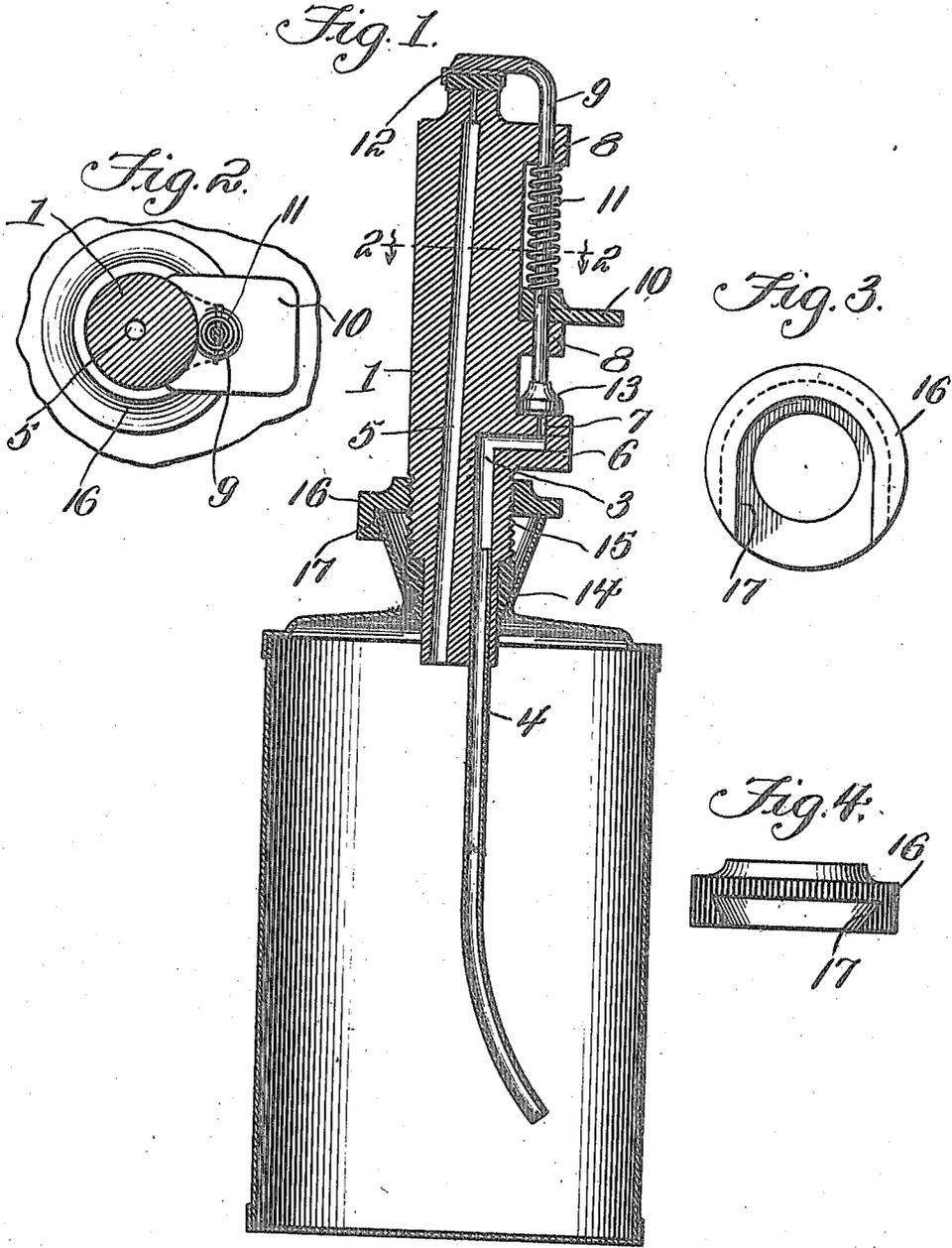


E. GAMBLE.  
ETHER DROPPER.  
APPLICATION FILED SEPT. 29, 1916.

1,237,773.

Patented Aug. 21, 1917.



Witness  
J. L. Wright  
L. Wilson

Inventor  
Ellsworth Gamble  
534 Victor J. Evans  
Attorney

# UNITED STATES PATENT OFFICE.

ELLSWORTH GAMBLE, OF WAVERLY, NEW YORK.

## ETHER-DROPPER.

1,237,773.

Specification of Letters Patent. Patented Aug. 21, 1917.

Application filed September 29, 1916. Serial No. 122,928.

*To all whom it may concern:*

Be it known that ELLSWORTH GAMBLE, a citizen of the United States, residing at Waverly, in the county of Tioga and State of New York, have invented new and useful Improvements in Ether-Droppers, of which the following is a specification.

This invention relates to ether droppers especially adapted to be used for application to cans containing the same and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a dropper of the character indicated which is of simple and durable structure and which when applied will permit the ether to drop freely from the container without waste. Also when the device is not in use means is provided for automatically and effectually closing the same whereby the container may be thrown about, overthrown or carried in the satchel of a physician without danger of the ether leaking from the container.

With these objects in view the dropper comprises a hollow body having a plug inserted in one end thereof, said plug being provided with a port and a vent pipe. The plug is adapted to close the opening of the said container and a nut is screwed upon the body and is adapted to engage the mouth of the container whereby the device is securely held in position thereon. The said body is provided at one end with a vent through which the ether is adapted to flow and at its side portion with a vent adapted to admit air into the body and from the body the said air may pass into the container through the pipe when the device is in use. A spring pressed rod is slidably mounted upon the body and carries valves which are adapted to normally close the vents of the body.

In the accompanying drawings:—

Figure 1 is a longitudinal sectional view of the ether dropper;

Fig. 2 is a transverse sectional view of the same cut on the line 2—2 of Fig. 1.

Fig. 3 is an under plan view of a nut used in conjunction with the dropper.

Fig. 4 is an edge view of the same.

The ether dropper comprises a body 1 which is provided with a passage 5 extending through the same from end to end thereof. The said body 1 is further provided with a vent 3 which is located at one side of

the passage 5 and a tube 4 is connected with the said vent 3. The upper end of the vent 3 enters an extension 6 of the said body 1 and the said extension is provided with a vent 7 which communicates with the vent 3. Spaded ears 8 are provided upon the body 1 and a rod 9 is slidably mounted in the said ears. A handle 10 is mounted upon the rod 9 at points between the ears 8 and a spring 11 bears at one end against the upper ear 8 and at its other end against the said handle 10. A valve 12 is carried at the upper end of the rod 9 and is adapted to close against the upper end of the passage 5 in the body 1. A valve 13 is carried at the lower end of the rod 9 and is adapted to close against the upper end of the vent 7. The spring 11 is under tension with a tendency to simultaneously hold the valves 12 and 13 closed against the passage 5 and the vent 7. However when the rod 9 is moved in an upward direction by using the handle 10, the said valves 12 and 13 are removed from the passage and vent. The lower portion of the body 1 is externally screw threaded as at 15 and a nut 16 engages the said thread. The nut 16 is provided at its underside with a recess 17 adapted to fit over the spout of a container as illustrated in Fig. 1 of the drawing. The lower portion of the body 1 is provided with a washer 14 which is adapted to fit within the spout of the container. When it is desired to use the ether the container is inverted whereby the ether may flow into and through the passage 5. At this time the operator has manipulated the handle 10 whereby the rod 9 is moved and the valve 12 is carried away from the end of the passage 5 and the valve 13 away from the end of the vent 7, consequently as the ether flows out of the container through the passage 5 air may enter the container through the vents 7 and 3 and the tube 4. When a sufficient quantity of ether has been drawn from the container pressure is removed from the handle 10 whereby the tension of the spring 11 comes into play and the rod 9 is moved longitudinally thus closing the valves 12 and 13 against the passage and vent and effectually sealing the same and thus preventing leakage of the ether from the container.

Consequently air may flow into the container through the vents 7 and 3 and pipe 4. Thus the ether may flow from the con-

tainer through the vent 5. When a sufficient quantity of ether has been withdrawn from the container, pressure is removed from the lug 10 whereby the tension of the spring 11 comes into play and the rod 9 is moved longitudinally thus closing the valves 12 and 13 against their respective vents and the device is effectually sealed which prevent the leakage of the ether.

10 From the foregoing description taken in connection with the accompanying drawing, it will be seen that an ether dropper of simple and durable structure is provided and that the same when not in use for dispensing the ether is effectually sealed and will prevent the leakage of the ether from the container notwithstanding the fact that the said container may be overturned or subjected to rough handling or use or carried

20 in the satchel of a physician.

Having described the invention what is claimed is:—

An ether dropper comprising a body having a passage extending through the same and provided at its side with an extension, there being a vent portion through the body and the said extension, said body also having at its side spaced ears, a rod slidably mounted in the ears and carrying at its ends valves adapted to close against the passage and vents respectively, a handle mounted upon the rod at a point between the ears and a spring bearing at one end against one of the ears and at its other end against said rod and being under tension with a tendency to normally hold the valves in closed positions against the passage and vents and means for attaching the body to a container.

In testimony whereof I affix my signature.

ELLSWORTH GAMBLE.