

0.5 to 3.3 per cent with a total flow from 5 to 15 liters per minute, or up to 10 per cent ether with a total flow of 5 liters per minute.

The apparatus, under normal conditions, is driven by regular alternating current. It is also possible to operate the apparatus by using a trembler and an automobile battery, or by using a special hand pump. The unit weighs 18 kg., and the dimensions including space for equipment, are $28 \times 38 \times 30$ cm.

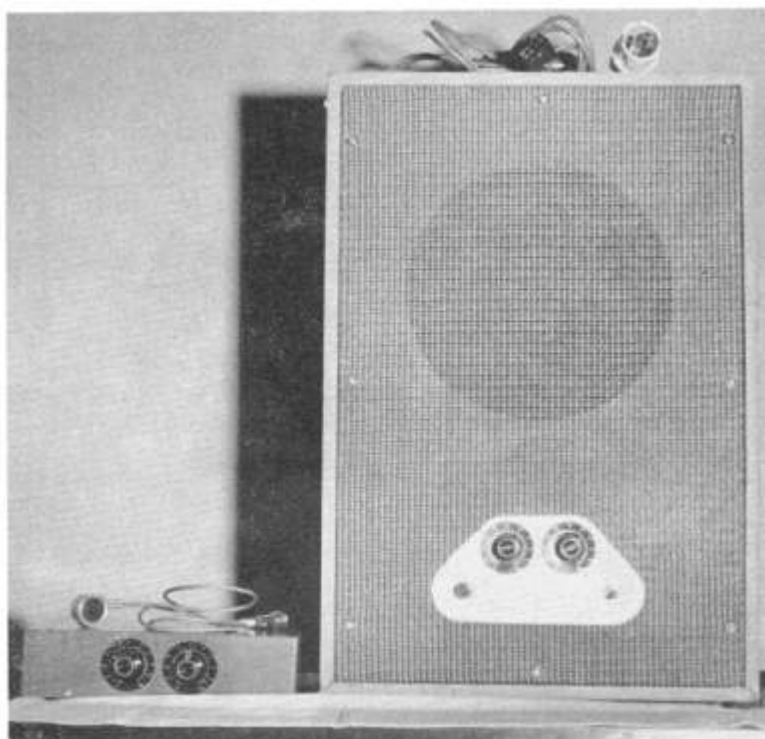
The apparatus has been used at the Finsen Institute, Copenhagen, in the Department of Anesthesia.

LARYNGEAL SPRAY

Dr. Steiner of the University of Chicago has devised a laryngeal spray similar in its essential features to that recently reported in *ANESTHESIOLOGY* (18: 507 (May-June) 1957). His communication arrived in the Journal Office after the report by Severinghaus and DeBacker had been prepared for publication. Dr. Steiner reports that he has used his laryngeal spray since September, 1955, with complete satisfaction.

AMPLIFICATION OF HEART SOUNDS

Dr. Paul Keller, Salt Lake City, Utah, uses a crystal "pick-up" mounted on a firm rubber diaphragm and placed firmly over the heart as a microphone. The heart sounds are amplified by a preamplifier and amplifier and fed to a speaker to the extent that they are audible throughout the operating room. Although the equipment is portable and can be transported from room to room, it is bulky and heavy. They recommend permanent installation of the amplifier and speaker equipment. They hope, however, that a compact portable unit, using transistors, can be developed.



Unit for amplification of heart sounds.