

least a very large number of well-marked cases of progressive cirrhosis in man, there is to be found largely within the liver cells, also in the lymph spaces in the newly formed connective tissue, a peculiar and very minute form of micro-organism present on staining to the proper extent, as a diplococcus surrounded by a faint halo, or when stained deeply, being a rather obscure bacterium, which may easily be mistaken for stained deposits within the cells.

2nd. That in the infective cirrhosis of cattle, a very similar micro-organism is recognizable, present in like positions within the tissues and showing similar appearances when stained.

3rd. That from at least thirty cattle affected with this disease I have been able to isolate the micro-organism—from the liver, bile, abdominal lymph glands, and in some cases from the various organs of the body.

4th. That the micro-organism isolated is a polymorphous micro-organism, appearing as a small diplococcus when grown in broth, tending to assume a distinctly bacillary form when grown for a few hours on other media, or in broth for a longer period.

5th. That this micro-organism is pathogenic for the animals of the laboratory, and that in them it is to be recognized within the hepatic cells as in other regions.

6th. That from a case of distinct atrophic cirrhosis in the human being, I have been able to isolate from various organs of the body a similar micro-organism, which grown in broth has a diplococcus form, grown upon agar, is present as a short or longer bacillus according to the age of growth.

This is not the occasion for me to discuss at length the bearing of these observations upon the nature of progressive cirrhosis in man. It is only necessary for me to say that if they are confirmed, as personally I feel they must be confirmed by everyone who proceeds with sufficient caution to follow the methods employed by

me, then cirrhosis of the liver assumes an entirely new aspect. We gain a satisfactory explanation at once of such phenomena as the enlargement of the spleen, which, as has already been noted by more than one observer, may be made out before there is any sign of portal obstruction; we see why so frequently there should be right-sided pleurisy, and may even find that the question as to whether a case is complicated with ascites or jaundice, depends upon this micro-organism; depends upon whether it sets up a low inflammation of the peritoneum, or whether it more especially affects the liver cells and bile ducts; while disturbances which may occur not immediately in connection with the liver, in the pancreas and in the kidney, would seem to gain a possible explanation from the fact brought out by me, that this micro-organism, common in the liver cells, is in an advanced case to be gained from the heart blood and from the kidney.

That the micro-organism only causes cirrhosis, I do not believe; indeed, we may find that it is the cause of more than one disturbance in the liver, and indeed in other organs. This I base upon the fact that in the case in which I have isolated this allied form from man, the micro-organism shows itself capable of existing in several regions of the body; in fact, of setting up what bacteriologically we regard as a septicæmic condition.

COFFEE AND TEA AS CAUSATIVE FACTORS IN NERVOUS DISEASES.

Dr. Charles E. Lockwood has contributed a very excellent paper to the *New York Medical Journal* on the study of alcohol, tobacco, coffee and tea as causative factors in the production of nervous diseases, and we here give his conclusions in reference to coffee and tea.