

scientific lifetime of so young a man as I am. There is scarce one present here but can remember the days of ample doubt as to the pathogenic properties of any of the bacteria; scarce one but can remember the time when Pasteur's wonderful series of observations upon anthrax and the bacillus of anthrax hardly received credence. From that period one saw passing days of gradually lessening doubt, until Koch's wonderful investigations into the bacillus of tuberculosis made men rush to the other extreme, made them absolutely sure that whether the microbe was discovered or no, specific microbe exists for every febrile disease, and for a great number of non-febrile diseases. Now, at the present time, there is among bacteriologists, among those deeply read and acquainted with the subject, as it were a backward swing of the pendulum, to a certain extent. What I mean is that, largely through the teaching of the German school of bacteriologists we had, but a few years ago, come to look upon every disease in which a definite microbe had been discovered, as being due to the presence within the organism of some microbe whose characteristics were absolutely sharply-defined. There was, for example, an absolutely specific microbe of cholera, possessing constant properties, constant peculiarities of growth on various media and constant chemical reactions of part of its products, with constant development of special ferments. There was a sharply-defined diplococcus of pneumonia, a bacillus of typhoid that could not be confounded with any other microbe. And so on with regard to all the important diseases whose germ has been discovered.

Well, I do not wish now to say that this is false; all that I wish to do in this short paper is to impress upon you the advisability of crying "Halt" before we unreservedly stand to this belief, and it is of especial importance to the members of this Association that the advisability of deliberating long and carefully should be kept in mind: inasmuch as it is just in relation to some of the most wide-