

(No Model.)

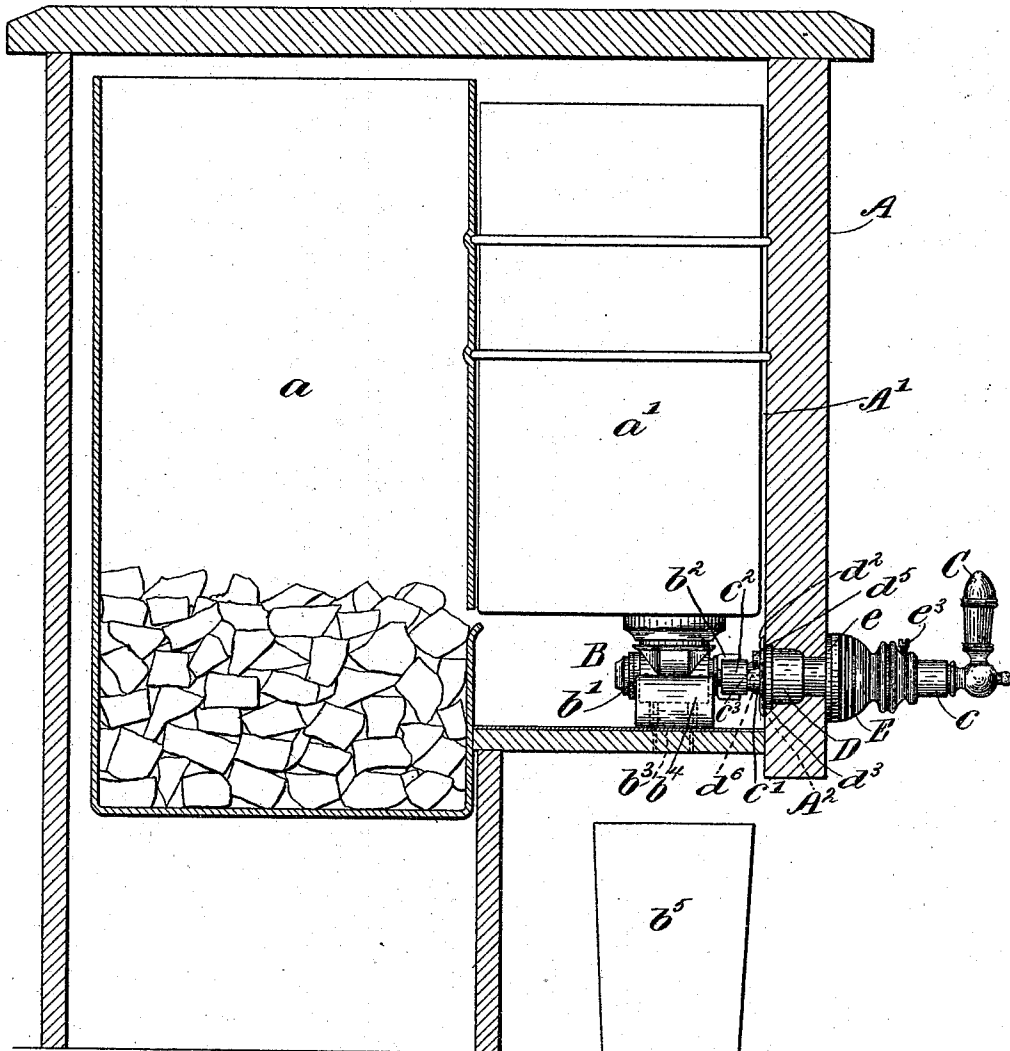
2 Sheets—Sheet 1.

C. H. DUFFIELD.
SIRUP FOUNTAIN COCK.

No. 552,518.

Patented Jan. 7, 1896.

Fig. 1



Witnesses:
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Louis Winterberger.

Inventor:
Charles H. Duffield,
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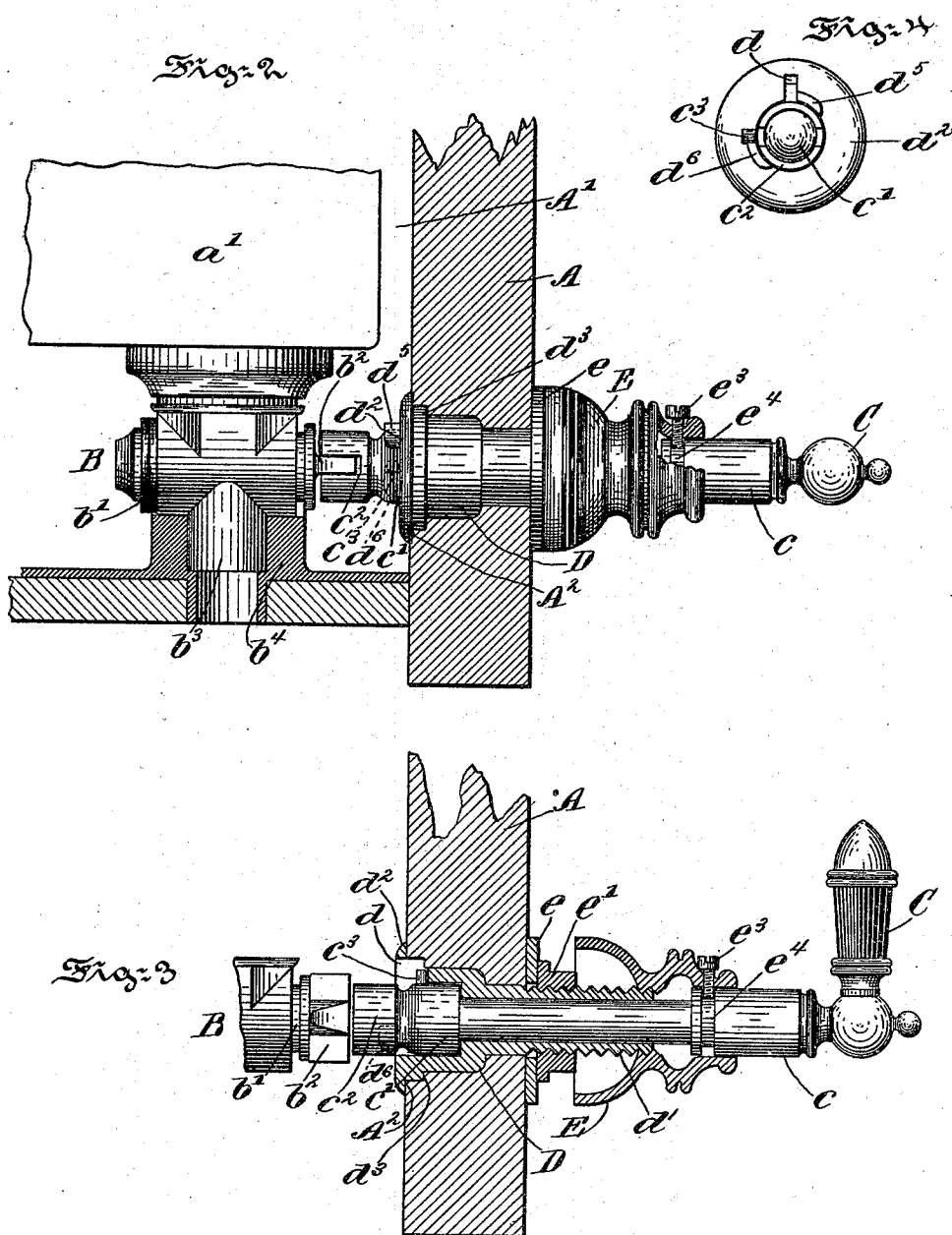
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UNITED STATES PATENT OFFICE.

CHARLES H. DUFFIELD, OF PHILADELPHIA, PENNSYLVANIA.

SIRUP-FOUNTAIN COCK.

SPECIFICATION forming part of Letters Patent No. 552,518, dated January 7, 1896.

Application filed May 7, 1895. Serial No. 548,371. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. DUFFIELD, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sirup-Fountain Cocks, of which the following is a specification.

My invention has relation to a sirup-fountain cock wherein the cock of a sirup-jar in such a fountain is provided with an operating-handle, and in such connection it relates to means for engaging and disengaging the cock and operating-handle to permit of the turning of the cock so as to allow of a discharge or a cutting off of sirup therefrom, and also to permit of the removal of the jar from the apparatus without removing the operating-handle.

The principal object of my invention is to provide a sirup can or jar having a rotary discharge cock or valve and a key or plug, an operating-handle having a spindle, a keyway connected with the end of said spindle, a pin on said spindle and a groove in the forward or handle end of the same, said spindle being adapted to slide in a surrounding sleeve, which is shouldered or flanged and having a notch or slot to permit of the in-and-out movement of the spindle guided by the movement of its pin in said slot, the sleeve being also provided with projecting stops or lugs formed upon the rear or flanged face of the sleeve to limit in connection with said pin the rotary movement of said spindle, the sleeve being also threaded at its forward end to receive a cap which is provided with a pin fitting in the annular groove in the handle end of the spindle, the cap when advanced or retracted on said sleeve being adapted to slide said spindle in said sleeve to connect or disconnect said keyway with the plug of the discharge-cock.

My invention, stated in general terms, consists of a sirup-fountain jar provided with a cock having a key or plug, a spindle provided with a keyway and sliding in a sleeve, and a cap sliding on said sleeve and provided with means for sliding said spindle in the sleeve, substantially in the manner and for the purposes hereinafter more fully described and claimed.

The nature, characteristic features, and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a sectional elevation of the chamber of a soda-water apparatus, showing the sirup-jar in position therein with its discharge-cock, spindle and keyway and the sleeve and cap for operating said spindle embodying features of my invention. Fig. 2 is an enlarged view, partly in elevation and partly in section, showing the operating-handle and spindle provided with a keyway and also means for connecting the keyway with the discharge-cock plug. Fig. 3 is a similar view showing the spindle and its keyway detached from the plug of the discharge-cock; and Fig. 4 is an end view of the operating-spindle and its sleeve, said spindle being in the same position as indicated in Fig. 2, but detached from the cock.

Referring to the drawings, A is a case or housing of the apparatus, of any suitable construction. This case or housing is provided with an internally-supported ice-chamber *a* and a sirup jar or can *a'*, each of suitable shape or form.

B is a discharge-cock secured at the bottom of the jar *a'* and provided with a rotary valve *b'*, having a key or plug *b²* and a discharge-nozzle *b³*, fitting a socketed chair or support *b⁴* to maintain the jar *a'* thereby firmly in position within the chamber A' of the case or housing A. The chair *b⁴* is provided with an opening at its base to permit of the discharge of sirup from the jar *a'* through the nozzle *b³* into a glass or other receptacle *b⁵*, as clearly illustrated in Fig. 1 of the drawings.

C is an operating-handle provided with a shoulder *c*, merging into a spindle which is enlarged at the rear portion *c'* and terminates in a slotted keyway *c²*. The enlarged portion is provided with a pin *c³*, adapted to enter an oblong slot *d* in a flanged, shouldered and partially-threaded sleeve D. The forward end of the sleeve is threaded, as at *d'*, and the rear end is shouldered and flanged, as at *d²* and *d³*—that is to say, the construction of the sleeve is such that it enters the casing or housing A from the inside through an open-

ing A², adapted to receive the flange and shoulder of the said sleeve, the sleeve being secured to the housing by means of a washer *e* and nut *e'*, applied on the threaded portion *d'*, which projects from the exterior of the case or housing A. E is an ornamental cap adapted to be advanced or retracted on the threaded end *d'* of the sleeve D, and is adapted when wholly retracted, as shown in Fig. 2, to conceal the washer *e* and nut *e'*. This cap E is provided with a screw or pin *c*³ at its forward end, projecting into an annular groove *e*⁴, formed in the shoulder *c* of the spindle, thus forming a connection between said cap and spindle, so that when the cap is advanced or retracted on the sleeve it imparts a longitudinal movement of the spindle.

Formed preferably integral with the rear flanged face of the sleeve D are two lugs or stops *d*⁵ and *d*⁶, one of which *d*⁵ is formed directly at the one side of the groove *d*, so as to form an extension of one wall thereof, as illustrated in Fig. 4. These lugs *d*⁵ and *d*⁶ limit the range of rotary movement of the spindle through the pin *c*³ thereof when the keyway *c*² is in engagement with the plug *b*² of the discharge-cock, the pin *c*³, when impinging on the lug *d*⁵, holding the spindle and keyway in such a position as that the discharge-cock is cut off, as indicated in Fig. 1, while the lug *d*⁶ stops the pin *c*³ and keyway when the plug of the cock has been opened, as indicated in Fig. 2.

When the spindle is in the position indicated in Fig. 1—that is to say, with the pin *c*³ in engagement with the lug *d*⁵—the said pin will also be in alignment with the slot *d* of the sleeve D, and if the cap E is now advanced on the sleeve D, as indicated in Fig. 3, the spindle will be drawn out longitudinally in the sleeve D until the keyway *c*² is out of engagement with the plug *b*² of the cock B. In this position the jar and cock may be removed from the compartment A' for the purpose of refilling. When the jar is replaced the cap E is retracted on the sleeve, moving the spindle inward until the keyway *c*² and the pin *c*³ have been wholly withdrawn from the slot *d* and rest against the lug *d*⁵. In this position rotary movement may be given to the spindle by turning the handle C, and this rotary movement is limited by the im-

pingement of the pin *c*³ against the lugs *d*⁵ and *d*⁶.

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

1. In a soda fountain apparatus, the combination with a sirup-jar having a discharge-cock provided with a key or plug, of a slotted and flanged threaded sleeve, an operating handle having a spindle longitudinally movable in said sleeve, said spindle provided with an annular groove, a pin projecting from said spindle and adapted to be guided in the slot of said sleeve, a keyway formed on the end of said spindle and adapted to engage the key or plug of said discharge-cock, lugs or stops projecting beyond the flanged end of said sleeve, a cap adapted to be advanced and retracted on said sleeve, and a pin carried by said cap and engaging an annular groove in said spindle, substantially as and for the purposes described.

2. In a soda fountain apparatus, the combination with a sirup-jar supported in a case and provided with a discharge nozzle cock seated in a chair and having a key or plug, of an operating handle provided with a shouldered front portion having an annular groove, said front portion merging into a spindle having the rear end enlarged and terminating in a keyway, a pin projecting from the enlarged end of said spindle, a flanged and slotted sleeve having a partially threaded exterior face surrounding said spindle, a cap adapted to be advanced and retracted on said threaded portion of the sleeve, a pin carried by said cap and engaging the annular groove in the shoulder of said spindle, and lugs or stops projecting from the flanged end of the sleeve to limit the rotary movement of said spindle through its pin, said operating handle being adapted to slide in said sleeve when the cap and pin are advanced or retracted on said sleeve, substantially as and for the purposes described.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

CHARLES H. DUFFIELD.

Witnesses:

GEO. W. REED,
THOS. M. SMITH.