

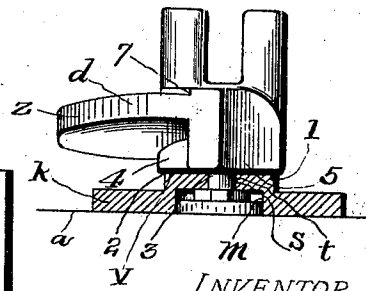
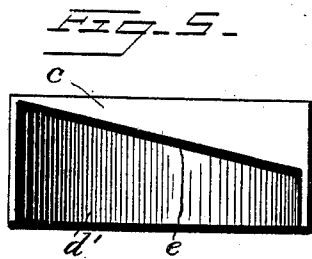
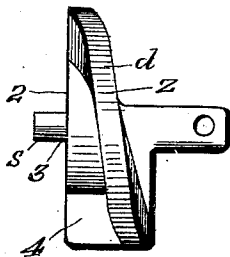
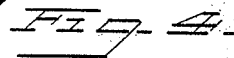
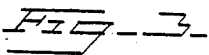
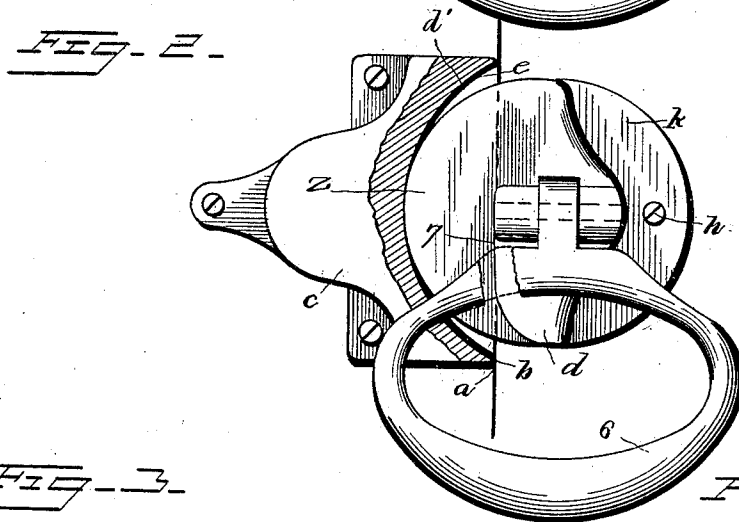
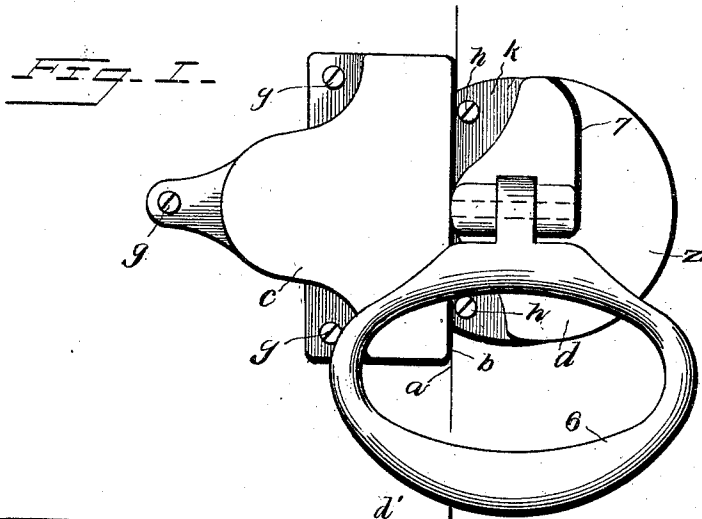
No. 707,858.

A. E. MENDENHALL.
DOOR FASTENER.

Patented Aug. 26, 1902.

(Application filed Dec. 2, 1901.)

(No Model.)



WITNESSES:

R. A. Boswell
George M. Austin

BY

A. E. Mendenhall
E. W. Anderson his Attorney

UNITED STATES PATENT OFFICE.

AARON E. MENDENHALL, OF ANDERSON, INDIANA.

DOOR-FASTENER.

SPECIFICATION forming part of Letters Patent No. 707,858, dated August 26, 1902.

Application filed December 2, 1901. Serial No. 84,441. (No model.)

To all whom it may concern:

Be it known that I, AARON E. MENDENHALL, a citizen of the United States, and a resident of Anderson, in the county of Madison and State of Indiana, have made a certain new and useful Invention in Door-Fasteners; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters and figures of reference marked thereon, which form a part of this specification.

Figure 1 is a front elevation of my latch, shown as disengaged from the keeper. Fig. 2 is a similar view showing the latch as engaged with the keeper. Figs. 3 and 4 are detail side and end elevations of the latch *d*. Fig. 5 is a side view of the keeper, showing its oblique or cam wall *e*.

The invention relates to door-latches especially designed for the doors of refrigerators and compartments requiring a tight closure to prevent the access or escape of air; and it consists in the novel construction and combinations of devices, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter *a* designates a portion of a door, and *b* a portion of the jamb of the doorway.

c indicates the catch-plate, which is designed to be attached to the door-jamb, and *d* the latch-bolt, designed to be secured to the door alongside the keeper. The catch-plate *c* is formed with recess *d* in its back portion, having an opening toward the inner face or face which is vertical or aligned with the edge of the door-jamb. The front wall *e* of this recess is oblique, its plane having a low angle of inclination from the top to the bottom. The outer marginal portion of this plate is provided with apertures, as at *g*, for the passage of fastening-screws. The latch *d* is pivoted in a journal-plate *h*, which is also provided with apertures, as at *h*, for fastening-screws. This plate is formed with a hollow boss 1 for the reception of a washer and nut or other fastening. Usually the journal-pin *s* of the latch *d* is headed up against

the washer. This pin passes through a journal-perforation *t* of the holder-plate. The latch-bolt is rotary and has a shank or body portion having a plane inner face 2 around the journal 3, said inner face having an offset 4, the face of which is flush with that of the face 2, which works in contact with the surface *v* of the boss or rise 1 of the holding-plate *k*. On the shank is provided the oblique latch-cam *z*, which extends from the offset 4 partly around the shank or body portion. The offset 4 forms a radial stiffening-rib for the cam. This latch-cam is circular in marginal contour; but such contour is not circularly complete, being cut away on one side to provide a chord edge 5, which, having a less radial distance from the axes of the latch, when brought opposite the opening of the catch-plate by turning the latch-cam out of engagement therewith allows the door to be opened. When, however, the door is closed, the latch-cam is turned by means of a handle 6 until the circular portion of the cam enters the recess of the catch-plate. Its obliquity or inclination is similar to that of the inclined recess-wall of the plate *c*, and as it is turned around the pressure against the inclined recess-wall of the plate *c* forces the door inward against the bearings of the doorway, so that it becomes closed in a tight and secure manner. On the outer face of the latch-cam which engages the inclined recess-wall is formed toward the wall of the cam a slight shoulder 7, which serves as a stop to limit the movement of the cam-latch when the handle, which is pivoted to lugs of the cam-latch, is in vertical position and the cam-latch is engaged with its catch-plate. Should the door, however, be very loose, this shoulder portion can also be turned into the recess and will serve to still further increase the pressure on the door.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

A door-latch having the journal-plate, the catch-plate, having a vertical inner face provided with a recess therein, having an inclined or cam wall, the latch-bolt having the cam designed to engage said recess and coop-

55

60

65

70

75

80

85

90

95

100

erate with the cam-wall thereof, said cam having the radial stiffening-rib and the stop-shoulder projecting from the upper face of the cam, said cam having also the handle-lugs,
5 and the handle pivoted to said lugs, said stop-shoulder being designed to engage the vertical face of the catch-plate when the handle is in vertical position and the cam of the

latch-bolt is in engagement with the catch-plate, substantially as specified. 10

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

AARON E. MENDENHALL.

Witnesses:

BELLE C. MOORE,

DE WITT C. CHIPMAN.