

gress lower. On the evening of the 13th the temperature was 100.6° , higher than the morning temperature, but still considerably less than the previous evening; 14th, a.m., 100° ; p.m. 100.4° ; 15th, a.m., 99° ; p.m., 100.6 ; 16th, a.m., 98.4° ; p.m., 98.2° ; 17th, a.m., 98.4° ; p.m., 100.4° . It is not necessary to go further with the reading of the temperature. It is at least evident that there is nothing of the nature of a tidal rise. On the other hand, there is quite a constant morning temperature, which by evening has gone up to about 100° . It is clear that this is not a case of typhoid fever. There is another symptom in this case which does not belong to typhoid fever: there is more or less constant bloody urine. I can account for this condition on no other ground than that it is malarial in its origin. There is no undue frequency of micturition, and no evidence of disease of the bladder or of the kidneys.

The only conclusion to which I could come, in view of these facts, was that our patient's disease was essentially malarial fever of the remittent type, with typhoid symptoms, and might be called typho-malarial fever.

Now, there are two ways in which this term may be applied. In the first place, that disease may be called typho-malarial fever in which there is malarial fever complicated with typhoid symptoms, or the term may be applied to cases in which the two diseases exist together,—that is, typhoid fever running *pari passu* with malarial fever. A third application of the term typho-malarial fever has been made; that is to indicate a special form of fever with its own morbid anatomy, distinct from that of typhoid fever and of malarial fever. But this idea, which originated with Dr. Woodward, of the army, has been given up. Can we in this particular instance settle this question? Can we say whether it is a case of malarial fever with a typhoid complication, or whether it is a case in which typhoid and malarial fevers are concurrent? In the first place, there can be no doubt that two general diseases may coexist in the same individual. You have probably all heard of measles and scarlet fever running their course together. Some diseases are nearly always associated, as, for instance, pneumonia and pleurisy, and pneumonia and bronchitis; but I am now referring more particularly to general diseases.

There is, therefore, no reason why we should not have malarial fever and typhoid fever concurrent. But let us discuss somewhat further the grounds on which we conclude that such is not the case in the present instance. This patient has been under observation for twenty-one days. As a rule, a case of typhoid fever either becomes decidedly convalescent or else ends fatally by the end of the third week. In the course of the third week the temperature begins to fall, and there is a tidal decline. The morning temperature is a little

lower than that of the previous morning; the evening temperature a little higher than the temperature of the morning of the same day, but a little lower than that of the previous evening. If this were a case of typhoid fever, we should expect it to show some disposition to terminate. In point of fact, during the past week the symptoms have become aggravated. His dry tongue had, under the use of turpentine, become moist, and all the symptoms, excepting the hæmaturia, had improved; but last week they became aggravated, and the temperature rose decidedly. On October 24th and 25th the temperature was normal. On the 26th it began to rise, and reached 103° . The next day it was in the morning 103° , and in the evening 104° . Since then the temperature has not been below 100° until the evening of October 31st, when it was 98.4° .

These symptoms, however, suggest a relapse in typhoid fever. You are aware that relapses in this disease are not infrequent; but when typhoid fever relapses it repeats its previous history. The spots, diarrhoea, and peculiar temperature recur. But there has been no diarrhoea; there are no spots on the abdomen; there is no tympanitis; neither is there marked abdominal tenderness. This case does not give us a repetition of the symptoms of typhoid fever, and we cannot consider it a relapse. I feel constrained to class this as malarial fever of the remittent type; for, as you see, there is more or less continuous fever. There are also typhoid symptoms, so that in one sense of the term it is a case of typho-malarial fever; but it is not a case of concurrent typhoid and malarial fever.

As we were under the impression, when he was first admitted, that we had a case of typhoid fever to deal with, he was placed upon a treatment which would really answer for both diseases. In the first place, I always begin the treatment with quinine for a few days, for it is often impossible to tell at first whether a fever is malarial or typhoid. Sixteen grains of quinine per day, continued for four or five days, will have the effect, in the first place, of keeping up the powers of resistance of the patient, and, in the second place, will remove any malarial element. We used quinine in the present case, and the symptoms were much improved. On account of the condition of the tongue, I also ordered ten drops of turpentine four times in the twenty-four hours. We made no local application, as is our custom in typhoid fever, in the form of poultices and turpentine stupes. Under this treatment he improved decidedly. Last week we suspended the treatment, and in the result of this suspension of treatment we have another evidence of the malarial nature of the disease. As soon as the treatment was stopped, all the old symptoms returned. We again returned to quinine and turpentine; but during the past twenty-four hours the administration of these remedies has been interfered with by "hiccough."