(No Model.)

J. S. SMART.

BEER OR ALE FAUCET.

No. 421,770. Patented Feb. 18, 1890.

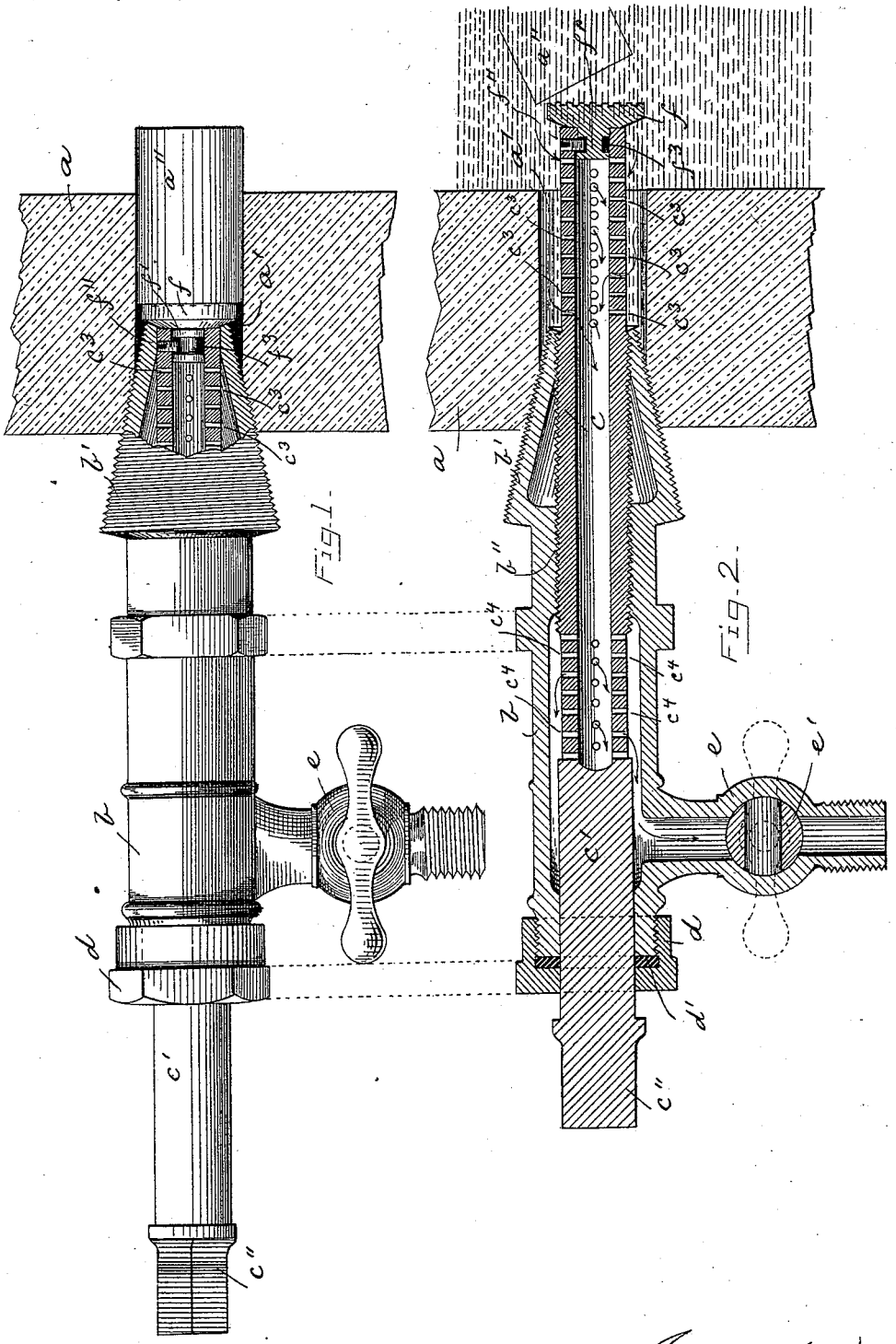

Fig. 1.

Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES S. SMART, OF SALEM, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO CHARLES A. RANDALL, OF SAME PLACE.

BEER OR ALE FAUCET.

SPECIFICATION forming part of Letters Patent No. 421,770, dated February 18, 1890.

Application filed September 28, 1889. Serial No. 325,432. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. SMART, a citizen of the United States, and a resident of Salem, in the county of Essex or State of Massachusetts, have invented new and useful Improvements in Beer or Ale Faucets, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in beer or ale faucets of the kind adapted to be secured to the bung-hole of a barrel-head preparatory to drawing the liquid from the barrel, and it is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a side elevation of the device, partly shown in section, showing the bung partly driven through the bung-hole of the barrel and the end of the faucet screwed into the bung-hole preparatory to drawing off the liquid contents of the barrel; and Fig. 2 represents a central longitudinal section of the device, showing the faucet attached to the bung-hole of a barrel, the bung forced into the latter and communication established between the faucet and the interior of the barrel.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a represents the barrel-head, *a'* its bung-hole, and *a''* the bung, as usual.

The improved faucet consists of a hollow metal shell *b*, having at its inner end the externally-screw-threaded tapering part *b'*, adapted to be screwed into the bung-hole of the barrel, as shown in the drawings.

b'' is a female screw-thread on the interior of the shell *b*, in which is longitudinally adjustable the hollow screw-threaded spindle *c*, as shown in Fig. 2.

c' is a cylindrical extension on the hollow spindle *c*, which extension is guided in a stuffing-box *d* and annular packing *d'*, and projects outward through the same, as shown.

The spindle *c* may be provided with a handle for its operation; but in practice I prefer to turn it with a wrench or key applied to its square end *c''*. *e* is a faucet or stop-cock connected to the shell *b* and communicating with the interior of the latter, said faucet being provided with a suitable perforated plug *e'*, provided with a handle for its operation, as usual. To the inner end of the hollow spindle *c* is journaled the disk *f*, provided with a shank *f'*, inserted loosely within the end of the hollow sleeve *c* and prevented from getting detached from the same by means of a pin or screw *f''*, screwed through the sleeve *c* and having its inner end projecting into an annular groove f^3 on the shank *f'*, as shown in the drawings. The disk *f* serves two purposes—namely, as a valve or closing device against the end of the tapering screw part *b'* while screwing the latter into the bung-hole of the barrel before the bung is forced inward into the barrel, and as a means, combined with the screw-threaded sleeve *c* and shell *b*, for forcing the bung into the barrel after the tapering screw *b'* has been screwed into the bung-hole, as shown.

The inner end of the hollow sleeve *c* is provided with a series of perforations c^3 c^3, through which the beer or ale is strained when passing from the barrel to the interior of the hollow spindle *c*. c^4 c^4 are similar perforations at the outer end of said hollow spindle *c* for conducting the liquid into the outer end of the shell *b* and to the faucet *e*, which latter is to be connected by means of a pipe and couplings, as usual, to a faucet in the room where the liquid is to be drawn or consumed.

By having the disk or valve *f* loosely journaled to the inner end of the hollow spindle *c* it will be seen that the latter may be revolved without rotating the former when forcing inward the bung *a''*, and consequently the latter is prevented from being torn, dug into, and wedged into the bung-hole while being thus forced inward.

The operation of the device is as follows: The bung *a''* is first partially driven inward, but not entirely through the bung-hole, as shown in Fig. 1. The tapering screw *b'* is then screwed into the exposed portion of the bung-hole, as shown in Fig. 1, which is accomplished by turning the shell *b* around its axis either directly by hand or by the aid of a suitable wrench or tool. After the shell *b* has thus been attached to the barrel-head,

the bung a'' is forced into the barrel by turning the spindle c-c' around its axis, causing it to be screwed inward, as shown in Fig. 2, and the bung a'' to drop into the barrel. The liquid is then free to pass through the strainer-perforations c^3 c^3, the hollow spindle c, and its perforations c^4 c^4, leading to the interior forward part of the shell b. The liquid may be drawn by opening the plug e' on the faucet e.

The device, as will be seen, is direct, acting with a positive motion and is entirely void of springs. It is composed of very few parts, and by its use a barrel may be tapped without any leakage whatever.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. In a beer or ale faucet, the shell b, having screw-threaded end b', adapted to be screwed into the bung-hole of the barrel, and internal screw-threaded part b'', combined with the hollow screw-threaded spindle c, having strainer-perforations c^3 c^3 in its inner end and exit-perforations c^4 c^4, communicating with the forward end of said shell and having cylindrical non-screw-threaded shank c' projecting through the outer end of said shell b, and a stuffing-box thereon, substantially as and for the purpose set forth.

2. In a beer or ale faucet, the shell b and its screw-threaded end b', combined with the longitudinally-adjustable hollow spindle c, having strainer-perforations c^3 c^3, exit-perforations c^4 c^4, and the swivel-valve or pressure-piece f, arranged at the inner end of the hollow spindle c, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 20th day of September, A. D. 1889.

JAMES S. SMART.

Witnesses:
ALBAN ANDRÉN,
CARL ANDRÉN.