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J. N. LANE

2,393,326

ANESTHETIC MASK

Filed Dec. 29, 1944

FIG. 1.

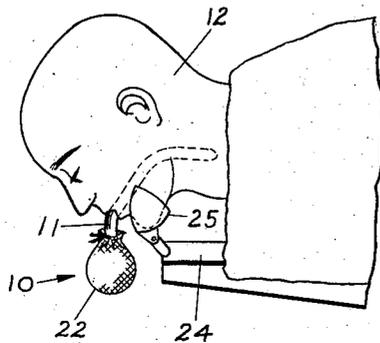


FIG. 2.

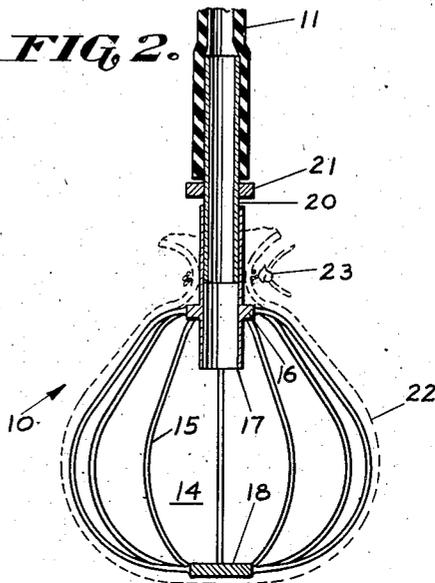


FIG. 4.

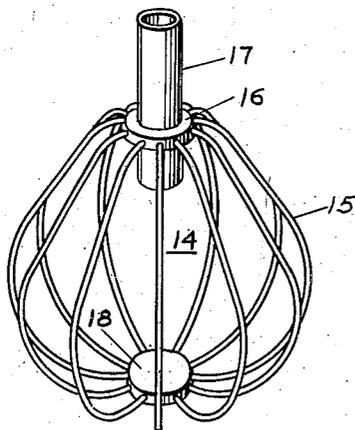


FIG. 3.

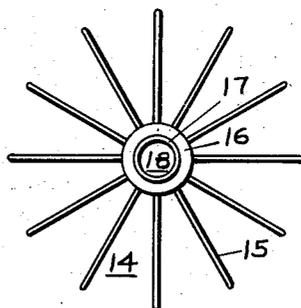
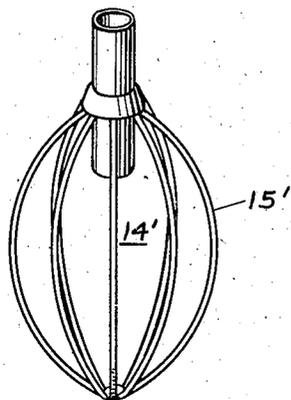


FIG. 5.



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UNITED STATES PATENT OFFICE

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ANESTHETIC MASK

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Application December 29, 1944, Serial No. 570,423

4 Claims. (Cl. 128—201)

(Granted under the act of March 3, 1883, as
amended April 30, 1928; 370 O. G. 757)

This invention relates to an ether or anesthetic mask and has for an object to provide an improved ether or anesthetic mask of a type that facilitates the administration of an anesthetic to a patient in any position, not merely when he is lying on his back, but also when he is lying on a side or lying face down.

A further object of this invention is to provide an anesthetic mask which makes it possible to place the patient in the best possible position for the operation to be performed and to continuously administer the ether or anesthetic in that position with no inconvenience whatsoever to the anesthetist.

With the foregoing and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter set forth, claimed and illustrated in the drawing in which:

Fig. 1 is an elevational view of this invention in use.

Fig. 2 is a sectional view through the mask of this invention.

Fig. 3 is an end view of the mask cage.

Fig. 4 is a perspective view of the mask cage, and

Fig. 5 is a perspective view of a slightly modified form of mask cage.

There is shown at 10 the anesthetic or ether mask of this invention used in connection with an intra-tracheal tube 11 which is inserted into the trachea of the patient 12. The mask 10 consists of a mask cage 14, entirely of metal or other suitable material, consisting of a plurality of spaced-apart wires 15 extending from a flange 16 on a tube 17, the wires 15 being joined together in a plate 18. To facilitate cleaning and to prevent corrosion, the cage 14, if of metal, will preferably be provided with a non-corrosive plating such as chromium plating or other suitable material which is not affected by the ether or other anesthetic that may be used. A nipple 20 having a knurled flange 21 is provided for connecting the cage tube 17 to the intra-tracheal tube 11, the intra-tracheal tube 11 being of a suitable semi-flexible material such as rubber or plastic which will not react with either the anesthetic or the body liquids to which it may be exposed.

A gauze bag 22, made of layers of gauze, is tied around the cage 14, being held by cords 23 if necessary, thus completing the mask, the wires 15 being bowed, as shown, to provide a suitable cubical space within the mask 14.

Obviously, the wires 15 may be shaped somewhat differently than shown, a modified form be-

ing shown at 15' for the mask 14' in Fig. 5. Also, the wires 15 could be made continuous instead of terminating in the plate 18, as shown.

In operation, having been anesthetized to a plane of anesthesia wherein he can tolerate an intra-tracheal tube of suitable size, the patient is placed on the operating table 24 in a suitable position for the operation to be performed, here shown as being face down, in connection with an operation to be performed on the back area of the patient. In such position the patient's chin will be supported in a suitable supporting chin rest 25. The tube 11 is inserted into the patient's trachea, being taped to the face if necessary. The mask 14 having been joined to the tube 11 by means of the nipple 20, and with the gauze 22 in position thereon, the anesthetist administers the ether or other anesthetic by the conventional drip method; that is, he merely drips it on to the gauze bag 22 at a suitable rate and the patient's breathing will cause suction on the bag to deliver air and anesthetic vapor through the tube.

Other modifications and changes in the number and arrangement of the parts may be made by those skilled in the art without departing from the nature of this invention, within the scope of what is hereinafter claimed.

The invention herein described and claimed may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

What is claimed is:

1. An anesthetic mask for administering anesthetic to a patient in any position through an intra-tracheal tube, said mask comprising a cage adapted to be connected to the intra-tracheal tube and gauze means embracing said cage, said cage comprising a plurality of spaced-apart wire members and a tube from which said wire members extend, and nipple means for joining said cage tube to the intra-tracheal tube.

2. An anesthetic mask for administering anesthetic to a patient in any position through an intra-tracheal tube, said mask comprising a cage adapted to be connected to the intra-tracheal tube and gauze means embracing said cage, said cage comprising a plurality of spaced-apart wire members and a tube from which said wire members extend and nipple means for joining said cage tube to the intra-tracheal tube, said gauze means comprising a gauze bag extending about said cage and tie means for securing said gauze bag on said cage tube.

3. An anesthetic mask for administering anesthetic to a patient in any position through an intra-tracheal tube, said mask comprising a cage adapted to be connected to the intra-tracheal tube and gauze means embracing said cage, said cage comprising a plurality of spaced-apart wire members and a tube from which said wire members extend, said cage tube being joined to the intra-tracheal tube.

4. An anesthetic mask for administering anes- 10

thetic to a patient in any position through an intra-tracheal tube, said mask comprising a cage adapted to be connected to the intra-tracheal tube and gauze means embracing said cage, said cage comprising a plurality of spaced-apart wire members and a tube from which said wire members extend, said cage tube being joined to the intra-tracheal tube, said gauze means comprising a gauze bag extending about said cage.

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