No. 702,131. Patented June 10, 1902.

R. M. GREEN, Jr.

SYRUP COCK FOR SODA WATER FOUNTAINS.

(Application filed Feb. 25, 1901.)

(No Model.)

Fig. 5.

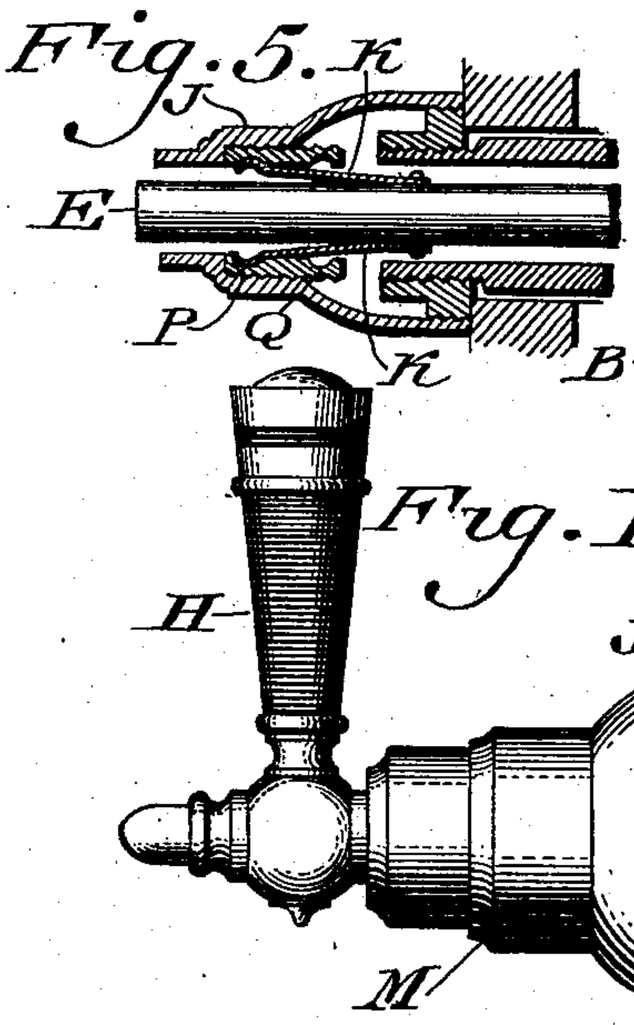


Fig. 1.

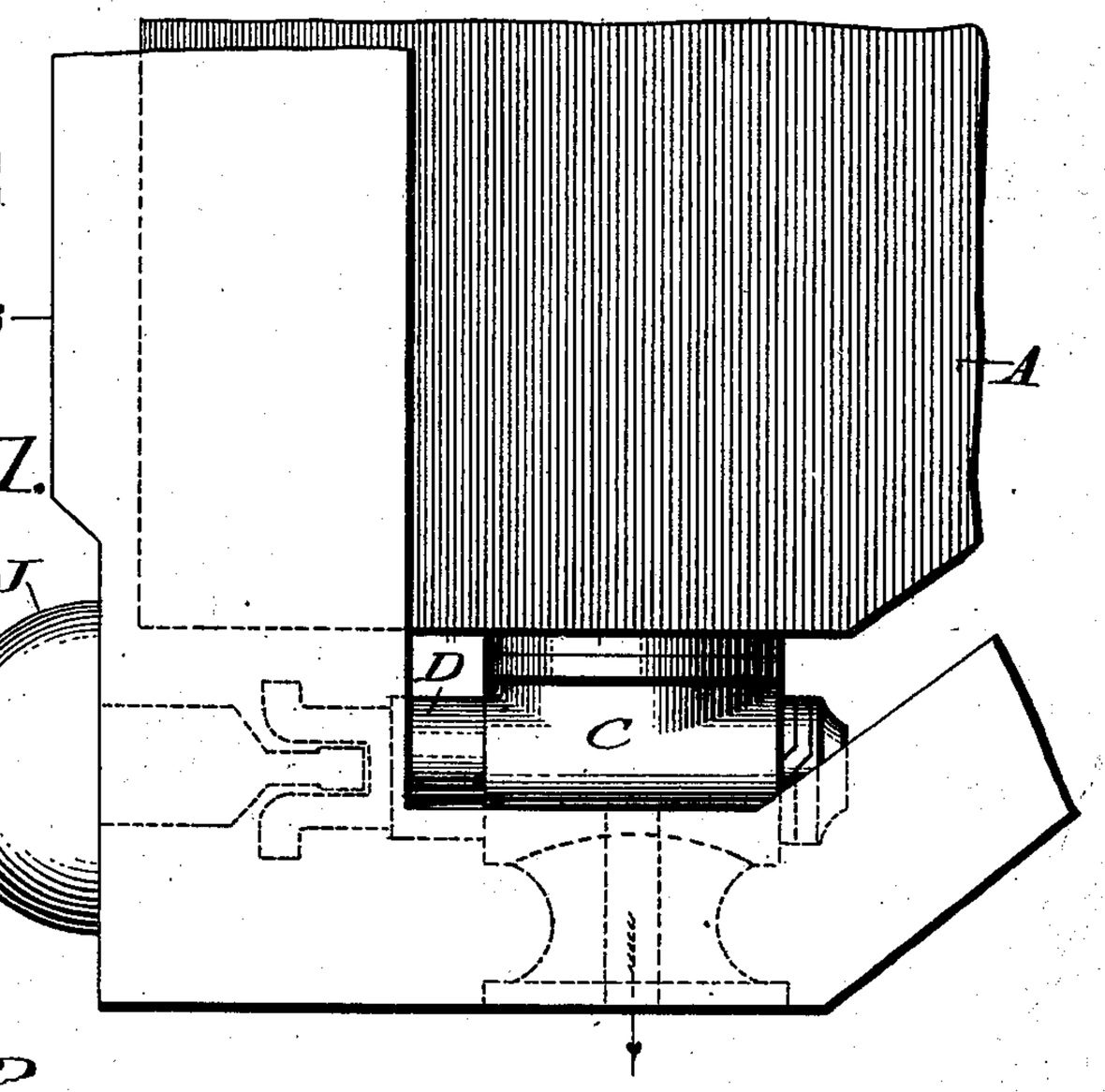
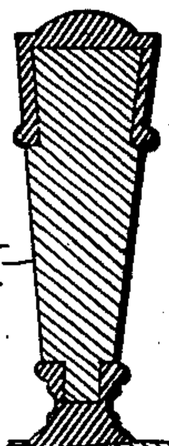


Fig. 2.



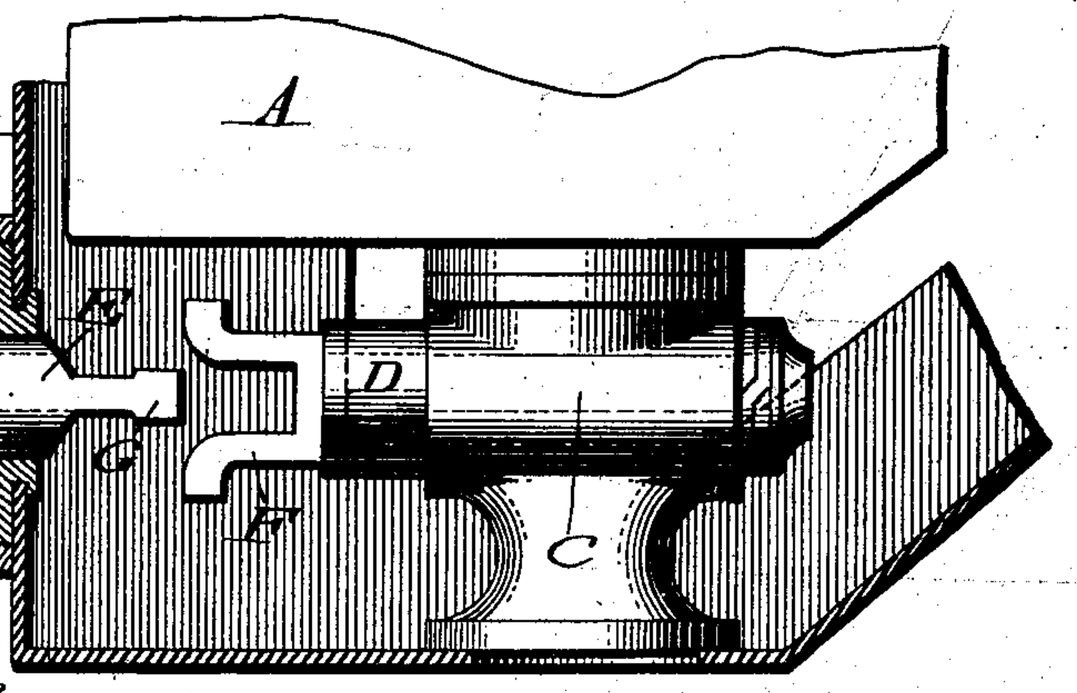


Fig. 3.

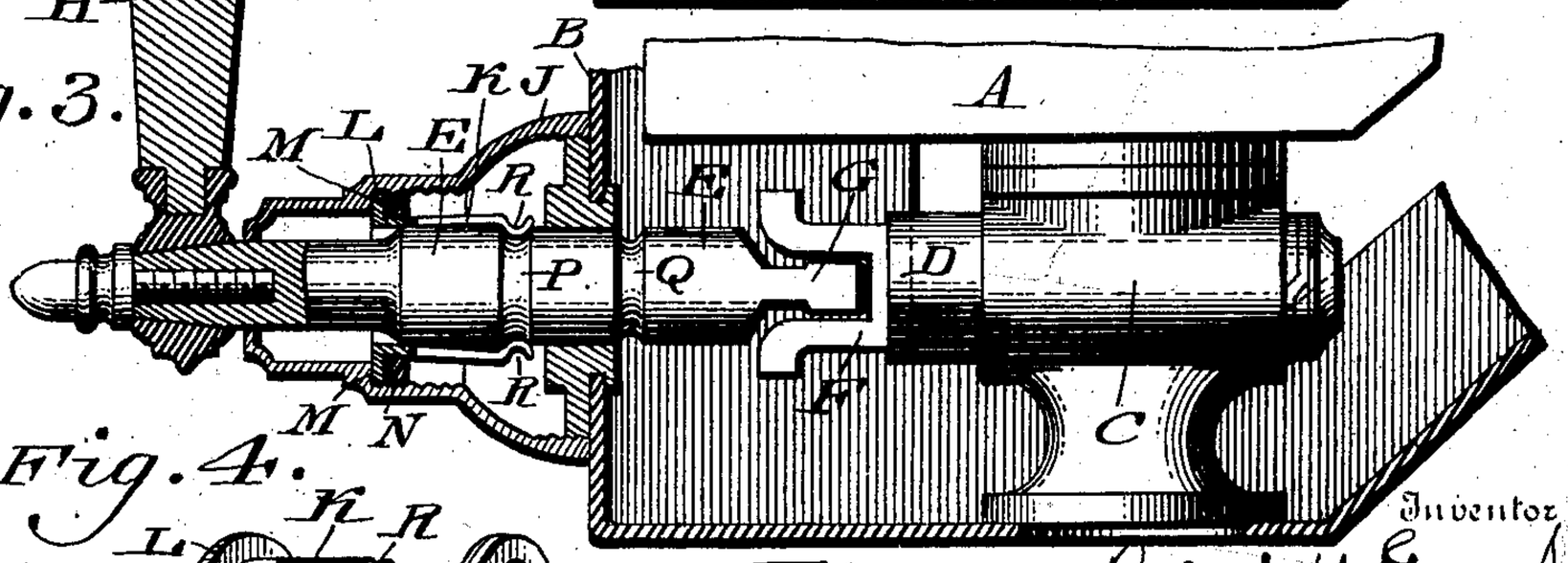
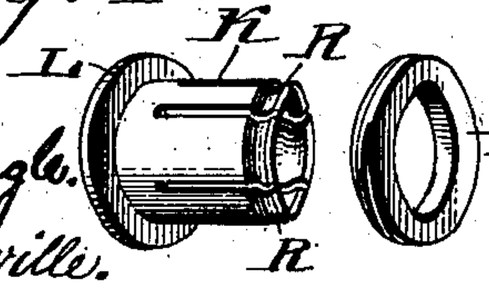
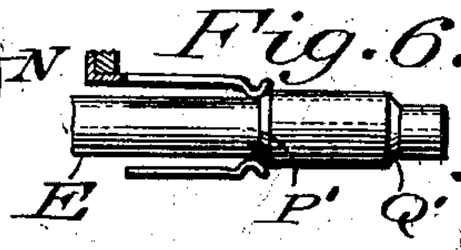


Fig. 4.



Witnesses
P. F. Eagle.
L. Dorville.

Fig. 6.



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UNITED STATES PATENT OFFICE.

ROBERT M. GREEN, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ROBERT M. GREEN & SONS, OF PHILADELPHIA, PENNSYLVANIA, A FIRM.

SYRUP-COCK FOR SODA-WATER FOUNTAINS.

SPECIFICATION forming part of Letters Patent No. 702,131, dated June 10, 1902.

Application filed February 25, 1901. Serial No. 48,763. (No model.)

To all whom it may concern:

Be it known that I, ROBERT M. GREEN, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Syrup-Cocks for Soda-Water Fountains, of which the following is a specification.

My invention relates to an improvement in soda-water fountains which are provided with means for connecting and disconnecting the syrup-cock and the operating-handle thereof, so that the syrup-tank, with the cock, may be readily removed from the fountain for cleansing, replenishing, inspection, renewing, or repairs and as readily replaced in normal or operative position.

The invention consists in forming the stem of the cock in sections detachably connected, whereby the syrup-tank may be readily removed from the tank-chamber and adapting the handle-section of said stem to be shifted out and in and locked in either position and providing means for controlling said handle-section in either of the positions to which the handle may be placed.

Figure 1 represents a side elevation of a syrup-cock for a soda-water fountain embodying my invention. Figs. 2 and 3 represent vertical sections thereof, showing the handle-section in different positions. Fig. 4 represents a perspective view of the engaging device employed for the handle-section. Fig. 5 represents a sectional view of a modification. Fig. 6 represents a side elevation of another modification.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a syrup-tank, B the chamber thereof, and C the discharge or dispensing cock of said tank, the stem of said cock being formed in sections D and E, one of said sections having a bifurcation or socket F thereon and the other section having a head G thereon, said head freely entering said socket and engaging therewith, whereby when the section E, which has the handle H connected therewith, is properly rotated the cock may be opened and closed. The section E is fitted within the exterior cap J and made to slide out and in and passes through the series of circularly-arranged tongues K, forming a sleeve the forward end of which is preferably formed with the flange L, which rests upon the shoulder M in said cap and is held firmly thereagainst by the ring or annulus N, which is screwed to the inner threaded wall of said cap. If desired, a single tongue may be employed, as is evident. The cap J is preferably firmly fixed or mounted upon the front of the soda-fountain or upon the syrup-tank frame if employed in connecting with a syrup-tank of the tilting type.

On the handle-section E are the circumferential shoulders or grooves P and Q, which are common to said section and are differently disposed therein and parallel around said section and either of which is adapted to seat the necks R on the inner end of the tongues K as claws or clamps, it being noticed that said tongues are of resilient or elastic nature, so as to be expansible and contractible, and thus the necks R are caused to spring into the respective groove P or Q, thus locking the section E in the inner or outer position it occupies.

The operation is as follows: When the section E is pushed in, the head G and socket F are engaged, and the necks R occupy the groove P, thus holding the section in its innermost or operative position and preserving the engagement of said head and socket, as shown in Fig. 3. When the section is drawn out, the head and socket are disconnected, and as the section advances the tongues are expanded and the necks R leave the groove P and ride on the portion of the section between said groove P and the groove Q until said necks reach the groove Q, when the tongues contract and the necks drop or spring into said groove Q, and thus lock the section and retain it in its outermost position, as shown in Fig. 2. When the section is again pressed in, the holding action of the tongues are overcome, and when the groove P comes under the necks R the latter spring into said groove, and the section is again locked in its innermost or operative position, the head and socket being again engaged, as in Fig. 3. It will be noticed the extent of the

sliding movement of the handle-section through the sleeve is limited to the distance from the groove P to the groove Q. It will also be noticed that the resilient tongues K bear against the respective shoulders of the handle-section, so that whatever position the handle N may be placed it will be controlled against improper motion, while the desired rotation of the said section may be readily accomplished without interference of said tongues, although the latter are in contact with said section.

Owing to the shoulder M, the flange L, and the ring or annulus N the tongues K are securely hung at one end from the interior of the cap J, its other end being free to expand and contract relatively to the grooves P and Q in the different positions of the handle-section of the stem.

The tongues K may be attached to the section E, and the shoulders or grooves P Q formed in the cap, as in Fig. 5, or shoulders P′ Q′ may be employed in lieu of well-defined grooves, as in Fig. 6, without in either case changing the spirit of my invention.

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

1. In a soda-water fountain, a syrup-cock having a rotary stem formed in sections with means for detachably engaging one with the other, a cap on the fountain in which the handle-section is mounted and shiftable, and a resilient clamp in said cap, said section having on the circumference thereof differently-disposed shoulders with either of which said clamp may engage respectively in the in and out position of the section.

2. In a soda-water fountain, a syrup-cock having a rotary stem formed in sections, the handle-section being shiftable in and out, a cap on the fountain in which said section is mounted, differently-disposed shoulders on said handle-section, and a resilient clamp in said cap adapted to bear freely against either of said shoulders respectively in the in and out positions of the section and during the rotation of the latter.

3. In a soda-water fountain, a syrup-cock having a rotary stem formed in sections, with means for detachably connecting the same, a cap on the fountain in which the handle-section is mounted, differently-disposed shoulders on the periphery of said handle-section, and resilient clamps in said cap adapted to freely engage with either of said shoulders relatively to the in and out positions of said section and during the rotation of the latter.

4. In a soda-water fountain, a syrup-cock having a rotary stem formed in sections with means for detachably connecting the same, the handle-section thereof being shiftable in and out and having differently-disposed shoulders circumferentially thereon, a cap on the fountain on which said sections are mounted, and a resilient clamp in said cap adapted to freely engage with either of said shoulders while said section is at rest and during the rotations of the same.

5. A syrup-cock having a stem formed in sections, the outer or handle section being shiftable in and out, a cap in which said section is mounted, the interior of the same having a shoulder thereon, and a clamping device within said cap adapted to engage said section, said device having a flange which abuts against said shoulder, and a ring connected with said cap and bearing against said flange.

6. In a soda-water fountain, a syrup-cock having a rotary stem formed in sections with means for detachably engaging and disengaging one with and from the other, a cap on the fountain in which the handle-section is mounted and shiftable, differently-disposed seats on the periphery of said section, and a tongued sleeve secured to said cap and freely encircling said handle-section and adapted to engage respectively with said seats relatively to the in and out positions of the section and during the rotations of the same.

ROBERT M. GREEN, JR.

Witnesses:
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W. R. HOOVER.