No. 812,107. PATENTED FEB. 6, 1906.

E. J. WIRFS.

LATCH FOR REFRIGERATOR DOORS.

APPLICATION FILED MAR. 23, 1905.

Fig. I.

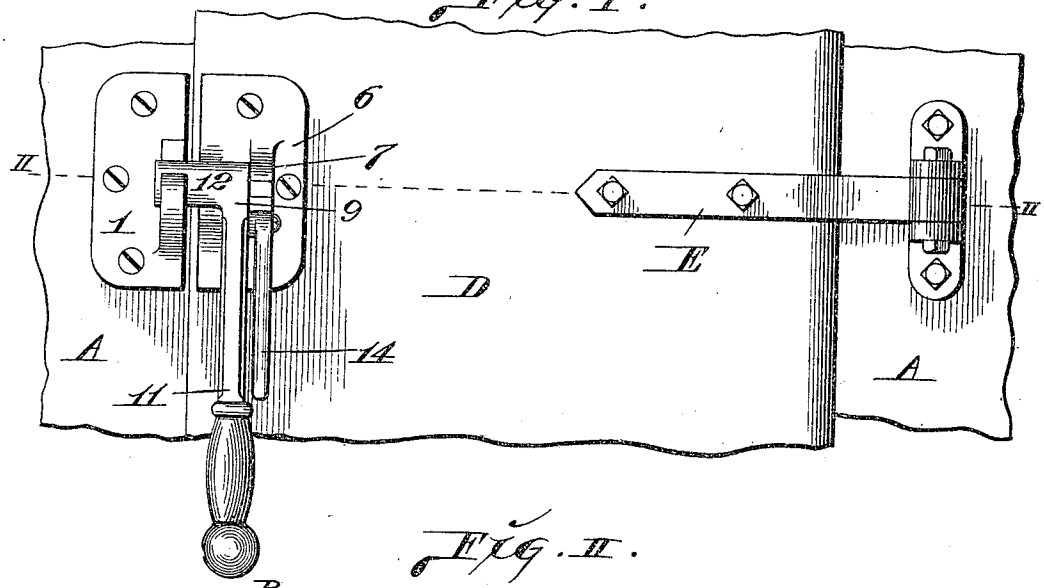


Fig. II.

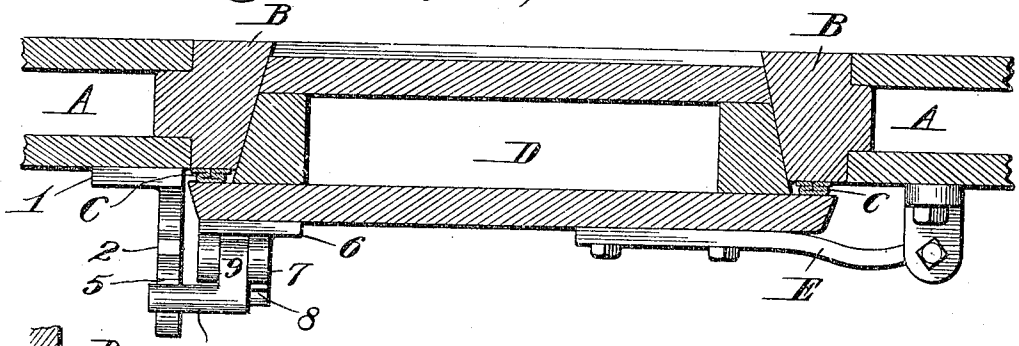


Fig. III.

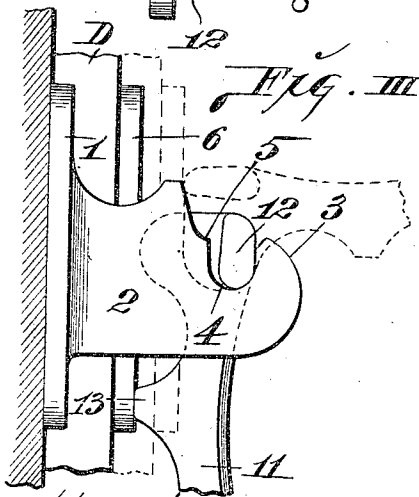
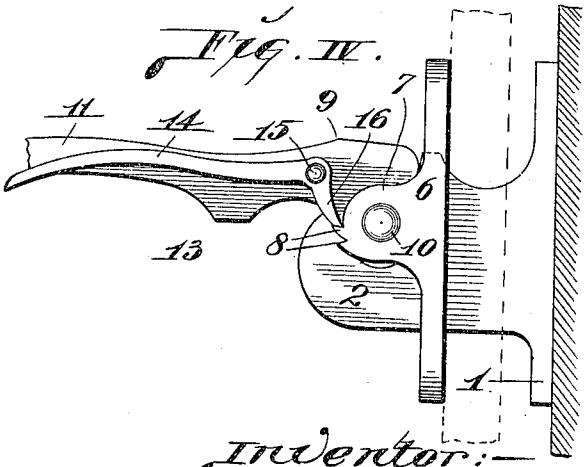


Fig. IV.



Witnesses:—
W. P. Smith
Blanche Hogan

Inventor:—
E. J. Wirfs.
By Wright Bro
Attys

UNITED STATES PATENT OFFICE.

EDWARD J. WIRFS, OF MEMPHIS, TENNESSEE.

LATCH FOR REFRIGERATOR-DOORS.

No. 812,107. Specification of Letters Patent. Patented Feb. 6, 1906.

Application filed March 23, 1905. Serial No. 251,599.

To all whom it may concern:

Be it known that I, EDWARD J. WIRFS, a citizen of the United States, residing in Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Latches for Refrigerator-Doors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a latch for the doors of refrigerators or cold-storage rooms, whereby the door may be forced firmly into the doorway against the packing-strips surrounding the doorway, and also whereby the door may be readily freed in opening it if there is any tendency of it to bind in the doorway.

Figure I is a front elevation of portions of the refrigerator-wall and the door applied thereto with my latch shown in connection with said parts. Fig. II is a horizontal section taken on line II II, Fig. I. Fig. III is a side elevation of my latch. Fig. IV is a view of the latch looking at the side opposite that seen in Fig. III, the latch-lever being shown in elevated position.

A designates the wall of a refrigerator, and B a door-frame, against the outer faces of which are positioned packing-strips C.

D is a door that controls the doorway within the frame B and the edges of which overlap the door-frame to impinge against the packing-strips when the door is closed. The door is swingingly supported by hinges E, that connect it to the refrigerator-wall.

1 designates a latch-keeper secured to the refrigerator-wall. This keeper has an arm 2, that is provided with a hook-point 3, and at the rear of the hook-point is a socket 4. 5 is a shoulder that constitutes the rear wall of said socket.

6 designates a bracket secured to the door D and provided with forwardly-projecting ears 7. At the front edge of one of the ears 7 are teeth 8, to which more particular reference will hereinafter be made.

9 designates a rocking latch that is supported by a pivot-stud 10, journaled in the bracket-ears 7. This latch has a hand-lever 11, by which the latch is raised and lowered, and projecting from the head of the latch 9 is an arm 12, which is approximately oval in cross-section, as seen most clearly in Fig. III, and is adapted to enter the socket 4 of the arm of the keeper 1 when the door D is closed.

13 is a stop projecting rearwardly from the latch-lever and adapted to limit the downward movement of said lever by striking against the face of the bracket 6, as seen in Fig. III.

In the practical use of my latch when the refrigerator-door is moved to the doorway of the refrigerator to which it is applied the latch-lever is upheld in the horizontal position, (seen in dotted lines, Fig. III,) and while the latch is in this position the door may be seated in the doorway without the latch engaging any part of the keeper 1. The latch-lever is then thrown downwardly, thereby carrying the oval or elongated latch-arm into the socket 4 of the latch keeper-arm, as seen in full lines, Figs. I, II, and III, and rocking the latch-arm downwardly into bearing against the rear face of the keeper-hook 3, with the result that the latch in the door to which it is applied is forced inwardly due to the pressure of said arm aganst the keeper-hook. As a consequence the door is carried firmly to the packing-strips C, thereby compressing them, as seen in Fig. II, and rendering the joint between the door and door-frame a tight one. When the door is to be opened, the latch-lever is elevated to a horizontal position, and in so elevating it the latch-arm 12 rides against the rear wall of the socket 4 in the latch keeper-arm, and due to its elongated shape pressure is exerted by said arm against said wall, with a result that the door is carried outwardly to a sufficient extent to permit of its being readily drawn open.

14 designates a trigger that is located alongside of the latch-lever, to which it is pivoted at 15. This trigger is provided with a catch-arm 16, that projects rearwardly from its point of pivotal support, and is adapted for engagement with the teeth 8 of the adjacent bracket-arm 7, as seen in Fig. IV. When the latch-lever is in elevated position, the point of this trigger engages said teeth to uphold the latch-lever and prevent its accidentally falling into engagement with the keeper should the refrigerator-door be closed while a person is in the refrigerator.

I claim as my invention—

1. In a refrigerator-door latch, the combination with a keeper, a door-bracket, a latch pivoted to said bracket and adapted to engage said keeper, and a trigger pivoted to

said latch and arranged to engage said bracket, substantially as set forth.

2. In a refrigerator-door latch, a keeper, a door-bracket, a latch pivoted to said door-bracket and adapted to engage said keeper, a trigger pivoted to said latch, and teeth forming a part of said door-bracket and adapted to receive the engagement of said trigger, substantially as set forth.

EDWARD J. WIRFS.

In presence of—
GEO. E. BASSETT,
H. A. TATMUN.