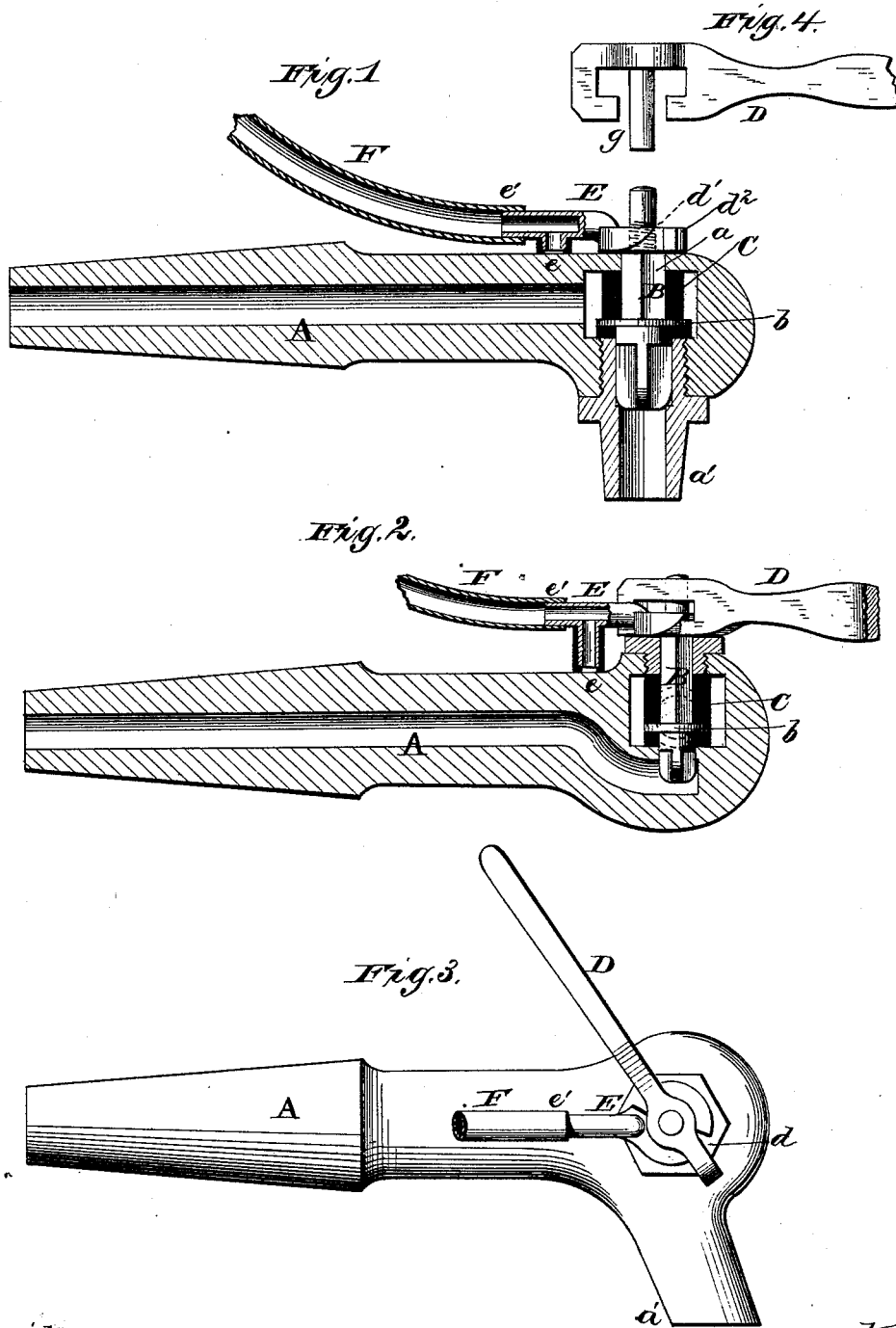


W. D. DOREMUS.
Faucet.

No. 218,165.

Patented Aug. 5, 1879.



Witnesses.
Frank L. Ouraud.
H. J. Ennis

Inventor,
Willard D. Doremus
By. Izragat Wright
Attorneys.

UNITED STATES PATENT OFFICE.

WILLARD D. DOREMUS, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN FAUCETS.

Specification forming part of Letters Patent No. **218,165**, dated August 5, 1879; application filed June 5, 1879.

To all whom it may concern:

Be it known that I, WILLARD D. DOREMUS, of Washington city, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Faucets; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in faucets or stop-cocks for vessels containing beer and other liquids, and it has for its object to produce a stop-cock or faucet with a self-closing valve, which is adapted to be operated to draw off the liquid by means of a suitable key, and to admit atmospheric air above the liquid while the same is being drawn off through a tube and a supplementary valve operated by the self-closing valve.

The letter A indicates the tubular portion or body of the faucet or stop-cock, which is tapered, as usual, at its rear portion in order to fit tightly in the vessel to which it is applied. The letter *b* indicates a valve mounted on a valve-stem, B, and adapted to be moved to and from its seat in a suitable chamber in the forward end of the body A of the stop-cock or faucet, as more fully hereinafter explained. Said valve consists of a shoulder formed on the valve-stem B, with a packing below of rubber or other suitable material, by means of which a tight joint is made with the valve-seat when the valve is against said seat. The portion of the valve-stem below the valve is formed with longitudinal wings, and is adapted to reciprocate in a suitable guide-opening below the valve-seat in order to guide the valve properly to its seat when closing.

Above the valve *b*, and abutting against its upper side, is a spring, C, which may be of rubber, as shown, or may be a spiral metallic spring. Said spring surrounds the valve-rod, and its upper end abuts against the upper part of the valve-chamber, so as to keep the valve normally against its seat and automatically return it to its seat after being opened, as more fully hereinafter explained. The upper end of

the valve-stem is enlarged or provided with a head, d^2 , which is slotted at opposite sides and provided with the cams d^1 , under which the edges of a slotted key are adapted to engage, as indicated plainly in Fig. 2 of the drawings, so that upon turning said key said edges will operate upon the cams and withdraw the valve-stem B, raising the valve from its seat and allowing the liquid to flow out through the stop-cock.

The enlarged portion or head of the valve-stem is provided with a tubular extension, E, from which extends downwardly at right angles a branch tube, *e*, upon which is fitted a short rubber tube somewhat longer than the branch *e*, said rubber tube abutting against the outer surface of the body of the cock when the valve *b* is closed, and forming a valve to close the end of the branch tube *e*. To the end *e'* of the tube E is secured a flexible tube, F, which extends back, and is connected with the interior of the vessel containing the liquid above the surface of the same.

The key for operating the valve is constructed, as shown detached at Fig. 4, with a T-shaped slot which fits over the head of the valve in such manner that its lower edges will engage the cams, as before mentioned. Said key is provided with a projection or pin, *g*, which extends downwardly into the slot, and which serves as a center on which said key may be turned, the upper end of the valve-stem being provided with an opening, in which said pin may be inserted and turned; or the key may be provided with an opening at the slotted portion, and a pin or projection formed on the valve-stem, upon which the key may be centered.

The operation of my invention will be readily understood in connection with the above description.

The key being fitted upon the head of the valve-stem, upon turning it, so as to bring the edges at the lower part of the slotted portion under the cams, the head will be elevated, withdrawing the valve-stem and the valve from its seat. At the same time the end of the branch *e* of the tube E will be withdrawn from its seat, allowing the atmospheric air to enter the vessel in the place of the displaced liquid, which flows out through the tubular

body of the faucet and the exit or nozzle *a'*, as indicated in Figs. 1 and 3 of the drawings.

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

In combination with a faucet, a self-closing valve mounted on a valve-stem, the upper end of which is provided with a cam and an air-induction valve, the seat thereof being formed by the body of the faucet, and adapted to be

operated by means of a suitable key, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 2d day of June, 1879.

W. D. DOREMUS. [L. S.]

Witnesses:

D. D. KANE,

J. TYLER POWELL.