last three years has not brought it nearer to type, if I may so express it. The agar colonies of the bacillus are much smaller than those of the ordinary colon bacillus; it does not ferment lactose or glucose, and does not yield the indol reaction, while upon acid potato the superficial growth is so slight as to be almost invisible, and I have found inoculations fatal to mice—animals not killed by the colon bacillus.

The constant discovery of this form in animals afflicted with the Pictou cattle disease renders it a most reasonable supposition that there is a direct relationship between its presence and the development of the disease. At the same time it is to be borne in mind that, so far, by simple inoculation, although rabbits, guinea-pigs, and mice are killed—and that on the average after relatively long periods (fifteen to thirty days in the two former animals)—I have been unable to reproduce the cirrhotic change in the livers of the same. It may be that the time elapsing between inoculation and death is too short to permit extensive fibrosis to develop, but it may well be that some additional factor is necessary to cause the cirrhosis in the cattle as in the inoculated animals, some prior or contemporaneous action upon the liver cells favouring the multiplication of the bacteria, or aiding the pathogenic action of their toxins upon the hepatic tissues.

Had further work upon human cirrhosis confirmed my first impression that the form isolated possessed individual features, and had further study revealed the repeated presence of such specific microbe in cases of the disease, it would also have been reasonable to assume cirrhosis to be due to the action of such a germ. But further study has shown that while one germ is to be detected in the livers of advancing cases of cirrhosis that germ is evidently the colon bacillus, more or less attenuated, it is true, but still a common form, and one which is habitually to be detected in livers presenting not a sign of cirrhotic change. If, therefore, there is any relationship between the presence of such a form and the development of the disease, clearly some other factor or factors must be at work. But beyond the point that there is this remarkable abundance of modified colon bacilli in the liver and in the mesenteric glands in cases of ordinary cirrhosis, I can at the present moment bring no further facts forward. To state positively what is the additional factor or factors requires experiments which necessitate months to bring to a definite issue. One may undoubtedly hazard a very shrewd guess as to what they must be. If the bacilli gain entry into the system through the intermediation of leucocytes, then a subacute enteritis or gastro-enteritis appears to afford the necessary localised determination of leucocytes, and such subacute or chronic gastro-enteritis is a very familiar feature in