

In this very first case, above mentioned, studied by me, I obtained evidences of bacteria similar to those of Pictou Cattle Disease, but owing to the fewness of cases presenting, to the great difficulty of staining sections aright, and, I must add, to my own failure to recognize the true relationships of the forms I isolated, it was not until 1898 that I published upon the subject, first in the *MONTREAL MEDICAL JOURNAL*, July, and next in a paper read for me by Professor Osler at the Edinburgh meeting of the British Medical Association (*The Lancet*, Aug. 13, 1898, p. 376), announcing the existence of a micro-organism in association with progressive portal cirrhosis as similar to that found by me in connection with Pictou Cattle Disease. This organism I obtained from the liver juice, the ascitic fluid, the lymph from the mesentery, heart, blood, kidney and mesenteric glands.

The colonies at first were very minute and the organism with its pronounced polymorphism and tendency to change from the diplococoid to the stumpy bacillary form, closely resembled that seen in the Pictou Cattle Disease. Examining a series of sections of twenty cirrhosis livers I found these present in the liver cells as minute diplococcus-like bodies surrounded by a faint halo, so small as best to be studied under a very high power of the microscope, namely, under 1-18th or 1-20th immersion lens. Here the tissues in general had a brown stain, but now, as I pointed out in the paper contributed to the *British Medical Journal*, Oct. 22nd, 1898, further studies throw a very considerable light upon this remarkable form. They showed conclusively that both the form obtained from the Pictou Cattle Disease (as indeed had been suggested by Professor Royce in the discussion upon my paper in Montreal, 1897) and that from the human livers, were at most varieties of the colon bacillus the organism, that is to say, which is the common inhabitant of the lower intestinal tract in man and the majority of warm-blooded animals. They were obviously attenuated and grew more slowly than the typical colon bacillus, they did not cause the same rapid turbidity of broth, while culture outside the body rendered them more active in their growth until eventually they closely corresponded in size and in most of their properties with the group of colon bacilli. Their effects when inoculated into rabbits and guinea-pigs resembled also those seen in connection with the colon bacillus.

I may here add that Dr. Charlton, now Fellow in Pathology at McGill University, has studied the organism of Pictou Cattle Disease within the last year, which we have kept growing for some years in our laboratory, and found that it corresponded in all particulars with one form of colon bacillus described by Dr. W. W. Ford, in his study