

(No Model.)

M. G. MELVIN.
NASAL DOUCHE.

No. 555,107.

Patented Feb. 25, 1896.

Fig. 1.

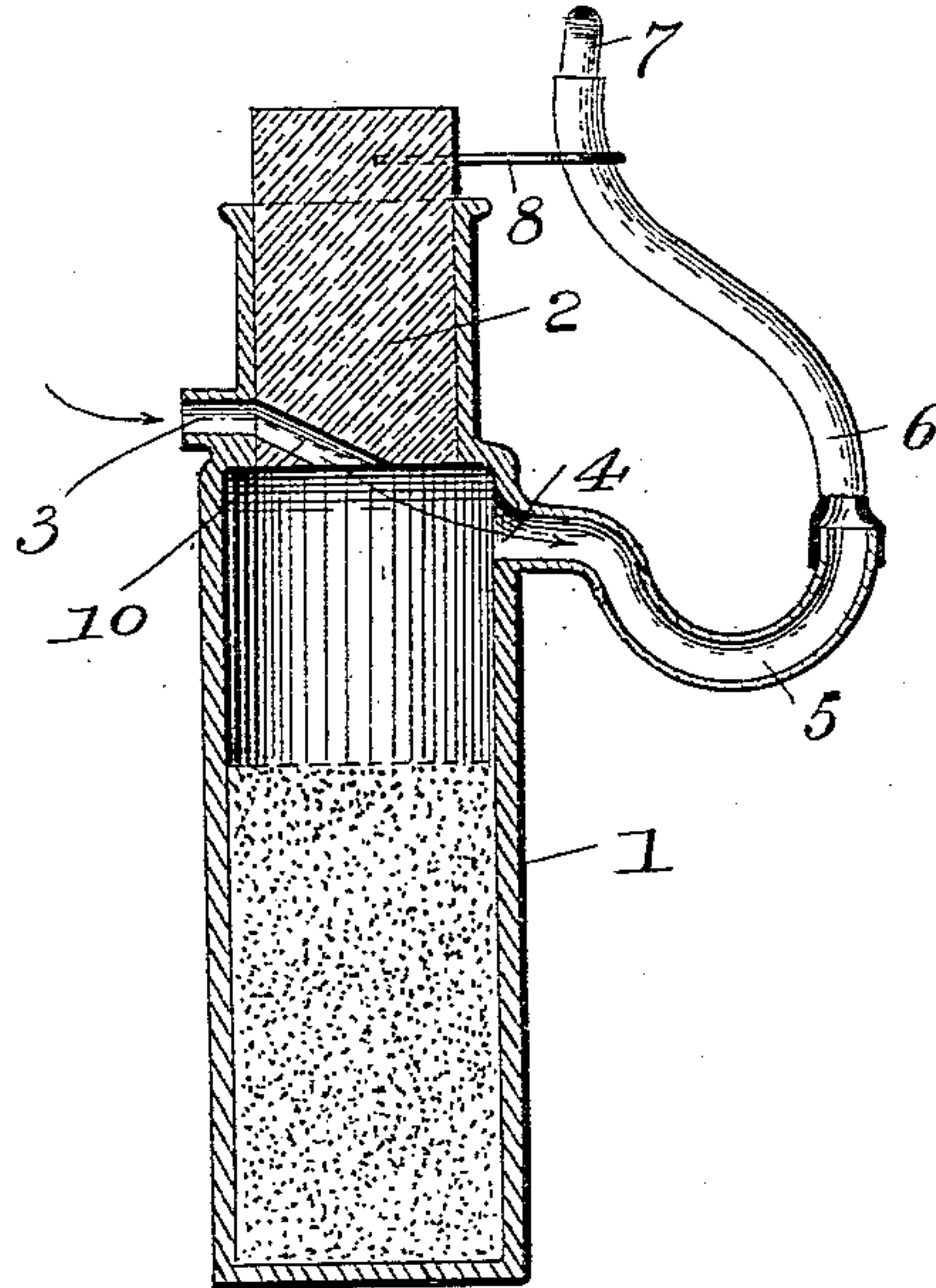
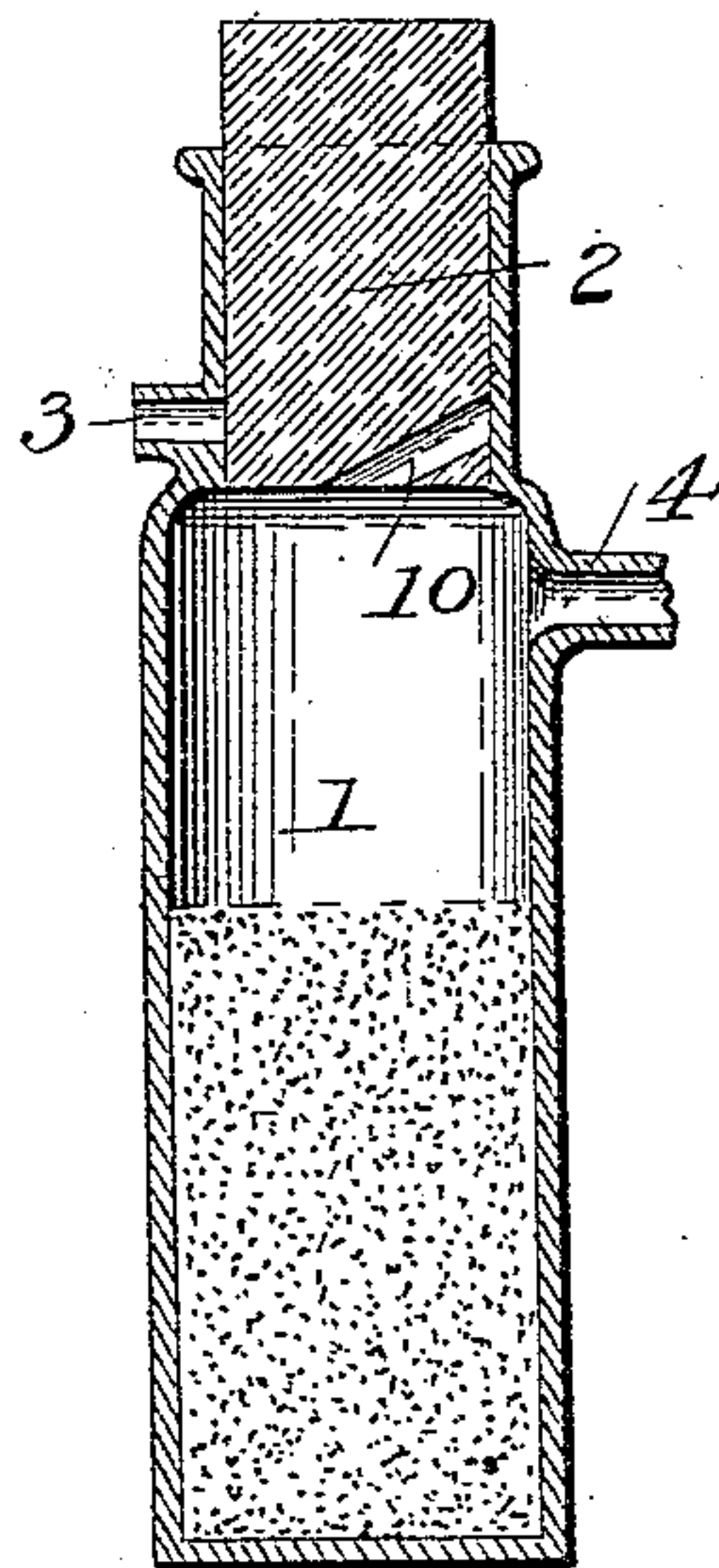


Fig. 2.



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NASAL DOUCHE.

SPECIFICATION forming part of Letters Patent No. 555,107, dated February 25, 1896.

Application filed February 9, 1895. Serial No. 537,806. (No model.)

To all whom it may concern:

Be it known that I, MARK G. MELVIN, a citizen of the United States, residing at Archibald, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Container and Insufflator; 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.

My invention relates to medical appliances, and more particularly to that class which are known as "insufflators" and are used for propelling and spreading medical powders or liquids through the nasal and post-nasal passages and membranes of the throat, and it has for its object to provide such a device as will be compact, simple, and efficient; and it consists in the construction and combination or parts of the same, as will be hereinafter more particularly set forth.

In the accompanying drawings, Figures 1 and 2 are longitudinal sectional views of a bottle or vessel embodying my invention.

1 indicates the container, as a bottle, which may be of any desired form or construction, and in the mouth of which is fitted a cork or stopper 2. On one side of the bottle, preferably at the neck, so as to be covered by the cork, is located an opening 3, and on another portion of the bottle, below the bottom of the cork, is another opening 4, from which extends a suitable tube or receptacle 5, which is substantially U-shaped and is preferably made integral with the bottle. Extending from the outer end of this receptacle is a flexible tube or conduit 6, the free end of which may be provided with any suitable rigid portion 7 for being inserted into the nose when in use.

The flexible portion of the conduit may be of any suitable length and is preferably held adjacent the mouth of the bottle by means of a support 8, projecting from the side of the cork. If desired, a short tube (not shown) may be secured to the side of the bottle at the first-mentioned opening, although this is not absolutely necessary. I also prefer to provide the inner end of the cork with a pas-

sage 10, which, when the cork is in a certain position, (see Fig. 1,) will register with opening 3 and permit of the entrance of air into the bottle and from there into the tube or receptacle 5 upon the opposite side. When not in use, all that is necessary to close the opening and prevent the escape of the contents of the bottle is to partially rotate the cork, so as to bring a solid portion over said opening. (See Fig. 2.)

When it is desired to use my invention, the vessel is partly filled with the material to be used, and the cork is inserted so as to cover the opening 3. The vessel is then inverted and returned to its original position, when it will be found that a portion of the contents has escaped into the curved extension. By making the extension of the proper size the amount of material that escapes from the vessel at each inversion will be sufficient for one dose or application. The cork is then partially rotated, so as to bring the passage 10 to register with the opening 3, which will give a free passage of air into and through the upper portion of the vessel above the contents. The end of the tube or flexible portion is then inserted into the nose and a quick inspiration of breath is taken, which will cause a current of air to pass into the vessel through the opening, which will carry the contents of the curved portion or extension up into the nose and the post-nasal passages and membranes of the throat. If it is desired to make more than one application, the tube is removed from the nose, the cork turned part way around, the vessel again inverted, the curved extension partially filled, the cork again rotated to open the passage, and the above process repeated. The tube 6 may be drawn through the support 8 when being used, or it may be removed entirely therefrom.

If desired, the entire insufflating apparatus may be attached to a cork, and thereby fitted to any ordinary vessel or bottle; but I prefer to construct it as above described.

From the foregoing description it will be seen that my invention comprehends a combined container and insufflator which is very compact and much more convenient than where there is a bulb to cause a current of

air to pass into the passages of the nose and throat. It is also much more efficient than where the material is thrown into the passages by a current of air blown through the mouth, as in expiration a certain amount of air is forced through the nasal passages, and, meeting the material, retards its progress, whereas by inspiration the material is drawn directly onto the parts to be medicated and receives no check from opposing currents, and then the process is perfectly natural.

Having described my invention, I claim—

1. The herein-described container and insufflator, comprising a vessel or receptacle having an upper mouth and provided with an air-inlet opening in its casing adjacent said mouth, and having an outlet-opening opposite said inlet-opening and on a plane below the latter, an approximately U-shape tube formed integral with said vessel or receptacle and leading from said outlet-opening, said tube being adapted to receive and retain a small portion of the contents of said vessel or receptacle, and a stopper working in the mouth of said vessel or receptacle and de-

signed to act as a valve for said inlet-opening, substantially as set forth.

2. The herein-described combined container and insufflator, comprising a vessel or receptacle having an upper mouth and provided with an air-inlet opening formed in its casing adjacent said mouth and having an outlet-opening opposite said inlet-opening and on a plane below the latter, an approximately U-shape tube formed integral with said vessel or receptacle and leading from said outlet-opening, said tube being adapted to receive and retain a small portion of the contents of said vessel or receptacle, and a stopper working in the mouth of said vessel or receptacle and provided with a hole or opening designed to register with said inlet-opening and forming a valve therefor, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MARK G. MELVIN.

Witnesses:

JOHN A. FOOTE,

JAMES O'ROURKE.