

agar was covered with a slight scum. The bouillion and blood serum presented no appearance of growth. The three tubes were then placed in the incubator. After 24 hours all except the bouillion showed a growth both from the appearance of the media and under microscopical examination.

#### CARBOLIC ACID.

A solution of carbolic acid and bouillion (1 in 125) was inoculated and placed in the thermostat. After three days there was a growth, but at the end of the fourth day the organisms were dead.

#### GIVES REACTION FOR INDOL.

It was twelve hours after the addition of sulphuric acid and sodium hyposulphite to the media (Dunham's solution) before any reaction was noticeable. The smaller the amount of the media tested, the deeper the color or reaction.

#### ACTION TOWARDS DIFFERENT STAINING REAGENTS.

It stains by Gram's method and with all the ordinary reagents, but especially well with gentian violet.

#### ACTION ON RABBITS AND GUINEA PIGS.

Inoculated a guinea pig subcutaneously. In 24 hours its temperature per vaginam was  $101\frac{1}{5}^{\circ}$  and there was a profuse diarrhoea. The animal was very dull and apparently quite ill. The temperature remained between  $100$  and  $102^{\circ}$  for six days. After 10 days the animal died. The autopsy revealed nothing abnormal, further than more than an ordinary amount of fluid in the peritoneal cavity. Bouillion was inoculated with specimens taken from the peritoneal and pleural cavities, also from the liver and heart. There was no growth. Selected a large, plump rabbit. Its temperature per rectum was  $99^{\circ}$  (considered normal). Injected a hypodermic syringe full of a growth on bouillion 24 hours old into the posterior auricular vein. The temperature ranged as follows:

	Morning.	Evening.
Third day after inoculation.....	$99\frac{2}{5}$	101
Sixth " " .....	$102\frac{3}{5}$	$102\frac{3}{5}$
Seventh " " .....	$103\frac{2}{5}$	104
Eighth " " .....	102	$102\frac{3}{5}$
Ninth " " .....	102	$102\frac{2}{5}$

When the temperature was at  $104^{\circ}$  (seventh day) there was a profuse diarrhoea. Three weeks after this inoculation inoculated the same rabbit subcutaneously in the flank with a bouillion culture 72 hours old. In 24 hours the animal had a temperature of  $103\frac{1}{2}^{\circ}$  and much diarrhoea. At the point of infection there was a semi-solid, raised mass about the size of a chestnut. Twenty-four hours after the swelling was of an elastic feel. The temperature was  $103\frac{5}{5}^{\circ}$  and diarrhoea continued. One week after flank inoculation the temperature was  $102\frac{1}{2}^{\circ}$ . For one month after this the fever fluctuated between  $102\frac{1}{2}$  and  $100^{\circ}$ . Six weeks later it was  $99\frac{1}{2}^{\circ}$ . There was now merely a scab remaining at the point of inoculation; the diarrhoea had ceased, but the animal was markedly reduced.