(Model.)

T. F. LANGLEY.

FAUCET.

No. 246,618. Patented Sept. 6, 1881.

Fig. 1.

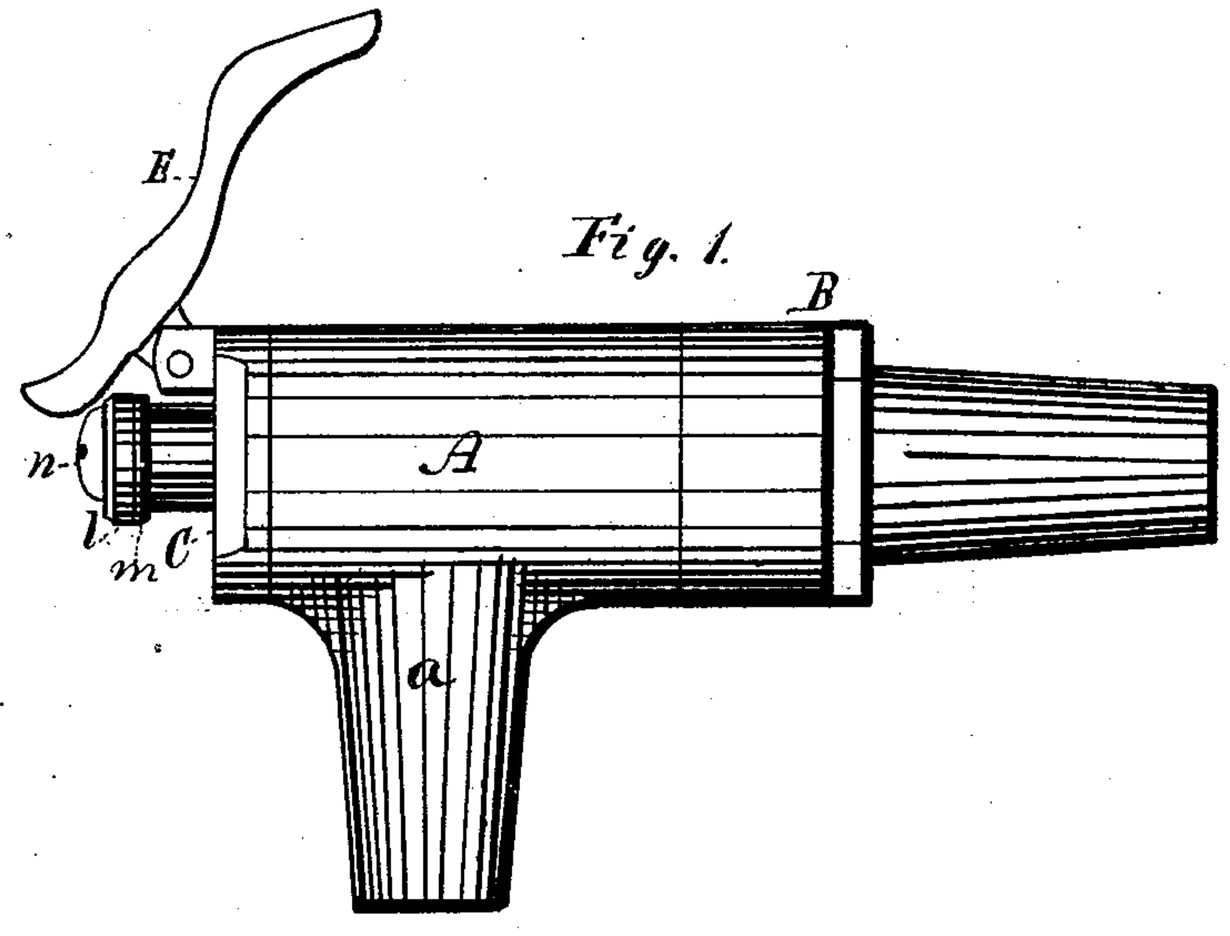
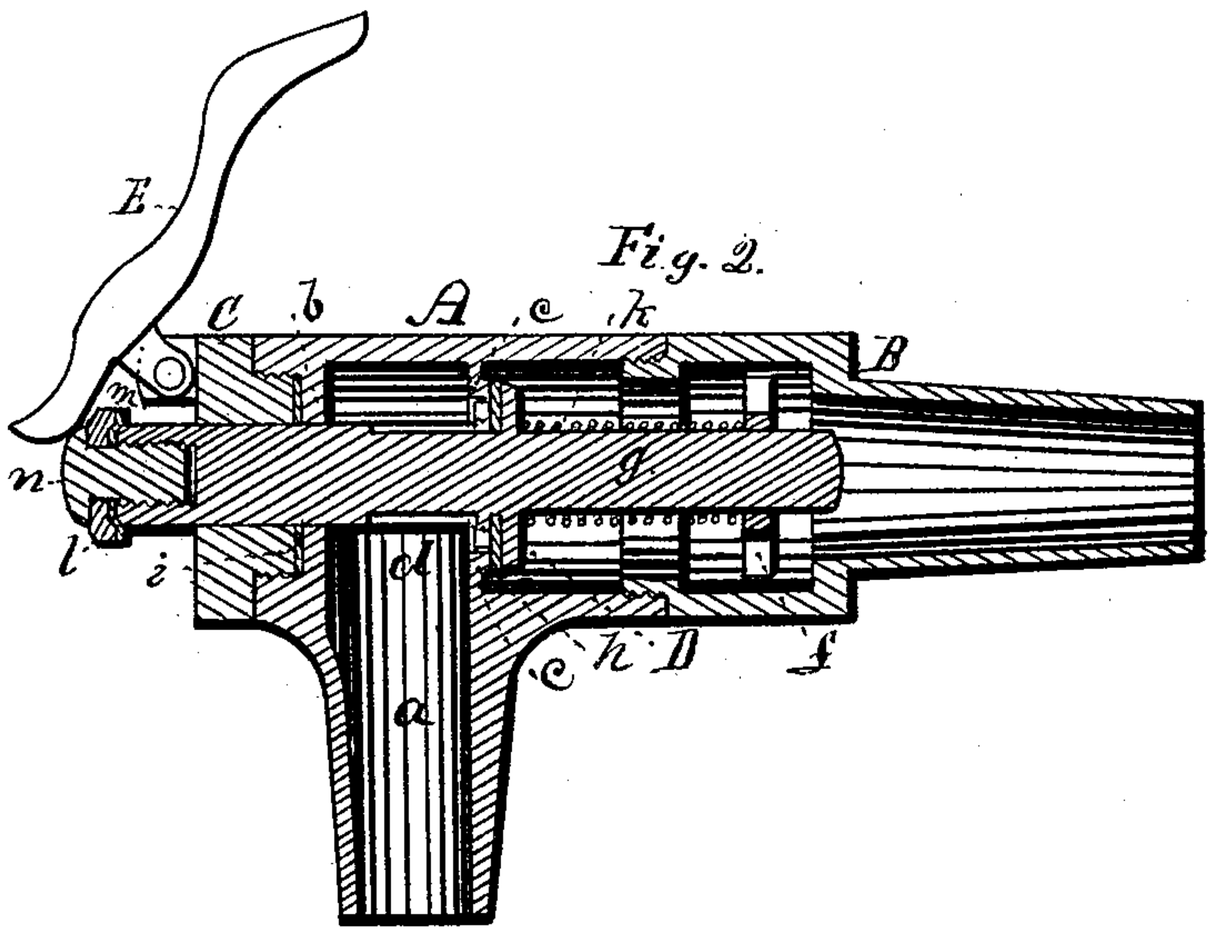


Fig. 2.



WITNESSES,
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UNITED STATES PATENT OFFICE.

THOMAS F. LANGLEY, OF EAST KINGSTON, NEW HAMPSHIRE.

FAUCET.

SPECIFICATION forming part of Letters Patent No. 246,618, dated September 6, 1881.

Application filed April 2, 1881. (Model.)

To all whom it may concern:

Be it known that I, THOMAS F. LANGLEY, of East Kingston, in the county of Rockingham and State of New Hampshire, have invented an Improved Faucet; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side view of the faucet; Fig. 2, a central longitudinal vertical section of the same.

Like letters designate corresponding parts in both figures.

The purpose of my invention is to make a faucet which shall be simple, cheap, and compact in construction, and effective, reliable, and durable in action.

In construction the main part or body A, bearing the spout *a*, has two internal flanges, *b c*, one before and one back of the spout, with a chamber, *d*, between, opening to the spout, and easily formed therewith in casting the part. The back flange, *c*, forms the seat for the closing-valve of the faucet, and the front flange, *b*, forms both a packing-seat for the valve-stem and the front wall of the water-passage. To the rear end of this main part the tap part B is screwed, and to the front end thereof a closing-cap, C, is screwed. The part B has formed inside a guide-bearing, *f*, for the stem *g* of the valve D, with water-passages through it around the said stem; and the cap C forms another guide-bearing for the valve-stem, which projects both forward and backward from the valve, which is thereby kept properly centered, and is allowed perfect freedom of movement to and from its seat, which it closes against by simple approach in the line of the axis of the faucet-body; and the valve has a packing, *h*, of leather, india-rubber, or other equivalent material that is not subject to wear by friction, and therefore will last a long time without renewing. The action of the water closes the valve in the direct line of its motion, which is the best possible arrangement. A light spring, *k*, serves to assist in promptly closing the valve, especially where the pressure of water is not great. This spring is located back of the valve, on its stem, and bears against the rear guide-bearing, *f*, at one end. It is therefore always immersed in water, and does not corrode as it would if alternately wet and exposed to the atmospheric air.

The cap C, in screwing into the front end of the main part A, holds a stem-packing, *i*, between it and the packing-seat *b*, which, when the valve is only partly open and the pressure of the flowing water is comparatively little, secures against leakage around the valve-stem, while yet not causing much friction around the stem; but when the valve is fully opened and the pressure of water is great, this packing, if it allows sufficient freedom of motion to the valve-stem, cannot be relied on to prevent leakage around it. I therefore apply a head, *l*, to the outer end of the valve-stem, with a packing, *m*, at its shoulder, which, when the valve is opened, closes against the outer surfaces of the cap C and makes all tight. This head also serves as a stop to limit the back movement of the valve, and the packing *m* additionally serves as a cushion or buffer to prevent noise when the stop reaches its limit. The head is best secured to the end of the valve-stem by a screw, *n*, so that it can be removed for renewing the packing and other purposes.

The front cap, C, not only furnishes the bearing for the outer end of the valve-stem, but it bears the lever E or equivalent means by which the valve is opened by simply pressing against the outer end of the valve-stem or its head. Instead of the lever, the valve may be opened by a screw-wheel or other suitable means.

By the employment of the closing-cap C with the packing back of it, in connection with the valve-stem having a packing or valve-head, *l*, on it, the faucet is rendered very compact and of good shape, as well as tight, scarcely projecting forward of the spout *a*. The whole construction, also, is simple, easy, and cheap. The valve-spring *k*, being situated behind the valve in the body of the faucet, also conduces to the compactness of the construction.

In the construction herein represented, and which is preferred, the lever E, which serves to open the valve, also serves the purpose of a wrench to screw on or off the cap C, to which it is hinged.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a faucet, the double-stem valve D, op-

erating as described, its outer bearing being a cap, C, and packing-seat *b*, with a thin packing, *i*, between the same, substantially as and for the purpose herein specified.

2. The packing-head *l* on the outer projecting end of the valve-stem, provided with a packing, *m*, at its shoulder, which closes against the outer surface of the faucet-cap C when the valve is opened, substantially as and for the purpose herein specified.

3. The combination, with the cap C, of the lever E, serving the double purpose of opening the valve and as a wrench to screw the cap on and off, substantially as herein specified.

The foregoing specification signed by me this 27th day of January, 1881.

THOMAS F. LANGLEY.

Witnesses:

ELIPHALET W. PHILBRICK,

RUSSELL H. FELLOWS.