(No Model.)

J. RILING.

CAP AND LOCKING DEVICE FOR CLOSING PIPES OR ORIFICES.

No. 518,008. Patented Apr. 10, 1894.

Fig. 1.

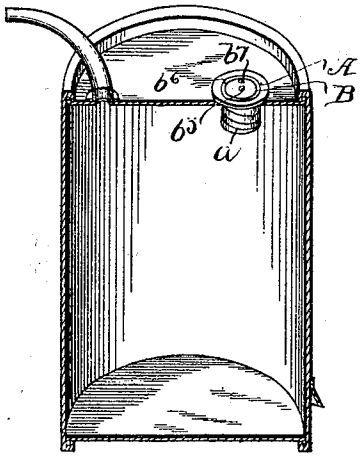


Fig. 6.

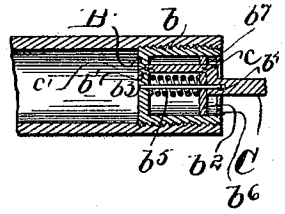


Fig. 2.

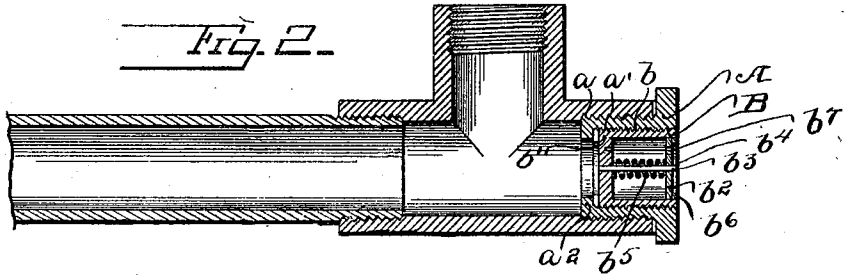


Fig. 4.

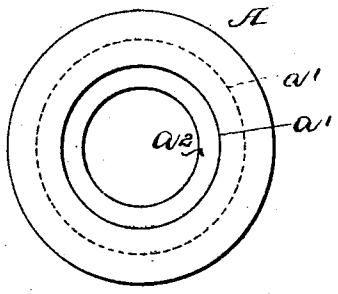


Fig. 3.

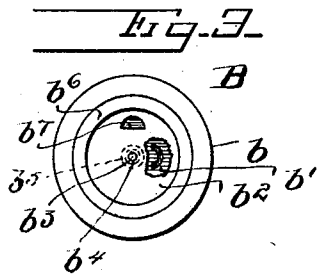
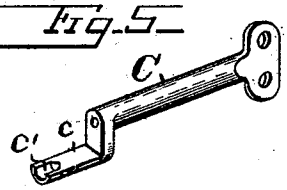


Fig. 5.



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CAP AND LOCKING DEVICE FOR CLOSING PIPES OR ORIFICES.

SPECIFICATION forming part of Letters Patent No. 518,008, dated April 10, 1894.

Application filed December 13, 1893. Serial No. 493,527. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH RILING, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improved Cap and Locking Device for Closing Pipes or Orifices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object to close orifices in cans, barrels, or other devices, or ends of pipes, so that they can be opened only by means of a key of particular character and thus access to the interior of the can, barrel or pipe cannot be had without the use of this key.

In the drawings I have illustrated my device as applied to a can, the use being to close and lock the orifice through which the liquid is poured into the can, and as closing the end of a pipe.

In the drawings—Figure 1 is a perspective view partially in section of a can with my device applied. Fig. 2 is a sectional view of a pipe the end of which is closed by my device. Fig. 3 is a plan view of the cap and locking device. Fig. 4 is a plan view of casing. Fig. 5 is a perspective view of the key. Fig. 6 is a perspective view of the cap and pipe dispensing with the case.

Describing generally, A is the casing provided with the exterior threads a and interior threads a' and the interior flange a^2.

B is the cap which is preferably cylindrical in shape and having threads, b, on its exterior. One end, b', of the cap is fixedly secured to the sides, and the other end b^2 is secured so as to have a movement vertically and to rotate. A standard b^3 is secured to the end b' and extends through an orifice b^4 in the end b^2. Around this standard, b^3, is the coil spring, b^5. A flange b^6 confines the movement of the end, b^2, in one direction. In the end, b^2, is the orifice, b^7, through which the hasp, c, of the key, C, is adapted to pass. The key C has in its hasp an inset, c', of any desired form, and upon the end, b', is an inset with which the key is adapted to register. The casing is inserted either in the orifice in the can or barrel, or in the end of the pipe and the cap placed in the casing. The key C is then used, the orifice, c^2, registering with the standard b^3 and the hasp c passing through the orifice, b^7. By means of the key, the end, b^2 is forced down until the hasp of the key is in contact with the end b' when the key is turned, turning only the end, b^2, until the key registers with its corresponding cut in the end, b', when the entire cap is rotated, which screws the cap into the casing until the cap reaches a point in line with or slightly below the other end of the casing. The key is then removed, the opening into the can or barrel or the end of the pipe is then closed, and closed in such manner that it will require the use of the same or a similar key to remove the cap. Where the device is used on cans it is advisable to use the case, as in that case there should be a portion projecting outwardly beyond the wall of the can, the case being used for this purpose as it is useful in filling the can. But where the cap is used merely to securely close an opening, as the end of a pipe, so as to prevent tampering, in that case it is only necessary that the cap should be used and the walls of the orifice threaded so as to receive the threads upon the cap, and the cap should be threaded to such an extent that the cap, where screwed to its full extent, is on a level with or within the outer line of the pipe or other device the opening in which is to be closed.

My device is very useful in those cases where the cans are the property of the party serving or providing the liquid, such, for instance, as oil, and the consumer agrees to purchase the supply from him. With the use of this device the supplier could, by retaining the key, prevent the can being filled by others than himself.

Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

1. A cap provided with a threaded exterior, a fixed end and an end adapted to move vertically independently of the fixed end, said last mentioned end being provided with an orifice for the insertion of the key; and the fixed end being provided with a device adapted to register with the key.

2. A cap provided with a threaded exterior, a fixed end and an end adapted to rotate in-

dependently of the fixed end, said last mentioned end being provided with an orifice for the insertion of the key, and the fixed end being provided with a device adapted to register with the key.

3. A cap provided with a threaded exterior, a fixed end, and an end adapted to rotate and move vertically independently of the fixed end, said last mentioned end being provided with an orifice for the insertion of the key, and the fixed end being provided with a device adapted to register with the key.

4. A cap provided with a threaded exterior, a fixed end and an end adapted to rotate and move vertically independently of the fixed end, said last mentioned end being provided with an orifice for the insertion of the key, and the fixed end being provided with a device adapted to register with the key, and a spring between said ends.

5. A cap provided with a threaded exterior, a fixed end and an end adapted to rotate and move vertically independently of the fixed end, said last mentioned end being provided with an orifice for the insertion of the key and the fixed end being provided with a device adapted to register with the key, a standard secured to the fixed end and passing through the movable end and adapted to receive the orifice in the key.

6. A cap provided with a threaded exterior, a fixed end, and an end adapted to rotate and move vertically independently of the fixed end, said last mentioned end being provided with an orifice for the insertion of the key, and the fixed end being provided with a device adapted to register with the key, a spring between said ends, a standard secured to the fixed end and passing through the movable end and adapted to receive the orifice in the key.

In testimony of which invention I have hereunto set my hand.

JOSEPH RILING.

Witnesses:
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