

(No Model.)

C. CLARK.

DEVICE FOR PREVENTING FRAUDULENT REFILLING OF BOTTLES.

No. 542,844.

Patented July 16, 1895.

Fig. 1.

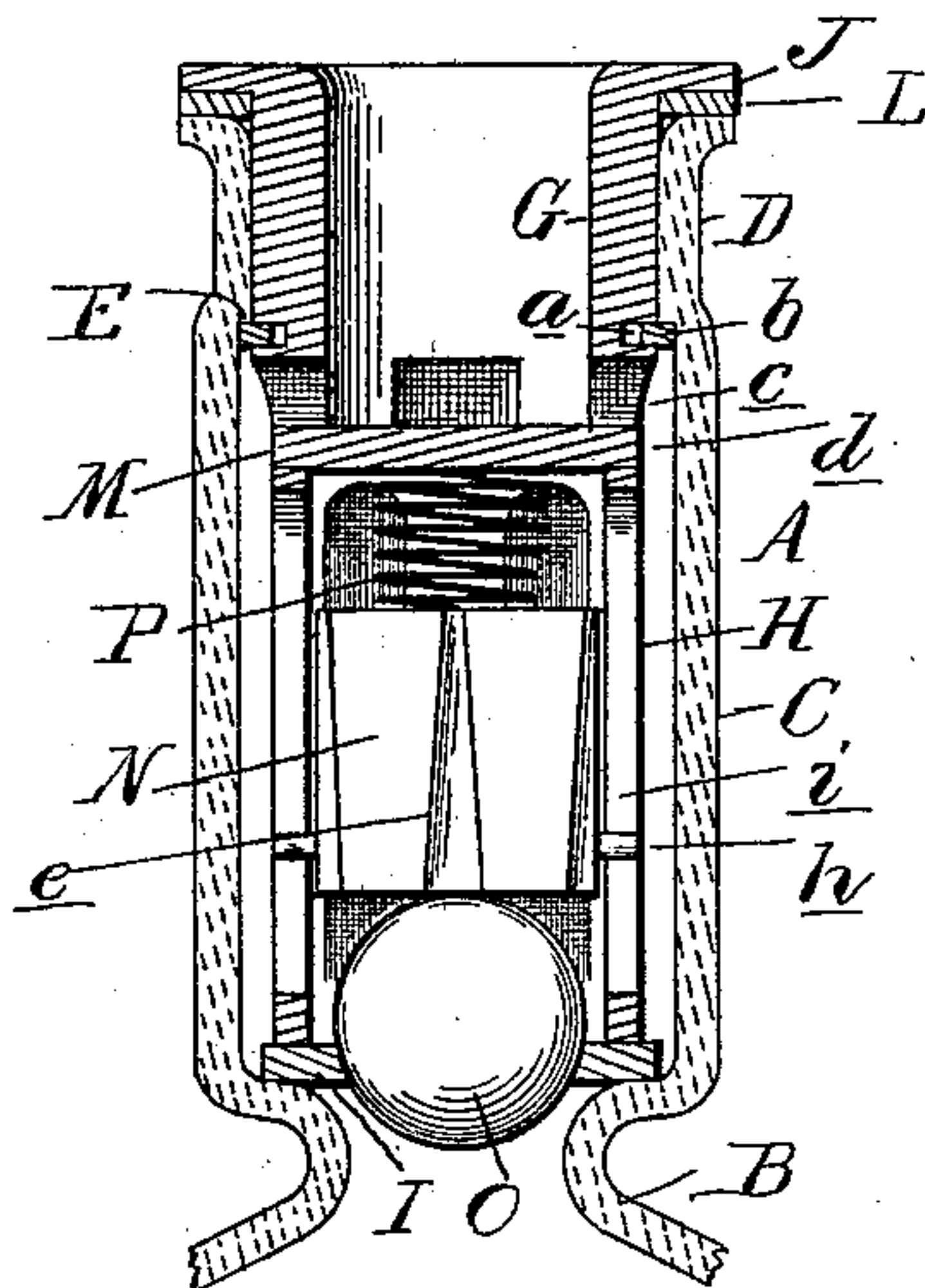
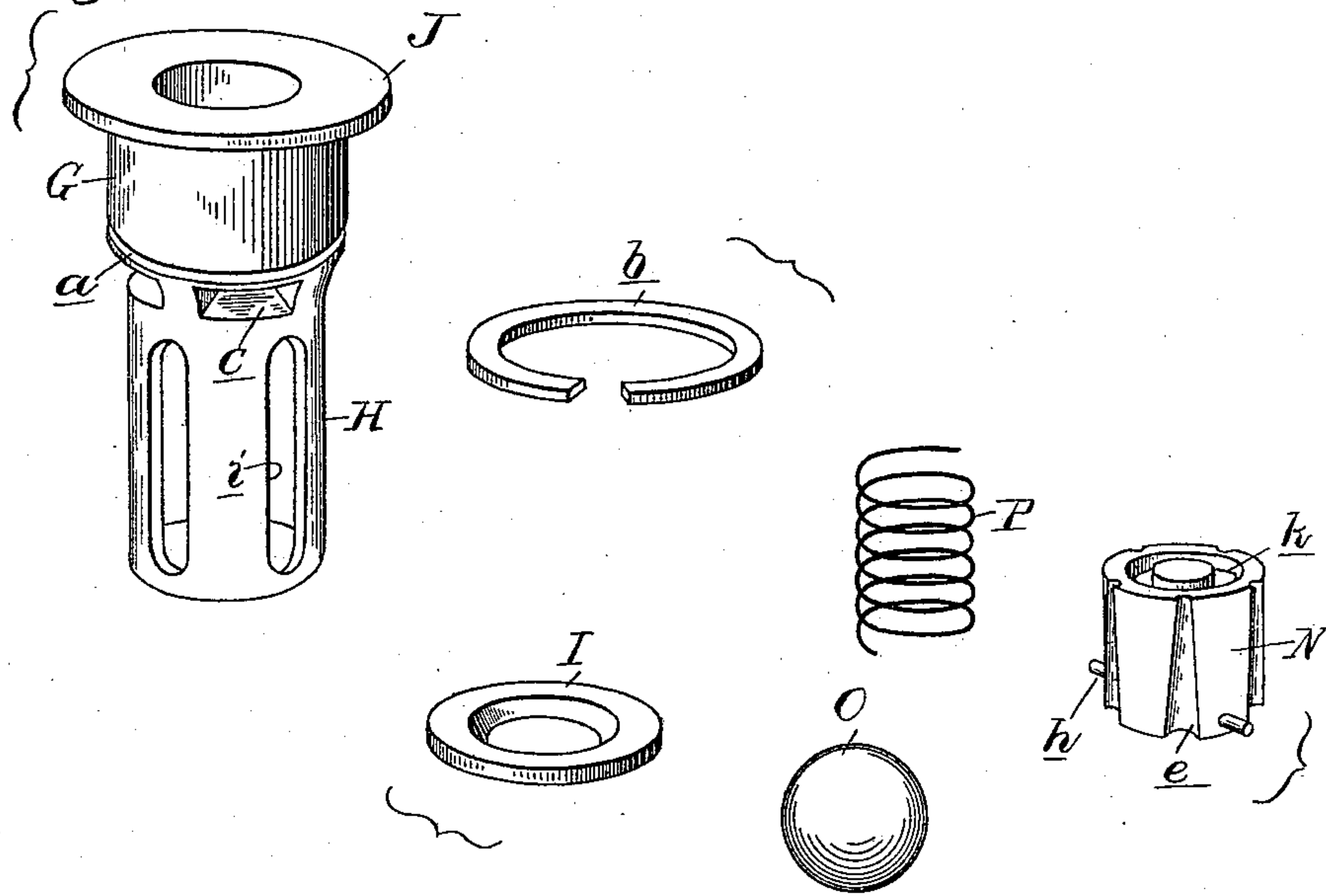


Fig. 2.



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DEVICE FOR PREVENTING FRAUDULENT REFILLING OF BOTTLES.

SPECIFICATION forming part of Letters Patent No. 542,844, dated July 16, 1895.

Application filed January 14, 1895. Serial No. 534,866. (No model.)

To all whom it may concern:

Be it known that I, CLEMENT CLARK, a citizen of the United States, residing at Sandusky, in the county of Erie and State of Ohio, have

5 invented certain new and useful Improvements in Devices for Preventing the Fraudulent Refilling of Bottles, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention consists in the construction of a sleeve or bushing adapted to be secured in the neck of a bottle after the same has been filled, having a valve and a tortuous passage to prevent the fraudulent refilling of the bot-

15 tle, all as more fully hereinafter described. In the drawings, Figure 1 is a vertical central longitudinal section through the neck of a bottle, showing my invention applied thereto. Fig. 2 is a perspective view of the parts

20 of my device detached. A represents the neck of a bottle, having the inwardly-extending corrugation B at the lower end thereof, the intermediate enlarged cylindrical section C, and the contracted top section D, there being a shoulder E at the

25 lower edge of the top section. A bottle having such a neck being filled, I insert therein a sleeve or bushing comprising the upper section G, adapted to fit tightly within the section D of the neck of the bottle, and the section H, contracted and extending through the section C of the neck, resting at its lower edge on the packing-ring I. At the lower edge of the section G of the bushing is an annular

30 groove *a*, in which is the split ring *b*, adapted to engage beneath the shoulder E and lock the bushing against displacement or removal after it has once been engaged. J is an annular flange exteriorly of the top

40 section of the bushing adapted to fit over the top of the neck, and between this flange and the neck is a packing-ring L. At the top of the section H of the bushing are lateral apertures *c*, leading into the annu-

45 lar passage *d* between the section C of the neck and the section H of the bushing. M is a transverse partition in the top of the section H, below which is the sliding block N, having the tapering vertical exterior grooves

50 *e*, and which is free to rise and fall, guided within the section H of the bushing, being

guided by the pins *h*, which engage in the vertical slots *i* in the bushing.

O is a ball-valve seating on the ring-shaped packing I. P is a spring bearing with its up- 55 per end against the lower face of the partition and with its lower end engaging in a circular socket *k* in the top of the block.

The parts being thus constructed, they are intended to operate as follows: If the opera- 60 tor inverts the bottle the weight of the liquid will overcome the tension of the spring P and lift the valve O from its seat, the contents finding ready exit through the apertures *i* in the bushing into the chamber *d*, and thence 65 through the apertures *c* into the upper section of the bushing. If the bottle is turned to a horizontal position the tension of the spring will close the valve, and, of course, as the bottle approaches an erect position the spring 70 is aided by gravity in closing the valve.

The difficulty with most of the devices which have been proposed for preventing such filling of a bottle has been that the bottle could be submerged and then quickly recip- 75 roated, lifting the valve from its seat a little each time and allowing a small portion of liquor to enter therein. I overcome this by inserting the block N above the valve and below the spring, and I find that the reaction of 80 the block against the valve, as the block is shifted by such reciprocations of the bottle, will throw the valve to its seat, while the block moves in the opposite direction, and thus maintains a tight joint. The grooves in 85 the block N tend to make enlarged channels for the fluid to pass out, thereby making easy pouring. The transverse partition, combined with the cage-like bushing below, prevents insertion of implements from above to tamper 90 with the valve and hold it from its seat, and thus defeat the purpose of the device.

What I claim as my invention is—

1. The combination of a bottle neck, of a check valve therein adapted to close the in- 95 let, a sliding block resting on the valve in the erect position of the bottle, having lateral projections thereon, vertical guides in which said projections slidably engage, and a spring located above and arranged to hold the block 100 upon the valve, substantially as described.

2. The combination with the neck of a bot-

the having contracted top and bottom sections,
of an independent valve seat resting on the
lower contraction a bushing fitted in the neck
to make a tight joint at the top, a ball check-
5 valve at the bottom of the bushing, a trans-
verse partition across the bushing near the
top, a spring actuated block slidingly secured
in the bushing and resting upon the valve

and means for preventing the rotation of the
block substantially as described. 10

In testimony whereof I affix my signature
in presence of two witnesses.

CLEMENT CLARK.

Witnesses:

M. B. O'DOHERTY,
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