

endothelium of the liver capillaries and again heaped up in the liver cells. My own opinion on examining these specimens is that in the majority of cases the bacteria are already dead when taken up into the liver cells, and that we are dealing, as I say, with the corpses of bacteria.

There are very many points in connection with these thoroughly surprising observations which need further elucidation. I have throughout this lecture already referred so frequently to the work of those in my laboratory that I dare say no more; it would be unfair to Dr. Anderson and to Dr. Ford to prematurely publish more concerning their work. There is one point that will probably come to everyone's mind, to which I must briefly refer, that is, why do these colon bacilli in the liver cells and elsewhere in this broken-down form take on the curious brown pigmentation, and actually take up iron? Only last Saturday Dr. Ford showed to me cultures that he had made of the colon bacillus outside the body, which were becoming diplococoid in shape and which took on this brown staining. He has been able, in short, outside the body, to reproduce both the appearance and the properties of these modified colon bacilli in the tissues. He will later describe his methods.

I am now very careful not to state that the colon bacillus is the primary or the essential cause of either cirrhosis or pernicious anemia; indeed, I think that it is probably not, that in either case there is some primary and underlying factor favoring its entrance into the economy: this, however, I do say, that a study of these conditions does confirm me in the belief that the constant destruction and taking up of excessive numbers of these, and it may be other bacteria of similar pathogenic powers, does affect the cells and does affect their activity. These observations, therefore, in my opinion, confirm a belief in the existence of the condition of what I have termed subinfection. Nay more, I believe that in the development of many chronic fibroid conditions, this subinfection will be found to play a definite part. "But," as Plato was wont to remark in a manner strangely and suggestively modern, "this is calculated to afford the subject-matter of another dissertation."