(No Model.)

H. S. PARK & J. B. HERRON.

SIRUP FOUNTAIN COCK.

No. 456,159. Patented July 21, 1891.

Fig. 1.

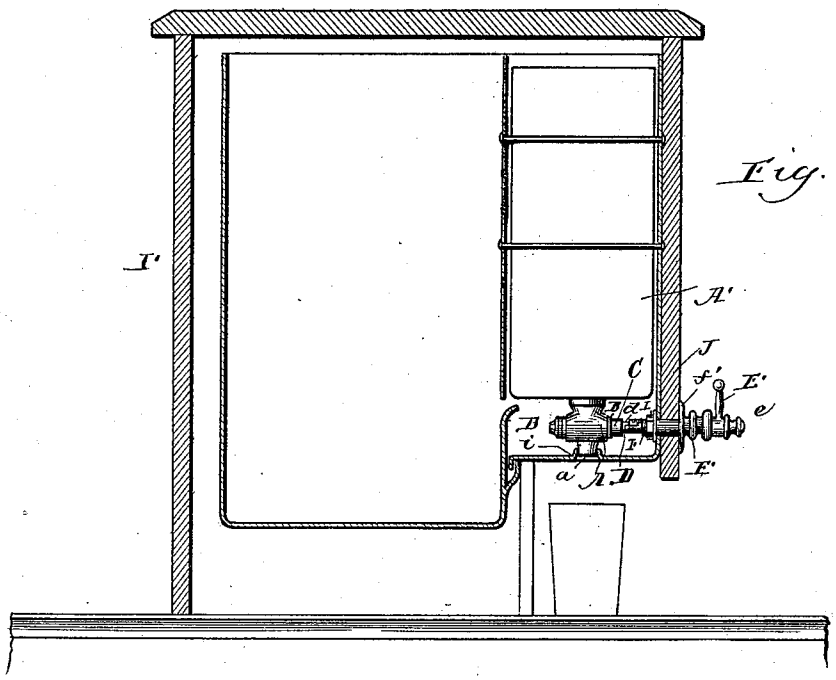


Fig. 2.

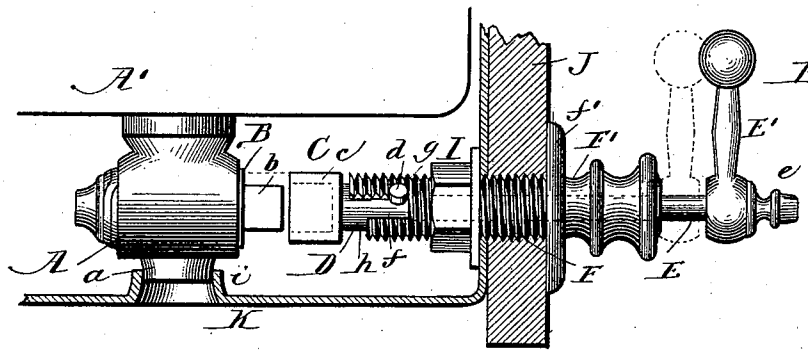
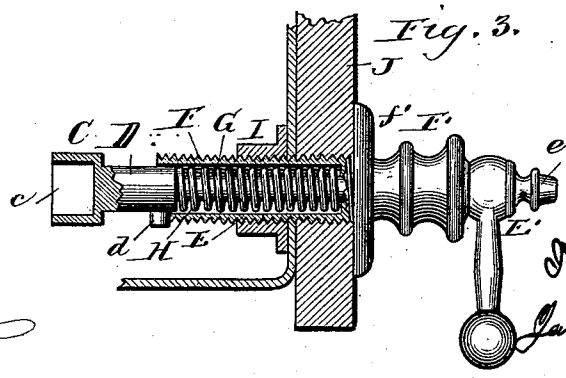


Fig. 3.



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SIRUP-FOUNTAIN COCK.

SPECIFICATION forming part of Letters Patent No. 456,159, dated July 21, 1891.

Application filed March 25, 1891. Serial No. 386,392. (No model.)

To all whom it may concern:

Be it known that we, HARVEY S. PARK and JAMES B. HERRON, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Handles for Sirup-Can Cocks; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a sectional elevation of the chamber of a soda-water apparatus, showing a sirup-can therein, with the discharge-cock and its operating-handle applied thereto. Fig. 2 is an elevation, enlarged as to Fig. 1, showing the discharge-cock for the sirup-can and its operating-handle. Fig. 3 is an elevation, partly in section, showing the operating-handle and its manner of attachment thereon.

This invention relates to a discharge-cock and operating-handle therefor to be used with a sirup-can standing vertical, which can is removable vertically from its chamber for the purpose of filling the same; and the object of the invention is to construct a detachable handle for the discharge-cock which will permit of the ready removal and replacement of the sirup-can without disturbing the discharge-cock and its operating-handle; and to this end the invention consists in a discharge-cock having a stem with a squared end and a sliding handle having a socket-head to receive the squared end of the discharge-cock for connecting the cock with its handle, so as to be operated by the handle, and disconnecting the cock from its handle for the removal and replacement of the sirup-can; in providing a locking pin and recess for holding the handle when drawn out and disengaged from the discharge-cock stem; in providing a spring for forcing the handle inward and into engagement with the discharge-cock stem, and in the several parts and combinations of parts hereinafter described, and pointed out in the claims as new.

In the drawings, A represents the shell or casing of a discharge-cock attached to a sirup-can A′ in any usual and well-known manner, and having in the construction shown a nozzle *a*, encircling the discharge-opening from the top.

B is the plug or valve for the discharge-cock, having at one end a square stem *b*, as shown in Fig. 2.

C is a head having an opening or recess *c* to receive the square stem *b* of the plug B.

D is a neck or extension of the head C, which neck or extension has a pin or projection *d*.

E is a rod extending from the neck D to the outside of the fountain-case.

The parts C, D, and E can be formed of a single piece, or they can be formed of separate pieces suitably united together, so as to form a continuous piece. The outer end of the stem or rod E receives a handle E′, which, as shown, is secured in place by a suitable nut *e*.

F is a thimble having an exterior screw-thread for entering and uniting the thimble to the fountain-case, and this thimble has a head F′, with a flange or plate *f*′ to abut against the outer face of the front of the case, and through this head F′ is a hole for the passage of the rod or stem E.

The inner end of the thimble F has a slot *f* for the passage of the pin or projection *d*, with a side notch *g* at its inner end to receive the pin or projection *d*, and a passage *h* at the end of the thimble for the turning of the pin or projection to permit the rod or stem E to be turned and turn the head C to operate the plug or valve B.

G is a chamber in the thimble F for the entrance of the stem or neck D.

H is a spring located in the chamber G around the rod or stem E, and abutting at one end against the end face of the stem or neck D and at the opposite end against the bottom of the chamber G.

I is a nut for the exterior of the thimble F and for clamping against the inner face of the front of the case.

J is the front of the case, to which the handle as a whole is applied.

K is a guard or support running from the

front J back to the ice-chamber of the case, as usual, and having thereon a wall or ring *i*, forming an opening for the nozzle *a* of the discharge-cock.

The thimble F is screwed into the front J for the flange or plate *f'* to abut against the outer face of the front, and the nut I is screwed onto the thimble F to abut against the inner face of the front, as shown in Fig. 2. The spring H is inserted in the chamber G and the stem E passes through the spring and the hole in the head F', and the handle E' is attached to the outer end of the stem and secured by the nut *e*. The ring or rest *i* is arranged so that when the neck or nozzle *a* is therein the stem *b* will be in line with the opening or recess *c* of the head C and so as to enter such hole or opening when the handle is advanced, as shown by dotted lines in Fig. 2.

The operation is as follows: The handle is disconnected from the valve or cock by drawing it outward, which draws the head C away from the stem *b*, and such outward draw is permitted by the slot *f*, which allows of the passage of the pin or projection *d*, and when the limit of the stop *f* is reached the pin *d* is entered into the recess *g* of the thimble F, which locks the handle and the head C in their withdrawn position, and when in this position the discharge-cock is clear of its handle and the sirup-can A' can be raised vertically and removed from the chamber. The sirup-can when replaced in its chamber enters the nozzle *a* into its ring or support *i* and brings the stem *b* in line with the opening or recess *c*, and by turning the handle E' for the pin or projection *d* to pass from the recess *g* and enter the slot *f* the spring H, which is contracted when the handle is withdrawn, will act and carry the handle forward for the head C to advance and receive the stem *b*, locking the handle to the stem, and when the handle and stem are locked together by the engagement of the stem with the head C the turning of the handle will turn the discharge cock or valve B, and such turning is permitted by the opening *h* at the end of the thimble F, and when turned the sirup is discharged through the nozzle *a* into the glass, as usual. The discharge of the sirup is stopped when the required quantity is had by turning the handle back to its normal position, which turns the head C, and through the connection of the head with the stem *b* turns the discharge cock or valve B to shut off the supply.

The slot *f* forms a guide for the withdrawal of the head C, and the edge of this slot forms a stop for turning the head and handle to this normal position, and a stop for turning the handle and head to open the discharge cock or valve is had by the end wall of the opening *h*. The notch *g* receives the pin or projection *d* and forms a positive retaining of the head C in its withdrawn position, so that no attention need be paid to the handle and head when disengaged from the discharge-cock, and when the pin or projection is turned out from its locking-recess *g* its limit of turning is had by the stop furnished by the edge of the slot *f*, so that the pin or projection *d* will come in line with the slot *f* for the spring H to act and force the head C into engagement with the stem *b*.

The device is very simple, and can be readily applied to the purpose for which it is intended, and in use will be found positive and effectual, and when the handle is withdrawn and the pin or projection *d* turned into its locking-recess *g* the handle and the head C will be held in their withdrawn position until the engagement of the pin or projection *d* with its recess is released, and when released the spring acts automatically to throw the head C into engagement with the stem *b*, and the parts must always come in line by the engagement of the slot *f* in connection with the pin or projection *d*, and this slot *f* furnishes a guide for the straight travel of the head C to engage the stem *b*, and its edge furnishes a stop for the pin or projection in turning out from the recess *g*, and its opposite edge furnishes a stop for returning the handle and the head C to their normal position, while the opening *h* with its edge furnishes a means for turning the handle and head to open the discharge cock or valve and limit the turning of such parts.

The square stem of the cock need not be one having four equal flat faces, as two of the opposite faces can be longer than the other two, and instead of four flat faces the stem could have three faces arranged in a triangular shape, or the stem could have a single square face and still be within the meaning of a square end, and the opening *c*, which receives the square end, should be of a shape corresponding to the end, and, if desired, the end could be formed with a fore-shortened face with the opening *c* accordingly, and so that the stem could not enter the opening except when standing in line and square therewith, and by this arrangement if the valve or cock should be turned wrong it could not be engaged with the handle until turned right, and this would prevent any turning of the valve except in the proper position to coact with the movement of the handle in opening and closing the cock or valve.

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a sirup-can, of a discharge-cock, a stem for the discharge-cock with a square end, a head receiving the square end of the stem, a stem for the head projecting outside of the casing and receiving a handle on its outer end, a thimble carrying the handle-stem, a locking pin and slot, and means for returning the handle-stem and en-

gaging the head with the stem of the discharge-cock, substantially as and for the purposes specified.

2. The combination, with a sirup-can, of a discharge-cock having a square-ended stem *b*, a head C, having an opening *c*, receiving the stem *b*, a neck D for the head C, having a pin or projection *d*, a stem E, carrying the neck D, a handle E′ on the outer end of the stem E, a thimble F, carrying the stem E, a chamber G in the thimble F, a spring H in the chamber G, and a locking-slot *f g h* in the wall of the thimble F, substantially as and for the purposes specified.

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