

The largest of our natural areas are in the National Parks and National Monuments. Efforts to secure the reservation of additional lands would fail of their purpose if, at the same time, the National Parks were not kept intact.

With the growing development of the country, the pressure upon the National Parks is constantly increasing. There have been a number of attempts recently to open these parks to some form or other of commercial use. The latest dangers are: First, the inclusion of the parks in the Water Power Bill, thus permitting the commission to grant permits for constructing in the National Parks and National Monuments, reservoirs, irrigation ditches, power plants and power lines; Second, the Smith bill, H.R. 12, 466, turning over 8,000 acres in one of the most beautiful parts of the Yellowstone Park to Idaho irrigation interests; and third, an attempt by the city of Los Angeles to dam certain of the waters in the Yosemite. Any of these proposed uses would not only destroy specific areas of much beauty and scientific interest, but would serve as an entering wedge in opening the parks to all kinds of commercial uses which would eventually undermine the entire National Park system. It is important that scientists make their wishes in this matter known in no uncertain way.

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PROFESSOR PAVLOV

TO THE EDITOR OF SCIENCE: Within the past few months Professor Pavlov came in for much comment on the pages of SCIENCE. Since most of the things that were brought to the attention of our scientific men were either based on mere hearsay or on second-hand information of the flimsiest sort, will you allow me the space to quote some direct news about Professor Pavlov.

H. G. Wells returned recently from a trip of inspection in Russia where he particularly investigated the condition of literary and scientific men. His extensive report has been just published by the *New York Times*.

Speaking of the various scientists with whom he conferred, Wells says:

Our blockade has cut them (the scientists) from all literature outside of Russia. They are without instruments. They are short of paper. The work they do has to go on in unheated laboratories. It is amazing that they do any work at all, yet they are getting work done.

Of Pavlov in particular he says:

Pavlov is carrying on research of astonishing scope and ingenuity on the mentality of animals. . . . Pavlov continues his marvelous researches in an old coat and with his study piled up with the potatoes and carrots he grows in his spare time.

It is gratifying to be assured that Professor Pavlov is raising potatoes only as a pastime and still gives the best of his genius to scientific investigation.

S. MORGULIS

A QUESTION OF BIBLIOGRAPHY

TO THE EDITOR OF SCIENCE: Regarding the inquiry of Dr. Willey, Coues says on page 50, in "Fur-bearing Animals":

From this country [Mackenzie River region], many accounts have reached me, from various officers of the Hudson's Bay Company, through the liberality of the Smithsonian Institution, which placed in my hands all the matter represented in its archives upon the mammals of the far north. . . . Messrs. Kennicott, Macfarlane, Ross and Lockhart have each recorded their experiences. . . .'

Therefore the following quotation from Dall's "Alaska and its Resources," p. 349, may be of interest.

Woiwódsky was succeeded by Fúruhalm as Chief Director of the colonies. The Kadiák was wrecked near Spruce Island. Robert Kennicott passed the winter at Fort Yukon, where Mr. Lockhart was in command.

In the annual report of the Smithsonian Institution for 1861, p. 60, it is stated that "Mr. Ross, chief factor of the Mackenzie River district, has had the cooperation of the gentlemen resident at the different posts in his district," among those mentioned is Mr. James Lockhart. He is mentioned in subsequent reports of the Smithsonian Institution, but always as James; never as J. G.

In the "Biography of Baird," on p. 378,

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.

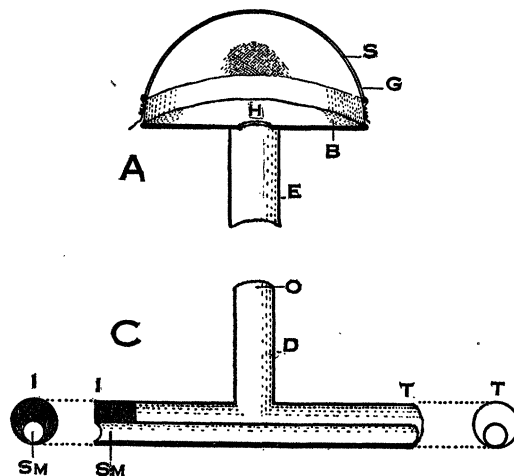


FIG. 1. *A*, anesthetic cone; *B*, circular base; *C*, cannula; *D* and *E*, intake and outlet tubes; *G*, gauze; *H*, hole into intake tube; *I*, end for attachment to artificial respiration apparatus; *O*, opening; *S*, wire screen; *sm*, small tube; *T*, trachea end of cannula.

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.