F. C. BLANCHARD & P. G. DARLING.

CAP FOR VALVES.

APPLICATION FILED JAN. 2, 1909.

915,930.

Patented Mar. 23, 1909.

2 SHEETS—SHEET 1.

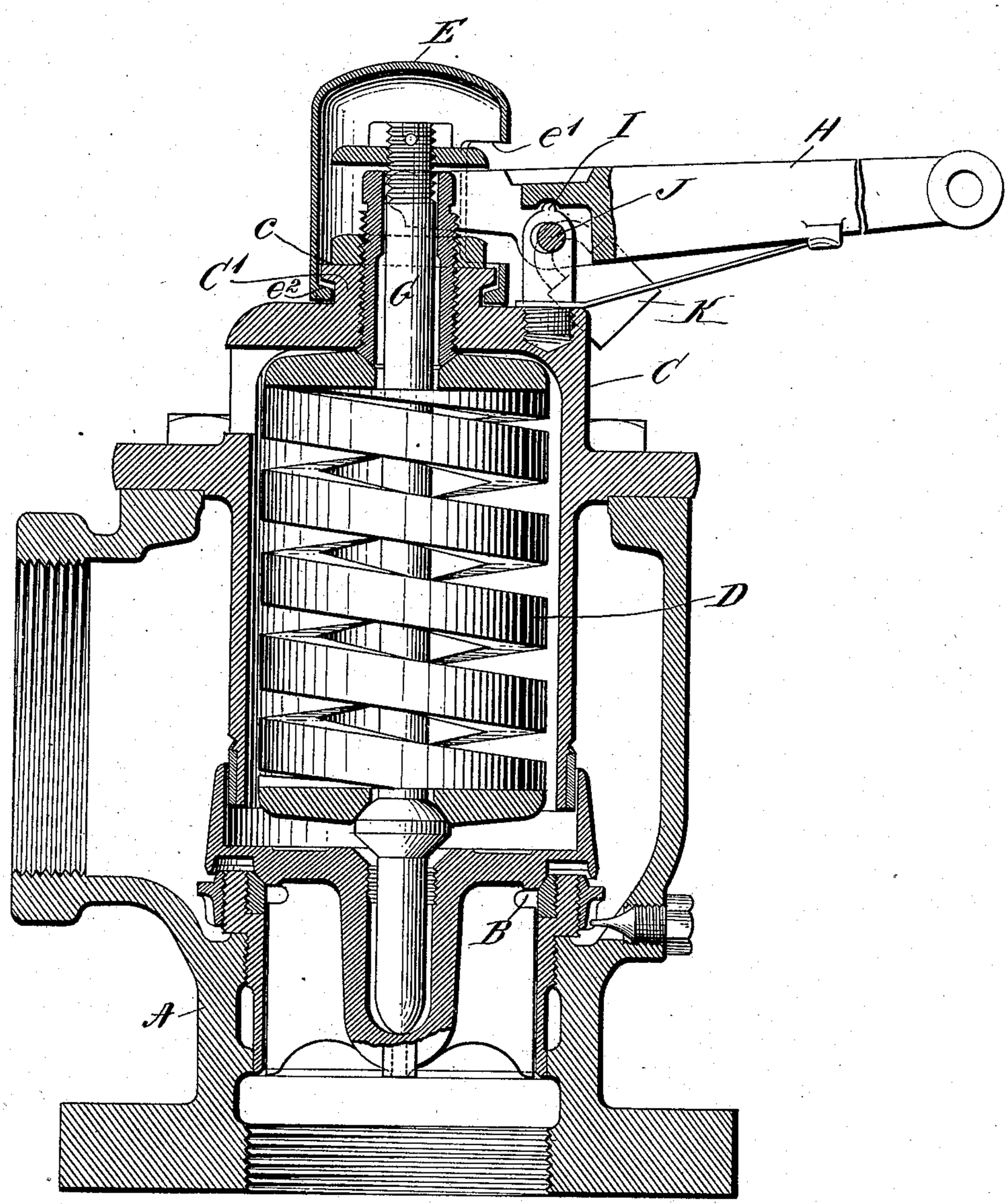

Fig. 1.

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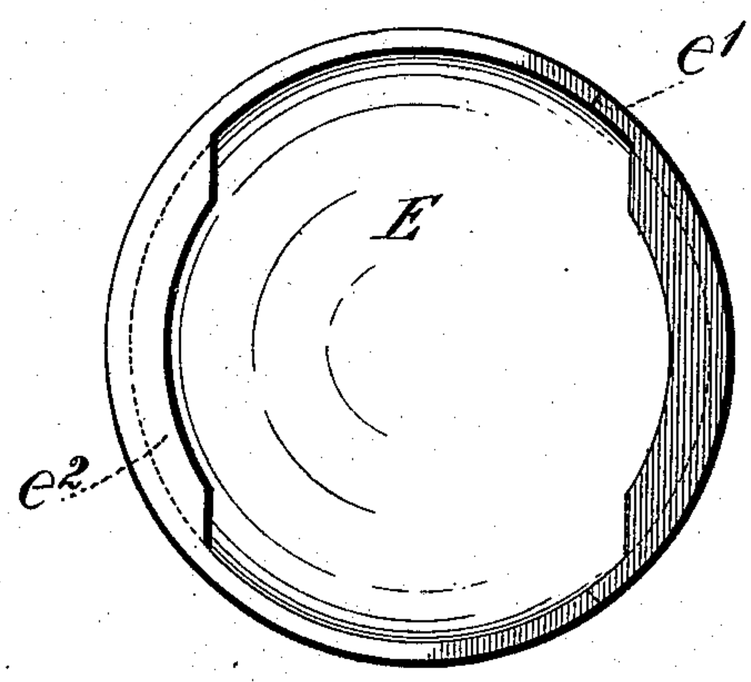

Fig. 2.

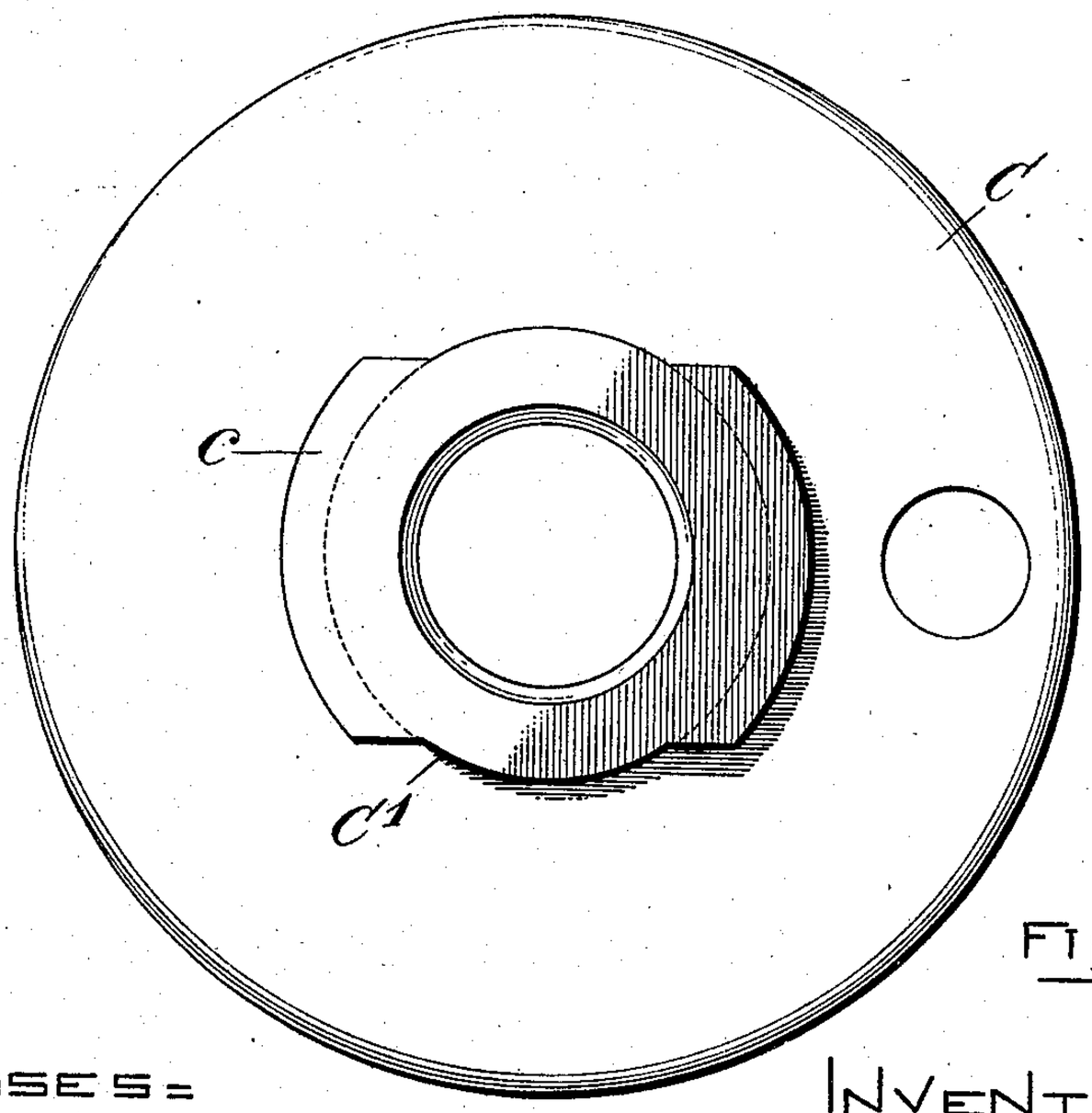

Fig. 3.

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UNITED STATES PATENT OFFICE.

FREDERICK C. BLANCHARD AND PHILIP G. DARLING, OF BRIDGEPORT, CONNECTICUT, ASSIGNORS TO THE CONSOLIDATED SAFETY VALVE COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

CAP FOR VALVES.

No. 915,930. Specification of Letters Patent. Patented March 23, 1909.

Application filed January 2, 1909. Serial No. 470,510.

To all whom it may concern:

Be it known that we, FREDERICK C. BLANCHARD and PHILIP G. DARLING, citizens of the United States, and residents of Bridgeport, in the county of Fairfield and State of Connecticut, have invented new and useful Improvements in Caps for Valves, of which the following is a specification.

Our invention relates to valves and its object is to provide a cap which may be cheaply and effectively secured to the valve and which will not require machine work in fitting it to the cover containing the valve spring.

Figure 1 is a sectional view of the valve containing our improvements; Figs. 2 and 3 are respectively plan views of the bottom of the cap and the neck of the cover.

Referring to the drawings, A is a valve casing provided with a valve seat in which the valve B is seated.

C is the cover mounted upon the valve casing A, and containing the spring D which holds the valve on its seat in the usual manner. The top of said cover C is provided with an upwardly projecting neck C′ having an annular flange *c* parallel with the top of said cover; and said flange *c* has a pair of segmental notches *c′* directly opposite each other, the length of each of said notches being preferably slightly more than one fourth of the circumference of said flange.

E is the cap of the valve having a slot or opening *e′* in the side thereof of sufficient size to permit of the passage of the lever H. At the bottom of said cap there is provided a pair of inwardly projecting lugs e^2 extending at right angles to the side of said cap. These lugs like the notches *c′* in the flange *c*, are directly opposite each other and of a proper size to permit them to pass readily through the notches *c′* to form the bayonet joint presently to be described.

The spring stem G projects upwardly through the cover C and one end of the lever H is secured thereto. The lever-rest I is mounted upon the top of the cover, and said lever and lever-rest are each provided with a hole through which the headed lever pin J may be passed.

In assembling the parts, the cap is applied to the cover in a position ninety degrees from that shown in Fig. 1, the lugs e^2 passing through the notches *c′* and thus brought into sliding engagement with the top of the cover below the flange *c*. The cap is then turned to the position shown in Fig. 1 with the slotted opening *e′* facing the lever-rest I. This turning movement causes the lugs e^2 to engage the flange *c* thus forming a bayonet joint which locks and secures the cap against longitudinal movement. The lever H is then inserted in the slotted opening *e′* and forked, or otherwise secured, to the spring stem G. The headed lever pin J is passed through the lever-rest I and the lever H and locked in position by a padlock K or other suitable means.

It will be obvious that the securing and locking of the lever H in the manner above described absolutely prevents any rotary movement of the cap upon the bayonet joint and effectively locks up the valve.

By reason of the fact that no machine work is required in fitting the cap to the cover, the above described structure can be manufactured with great economy, without the sacrifice of the essential strength and durability, or effective means of securely locking the valve.

What we claim is:

1. In a valve, a valve casing provided with a valve seat, a valve coöperating with said valve seat, a cover, a cap secured to said cover by a bayonet joint, and means to prevent rotary movement of said cap.

2. In a valve, a valve casing provided with a valve seat, a valve coöperating with said valve seat, a cover provided with a flange having a plurality of segmental notches, a cap provided with a plurality of lugs, said lugs in engagement with said flange and means to prevent rotary movement of said cap.

3. In a valve, a valve casing provided with a valve seat, a valve coöperating with said valve seat, a cover, a spring stem projecting through said cover, a cap having a slotted side and secured to said cover by a bayonet joint, a lever passing through said slotted side and secured to said stem and means to lock said lever whereby said cap is secured against rotary movement.

4. In a valve, a valve casing provided with a valve seat, a valve coöperating with said valve seat, a cover having a flange provided with a plurality of segmental notches, a spring stem projecting through said cover, a

cap provided with a slotted side and a plurality of lugs in engagement with said flange, a lever passing through said slotted side and secured to said stem, and means to lock said lever whereby said cap is secured against rotary movement.

5. In a valve, a valve casing provided with a valve seat, a valve coöperating with said valve seat, a cover, a spring stem projecting through said cover, a cap having a slotted side and secured to said cover by a bayonet joint, a lever passing through said slotted side and secured to said stem, a lever-rest, a lever pin passing through said lever and said rest, and means to lock said pin in position.

6. In a valve, a valve casing provided with a valve seat, a valve coöperating with said seat, a cover having a flange provided with a plurality of segmental notches, a spring stem projecting through said cover, a cap provided with a slotted side and a plurality of lugs in engagement with said flange, a lever passing through said slotted side and secured to said stem, a lever-rest, a lever pin passing through said lever and said rest, and means to lock said pin in position.

Signed by us at Bridgeport, Connecticut this 30th day of December, 1908.

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Witnesses:
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