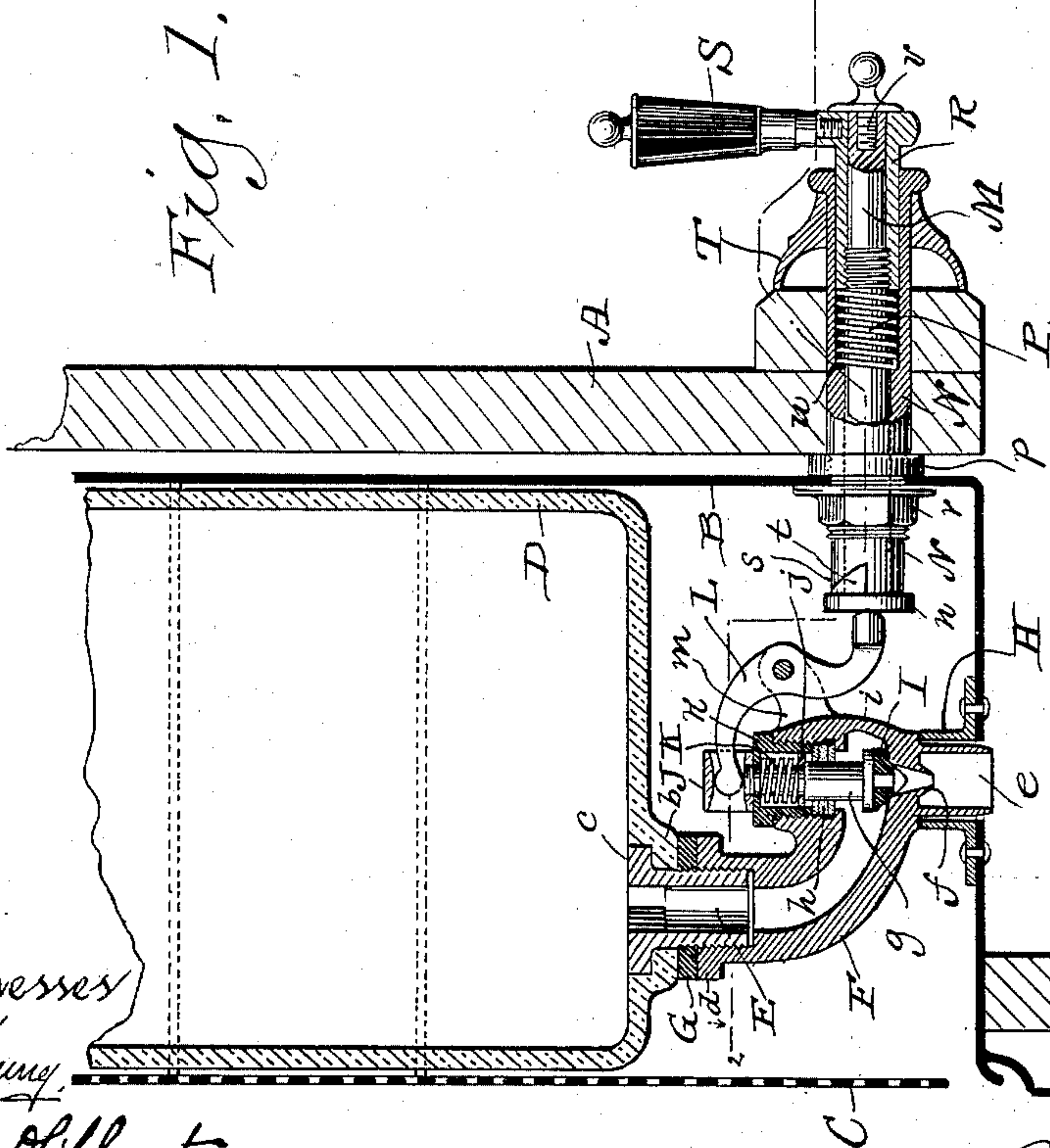
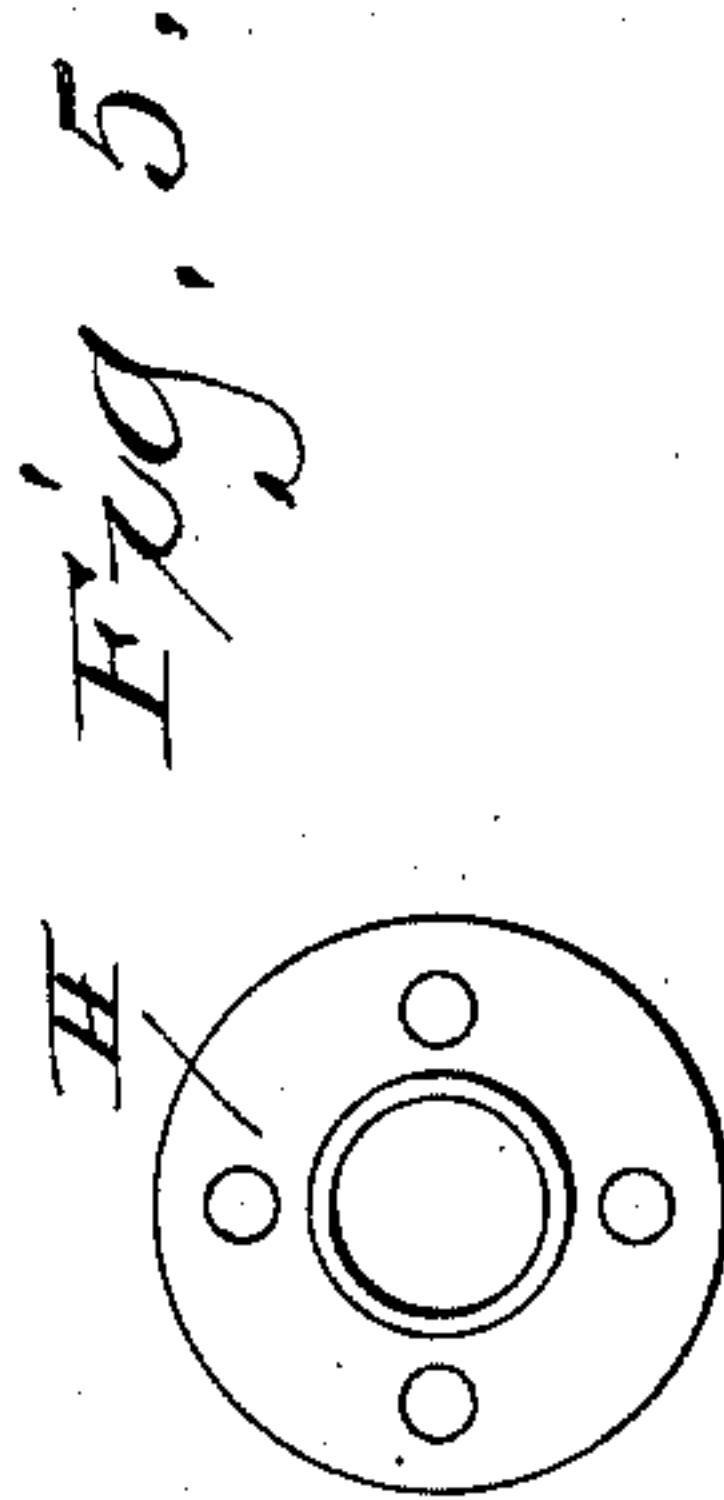
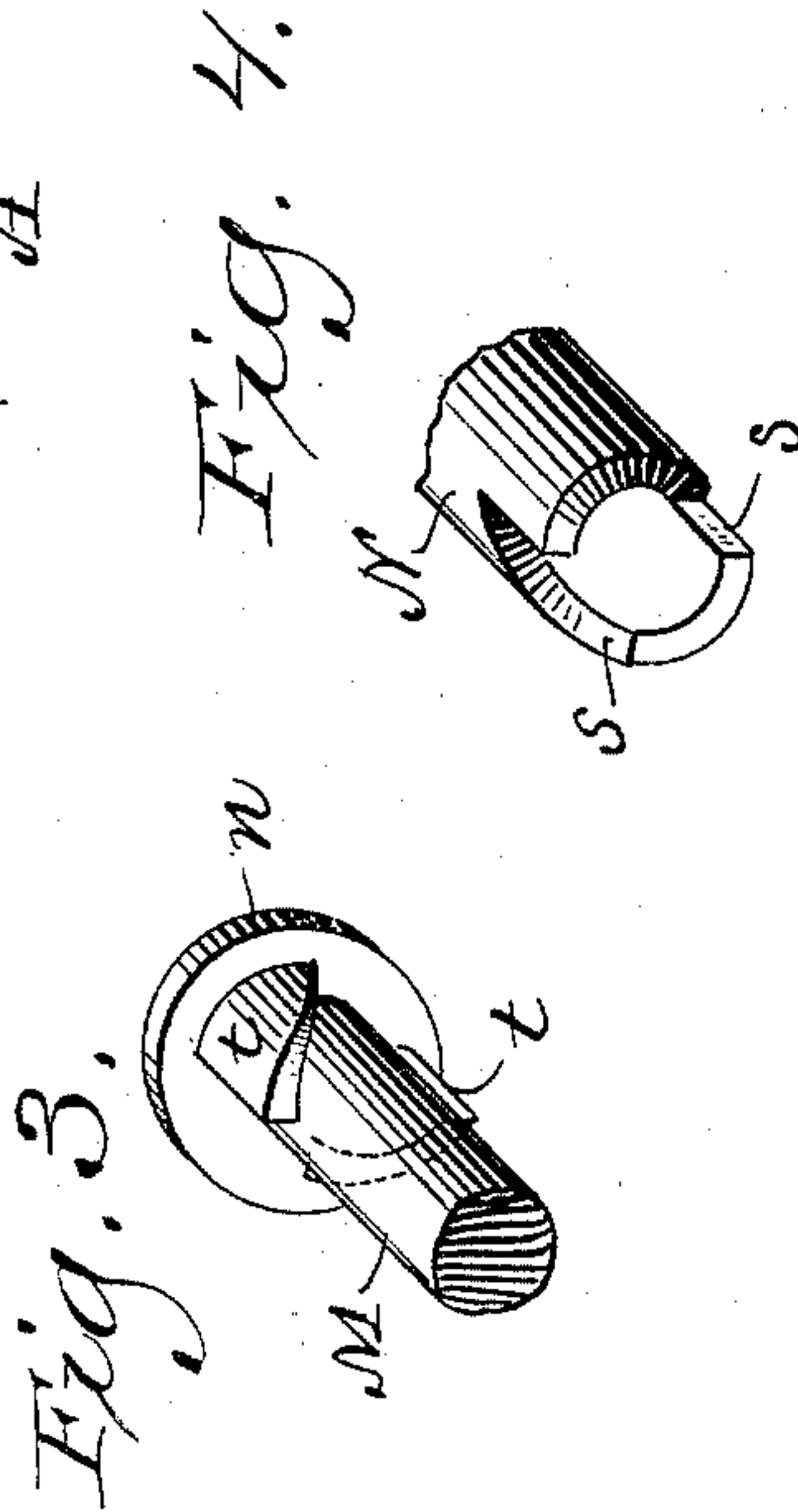
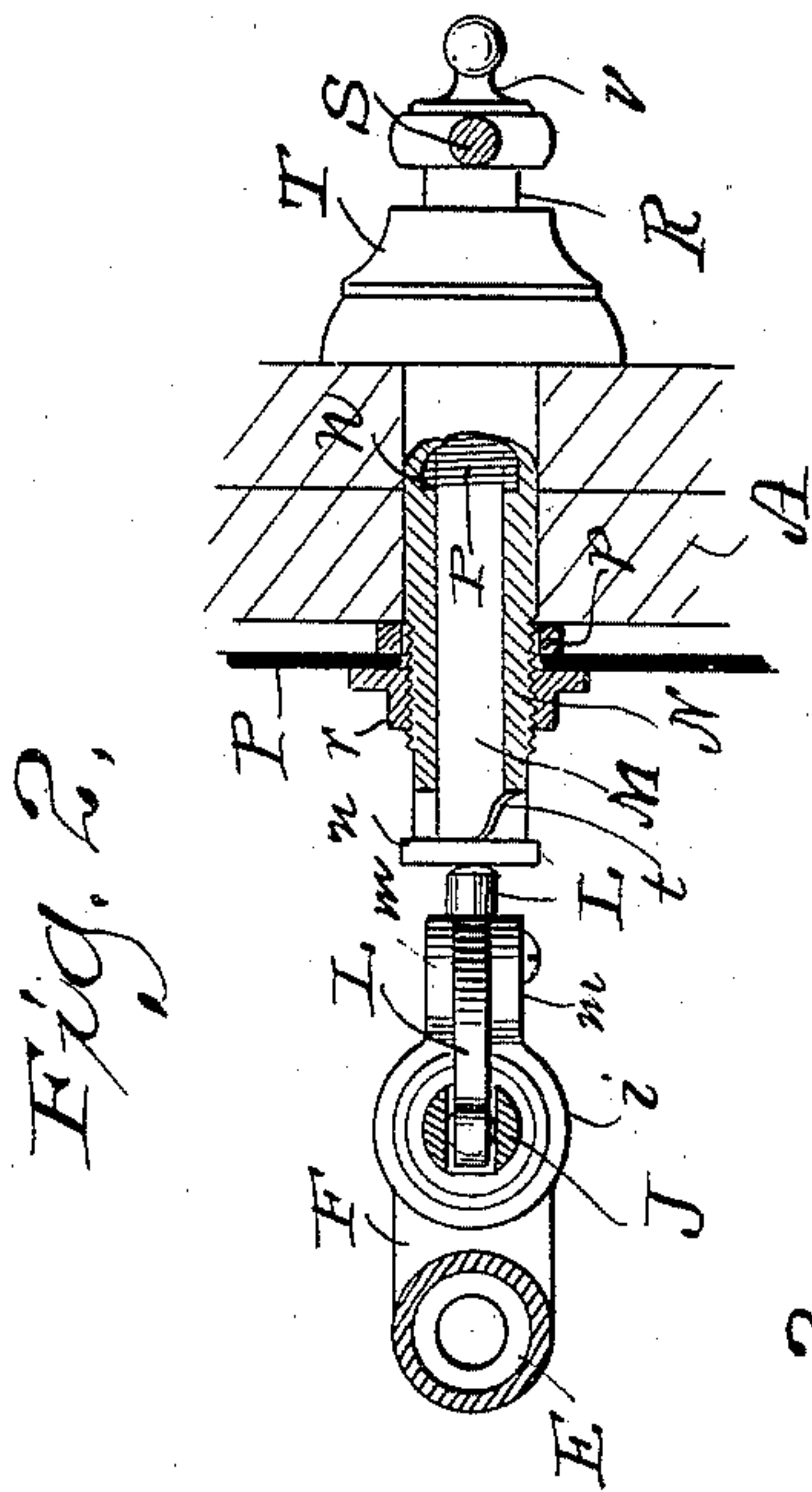



A. SCHIER.
SODA FOUNTAIN.

Patented June 21, 1892.



Witnesses
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 Inventor
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UNITED STATES PATENT OFFICE.

ADOLPH SCHIER, OF CHICAGO, ILLINOIS.

SODA-FOUNTAIN.

SPECIFICATION forming part of Letters Patent No. 477,463, dated June 21, 1892.

Application filed February 23, 1892. Serial No. 422,403. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH SCHIER, a citizen of the United States, and a resident of Chicago, in the county of Cook, and in the State of Illinois, have invented certain new and useful Improvements in Soda-Fountains; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide for the removal and replacing of soda-fountain sirup-cans without interference with the rods by which the discharge-cocks of such cans are actuated; and to this end the said invention consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a vertical transverse section of a portion of a soda-fountain, and illustrates my improvements in connection therewith; Fig. 2, a horizontal section taken on line 2 2 of the preceding figure; Figs. 3 and 4, detail perspective views of a cam-rod and sleeve constituting part of my invention, and Fig. 5 a plan view of a socket for engagement with the nozzle of a sirup-can discharge-cock.

Referring by letter to the drawings, A represents the overhanging front portion of an ordinary soda-fountain; B, the chamber for the sirup-cans, and C the chamber for ice, the front wall of this latter chamber being perforated, as is usual in the art. Each sirup-can D has its bottom provided with a seat *b* for a flange *c* on a nipple E, that is constructed of any suitable material, and screw-threaded at its lower end to engage with corresponding threads cut in the upper end of a casing F, and a packing G is interposed between the nipple-seat *b* and a flange *d* on said upper end of the casing.

Depending from the casing F is a nozzle *e*, that loosely engages a flanged socket H, that is riveted or otherwise rigidly secured to the bottom of the sirup-can chamber, and in practice it is preferable to have the nozzle extend a short distance below said chamber, as illustrated in Fig. 1. A passage *f* between the casing F and its nozzle is governed by a valve I, having its stem *g* extended up through the packing *h* in stuffing-box *i*, that forms part of said casing, and the upper end of the valve-

stem is screw-threaded to engage an apertured head J, as is also best illustrated in Fig. 1. Interposed between a disk *j* and a screw-cap *k*, forming part of the stuffing-box *i*, is a spiral spring K, that surrounds the valve-stem *g*, and when the valve I is lifted the spring is contracted by the movement in order to afterward expand and automatically return said valve to its seat. The apertured head J on the valve-stem *g* is engaged by one end of a curved lever L, fulcrumed midway of its length to a bracket *m*, that extends from the casing F, and the other end of this lever is in opposition to a disk *n*, forming the inner extremity of a rod M, that has its bearing in a sleeve N, that extends through the fountain-front A and adjacent wall of the chamber B, a washer *p* of suitable thickness being preferably arranged on said sleeve within the usual air-space between said fountain-front and chamber. That portion of the sleeve N that comes within the chamber B is screw-threaded and engaged by a retaining-nut *r*, engaged therewith to bear against the adjacent wall of said chamber. The inner extremity of the sleeve N is provided with cam-surfaces *s*, opposed to cam-lugs *t* on the rod M, whereby the latter will be caused to move longitudinally simultaneously with a partial rotation. This longitudinal movement of the rod M will cause a pressure of the disk *n* at its inner extremity against the adjacent lever L, and thus the latter will be actuated to lift the valve I from its seat. The longitudinal movement of the rod M is against the power of a spiral spring P, that surrounds the same between a shoulder *u* in the sleeve N, and another sleeve R, that has a screw-threaded connection with said stem and turns freely in the former sleeve. The sleeve R is provided with a handle S, and set-screw *v* engages with the outer extremity of the rod M to bear against said sleeve.

When the handle S is operated to turn the sleeve R, there is a corresponding motion of the rod M against the power of the spring P, and the cam action necessary to the longitudinal movement of said sleeve and rod takes place, whereby the valve I is lifted by the lever L and held away from its seat as long as may be necessary to have a desirable amount of sirup flow from the relative can. The han-

dle S being released, the rod M and sleeve R, fast thereon, are automatically returned to their normal position by the expansion of the spring P, and the valve I is reseated by the expansion of the spring K, that surrounds its stem, and is previously compressed by the lift of the same.

As a matter of finish a ferrule T may be interposed between a bead on the outer end of the sleeve N and adjacent front of the fountain.

By the construction and arrangement of parts above described it will be seen that the sirup-can can be removed from the chamber B at any time without detachment of any portion of the mechanism by which the valve I is actuated, and it will also be observed that said can and casing F may be readily separated, while at the same time all of the parts relative to said casing or those relative to the lever-actuating rod can be as readily detached for convenience in packing, cleaning, or repairing.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a sirup-can having an outlet governed by a lever and spring-controlled valve, and a longitudinally-reciprocating rod positioned to have its inner extremity oppose and operate the valve-lever, substantially as set forth.

2. The combination of the sirup-can provided at its bottom with a depending nipple, a casing detachably connected to the nipple and having an outlet governed by a spring-controlled valve, a lever fulcrumed to the casing and connected to the valve, and a longitudinally-reciprocative rod positioned to have its inner extremity oppose and operate the valve-lever, substantially as set forth.

3. The combination of the sirup-can, a casing connected thereto and having an outlet governed by a valve that has a spring-controlled stem provided with an apertured outer end, a curved lever fulcrumed on the casing to have

one of its ends engage the aperture in the valve-stem, and a longitudinally-reciprocative rod positioned to have its inner extremity oppose and operate said lever, substantially as set forth.

4. The combination of the sirup-can having an outlet governed by a lever and spring-controlled valve, a rod having one extremity thereof opposed to the valve-lever and provided with cam-lugs, a sleeve forming a bearing for the rod and provided with cam-surfaces in opposition to said lugs, and a turning-handle fast to the other extremity of said rod, substantially as set forth.

5. The combination of the sirup-can having an outlet governed by a lever and spring-controlled valve, a rod having one extremity thereof opposed to the valve-lever and provided with cam-lugs, a sleeve forming a bearing for the rod and provided with cam-surfaces in opposition to said lugs, another sleeve loose within the first and fast on said rod, and a spring arranged to be compressed by a longitudinal movement of the aforesaid rod, substantially as set forth.

6. The combination of the sirup-can having an outlet governed by a lever and spring-controlled valve, a rod having one extremity thereof opposed to the valve-lever and provided with cam-lugs, a sleeve forming a bearing for the rod and provided with cam-surfaces in opposition to said lugs, a set-nut engaging the sleeve in opposition to a wall of a chamber for said sirup-can, another sleeve loose within the first and fast on said rod, and a spring arranged to be compressed by a longitudinal movement of the aforesaid rod, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Chicago, in the county of Cook and State of Illinois, in the presence of two witnesses.

ADOLPH SCHIER.

Witnesses:

JOSEPH KENNY,
WM. C. SCOTT.