No. 766,867. PATENTED AUG. 9, 1904.

G. L. BENNETT.

INHALER FOR ANESTHETICS.

APPLICATION FILED DEC. 7, 1903.

NO MODEL.

Fig. 1.

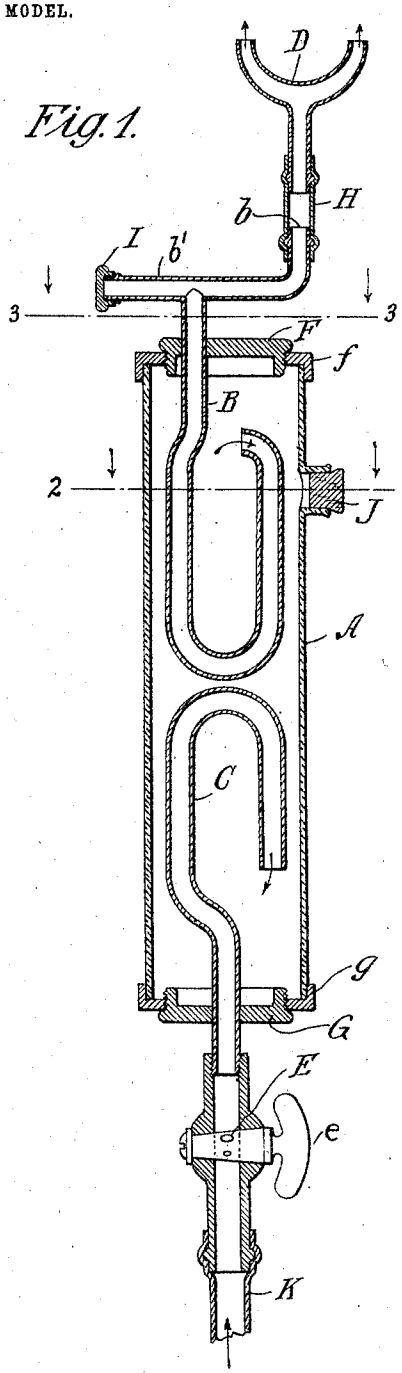


Fig. 2.

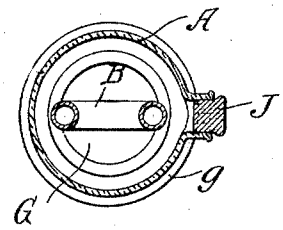
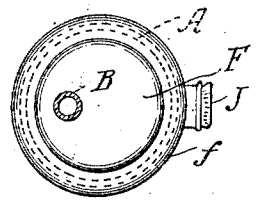


Fig. 3.



Witnesses:
Carl Schafer
Charles C. Bishop

Inventor
George L. Bennett
By Orris A. Bishop Atty.

No. 766,867. Patented August 9, 1904.

UNITED STATES PATENT OFFICE.

GEORGE L. BENNETT, OF CHICAGO, ILLINOIS.

INHALER FOR ANESTHETICS.

SPECIFICATION forming part of Letters Patent No. 766,867, dated August 9, 1904.

Application filed December 7, 1903. Serial No. 184,245. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. BENNETT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Inhalers for Anesthetics, of which the following is a specification.

My invention is related to mechanical devices used in the practice of surgery; and the objects in my improvement are, first, to provide a more convenient and compact evaporator that can be carried in the surgeon's pocket; second, to provide an evaporator that can be held in the hand, the heat of the hand causing the fluids in use to evaporate more rapidly; third, to provide an evaporator that will enable the operator to see at all times just what quantity of fluid he has in it. I attain these objects by a mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of the entire device. Fig. 2 is a sectional view cut on line 3 3. Fig. 3 is a sectional view taken on line 2 2.

Similar letters refer to similar parts throughout the several views.

My invention consists in a cylindrical tube A, of glass or other suitable material, having rims *f g* cemented externally to each end, the rims being provided with screw-threads internally. Caps or plugs F G are inserted in the ends by means of the screw. The small tube *c* is bent in the shape of an elongated hook and fixed centrally in the plug G, extending into the cylinder half its length. The small cock *e* is then fixed to the outer end of the tube, the cock having means for connecting a hose *k*, leading to an air-compressor. (Not shown.) The plug F is fitted with a similar hook-shaped tube B. The tube is fixed eccentrically in the plug, as shown at B, Fig. 3, and extends outwardly about one inch, where it is connected with a transverse tube *b'*. A short distance from the connection it is bent at a right angle parallel with the cylinder. The forked tube D is connected with tube *b* by a small piece of hose H. The end of the tube *b'* is closed by a cap I. The object of this arrangement is to enable the operator to change the nasal fork D from the vertical tube *b* to the horizontal tube *b'*, replacing it with the cap I. This change is required when the patient takes the anesthetic in a recumbent position. When the patient sits in a chair, the device is used in the position shown in drawings.

The transverse tube *b'* has another function. The device being cylindrical, it would roll from the position where it was laid; but the tube being fixed at one side of the cylinder the tube forms a base for it to rest on.

The cylinder A is provided with an opening J in one side, fitted with a suitable stopper, to enable the operator to spill in the anesthetic fluid.

The object of the hook-shaped tubes is to preclude the possibility of spilling the fluid out by accident or otherwise, as there will never be more than one-half ounce of fluid in it at a time. They are fixed longitudinally in the same plane with the cylinder with both open ends on the same side. However, they may be set at a right angle with the transverse tube, so that when the evaporator is resting on the tube and nasal fork they will stand in a vertical position, open ends uppermost.

In operation connect a hose leading from an air-reservoir with the cock on lower end of evaporator, spill into the chamber the quantity of fluid anesthetic required, the patient having been arranged in a reclining or vertical position, and the nasal fork adapted to the position of the patient by changing it from vertical to the horizontal tube, or the reverse, as the case may be. Turn on the air, and it will pass through the first hooked tube and be blown down on or into the fluid, causing it to evaporate and be taken up by the air and forced out through second hooked tube to the nasal fork in the direction shown by arrows, the fork having been adjusted in nostrils of the patient. The flow of air may be regulated by the cock, it being an ordinary three-way cock having three sizes of discharge-ports. (Shown at E, Fig. 1.)

As the operator knows exactly the quantity of anesthetic fluid he has in the evaporator and the relative percentage of fresh air he can control, the danger of a collapse of patient is

reduced to a minimum. However, he should exercise the same caution that he would in using any other process. When the patient is fully unconscious, the flow of air can be cut down to just a sufficient quantity to keep him in that condition.

Having described my invention and its operation, what I claim as my invention, and wish to secure by Letters Patent, is—

The combination in an anesthetic-fluid evaporator of the cylindrical reservoir having rims and screw-plugs fixed at each end and means for filling said cylinder, the hook-shaped tubes, one fixed centrally in the lower plug and one fixed eccentrically in the top plug, said tubes extending into the said cylindrical reservoir, the transverse tube having a longitudinal, extension, the movable nasal fork, the cock connected with the projecting end of the tube C and means for connecting a hose substantially as described.

GEORGE L. BENNETT.

Witnesses:
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M. E. GREGG.