following: No. 1 plate—Seven colonies, although differing in size and shape, showed the same organism, differing only in a few of the colonies as to length. No. 2 plate—In ten colonies the same bacillus was present, but varied more in size than those of the first plate. In one case the longer, or filamentous, were run together into clumps. This variety is, when present, always associated with the short rod-shaped. No. 3 plate —In five colonies the same bacillus was present.

The following is the result of 44 hours' growth in thermostat on litmus milk, gelatin and potato:

Litmus milk—Bacillus was of medium size and media of a dirty white color. In 48 hours (but 4 hours later) media showed slight coagulation, and was almost clear white in color. After 72 hours there was marked coagulation, and in 19 days nearly half the media was so involved. Coagulation never increased after this time, but the remaining part of the media became like muddy water in appearance.

Gelatin—Bacillus slightly shorter and thicker than usual. There was a light gray or dirty white discoloration of the upper portion of the media.

Potato – Few bacilli, but of ordinary size. The media was furrowed. The parts between the furrows were covered with a creamy scum, while the furrows themselves were dry and brownish.

Stab culture was made out on each of the following: Gelatin, agar, glucose agar and gelatin agar.

Gelatin—After 24 hours at ordinary temperature of a room there was no change in medium. After seven days there was no liquifaction, but a light gray discoloration extended over the course of the stab. The media was slightly split (probably due to drying). The organism was large and spores were present.

Agar-Medium slightly split and the whole surface covered with a scum. In the course of the stab there were two or three air bubbles.

Glucose agar—At entrance of the stab there was a slight elevation, which was of a deeper color than the medium. The surface of the rest of the media presented a thick and dirty cream-like color, which was continued over the whole course of the stab. There were gas or air bubbles in the course of and at some distance from the stab.

Gelatin agar—The surface of the medium was much the same in appearance as that of glucose agar. There was a slight funnel shape along the line of inoculation.

In any of the above cases it is doubtful whether there was any growth below the surface of the media, excepting in glucose agar.

PROBABLY GROWS WITHOUT THE PRESENCE OF OXYGEN.

A stab culture in agar was made and liquefied agar poured over it. I also inoculated a blood serum tube and applied Buchner's method. These were allowed to remain in the thermostat for 24 hours before examination. In each case the bacillus was present, but I think in not so healthy a condition as under ordinary circumstances.

ACTION WITH REGARD TO HYDROGEN GAS.

Inoculated agar, bouillion and blood serum, and placed them in an atmosphere of pure hydrogen. At the end of 27 hours the surface of the