after the mixture has stood a few days the clot forms more slowly and tends to remain soft. At this time the clot becomes more firm if fresh serum, containing fibrin ferment is added as well as tissue extract. When the mixture has stood for several weeks, clotting can no longer be induced.

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The minimum number of respirations sufficient to maintain life.

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We have made experiments on the dog to determine how few respirations will maintain life. Both artificial respiration of the ordinary type and the spontaneous respirations of the animal were used for this purpose. We will speak only of the results obtained by the use of artificial respiration.

Ether was used for the exposure of the trachea. A T-shaped glass cannula inserted and firmly tied in the trachea was provided with a respiratory valve, devised by Dr. Meltzer, which in turn was connected with a source of air pressure.

There are two series of experiments. In the first series curare was injected to completely abolish the respiratory movements. We began with two artificial respirations per minute continued for periods varying from 40 to 80 minutes. In all of the 19 experiments the dogs were living at the close of the period. The vagi were intact in 12 experiments; they were cut in 7 experiments. While the volume of air introduced was not measured, it was obviously much below the total lung capacity.

In the second series curare was omitted. A clamp was applied to the trachea below the cannula as a precaution against the entrance of air between the artificial respirations. There were 13 experiments. In 8 the vagi were intact. Of these two survived. Four died in about 25 minutes; two died in about 75 minutes. In 5 experiments the vagi were cut. All died.