(167.)

JAMES H. ALEXANDER.

Faucets.

No. 121,978. Patented Dec. 19, 1871.

Fig. 1.

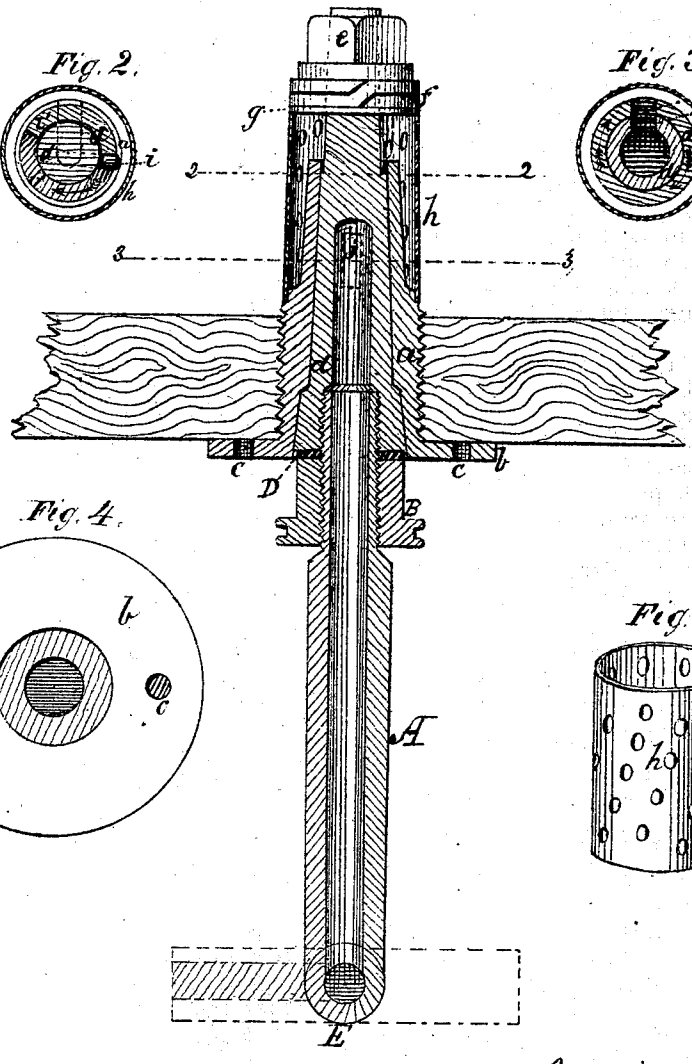

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Witnesses
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JAMES H. ALEXANDER, OF GENEVA, NEW YORK.

IMPROVEMENT IN FAUCETS.

Specification forming part of Letters Patent No. 121,978, dated December 19, 1871.

To all whom it may concern:

Be it known that I, JAMES H. ALEXANDER, of Geneva, in the county of Ontario and State of New York, have invented a new and useful Improvement in Faucets; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and the letters of reference marked thereon.

Figure 1 represents a longitudinal section of my improved faucet as applied to the head of a barrel. Fig. 2 represents a transverse section taken at line 2 2. Fig. 3 represents a transverse section taken at line 3 3. Fig. 4 represents the face of the disk or flange, and Fig. 5 represents the tubular strainer.

My improved faucet is designed to be a permanent fixture in the head of a barrel to which it is applied; and it can only be used to draw from the contents of the barrel by a person having the key. It is so constructed that the barrel will necessarily be kept closed to exclude the air when its contents are wholly drawn out; and threfore it is best adapted for brewers' use, to prevent the loss of barrels from becoming sour, or musty from exposure to the air, after they have been used and emptied.

In Fig. 1 the tubular screw *a* is represented as inserted through the head of a barrel with its annular flange *b* (which is provided with two holes, *c*, to admit the prongs of a wrench) against the outer surface of the head. The aperture in the part *a* is of conical shape, and is fitted closely by the tapering tubular tap *d*, which is held in place by a nut, *e*, which rests against the spiral spring *f*, which is supported upon a disk, *g*, that rests upon the end of the strainer *h;* and the latter surrounds the inner portion of the faucet, as represented in Fig. 1. A short pin, *i*, inserted in the tap *d*, projects outwardly to act as a stop, the open end of the tubular part *a* being provided with a lip, *i'*, around less than half of its circumference, which lip the pin *i* will come in contact with when the faucet is in use, as hereinafter described. The rectangular openings represented at J in Fig. 1, made through the tubular screw *a* and tap *d*, are for the passage of the liquid. These openings J are also represented in Fig. 3. The outer portion of the tubular orifice in the tap *d* is provided with a screw-thread, into which the tubular key A (which is also formed with a corresponding screw-thread) will be inserted. Upon the threaded portion of the key a coupling-collar, B, is seated, having an elastic cushion, D, at its inner end, through which the key A is also inserted. The orifice extending through the key A extends out laterally through one branch of the handle E. When the key A is screwed into the orifice of the tap *d* and the handle E occupies a vertical position, with its tubular end upmost, the coupling screw-collar, with its elastic packing or washer D, will be screwed firmly against the outer end of the tap *d*, which will cause the connection of the key and tap to be fastened so firmly together that the reversible rotary movements given to the key in opening and closing the faucet will necessarily act upon the tap. And when the key is so secured to the tap with the tubular end of the handle E upmost, the faucet will be closed, as then the two openings *j j* will be out of range or line with each other; but by turning the key half a revolution, as indicated by the arrow in Fig. 3, these openings *j j* will be brought opposite to each other, which will open the faucet to permit liquid, which flows through strainer *h*, to pass out through the tubular tap and the key and its handle. When the barrel is emptied and the key is to be removed, the first half-revolution of the key made to unscrew it will close the faucet and thus leave the barrel air-tight. Instead of the screw-collar B to fasten the key to the tap so as to cause them to move together, a short thumb-lever and spring, or a sliding bolt could be applied to the key, so as to connect these parts until the occasion arrives to remove the key from the stationary parts of the faucet.

It will be understood that my faucet may be so applied as to discharge the liquid in any desired direction.

Having described my invention, I claim and desire to secure by Letters Patent—

1. The combination of the parts *a d f g h*, as constructed and arranged, operated by a removable tubular key, substantially as described, for the purpose specified.

2. The tubular key A, in combination with the coupling screw-collar B and tap *d*, substantially as described, for the purpose specified.

In testimony whereof I have hereunto set my hand this 26th day of September, A. D. 1871.

JAMES H. ALEXANDER.

Witnesses:
H. P. K. PECK,
S. E. PECK.