

secretions and demonstrated the presence of the micro-organism in stained coverglass preparations.

*Cultures* were made from the various tissues and organs of the body on different media, the most abundant growths being obtained on glycerinated agar. On this medium the *exudate* from the meninges gave an abundant growth after thirty hours, appearing at first as pearly gray dots, spreading out in plaques over the surface of the tube and gradually assuming a more grayish, opaque appearance. On staining with the various reagents above mentioned, the results were identical, and no definite chain formations were seen on this medium. On being transferred from the agar to broth, the growth was again abundant, appearing mainly in the sediment, the supernatant fluid remaining fairly clear. The diplococci were here for the most part large and arranged distinctly in chains, containing from four to eight cocci in each. Some of the chains, however, were made up of very much smaller organisms, resembling the ordinary pyogenic streptococci; that they were, however, of the same nature as the other diplococci was proven by their negative reaction to Gram's method. Cultures on glycerinated agar and broth from the *pericardial exudate* gave likewise pure cultures of the meningococcus. From the *heart blood*, the *liver*, the *spleen* and the *bile*, cultures taken on various media remained sterile. From the *lung* a mixed culture of staphylococci and lancolate diplococci was obtained. While most observers have found agar the most suitable culture medium, it may be stated that the Boston bacteriologists have met with best results in employing blood serum; the differences are in all probability associated with the chemical reactions of the media. *Inoculations* of a three-days-old broth culture subcutaneously into a guinea-pig proved innocuous, as did also the intravenous injection into a rabbit of a 24-hour-old broth culture. It has been shown repeatedly that the life of these bacteria is extremely short, and transfers every second or fourth day are necessary to keep the germ alive. Hence a three days' growth might readily prove harmless to a guinea-pig, though the fact that recent growths were innocuous when introduced into the circulation is of no little interest.

*Sections* were made of the various organs and tissues of the body; those from the brain and meninges, including the exudate, showed mainly great dilatation of the blood vessels, with recent punctiform hæmorrhages and large collections of polynuclear leucocytes, with extreme fragmentation of the nuclei. Extensive areas of necrosis were likewise manifest in the nerve tissue. The micro-organisms were by no means easy to detect, the specimens stained with safranin giving the best results. In the spinal cord the same condition was evident,