can be frequently repeated without risk of injury.

Blood per rectum has also the advantage possessed by transfusion of not being subject to the changes incident to the process of digestion.

Various articles are used for rectal alimentation—milk, albumen, and lately albuminose has been recommended. To be of any use to the system they must be taken into the circulation, converted into blood, or else substituted for it. Blood is the product of digestion, and it is supposed that before food can be converted into blood, the saliva, gastric, pancreatic, and intestinal juices and bile must perform their action, absorption must take place, and, finally, that wonderful, vital constructive process by which the corpuscules are made, and the blood is fitted to perform its part in nutrition. If this be all true, blood cannot be manufactured from these articles when injected into the rectum, and their beneficial effect must be accounted for in some other way. It would seem, therefore, that blood itself, for rectal alimentation, if absorbed, would be more suitable to meet the wants of the system.

Blood is the food and air of the tissues. As it is the province of the vegetable world to convert the elements of surrounding nature into organic forms fitted for food, so it is the province of digestion to convert food into blood to feed the vital organs. Blood is therefore called the *vital fluid or the life*, and its presence in the vital organs is indispensable to their function. Only a momentary arrest from the brain results in syncope, or fainting away, and any organ deprived of it soon loses functional activity. Supplies for the growth and repair of the whole body are in the blood. Blood is but the body in a liquid state. Being, therefore, perfectly adapted to build and construct tissues, and indispensable to life, its administration would seem to be indicated when tissues are wasted and life is threatened by disease.

Like other vital organs, the nerves depend directly on the blood for their functional activity, and deprivation results in morbid phenomena. Close physiological relations exist between the red globules of the blood and the healthy life of the nerves. This relation is probably between the hemoglobine—the red coloring matter of the blood, which forms the principal substance of which the red globules are composed (about 25 to 30 per cent. of their weight, or 86 per cent. of their solid ingredients)—and the nerves. A morbid diminution of the red globules is designated anæmia. As the action of every organ in the body depends upon the nerves, it naturally follows that if they be impaired there is a general deficiency of functional energy. All the vital functions are languidly performed. The action of the heart is feeble, and easily disturbed. Mental energy, strength of will, and purpose, are diminished. Neither can the action of impaired nerves on the secretory organs manufacture healthy digestive fluids for the preparation of food to be converted into healthy blood, so necessary for nerve supply. Then, too, the brain sympathizes in this condition, and the mind, becoming affected, in turn reacts on the nerves to increase the disorder.

Nutrition is directly under nerve control. Every secreting cell, every absorbing villi, the inherent power of each tissue to select from the blood appropriate matter for its repair, even the muscles for respiration, are supplied by artery and vein, with nerve to guide their action, for the purpose of furnishing them with blood, to be used for building new tissue, and to impart nerve-force to repair that lost in the exercise of their functions.

Desiccated bloood is therefore suggested for rectal alimentation, when the life-powers are threatened by asthenia, due either to loss of blood, loss of nerve-power, or to both. It is indicated in all cases where, for any reason, digestion is impaired, in cachectic states from special constitutional poisons, and in all cases when impaired blood, nerves, or digestion give rise to the anæmic condition, with its resulting general debility, hypochondriasis, or other functional disorder.