(Model.)

J. ZERFAS.

LOCKING LATCH.

No. 266,947. Patented Oct. 31, 1882.

Fig. 1.

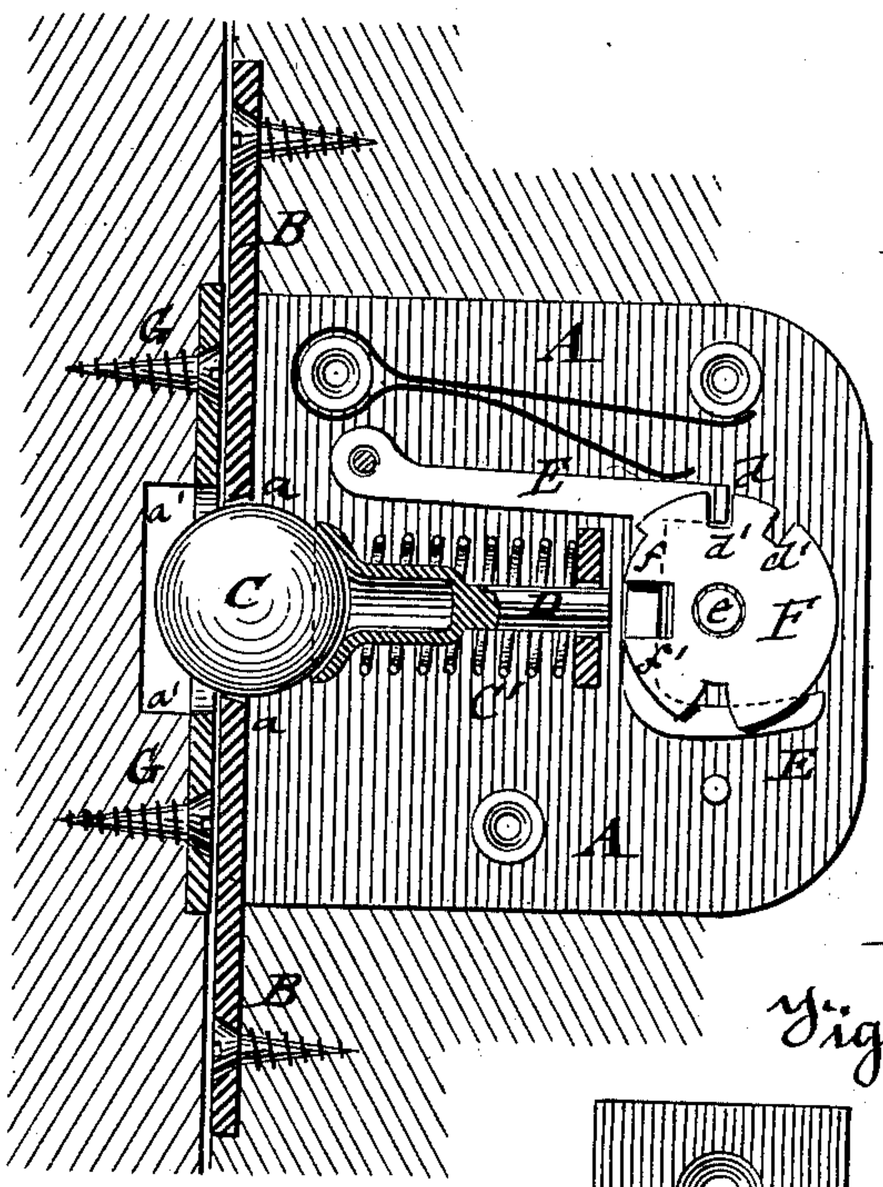


Fig. 2.

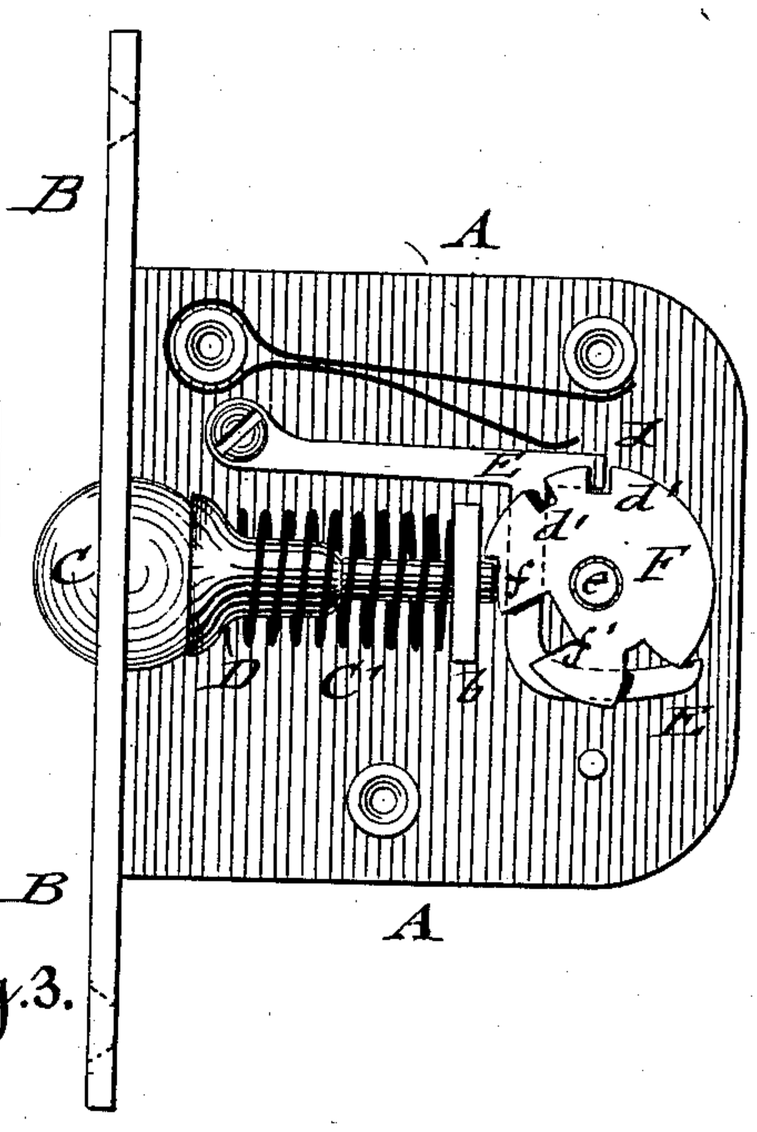
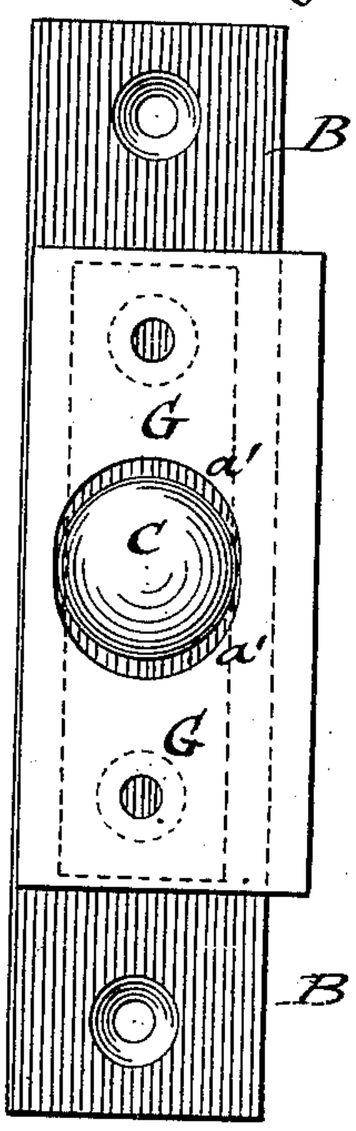


Fig. 3.



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LOCKING-LATCH.

SPECIFICATION forming part of Letters Patent No. 266,947, dated October 31, 1882.

Application filed May 3, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH ZERFAS, of the city, county, and State of New York, have invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention has reference to an improved lock for refrigerators, meat-safes, closets, and similar inclosures; and it consists of a casing having a face-plate with a circular opening, through which a spherical bolt of somewhat larger diameter than the opening is forced by means of a spring applied to the inner portion of the bolt and to a fixed lug of the casing, the bolt being used in connection with means for locking or releasing it, as will be more fully described hereinafter, and finally be pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of my improved lock; Fig. 2, a side view, and Fig. 3 an end view, of the same.

Similar letters of reference indicate corresponding parts.

A represents the casing or main plate of the lock, to which is riveted or otherwise attached the face-plate B at right angles thereto. The face-plate B is provided with a circular opening, *a*, through which a locking-bolt, C, of spherical shape, but of a slightly larger diameter, is forced by the pressure of a spiral spring, C′. This spiral spring may be directly applied to the inner part of the spherical bolt within the face-plate B, and to a fixed lug, *b*, of the main plate A; or it may be applied to a cup-shaped support, D, of the bolt B, the shank of which is guided in the lug *b*, as shown in Fig. 2. A spring-pressed tumbler, E, is pivoted to the main plate, and adapted to engage by a projection, *d*, notches *d d′* of a locking-disk, F. The tumbler E extends downward back of the disk, as shown in the drawings. The disk F is centrally pivoted to a fixed pin, *e*, and is turned by means of a key, which also raises the tumbler E in the usual manner, so as to throw either a recess, *f*, of smaller depth, or a recess, *f′*, of greater depth, into line with the shank or stem of the bolt-supporting cup D, whereby the bolt C is either locked or allowed to be forced back for opening or closing the door to which the lock is applied. The spherical bolt C locks into a jamb-plate, G, having an elongated opening, *a′*, of about the same width as the spherical bolt C.

To use the lock, it is fastened in a mortise in the edge of the door of the refrigerator, or any other similar door, so that when the door is shut the spherical bolt will be thrown by its spring into the opening *a′* of the said jamb-plate. It will then be found that while the force of the spring C′ holds the spherical bolt C in position in the opening *a′* sufficiently to keep the door closed, still by reason of the elasticity of the spring C′ and by reason of the rolling motion of the spherical bolt C the door can be easily pulled open and be as easily shut again, the spring C′ always bringing back the spherical bolt C to its place in the openings *a* and *a′* of the face and jamb plates. In the act of opening or closing the door the spherical bolt C is forced back, and therewith also the shank of its cup D, said shank entering into the deeper slot *f′* of the disk F. If it be desired to lock the door, the spherical bolt C is retained in its position by throwing the shorter recess *f* of disk F in line with the shank of the cup, as shown in Fig. 2. The bolt C will thus be locked, because the disk F is in such a position that the shank of the bolt-supporting cup D cannot move backward. By a reverse motion of the key the disk F is returned to the position shown in Fig. 1, in which position the bolt may be pressed back with its spring and the door opened or closed, as desired.

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

1. A locking device consisting of a supporting-stem the shank end of which is guided by a perforated lug, while the other end is enlarged and provided with a concave recess fitted to receive a spherical bolt, a spiral spring one end of which presses against the enlarged part of the stem, while the other end

presses against the lug, a locking-disk, and a tumbler operated in connection with the disk, substantially as described.

2. The combination of a main plate, A, face-plate B, having circular opening *a*, spherical bolt C, cup D, spiral spring C′, perforated lug *b*, spring-pressed tumbler E, having projection *d*, and locking-disk F, having notches *d′ d′*, *f*, and *f′*, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOSEPH ZERFAS.

Witnesses:
CARL KARP,
ALFRED MOSER.