

Dall gives a letter from R. McFarland, in which the death of Lockhart is mentioned.

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#### RESEARCHES IN HELMINTHOLOGY AND PARASITOLOGY

TO THE EDITOR OF SCIENCE: The Smithsonian Institution published in 1904, the collected "Researches in *Helminthology* and Parasitology" (1844-1891) by Joseph Leidy, M.D., LL.D. The issue was gratis, and is now out of print.

The writer has been applied to by a number of research laboratories in comparative pathology for reprints—he would be glad to know of any one to whom complimentary copies were presented, who would be disposed to donate any such, for use among those engaged in similar lines of investigation.

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#### SPECIAL ARTICLES

##### A SIMPLE DEVICE FOR GIVING ANESTHETICS

So often in giving anesthetics to an animal through the trachea cannula the student either covers the intake opening with several layers of gauze, or plugs the opening with absorbent cotton. To these he applies the anesthetic. When these substances are moistened, the air passages which exist between the fibers in the dry condition are almost wholly obliterated, and the animal is more likely to become asphyxiated than anesthetized. To prevent this almost universal failing I have devised a simple trachea cannula, adapted to both normal and artificial respiration and an appliance for anesthetization, which slips over the intake opening of the cannula.

The cannula consists of a metal T-tube, Fig. 1, *C*. In the long part a small tube extending the full length is soldered. At one end, *I*, all of the opening into the larger portion of this double-barreled tube is closed with solder, thus leaving only the smaller tube open, *sm*. This end is attached to the arti-

ficial respiration apparatus, which practically closes it during normal respiration. The other end, *T*, is inserted into the trachea. The end views of these portions of the tube are shown at the left and right of the figure.

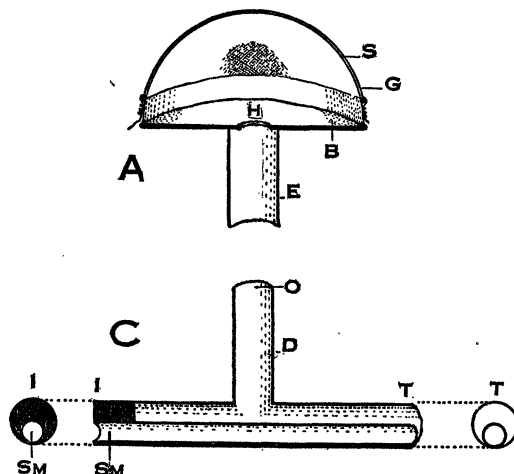


FIG. 1. *A*, anesthetic cone; *B*, circular base; *C*, cannula; *D* and *E*, intake and outlet tubes; *G*, gauze; *H*, hole into intake tube; *I*, end for attachment to artificial respiration apparatus; *O*, opening; *S*, wire screen; *sm*, small tube; *T*, trachea end of cannula.

The device for the administration of the anesthetic is made from a small hemispherical tea strainer (Fig. 1, *A*). The opening of the strainer is soldered to a circular metal plate (*B*) with a hole (*H*) in the center, and a metal tube (*E*) soldered on the lower surface. This tube is large enough to easily slip over the side tube (*D*) of the cannula. One or two layers of gauze (*G*) are spread over the wire screens (*S*) of the strainer and fastened by passing a string or rubber band around the lower margin. The gauze, which can be readily replaced, is thus held away from the intake opening and permits of free passage of air and the thorough vaporization and mixing of the anesthetic with good air. In this manner a few drops of the anesthetic at a time are sufficient to keep the animal in complete anesthesia.