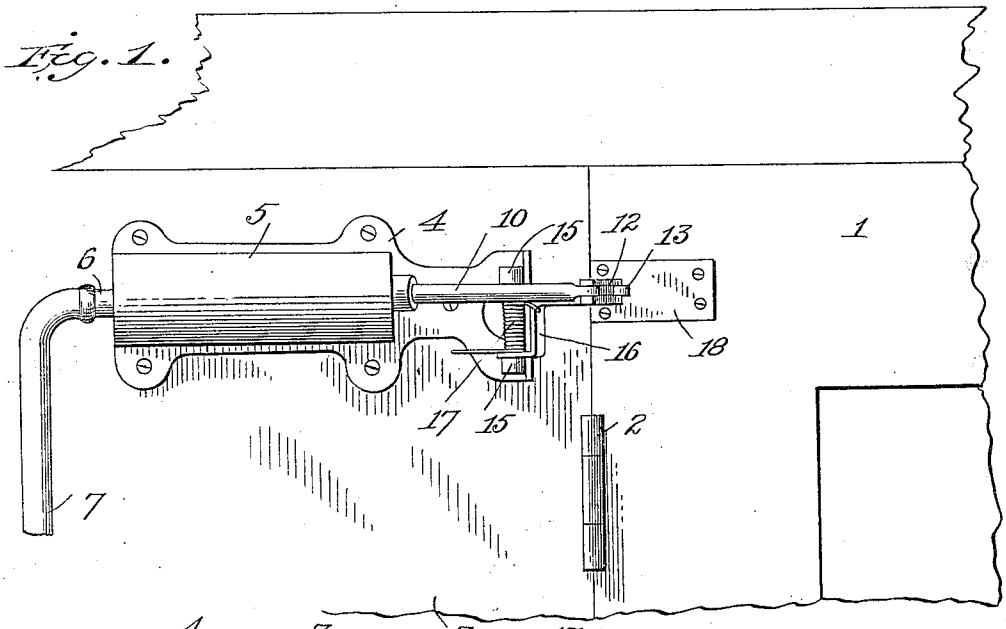
No. 801,477. PATENTED OCT. 10, 1905.

W. H. ROSE.

DOOR OPERATED AIR PUMP FOR ATOMIZERS.

APPLICATION FILED JULY 21, 1905.

Fig. 1.



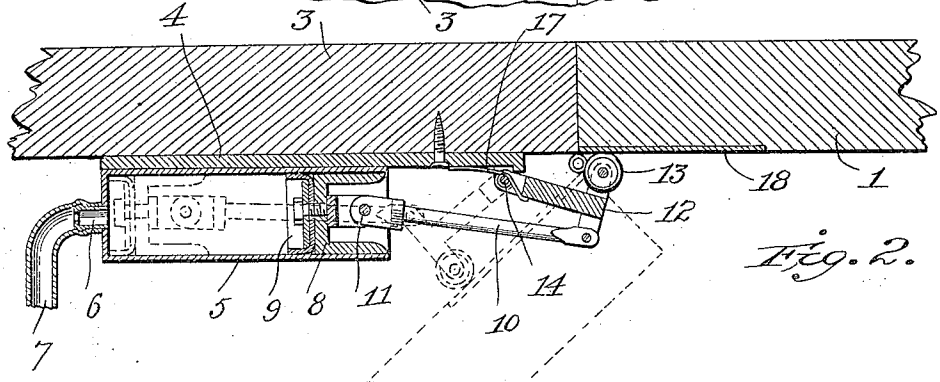


Fig. 2.

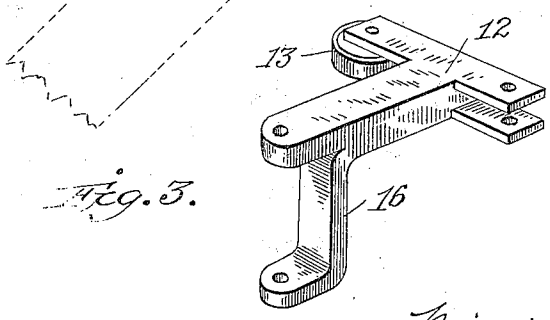


Fig. 3.

Witnesses

Edwin L. Gewecke

Arthur L. Bryant

Inventor

William H. Rose

By Foster Freeman & Watson

Attorneys

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM H. ROSE, OF BALTIMORE, MARYLAND.

DOOR-OPERATED AIR-PUMP FOR ATOMIZERS.

No. 801,477. Specification of Letters Patent. Patented Oct. 10, 1905.

Application filed July 21, 1905. Serial No. 270,660.

To all whom it may concern:

Be it known that I, WILLIAM H. ROSE, a citizen of the United States, and a resident of Baltimore, Maryland, have invented certain new and useful Improvements in Door-Operated Air-Pumps for Atomizers, of which the following is a specification.

This invention relates to an air-pump which is automatically operated upon the opening or closing of a door to supply air under pressure to an atomizer, the object being to spray a deodorizing or disinfecting fluid in toilet-rooms or like places.

The invention will be described in detail in connection with the accompanying drawings, in which—

Figure 1 is an elevation of the upper portion of a door and door-frame, illustrating my improved air-pump in working position. Fig. 2 is a horizontal section of the same through the middle of the pump, and Fig. 3 is a detail view of the pump-operating lever.

Referring to the drawings, 1 indicates a door swinging upon hinge 2. Fixed upon the wall or door-casing 3 is a base-plate 4, to which is connected the air-pump and its operating devices. The pump comprises a cylinder 5, having one end open and the other end closed and provided with an outlet 6, to which is connected a pipe or hose 7 for conducting air to the atomizer. Within the cylinder is a piston 8, having a cup-leather 9 or other suitable device for preventing escape of air past the piston. A pitman or link 10 is connected to the piston by a suitable pivot-pin 11. The outer end of the pitman 10 is pivoted to one arm of a T-shaped lever 12. The opposite arm of the lever carries an antifriction-roller 13, while the stem or longer arm of the lever is pivotally mounted on a pin 14, carried by lugs 15 on one end of the base-plate 4. The lugs 15 are some distance apart, and the stem of the lever 12 is bifurcated, as shown at 16, and connected to the pivot-pin at opposite ends thereof adjacent to the lugs 15. A spring 17 constantly tends to throw the lever 12 away from the pump and causes its roller 13 to bear upon the door. A track-plate 18 is preferably provided for the roller to run on to prevent injury to the door and to cause the roller to run smoothly.

The operation is as follows: When the door is closed, the parts are in the position shown in full lines in Figs. 1 and 2. As the door opens the roller travels outward upon the plate 18, and the several movable parts of the pump finally assume the position shown in dotted lines in Fig. 2. The air contained in the pump is thus forced out through the pipe or tube 7 operating the atomizer. (Not shown.)

It will be noted that the parts of my improved pump are simple and strong and not likely to get out of order. The spring 17 should have sufficient strength to withdraw the piston upon the closing of the door. If desired, it may be made stronger and adapted to effect the closing of the door automatically.

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

1. In a door-operated air-pump, the combination with a door, of a base-plate fixed to the wall or casing adjacent to the door, a pump-cylinder connected to said base-plate and having an air-outlet, a piston in said cylinder, and an operating device for the piston comprising a T-shaped lever pivotally connected to the base-plate, a link connecting one arm of said lever with the piston, and a roller upon another arm of said lever adapted to engage with a door, substantially as set forth.

2. In a door-operated air-pump, the combination with a door, of a base-plate fixed to the wall or casing adjacent to the door, a pump-cylinder connected to said base-plate and having an air-outlet, a piston in said cylinder and an operating device for the piston comprising a pin mounted in the base-plate, a bifurcated T-shaped lever hinged on said pin, a spring arranged to press the lever toward the door, a roller upon one arm of said lever adapted to engage with the door, and a link connecting the other arm of said lever with the piston, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. ROSE.

Witnesses:
BERNARD A. SCHMITZ,
PHILIP ROLLE.