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# ON THE DIPLOCOCCOID FORM OF THE COLON BACILLUS.

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In the course of a careful study of a long series of livers, both cirrhotic and otherwise, we have in the specimens examined, with scarce an exception, encountered larger or smaller numbers of minute bodies, and the more we have studied them the more assured we have become that these are bacterial in nature. Under the ordinary  $\frac{1}{12}$  immersion lens, and by the usual methods of staining these may easily be overlooked, and if recognized they may easily be mistaken for minute pigment granules present in the liver cells. But by more intensive staining and by employing a good  $\frac{1}{18}$  immersion lens their nature becomes more evident.

The methods we have employed with the greatest amount of success have been by staining with carbol-fuchsin (one-half the ordinary strength) and subsequent bleaching in the sunlight in our earlier observations, and of late, almost exclusively, carbol-thionin, made according to the formula in Muir and Ritchie's text-book, the sections being cleared by aniline oil. Stained by either of these methods the granules resolve themselves in the main into the fine diplococci, surrounded often by a fine halo, as to the nature of which we shall speak later. When these diplococci are present in any numbers there may also be isolated minute spherical and ovoid bodies of the same dimensions, and there may also be seen occasional strings of three or four coccus-like bodies.

We have recognized these in the livers of man, the cow, sheep, rabbit, and guinea-pig. At first, working with the cirrhotic livers