

(No Model.)

J. W. SUETTERLE.

REVERSIBLE HANDLE FOR REFRIGERATOR DOORS.

No. 532,922.

Patented Jan. 22, 1895.

Fig. 2.

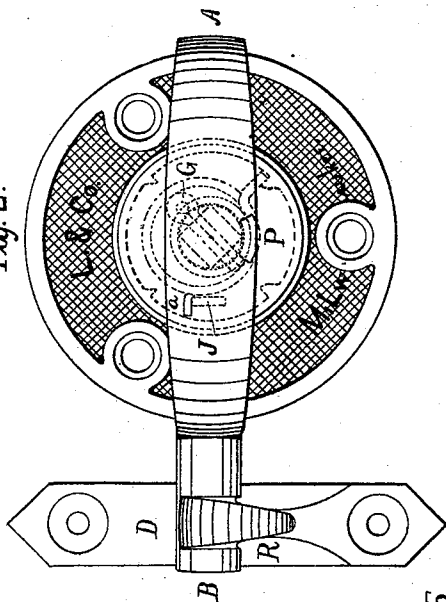


Fig. 1.

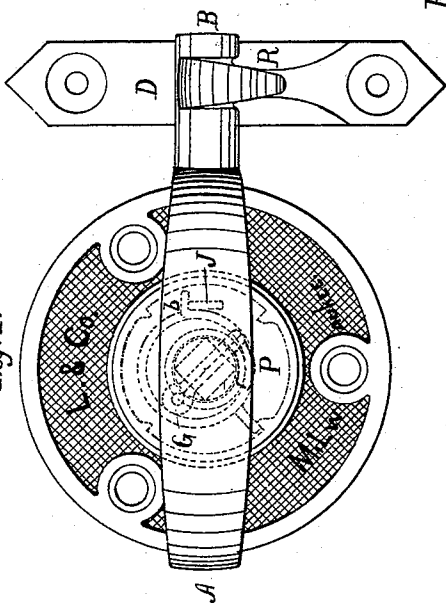


Fig. 4.

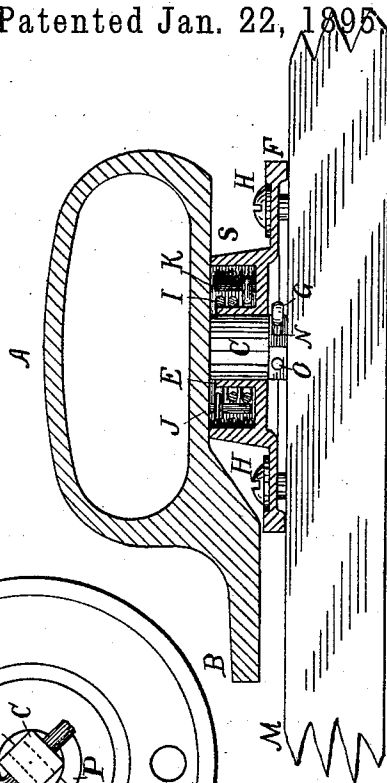


Fig. 5.

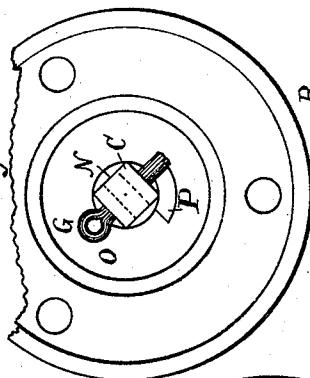
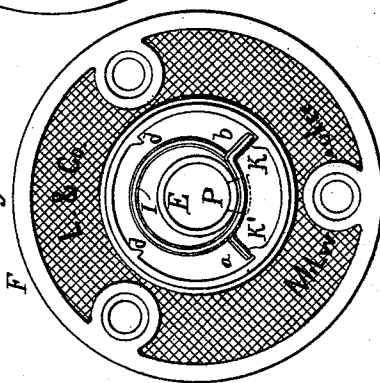


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN W. SUETTERLE, OF MILWAUKEE, WISCONSIN.

REVERSIBLE HANDLE FOR REFRIGERATOR-DOORS.

SPECIFICATION forming part of Letters Patent No. 532,922, dated January 22, 1895.

Application filed November 23, 1894. Serial No. 529,694. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. SUETTERLE, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Reversible Handles for Refrigerator-Doors, of which the following is a specification.

My invention relates to improvements in combined latches and handles for refrigerator doors.

The object of my invention is to provide a spring actuated handle and catch which are equally adapted to be used upon either right or left hand sides of the doors, and it pertains, first, to the construction of the fastening plate or rose, whereby it is adapted to retain and support the handle and actuating spring within a chamber upon the exterior surface of the door, whereby the necessity of forming a cavity in the surface of the door therefor, is avoided; second, to the arrangement of the spring, and the several spring holding and actuating stops within the chamber of the fastening plate, whereby a single spring is adapted to actuate the fastening latch, both toward the right and left, as desired, thus adapting the same handle to either right or left hand doors; third, to the construction and arrangement of the handle, shank, shank-stop and fastening plate, whereby the same handle may be reversed in its position upon its supporting shank, and thereby used for both right and left hand doors, without turning or inverting the retaining plate and the names, letters or other characters printed thereon.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1. represents the combined handle and latch as secured upon the right hand side of the door. Fig. 2. represents the same upon the left hand side of the door. Fig. 3. represents the fastening plate with the handle removed. Fig. 4. represents a horizontal section of the handle and fastening plate as secured to a door. Fig. 5. represents a rear view of the fastening plate, showing the device for adjusting the shank for both right and left hand doors.

Like parts are referred to by the same reference letters throughout the several views.

The handle A, latch B, and shank C are all formed integral, whereby the operator may, without moving his hand, turn and disengage the latch B from the catch D, and swing open the door.

The handle and its supporting shank are secured within the supporting sleeve E of the fastening plate F by the retaining pin G, while the fastening plate is in turn, secured to the exterior surface of the door M by the screws H.

I is a handle-actuating spring, which spring is supported loosely around the sleeve E, within the collar or annular flange S, and its respective ends are alike adapted to engage against the same actuating lug J of the handle, and against the respective stationary stops K and K' of the fastening plate. When the handle is turned toward the right as in Fig. 2, the lug J of the handle engages the angular bend *a* of the spring, and turns the spring with it, whereby, by the recoil of the spring, the handle is turned back toward the left to its normal position, as soon as released.

When the handle is turned toward the left, as required, to disengage it from the catch, when located upon the opposite side of the door, the lug J engages against the angular bend *b* at the opposite end of the spring, whereby said spring is turned in the opposite direction, when by the recoil of the spring, the handle is thrown back as before, to its normal position as soon as released.

When the lug J is brought to bear against the angular bend *a* of the spring, the angular bend *b* at the opposite end of the spring is brought to bear against the stationary stop K. When said lug J is brought to bear against the angular bend *b* by the reverse movement of the handle, the angular bend *a* is brought to bear against the other stationary stop K'. The turning movement of the lug J and the angular bends *a* and *b* of the spring, in either direction, are limited by the stops *d*.

To provide for reversing the position of the handle and latch from one side of the door to the other, without inverting the fastening plate, I have formed two apertures N and O

at right angles to each other, in the rear end of the shank C, for the reception of the key or fastening pin G. Thus, when the handle is fastened to the left side of the door, as shown in Fig. 2, the key or fastening pin is adjusted to bear against the left hand side of the stationary stop P, which is formed on the rear surface of the fastening plate, whereby the latch is held in horizontal position in line with its supporting shank, as shown in Fig. 2. When, however, the handle is fastened on the right hand side of the door, as shown in Fig. 1, the key or fastening pin G is inserted through the other aperture of the shank, at right angles to its former position, so as to bear against the right hand side of the stationary stop P, whereby the latch is brought to rest in a horizontal position in line with its supporting shank, as shown in Fig. 1. The catch D is secured to the door frame of the refrigerator in the ordinary manner and is provided with an inclined bearing surface, by which the latch is caused to rise automatically when brought in contact therewith, as the door is closed when it is thrown into the retaining catch by the recoil of said actuating spring.

If desired, a lock-nut and recessed plate, or other equivalent device, may be substituted for the retaining pin G, upon the rear end of the shank C, for securing the handle to the fastening plate and limiting its turning movement.

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

1. In a fastening device for refrigerator doors, the combination with a handle latch and handle supporting shank formed integral,

of a fastening plate provided upon its front or outer surface with an annular spring inclosing housing or flange, and a central shank supporting sleeve, and upon its rear surface with a stationary stop adapted to engage against the shank retaining key, and limit the turning movement of the handle, substantially as set forth.

2. In a fastening device for refrigerator doors, the combination of the fastening plate provided with annular flange or housing S, shank supporting sleeve E, spring retaining stop K and K', and handle retaining stops *d* and *d'*, coiled spring I provided with angular bends *a* and *b* adapted to bear against the lugs K' and K, handle A provided with inward projecting lug J, adapted to bear against the angular bends of the actuating spring I, all substantially as and for the purpose specified.

3. In a fastening device for refrigerator doors, the mechanism for reversing the position of the handle, and latch from one side to the other of its retaining plate, without turning such plate, consisting in the combination with the handle retaining shank provided with two key retaining apertures arranged at right angles to each other, and with the rear surface of said fastening plate of a key and key-stop or lug adapted to arrest the movement of said key and shank from either side, all substantially as and for the purpose specified.

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

JOHN W. SUETTERLE.

Witnesses:

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L. C. WHEELER.