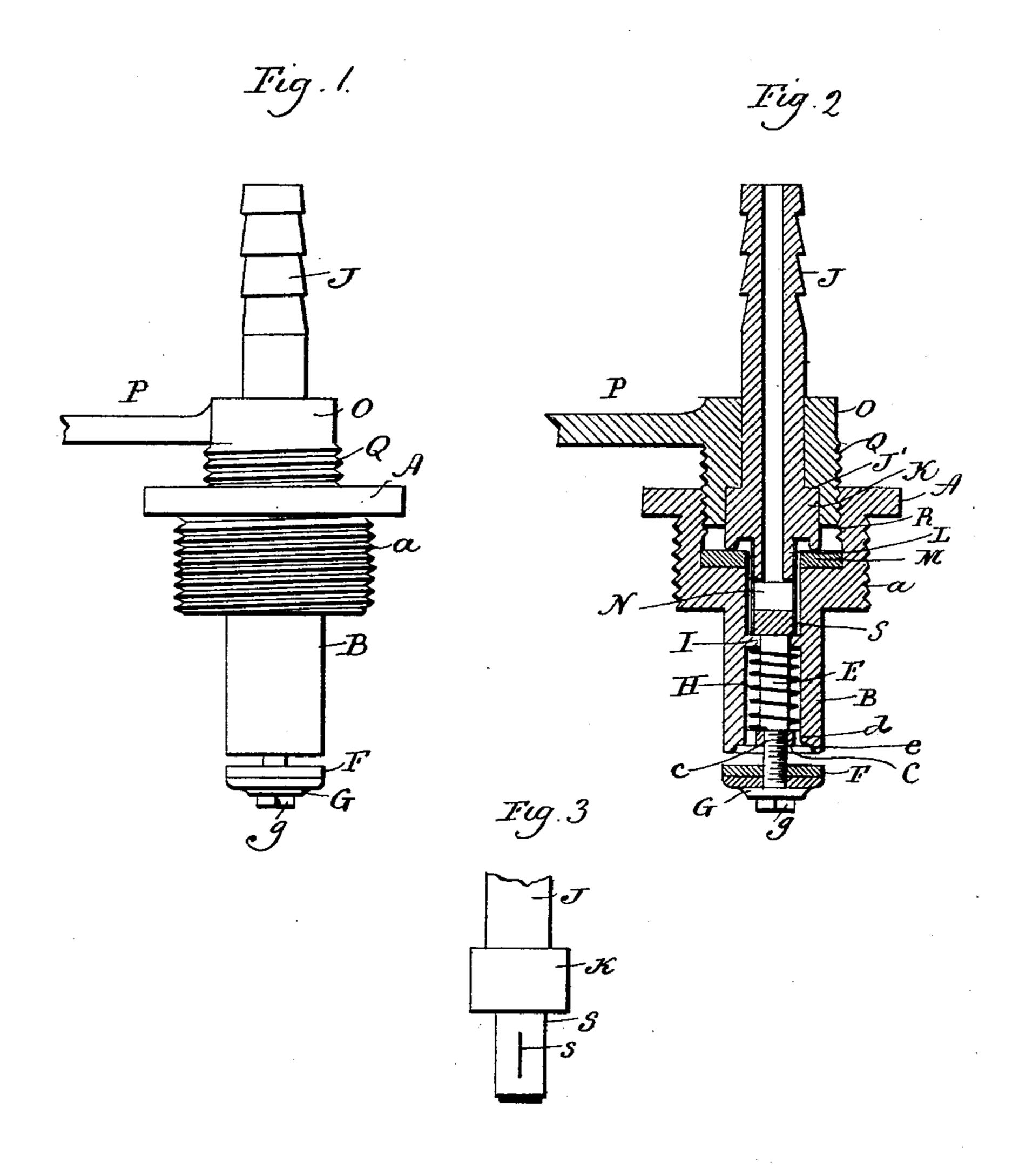
(No Model.)

F. W. SCHLAGER. COMBINED BARREL VENT AND BUSHING.

No. 587,613.

Patented Aug. 3, 1897.



Hetrusses Hellian D. Kelsey. Frank M. Schlager Inventor By augo. Earle Heymon

United States Patent Office.

FRANK W. SCHLAGER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF TO DANIEL J. HURLEY, OF SAME PLACE.

COMBINED BARREL VENT AND BUSHING.

SPECIFICATION forming part of Letters Patent No. 587,613, dated August 3, 1897.

Application filed November 25, 1896. Serial No. 613,359. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. SCHLAGER, of New Haven, in the county of New Haven and State of Connecticut, have invented a 5 new Improvement in a Combined Barrel Vent and Bushing; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, 10 and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a combined barrel vent and bushing constructed in accordance 15 with my invention; Fig. 2, a vertical central section of the same; Fig. 3, a detached view

of the lower end of the vent-pipe.

This invention relates to an improvement in a combined barrel vent and bushing such 20 as is commonly used with barrels of ale and beer, and so that a supply of air may be forced into the barrel from any convenient point, the act of coupling the vent to the bushing opening the valve in the barrel, and so that air 25 may be forced inward, yet prevent the escape of the air from the barrel, the object of the invention being to provide an effective valve and convenient means for coupling the ventpipe to the bung; and it consists in the con-30 struction, as hereinafter described, and particularly recited in the claim.

A represents the bushing, which is circular and provided with threads a for engagement with the barrel in the usual manner. Through 35 the end of the bushing and so as to project upwardly therein and downwardly below the bushing is a cylinder B, partially closed at its lower end by a plate C, having a central opening c, around which is a series of openings d, 40 and below the openings depends an annular rib e. Extending through the cylinder is a spindle E, the lower end of which is threaded and extends through the opening c and receives a packing-washer F, of rubber or other 45 suitable material, over which is placed a cap G, which is secured to the end of the spindle by a nut g. Around the spindle in the cylinder is a spring H, located between the plates C and stops I, the tendency of the spring being to lift the washer at the lower end of the 50 spindle upward against and so as to close the lower end of the cylinder.

J is an air-pipe adapted to be connected from any suitable source of supply and is formed with a flange K, which may be seated 55 upon a washer L within the bushing A, and from the center of the pipe depends a hollow stem M, closed at its lower end and formed with side ports or openings N, said stem being adapted to bear upon the upper end of 65 the spindle E when the pipe is forced downward by a coupling member O, which coupling member O is provided with a handle P and formed with threads Q, adapted to engage with the threads R, formed in the inner 65 wall at the upper end of the bushing A. The lower end of the coupling is recessed to receive a shoulder J', formed at the lower end of the air-pipe J, which shoulder is adapted to form a tight joint between the coupling 70 member and air-coupling. Surrounding the stem M is a sleeve S, of rubber, which closes the ports N, the said sleeve having a slot s

located between the ports N.

When it is desired to admit or force air into 75 the barrel, the coupling member O is turned into the bushing A, which presses the stem M downward, whereby the spindle E is forced downward and opens the lower end of the cylinder. When thus opened, air may be 80 forced downward through the pipe J and will escape through the openings N and expand the rubber sleeve S, so as to allow the air to escape through the slot s, while if the force of air be removed the sleeve S closes the open-85 ing s and prevents the escape of air from the barrel. When the coupling member is removed to detach the air-pipe, the spring H acts to close the valve at the lower end of the cylinder and so that the parts are brought 90 into position for action by the act of coupling the air-pipe to the bung.

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

In a combined vent and bushing, the combination with the bushing supporting a cylinder, a valve adapted to close the lower end

of said cylinder, a spring-operated spindle connected with said valve and extending upward through said cylinder into the bushing, a pipe formed with an annular flange and with a cylindrical stem at its lower end, transverse openings into said stem, and a valve for closing said openings, a coupling member surrounding said pipe and bearing upon said flange, and adapted to be turned into the upper end of the bushing, whereby said stem

is forced to press the spindle downward, substantially as described.

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

FRANK W. SCHLAGER.

Witnesses:
FRED. C. EARLE,
LILLIAN D. KELSEY.