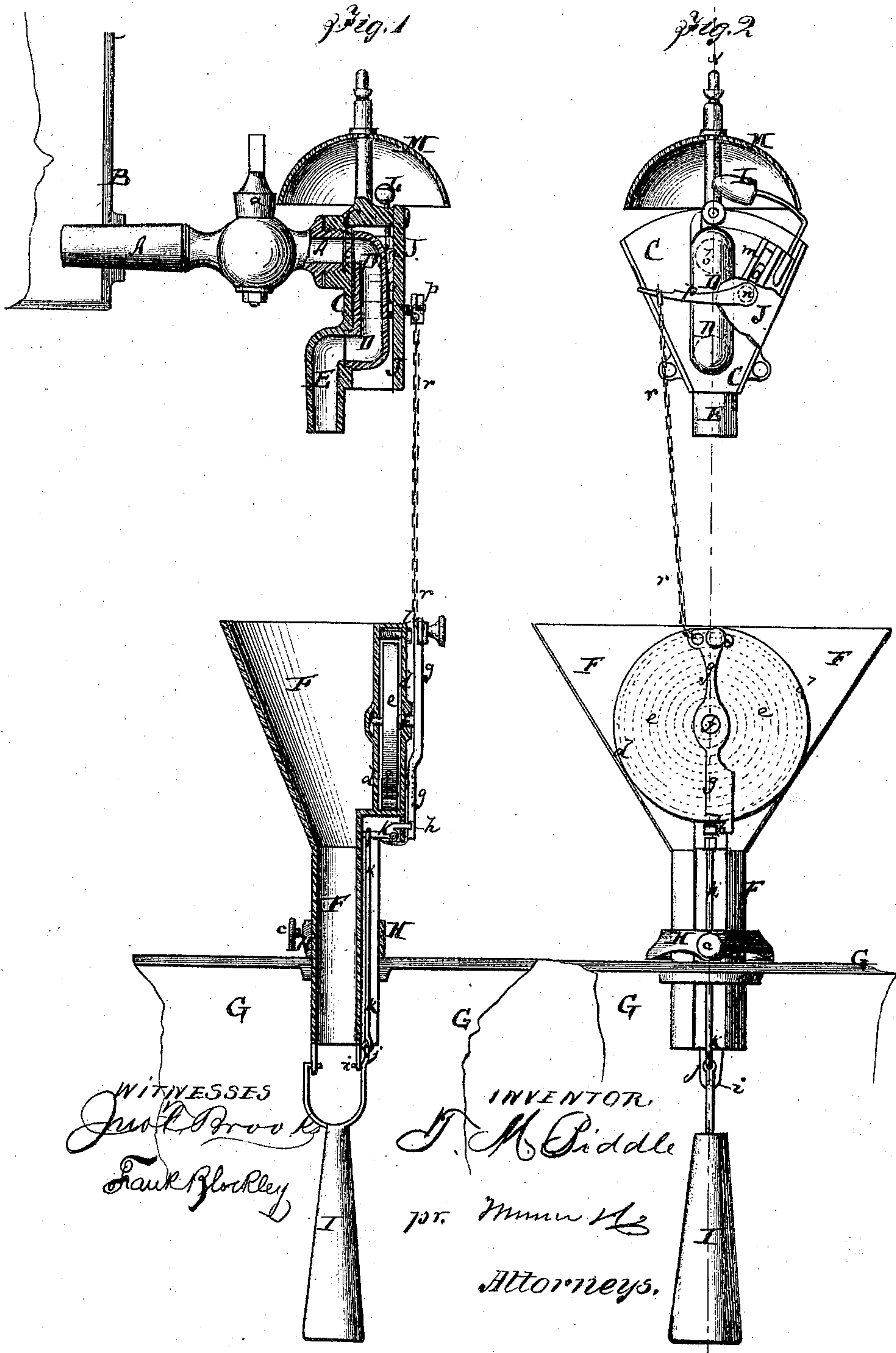


T. M. Biddle,

Alarm Faucet.

No. 97,594.

Patented Dec. 7. 1869.



United States Patent Office.

THOMAS M. BIDDLE, OF FORT WAYNE, INDIANA.

Letters Patent No. 97,594, dated December 7, 1869.

IMPROVEMENT IN ALARM-FAUCETS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS M. BIDDLE, of Fort Wayne, in the county of Allen, and State of Indiana, have invented a new and improved Alarm-Faucet; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical transverse section of my improved alarm-faucet.

Figure 2 is a front view, partly in section, of the same.

Similar letters of reference indicate corresponding parts.

This invention has for its object to provide means for automatically arresting the flow of liquid matter of suitable kind, when the receptacle is filled to the requisite height.

For this purpose, I have provided a float, which, when supported on the liquid, will act on a section of the faucet, so as to prevent the further flow of liquid through the same. At the same time, an alarm-bell may be connected with the apparatus, for giving notice to the attendant of the interrupted flow.

In cellars, where numbers of barrels have to be filled, this device will be particularly convenient and useful, as the overflow and loss of much valuable liquor are thereby prevented.

A, in the drawing, represents the faucet, through which the liquor is to be drawn from a tank or cask, B, of suitable kind.

It is provided with a cock, *a*, as shown.

Upon the end of the faucet is screwed a plate, C, which has an aperture, *b*, directly in line with the open end of the faucet.

To the plate C is pivoted a U-shaped tube, D, which has its lower end swivelled in a part of the plate, while its upper open end can be brought in line with the aperture *b* and faucet, as in fig. 1.

In this position the liquor will, when the cock *a* is opened, flow through the faucet, and through the pipe D, into a pipe, E, which is in contact with the pipe D, as shown.

The liquor will thence flow into a funnel, F, which is inserted in the bung-hole of the barrel G, or other receptacle for the liquor.

On the shank of the funnel is a collar or ring, H, up-and-down adjustable, and fastened by a set-screw, *e*, at any height. Its object is to adapt the device to barrels of different thickness of material.

On one side of the funnel is, in a barrel, *d*, arranged a coiled spring, *e*, which is attached with one end to the barrel, and with the other to a central shaft, *f*.

On the shaft is mounted a lever, *g*, which can be locked in the position shown in fig. 2, by a spring-catch, *h*. This catch is pivoted to the funnel, as shown.

I is a float, made of sheet-metal or other suitable material, and suspended by a pivot, *i*, from the funnel.

An arm, *j*, projecting beyond the pivot *i*, is, by a rod, *k*, connected with the catch *h*.

When the float is suspended, as in the drawing, its arm *j* is in line with the rod *k*, and the catch is thereby caused to project far enough to retain the lever *g* in the position shown.

As soon as the liquor rises in the barrel, so that it reaches the float, it will gradually swing the float into a horizontal position, and thereby pull on the rod, so as to withdraw the catch *h*.

The lever *g* is then liberated, and is, by the spring *e*, swung around until the end, formerly held by the catch *h*, strikes a fixed stop, *l*, opposite to *h*.

By this motion of the lever *g*, the tube D is carried around to be disconnected from the faucet.

On the tube is formed a sideward-projecting plate, *m*, which has a groove or slot, as in fig. 2.

In a plate, J, which is fastened to C, to enclose D, is arranged an arbor, *n*, which has a crank, *o*, fitted into the slot or groove of *m*, while another crank or arm, *p*, is, by a chain, *r*, to be connected with the lever *g*.

When the lever *g* is, by the aforementioned action, carried around, it pulls the chain *r*, and thereby swings the arbor *n*, and with it the tube D.

The latter swings on its lower end, and has its upper end carried away from the faucet, its plate *m* closing the end of the faucet, and preventing further escape of liquor.

On the plate *m* may also be formed a hammer, L, which, when the faucet is automatically closed, as aforesaid, will strike against a bell, M, that is supported on the plate C. This bell-attachment may, however, be omitted.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The funnel, provided with a float, which, when raised, serves to close the faucet, through which the liquor flows into said funnel, substantially as herein shown and described.

2. The combination of the float I, rod K, lever *h*, rod *g*, chain *r*, shaft *n*, and hammer L, arranged and operating as described, to strike the bell M, as set forth.

3. The swinging tube D, arranged on the plate C, which is suspended from a supply-faucet or tube, substantially as herein shown and described.

4. The arbor *n*, having the cranks *o* and *p*, and connected with the pivoted tube D, when combined with the lever *g*, catch *h*, spring *e*, and float I of the funnel, substantially as herein shown and described.

THOS. M. BIDDLE.

Witnesses:

BRITTON POULSON,
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