No. 712,643. Patented Nov. 4, 1902.

A. H. BISHOP.

DEVICE FOR ADMINISTERING ANESTHETICS.

(Application filed Aug. 30, 1902.)

(No Model.)

Fig. 1.

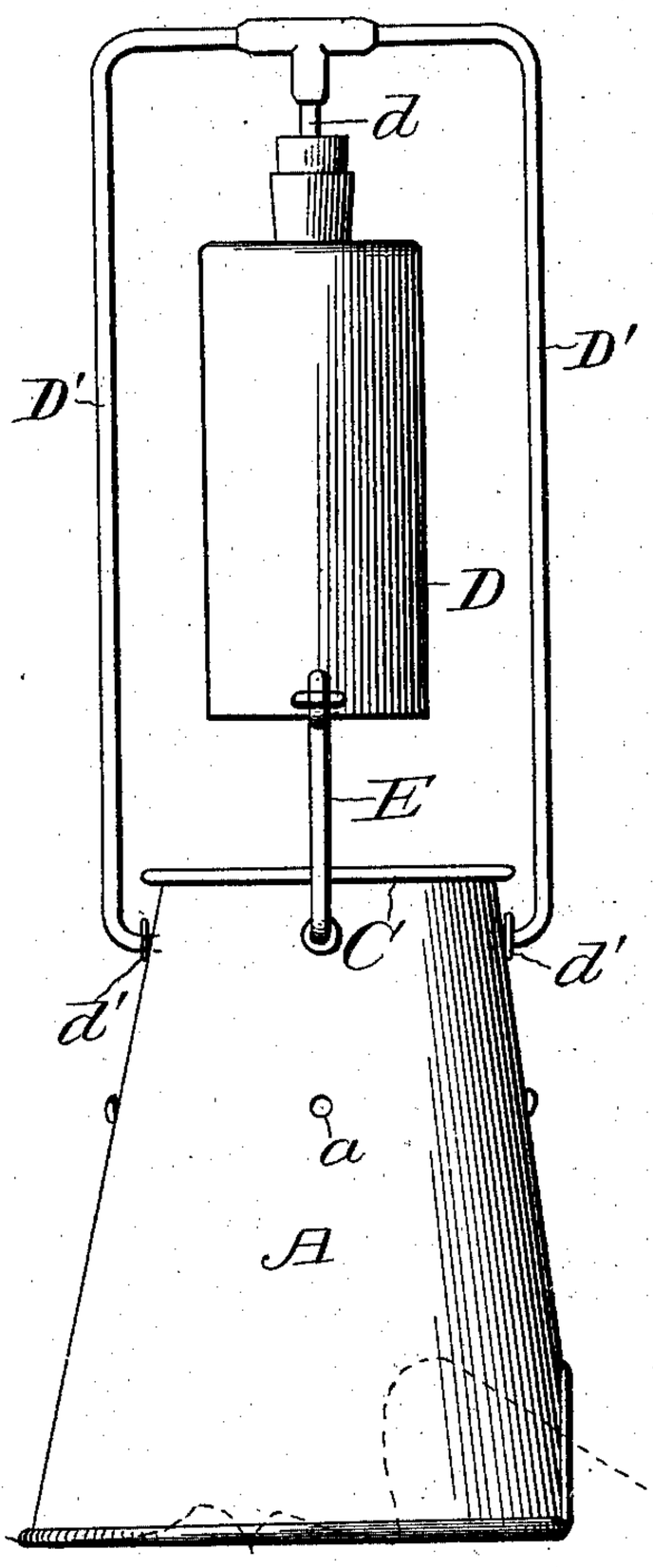


Fig. 2.

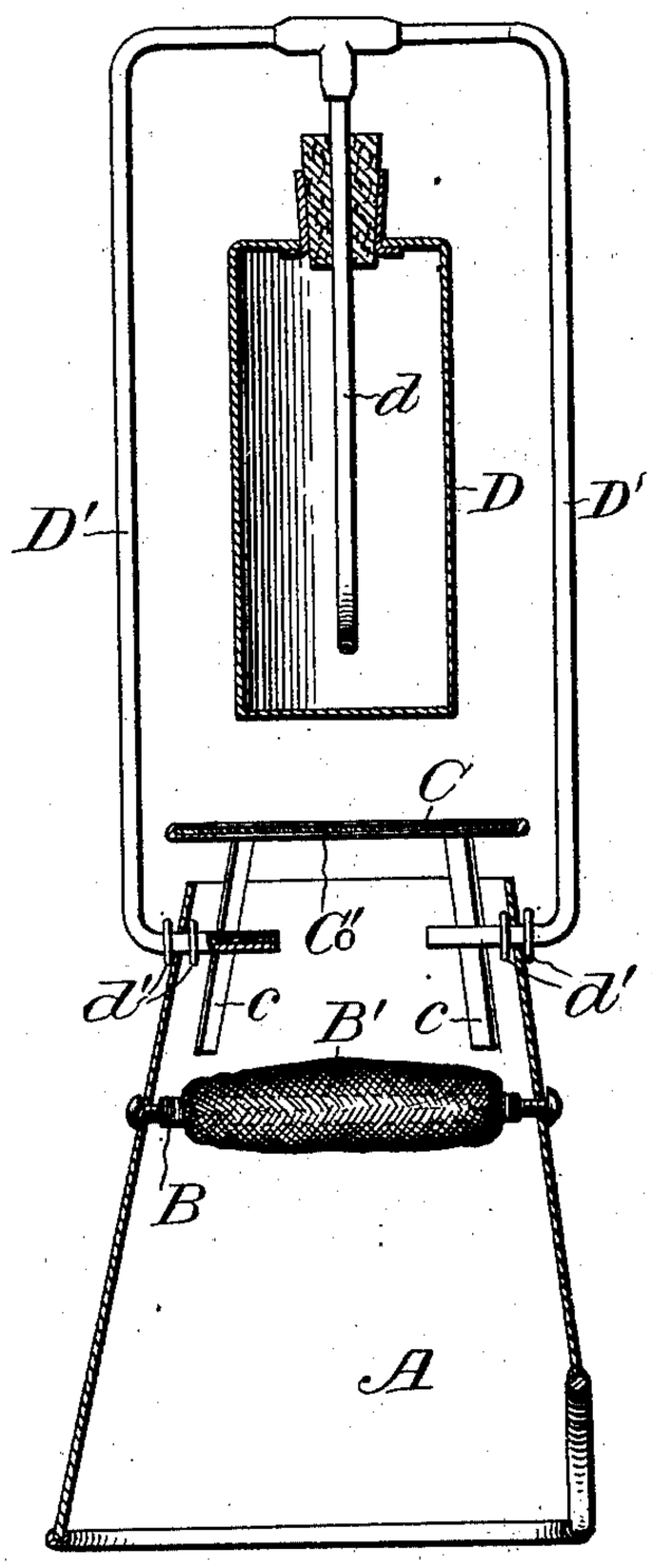


Fig. 3.

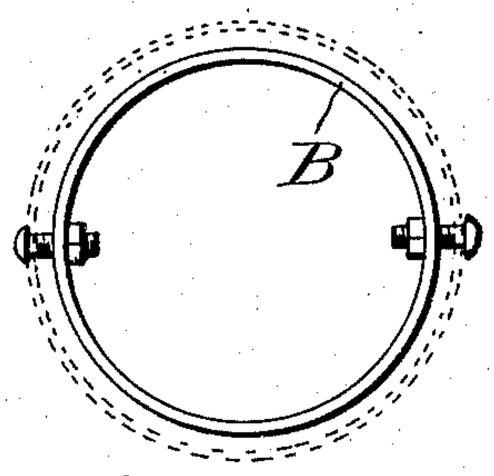
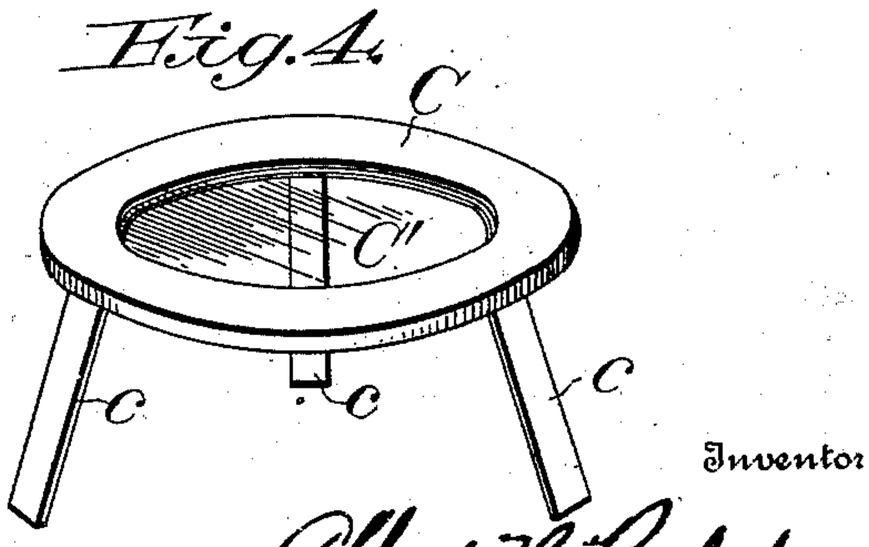


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

ALBERT H. BISHOP, OF FORT DODGE, IOWA.

DEVICE FOR ADMINISTERING ANESTHETICS.

SPECIFICATION forming part of Letters Patent No. 712,643, dated November 4, 1902.

Application filed August 30, 1902. Serial No. 121,686. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. BISHOP, a citizen of the United States, residing at Fort Dodge, in the county of Webster and State of Iowa, have invented certain new and useful Improvements in Devices for Administering Anesthetics; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in devices for administering anesthetics, as ether; and the invention consists in the construction and combination of the parts constituting the same, as will be hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of an instrument or device for administering ether or other anesthetic made in accord with my invention. Fig. 2 is a vertical section. Fig. 3 is a plan view of the pad-holder, and Fig. 4 a perspective view of the covering-plate for the hood.

Referring to the drawings, which illustrate one embodiment of my invention, A designates a hood or mask, which is made up of any suitable rigid material, and the same may be of any suitable shape, so that it will in use fit over the nose and mouth of the patient. The hood, as illustrated, is open at its lower end and is recessed for the bridge of the nose and is in the form of a truncated cone. The hood may be formed out of hard rubber, papier-mâché, or of metal and is provided with perforations *a a* to admit the passing therethrough of pins or bolts which engage a band or ring B, which carries a pad of gauze or other light-woven material. The ring and pad are preferably of less diameter than the diameter of the hood opposite the point of attachment, and the gauze covering for the ring may be secured thereto in any suitable manner, and upon the pad B′ the anesthetic is dropped. The pad B′ is of such construction and material that it will absorb the liquid anesthetic and permit air to pass through and about the pad, so that the volatile elements of the anesthetic will be mixed with air before being inhaled by the patient.

The upper end of the hood A has removably attached thereto a plate or disk C, consisting, preferably, of a metallic rim which carries a transparent disk C′, and to the rim there are attached spring-arms *c c*, which are shaped to frictionally engage the inner sides of the hood and maintain the plate C in such position as it may be placed, and it is obvious that by the construction shown the plate may be adjusted to and from the upper edge of the hood to admit more or less air to and about the pad.

Ether or other similar anesthetic is placed in a container D, which is preferably made of metal or other material which is a good conductor of heat, such vessel having at its upper end a conical neck for the reception of a stopper, through which is passed a tube *d*, the lower end being positioned near the bottom and to one side of the container. The upper end of this tube *d* is connected by a coupling with side tubes D′, which extend from the coupling outward and downward, the lower ends of the side tubes D′ being bent inward, so that they can pass through perforations or apertures, which are positioned opposite each other near the upper end of the hood. The ends of the side tubes extend inward to be positioned above the pad. The tubes D′ D′ may have run therethrough a string of absorbent material to partially fill the tubes to insure a dropping of the liquid from the ends of the tubes upon the pad rather than a constant flow thereon. The tubes adjacent to their ends and on each side of the hood may be provided with washers *d′*.

The ether-container D is connected to the hood by means of hooks or bars E, which are pivotally attached to the hood at one end and engage with staples or eyes attached near the bottom of the container, and said hooks or bars E are positioned at right angles with the tubes D′ and in conjunction therewith will maintain the container above the hood.

By virtue of the construction set forth the pad may be readily removed to change the gauze or absorbent material of which it is made up, the top may be adjusted to cut off

or regulate the supply of air above the pad, the siphoning of the liquid anesthetic may be watched through the transparent top, and the flow may be regulated by grasping or covering more or less of the container by the hand, as the heat thus applied will by reason of the volatile nature of the ether cause a pressure in the container above the liquid. To start the siphoning or dropping of the anesthetic upon the pad, it is only necessary for the operator to grasp the container with his hand, and in a short time the pressure within the container will start the flow. The shape of the hood and the construction of the parts may be varied from what is shown in the drawings. The container D may be swung to a horizontal position, and when so placed the end of the tube *d*, owing to the bend therein, will be above the level of the liquid, and thus stop the flow.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device for administering anesthetics, the combination of a hood, a pad removably supported within the same, a partially-transparent closure or top adjustably attached to the upper end of the hood, a container for the anesthetic carried by the hood, supply-tubes between the container and the hood the discharge end of the tubes being positioned above the pad, substantially as shown and for the purpose set forth.

2. In a device for administering anesthetics, the combination of a hood, a metal container maintained above the same, a pipe which enters the container, side tubes connected with the pipe the lower ends of the tube entering the hood, a pad supported by the hood and a cover or top adjustably attached to the open upper end of the hood, substantially as shown and for the purpose set forth.

3. In a device for administering anesthetics, the combination of a metal container for the anesthetic, two siphon-tubes connected to a pipe which enters the container, a hood having apertures on opposite sides through which the siphon-tubes enter the hood, a pad maintained below the discharge ends of the siphon-tube and an adjustable top for the hood, substantially as shown.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses.

ALBERT H. BISHOP.

Witnesses:
M. F. NEALY,
J. E. DOWNEY.