

(No Model.)

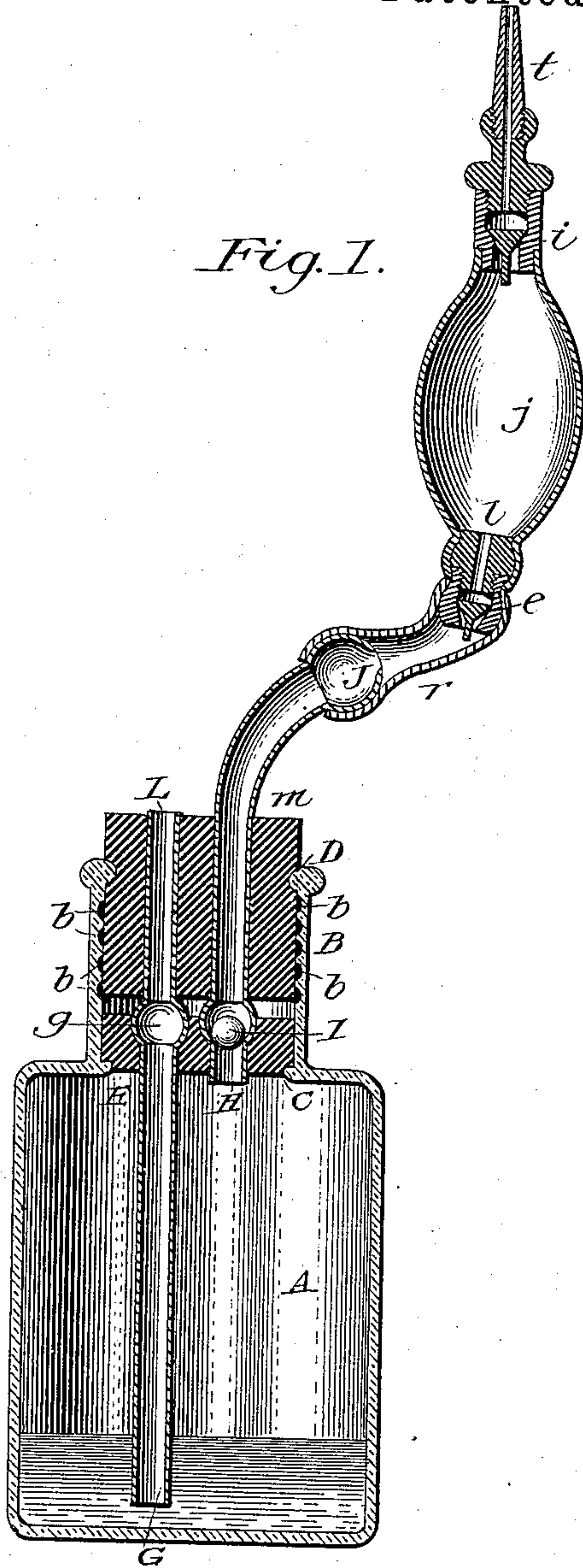
J. F. POND.

INHALER.

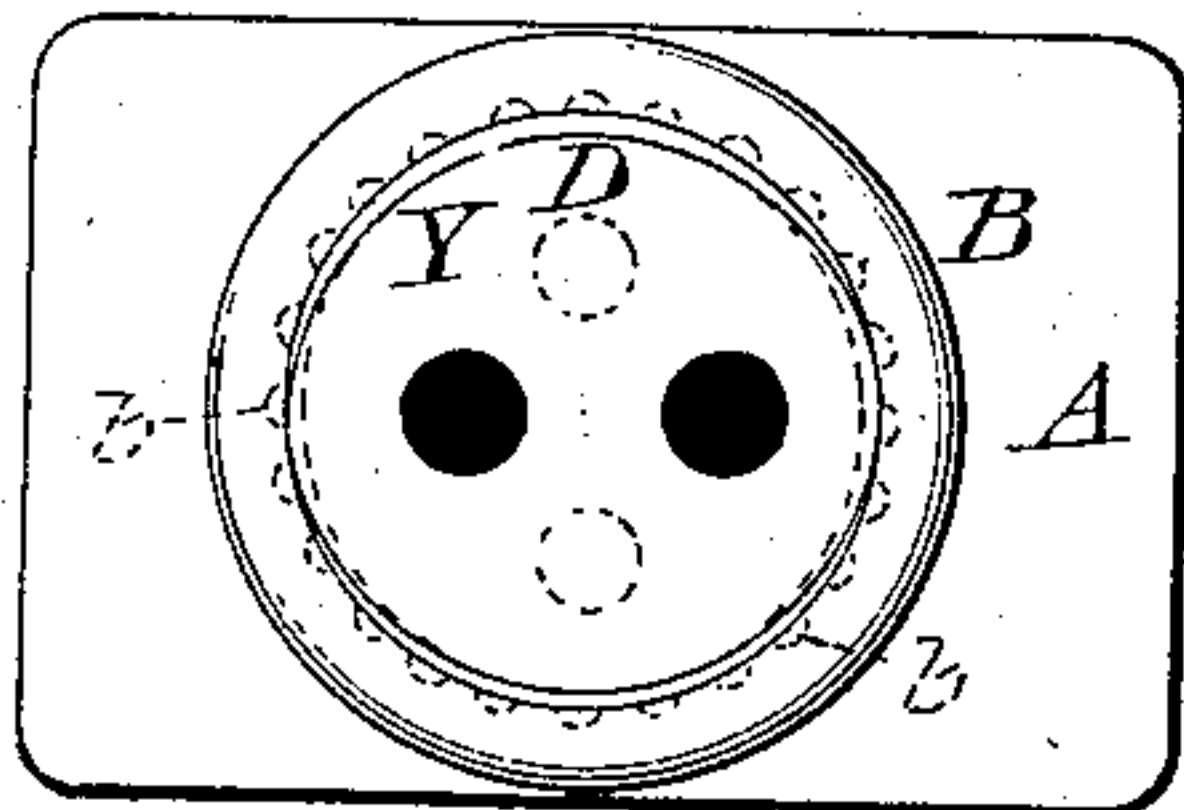
No. 324,161.

Patented Aug. 11, 1885.

*Fig. 1.*



*Fig. 2.*



Witnesses:  
*James W. Wilson*

Inventor.  
*Joseph F. Pond*

# UNITED STATES PATENT OFFICE.

JOSEPH F. POND, OF CLEVELAND, OHIO.

## INHALER.

SPECIFICATION forming part of Letters Patent No. 324,161, dated August 11, 1885.

Application filed April 3, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH F. POND, of the city of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and valuable Improvement in a Combined Inhaler and Injector; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

My invention relates to a combined vapor injector and inhaler as a surgical or medicinal appliance; and the novelty consists in the construction, arrangement, and adaptation of parts, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

The invention is fully illustrated in the accompanying drawings, which form a part of this specification, and in which Figure 1 is a central longitudinal section, showing the entire device, and Fig. 2 is a top plan view in dotted lines, showing the upper cork as having been given a quarter turn to break connections between the tubes.

Referring to the drawings, A designates the bottle or vessel which holds the medicament which is to be vaporized, and it is provided with a neck, B, having internal serrations, *b*, an internally-projecting ledge, C, at or near the base of the neck, and a similar ledge, D, at or near the mouth of the same. The ledge C may be of any desired form or configuration, and is designed to prevent the inner cork, E, from being accidentally forced into the body of the bottle. This inner or stationary cork, E, is permanently provided with a long tube, G, designed to have its lower end immersed in the liquid; and it has a bulb portion, *g*, which prevents it from being forced through the cork. In this cork also is permanently located a short pipe, H, the lower end of which is designed to be at all times above the surface of the contained liquid, and it is provided with a globular valve-seat and ball-valve, I. This ball-valve I, thus located, serves at all times to prevent a back-flow, which would force the liquid through the tube in a reverse direction, either by the

coughing of the person inhaling or by the faulty operation of an upper valve when the device is being employed as an injector.

Y designates the upper cork, which is held against displacement by the serrations *b* and ledge D, and it is provided with a short tube, L, and a mouth-tube, J. The upper portions of the tubes G H extend slightly above the inner cork, E, and the tubes J L in the upper cork are arranged to register with these extending ends when the upper cork is in operative position.

When the device is not in operation and it is desired to prevent the evaporation of the liquid, it is only necessary to give the upper cork a quarter turn and disengage the tubes. The flexible bottom of the upper cork thus effectually closes the mouths of both tubes G and H.

The tube J has an enlargement at its upper extremity, and a flexible tube, *r*, serves to connect said tube J with a flexible bulb, *j*, in the lower metal portion of which is the valve *e* and passage *l*, and in the upper portion the passage *i* and valve *k*, as these bulbs are ordinarily constructed. This bulb is provided with interchangeable nozzles *u t* to correspond with the services required.

As shown in Fig. 1, the device is arranged as an injector, and is of importance in injecting medicated air into the bladder to afford something for the muscles of the abdomen to work upon in order to expel the sediment which is frequently left in the bladder after urinating.

The flexible tube *r* is readily applied to the mouth-piece and as readily disengaged.

Having thus described the invention, what I claim as new is—

1. The cork E, having pipes or tubes G H, the tube H, having valve I, their upper portions extending slightly above the upper portions of said cork E, and each having enlargements, combined with the movable cork Y, having openings L J, arranged to register with the pipes G H.

2. In an inhaler and injector, the tube-supporting cork E, having tubes G H, the tube H, having ball-valve I, the movable cork Y, having mouth-tube J, in combination with the bottle A, having ledges C and D, the bulb



*j*, and connecting-tube *r*, for the purposes set forth.

3. The combination of the cork E, provided with tubes G H, valve I, each tube having  
5 an enlargement at its upper end, the cork Y, provided with tubes L and J, the latter being provided with an enlargement at its upper end, and the bulb *j*, with valves and inter-

changeable nozzle connected by the flexible tube *r* to the tube J, all as and for the purpose set forth.

JOSEPH F. POND.

Witnesses:

H. A. WISE,  
GEO. H. BURWELL.