bility of the animals recovering, to kill them at stated intervals and determine the amount of tuberculosis by the naked eye and the microscope. By this method an exact appreciation of the state of things could be obtained. By arranging them in pairs according to weight it was moreover, possible to compare animals of approximately the same degree of resisting power.

Two guinea-pigs and two rabbits died spontaneously before the conclusion of the experiment, apparently from some gastro-intestinal disturbance. The rest of the pigs were killed after thirty days, and onehalf of the remaining rabbits about the same time. The first animals killed presented so little pathological change that it was thought advisable to keep the remaining six for two weeks longer in the hope that the lesions would be more marked. Autopsies were performed at various times with the special object of determining the extent of the dissemination of the tuberculous virus, the effect of the serum injections, if any, and the character of the bacilli of tuberculosis found in the various parts. Portions of the organs were examined microscopically, both by the hæmotoxylin method and the modified Ziehl-Neelsen method for tubercle bacilli. Smears were made from the organs and stained for bacteria. Cultures were also taken from the organs.

Without going into the full details it may be stated that of the guinea-pigs only one (No. 2) gave evidence of any dissemination of the tubercle bacilli to any distance from the site of the original inoculation. It had not received serum. In Nos. 1 and 4 the inguinal glands were affected; the bacilli were discovered in No 1 which had not received serum, but not found in No. 4 which had. In No. 6 which had received serum, the infection was strictly localized to the site of inoculation. In those inoculated in the leg, Nos. 3, 5, 7, and 8, all except one showed enlargement of the inguinal glands. In only one that had not received serum were the bacilli discovered (No. 3). One that had received serum did not develop a local lesion (No. 8).

In the case of the rabbits, only one developed gross tuberculosis (No. 8), and this one had not received serum. This result was in general what one would have expected as rabbits are much more refractory to tuberculosis than are guinea pigs. None of the culture tubes developed the specific bacillus, and when found in smears, they were in a state of extreme fragmentation and degeneration, showing that the infection was an extremely mild one. So far as I could see the inoculations of serum had no effect whatever upon the temperature of the animals receiving it, but the rabbits so treated lost weight rather rapidly, although the pigs were unaffected. This was probably due to interference with the feeding for the injections produced extensive areas of co-