Dec. 20, however, there was a sudden rise of temperature to 102° in the evening, running down to 101° the next morning, and then up again to 103° the following evening. This was evidently a relapse, the temperature-chart bearing a very close resemblance to that of the second week of the original attack. Later in the course of this relapse there was a sudden fall of temperature to 97½° one morning, accompanied by a copious hemorrhage from the bowels. On that evening the temperature was 102½°. Since that time the patient has been slowly but steadily improving, until to-day his temperature is normal.

Before proceeding to discuss the treatment, let me call your attention very briefly to the symptoms of typhoid fever. First, as regards the temperature. This usually begins at 99½° in the first week. As the disease progresses the temperature mounts up and drops down, falling each morning, but not quite so far as on the preceding morning, and rising each evening higher than on the preceding evening. The temperature on the seventh day generally stands at 101° in the morning and 102½° in the evening. In typhus fever the rise of temperature is not gradual, but very rapid, running right up to 102°, 103°, 104°, even higher. In the second and third weeks of typhoid fever the temperature is fairly uniform, though high, with a daily variation of from 1½° to 2°. At the end of the third week the temperature begins to fall, showing a correspondingly lower temperature each morning and evening. These data are of great value in discovering whether the fever is running its proper course. In malarial fever there is a complete remission or intermission, according to the type of the fever. This is never the case in typhoid fever.

The other most characteristic symptoms of typhoid are those connected with the abdomen. The belly is usually very much swollen and tympanitic. There is either constant diarrhœa or an irritable state of the bowels, with cutting indomitable pains. As regards nervous symptoms, in the second week there is usually listlessness, dulness, and hebetude. The patient desires to be let alone. At night there is, perhaps, muttering delirium, or even violent excitement. The eyes are almost entirely closed. There is frequent twitching of the muscles. The tongue is tender and moved with pain. There is loathing of food, but rarely any vomiting. In the second and third week the pulse usually rises from 96 up to perhaps as high as 120 beats per minute. The frequency of the pulse, however, is not as great as in typhus and scarlet fever. The breathing is shallow and frequent, with some sonorous râles, perhaps over the chest. The eruption commonly appears on the seventh or eighth day, and consists of spots of a rose-red color about the size of the finger nail, seen usually on the belly somewhere between the nipple and umbilicus. These spots are but slightly, if at all, elevated above the surface of the skin. The spots are sometimes entirely absent throughout the fever. There is no proportion between the violence of the disease and the amount of eruption. One of the characteristic symptoms of this fever is profuse epistaxis; you see that this was entirely absent in the present instance. There is very rarely excessive thirst; the mind is usually too much dulled in its sensations.

The most widely different views have been expressed as regards the treatment of this disease. Each view has had, for the time being, at least, its advocates. This divergence of opinion is very easy of explanation, since the disease may be entirely different in different epidemics. In some epidemics there may be very great mortality. Others may be comparatively mild. These statements are true of all epidemic diseases. I will not, therefore, mention any of the specific treatments. Typhoid fever, too, more than almost any other disease, is modified by personal idiosyncrasies. It is one of the longest of specific fevers, and, consequently, taxes the strength to an unusual extent. If it be among the poor, the mortality, for these very reasons, may be exceedingly great, much more so than if the epidemic had attacked one of the higher classes of society.

The basis of our intelligent treatment of syphilis is iodide of potassium and mercury. No one knows why these remedies are so valuable in that disease. In typhoid fever we know of no specific remedy; we must consequently treat the disease according to its morbid elements. We know that typhoid fever is a specific follicular ulceration of the alimentary canal. This is the most important element of the disease; most of its dangers are connected with this lesion, death resulting from either (1) excessive diarrhœa, (2) hemorrhage from the bowels, or (3) perforation of the intestinal wall. In addition to the above element we have to consider the blood-poisoning and the nervous symptoms generally present.

Are the ulcerated solitary glands and Peyer's patches the primary seat of the trouble? Does the blood become poisoned by septic influence from them, or is it poisoned by matters absorbed from other sources, and are the glands inflamed in removing the poison? To put the question more pointedly, are the glands ulcerated before the blood is poisoned, or ulcerated in removing the poison from the blood? In syphilis the glands of the body become enlarged as a consequence of blood-poison; whereas in diphtheritic sore throat the glands are swollen from the absorption of poisonous matters. We know that the poison of typhoid fever enters the system through the alimentary canal, that the glands of the intestines are *first affected*, then those of the mesentery, and then the other glands throughout the system. This lesion of the glands of the intestines must therefore have some connection with the origin of the disease. We have also to deal with a specific blood-poison in typhoid fever. This poison seems to consist of effete matter from the body of another person who has had the disease; at least this is the commonly received explanation. For my own part, I do not believe that this transplanted excrementitious poison is the only one, but think that the poison may be generated *de novo* from effete animal and vegetable matters.

The specific follicular catarrh of the intestines is of great importance in the determination of our treat-