

No. 691,881.

Patented Jan. 28, 1902.

F. E. THOMPSON & F. N. YOUNG.  
REGISTERING FAUCET FOR SYRUP BOTTLES.

(Application filed Aug. 3, 1900.)

(No Model.)

2 Sheets—Sheet 1.

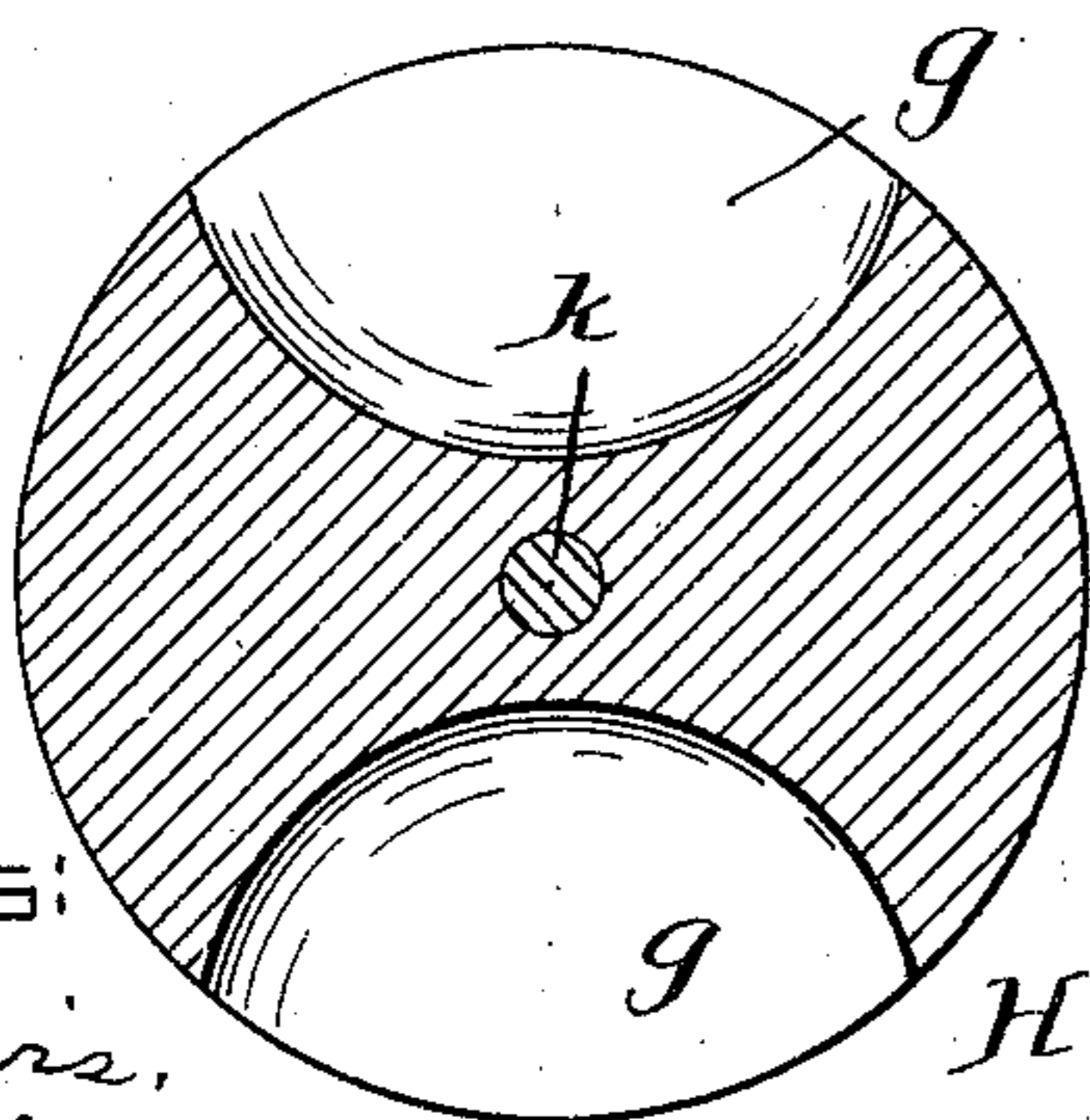
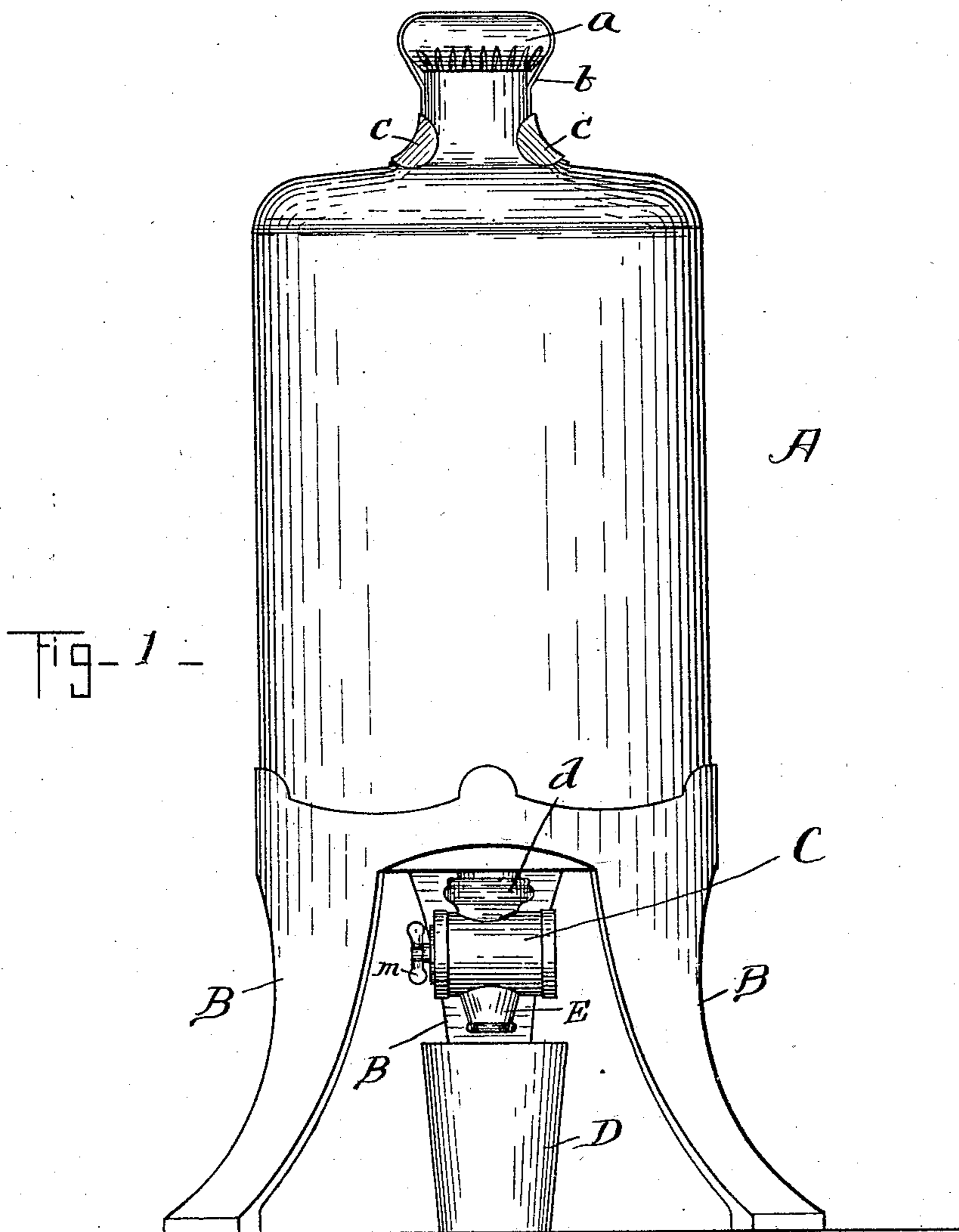


Fig-2 -

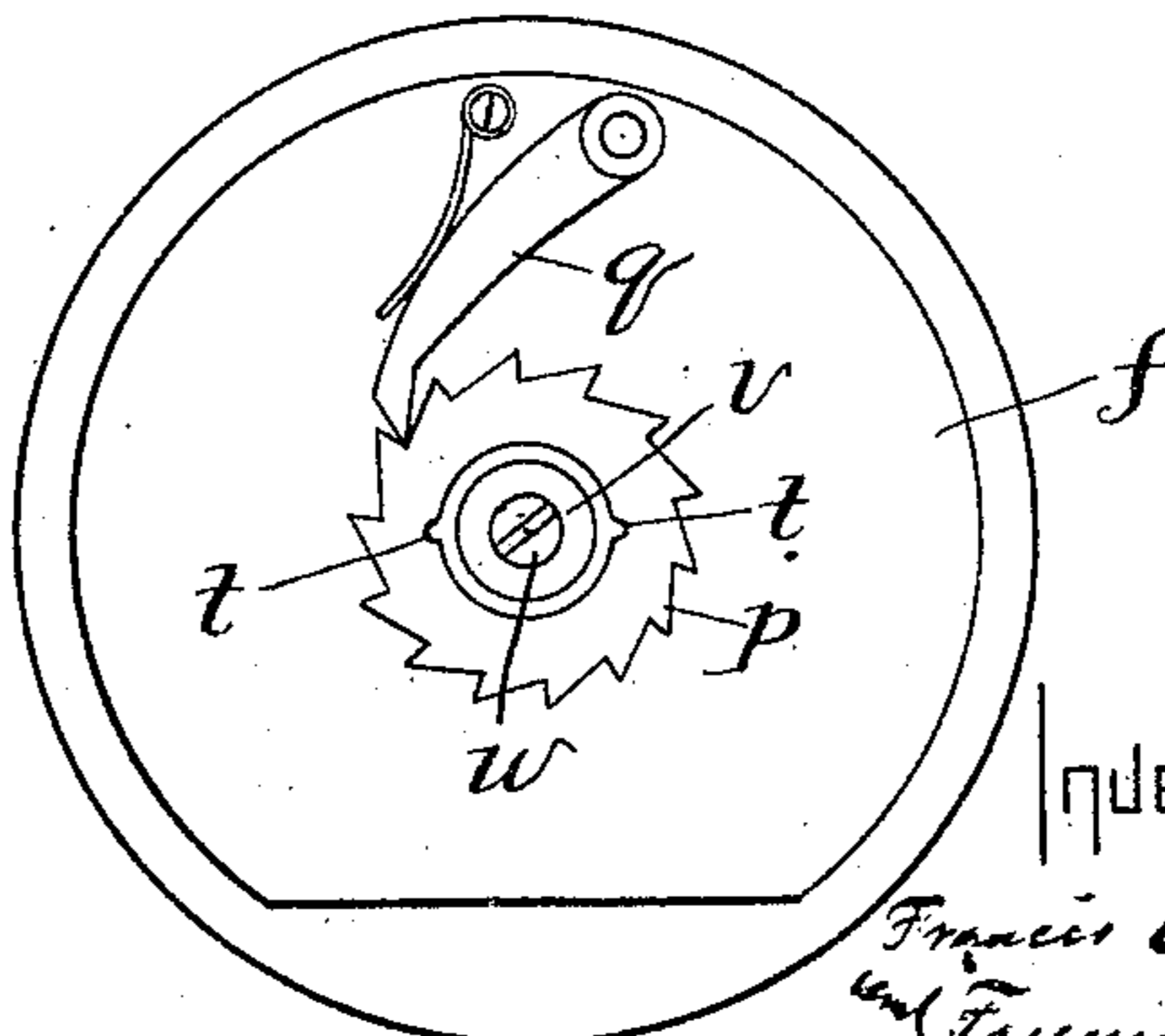


Fig-3 -

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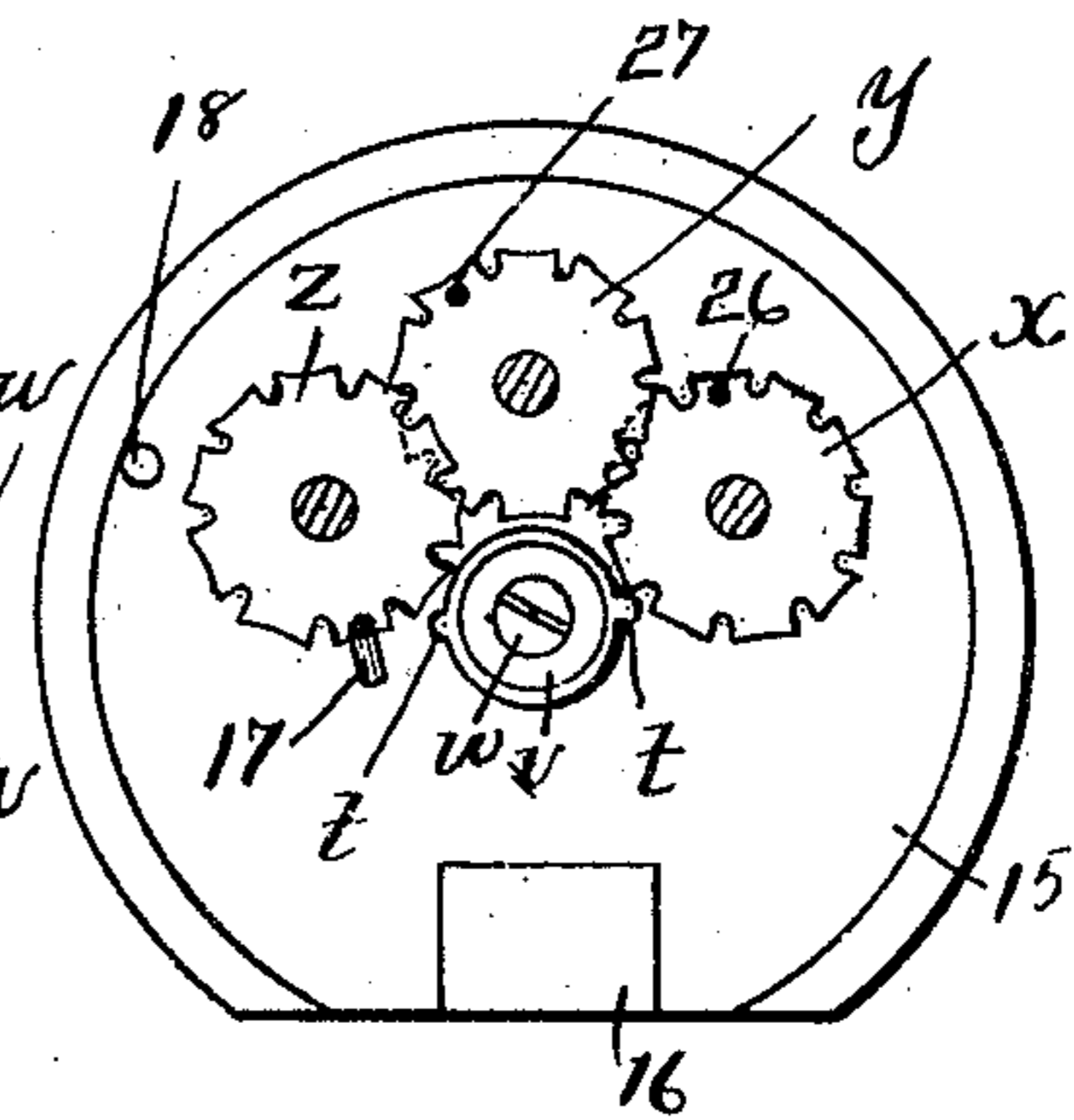
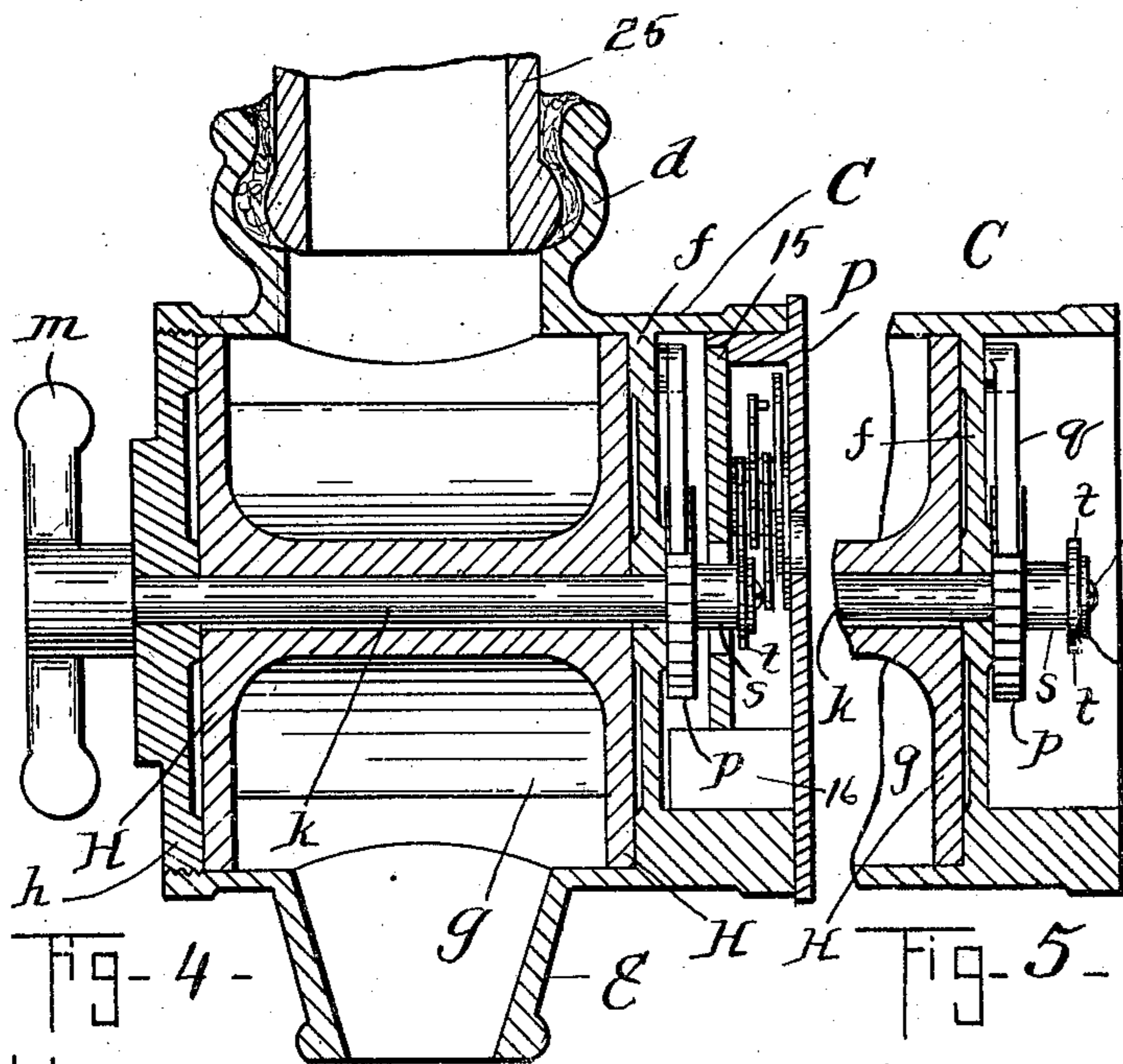
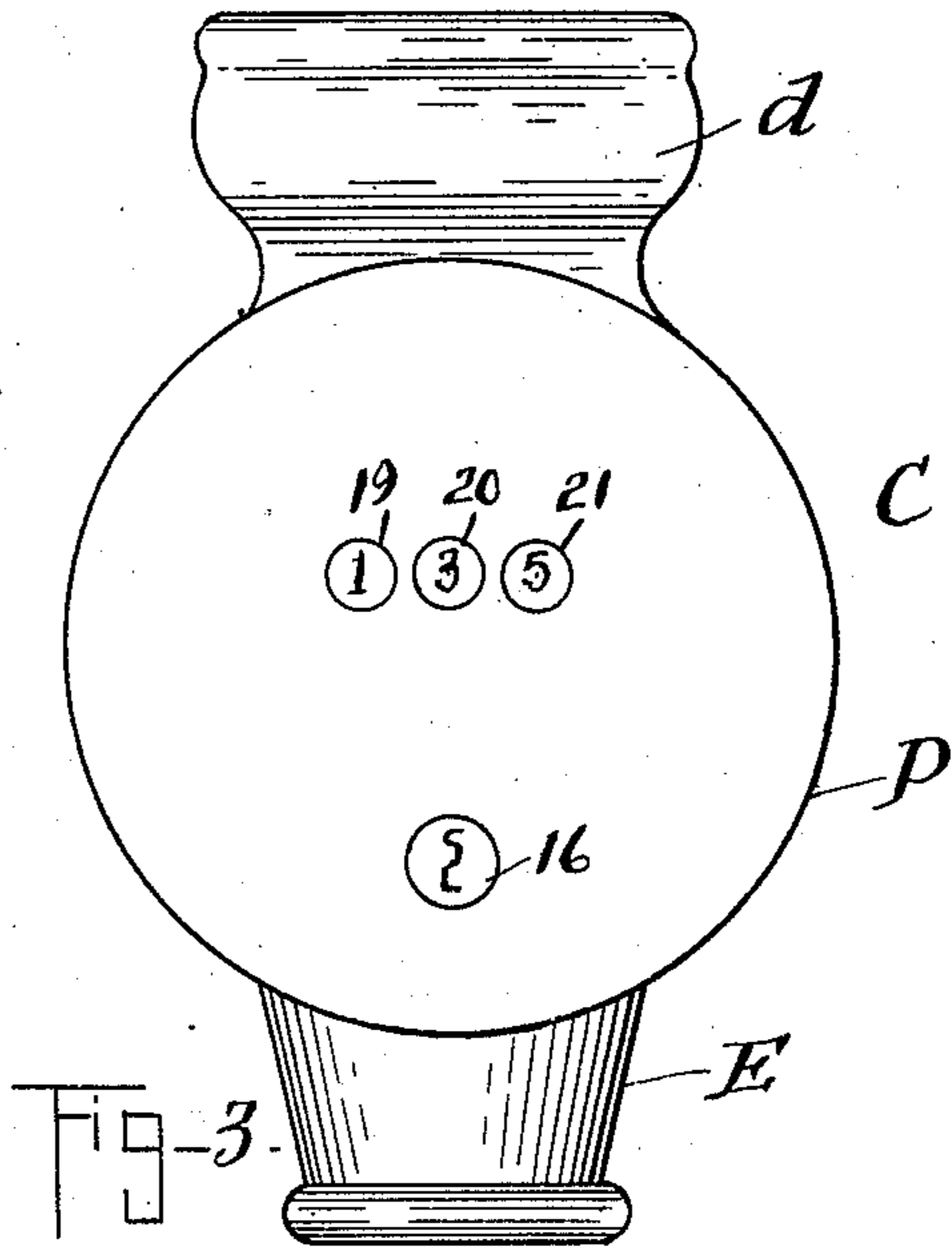
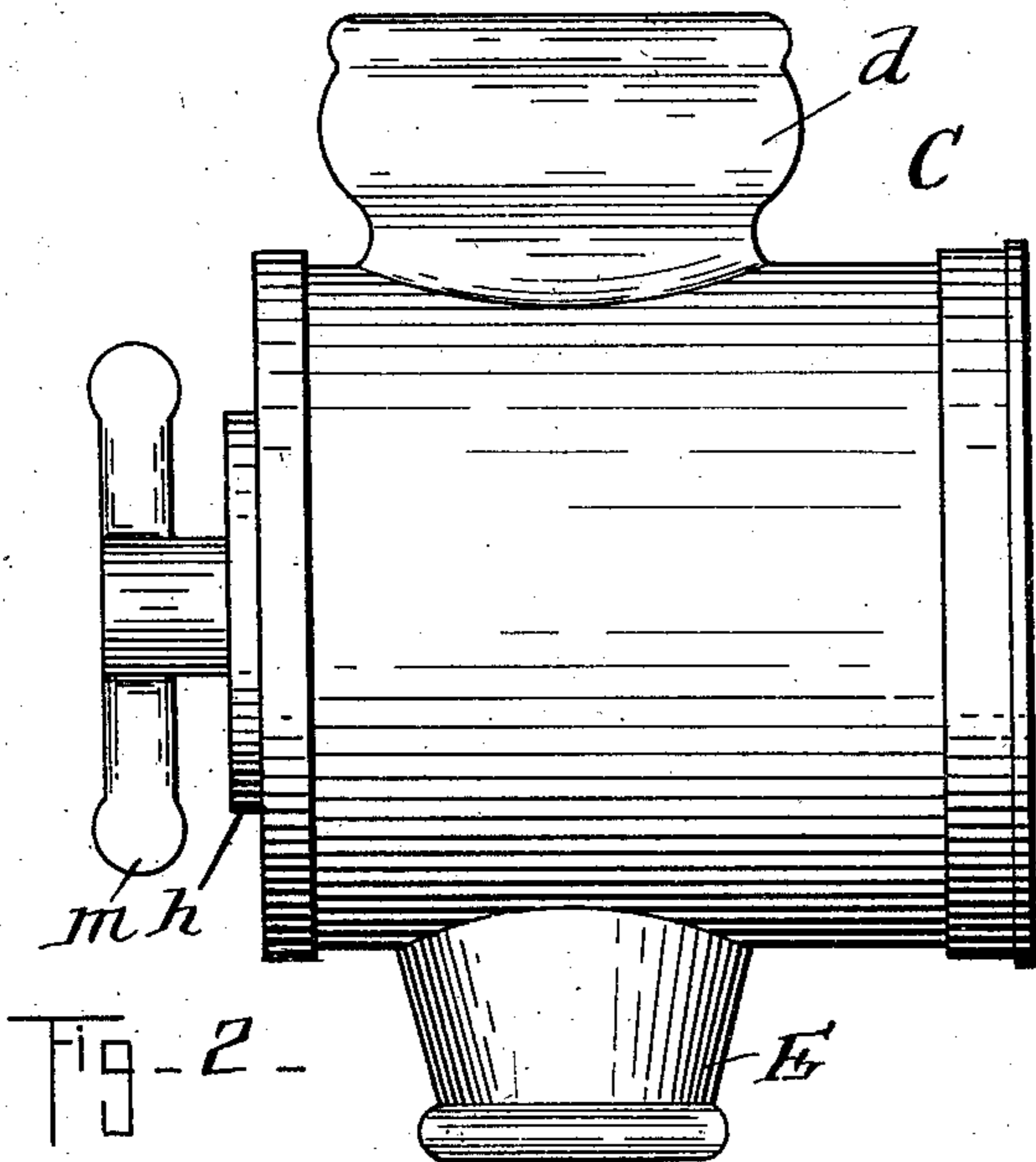
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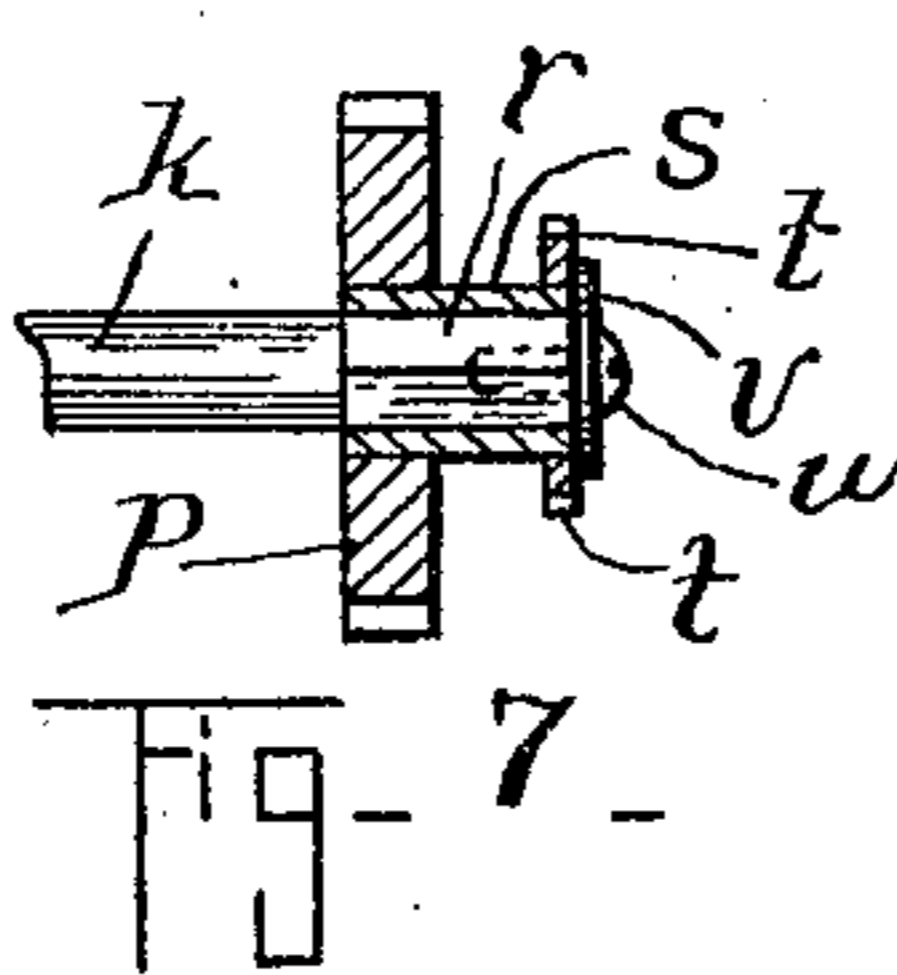
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2 Sheets—Sheet 2.



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# UNITED STATES PATENT OFFICE.

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## REGISTERING-FAUCET FOR SYRUP-BOTTLES.

SPECIFICATION forming part of Letters Patent No. 691,881, dated January 28, 1902.

Application filed August 3, 1900. Serial No. 25,846. (No model.)

*To all whom it may concern:*

Be it known that we, FRANCIS E. THOMPSON and FREEMAN N. YOUNG, of Boston, in the county of Suffolk and State of Massachusetts, have jointly made certain new and useful Improvements in Registering-Faucets for Syrup-Bottles, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation of a syrup-bottle having our improvement applied thereto and showing the same in condition for use; Fig. 2, a side elevation of the registering and measuring device detached; Fig. 3, an end elevation of the same; Fig. 4, a vertical longitudinal section through the measuring-cock; Fig. 5, a like view showing the locking-pawl; Fig. 6, an end elevation of the inner wall of the register, showing the counting-wheels; Fig. 7, a sectional view illustrating details; Fig. 8, a cross-section of the measuring-cock, and Fig. 9 an end elevation of the part shown in Fig. 5.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

Our invention is intended to be used in connection with devices for dispensing syrups for use in beverages—as, for example, the carbonated waters commonly called “soda”—and comprises an attachment for registering the number of portions of syrup so dispensed.

The nature and operation of the improvement will be readily understood by those conversant with such matters from the following explanation.

In the drawings, A represents a bottle of ordinary construction for containing syrups, the mouth of which is closed by a metallic cap *a* in the usual manner. Over this cap a ribbon *b* is passed and is secured at each end by seals *c*. This bottle is supported on a stand provided with legs B, and the tap C opens into the bottom of such bottle at a sufficient height to admit a glass D under it. This tap C comprises a cylindrical casing provided with a nipple *d*, opening therein at the top,

which is cemented or otherwise secured to a discharge 25 in the bottom of the bottle. On the opposite side of the casing is an outlet *e*. The casing has a solid inner wall *f*, and its outer end is closed by an exteriorly-threaded head or cap *h*. In this wall and cap a spindle *k* is fitted to rotate and carries on its outer end the ordinary handle *m*. The measuring-cock H is mounted on the spindle within the casing and is provided with two chambers of known capacity *g*, so arranged that a half-revolution of the cock will discharge into the outlet *e*, while the companion chamber will refill from the bottle. The inner end of the spindle *k* is squared at *r*, and on this squared portion is slipped a sleeve *s*, (see Fig. 7,) which is held tightly thereon by a washer *v* and a screw *w*, turned into the end of said spindle. This sleeve has fast to it a ratchet-wheel *p*, which is engaged by a spring-pushed pawl or click *q*, pivoted on the partition *f* outside of the chamber in which the cock works. A cap P closes the opposite end of the casing C and is secured by a lock 16. This cap has a partition 15, through which the sleeve *s* projects. On the inner face of said partition, in the chamber formed thereby, is a series of three registering-wheels *x y z*, representing units, tens, and hundreds in the ordinary manner of cyclometers and other counting-machines. On the sleeves there is an annulus provided with two radiating projections *t*, so arranged that at each half-revolution of the spindle *k* the units-wheel *x* will be moved the distance of one tooth. At each complete revolution of the units-wheel a pin thereon, 26, will engage and move the corresponding distance the second wheel *y*, and a pin 27 on said wheel *y*, after a complete revolution, will in like manner engage the hundreds-wheel *z*. The numerals on these respective wheels are displayed in openings 19 20 21 in the lock-cap P. By this means, as will be readily understood, the number of discharges made from the cock H may be registered. As the bottle A is designed to hold a determined number of drinks or portions of which the cock-chambers *g* are a measure, we so arrange the counting-machine that when said determined number has been discharged by the cock the machine will be locked against further rotation.

This we effect by means of a radiating pin 17 (see Fig. 6) on the hundreds-wheel  $z$ , which at the completion of the revolution thereof will engage a stud 18 on the partition 15 and stop further movement of said wheel. It will be understood, of course, that the click  $q$  has during all the process of emptying the bottle A locked the spindle against being turned back.

For the purpose of example it may be supposed that the bottle A is designed to contain one hundred and thirty-five portions of syrup. After these have all been discharged by the cock H and registered on the registering mechanism, as shown, said mechanism is locked against further rotation in either direction by means of pin 17 and pawl  $p$ , as described. Now to refill the bottle it is necessary either to destroy the seal  $c$  and remove the cap-seal  $a$  or else to refill through the cock. This can only be done by unlocking the cap P, the key of which is presumed to be in the possession of the manufacturer of the syrup. When said cap is unlocked, it is a simple matter, as will be readily understood, to readjust the counting-wheels  $x y z$  back to the zero-point, and by turning out the screw  $w$  the sleeve  $s$  and its pawl may be removed from off the spindle. Then by unscrewing the head  $h$  from the casing said spindle and the measuring-cock may be removed for the purpose of cleaning; but until the sleeve is removed from the spindle it is impossible to get at the cock for the purpose of refilling the bottle.

We do not confine ourselves to employing this device solely with bottles provided with a neck for filling, as any sort of a receptacle may be used and the refilling be done by the

proprietors when the empty receptacle is returned and the registering device removed for readjustment, as above described.

Having thus described our invention, what we claim is—

1. A liquid-containing receptacle provided with a discharge in combination with a measuring-cock in said discharge; a registering mechanism fitted to be actuated by the rotations of the cock-spindle in one direction; a cap inclosing said mechanism; a click for locking the cock-spindle against movement in one direction; and a stop limiting the movement of said registering mechanism, whereby when a determined number of discharges have been made by said cock it will be locked against movement in either direction and the interior of the receptacle be inaccessible until the cock is released.

2. The bottle, A, provided with the discharge, 25, in combination with a support for said bottle; the measuring-cock, C, attached to said discharge; a ratchet on the cock-spindle; a click engaging said ratchet; the lock-cap,  $p$ , forming a chamber with the cock-casing; a series of registering-wheels disposed within said chamber and adapted to be actuated by movements of the cock-spindle in one direction; and a stop limiting the movements of said wheels whereby when a determined number of discharges have been made by said cock it will be locked against movement in either direction.

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