

(No Model.)

J. K. CLARK.
CATCH PLATE OR STRIKER.

No. 522,878.

Patented July 10, 1894.

Fig. 1.

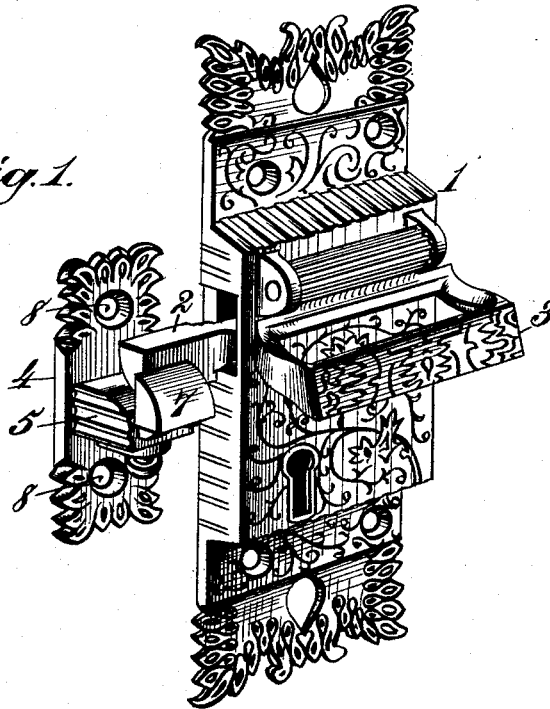


Fig. 2.

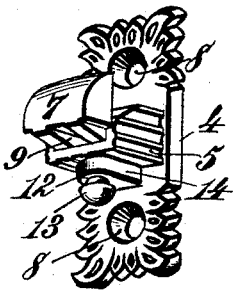


Fig. 3.

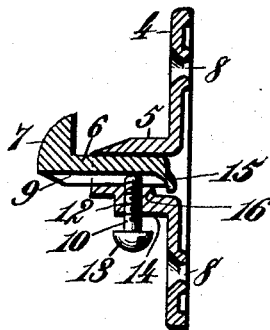
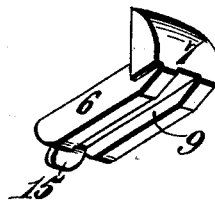


Fig. 4.



Witnesses.
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Inventor.
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By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

JOHN K. CLARK, OF BUFFALO, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO MARY K. CLARK, OF SAME PLACE.

CATCH-PLATE OR STRIKER.

SPECIFICATION forming part of Letters Patent No. 522,878, dated July 10, 1894.

Application filed October 12, 1893. Serial No. 487,989. (No model.)

To all whom it may concern:

Be it known that I, JOHN K. CLARK, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Catch-Plates or Strikers, of which the following is a specification.

This invention relates to that type of catch plates or strikers which are adjustable in a direction to and from the door frame through the medium of a screw, for the purpose of compensating for swelling or shrinking of the door, or door frame, and insuring the correct engagement of the latch with the catch plate or striker to properly close the door and exclude the external atmosphere, and prevent the escape of cold from within.

The objects of my invention are to simplify the prior construction; avoid the necessity of providing the front wall of the striker frame with an opening for the passage of the latch thereinto for engagement with the catch plate or striker; to render the device more stable and substantial in operation; and to generally improve adjustable catch plates or strikers and render them susceptible of being more conveniently and economically manufactured, and thus reducing the cost of refrigerators or other structures to which this type of catches or strikers are applied.

To accomplish all these objects my invention consists in the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of my invention arranged in operative connection with a latch-lock, such as is used on refrigerators. Fig. 2 is a detail perspective view of the striker frame with the catch-plate or striker in position. Fig. 3 is a vertical central sectional view of the same; and Fig. 4 is a detail perspective view looking at the under side of the catch-plate or striker.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a latch-lock case; 2 a latch; and 3 a pivoted swinging handle by

which the latch can be swung in a vertical plane. The construction of the latch-lock case, the latch, and the means for operating the latch, may be variously modified without altering the character of my invention, which relates particularly to the catch-plate or striker with which the latch engages for holding the door closed.

The striker-frame is composed of a base-plate 4, from which, at a point between the upper and lower ends, projects a housing or socket 5 arranged at right angles, or approximately so, to the base-plate, and composed of upper, lower, and side walls, between which is adapted to move the horizontal shank 6 of the catch-plate or striker 7. The base-plate 4 is provided with screw holes 8 by which it can be attached to a door frame through the medium of suitable screws. The walls of the housing 5 constitute guides for the shank of the catch-plate or striker, and serve to hold the latter at all times in a steady position, so that the stability of a striker-frame having an adjustable catch-plate or striker is materially improved in the practical use of the device. The lower side of the shank of the catch-plate is provided with a longitudinal groove 9, into which projects the inner end of a set-screw 10 engaging a screw-threaded socket 12 in the bottom wall of the outwardly projecting housing 5. The outer end of the screw is provided with a suitable head 13, by which it can be rotated for causing the screw to bind directly against the bottom wall of the shank of the catch-plate or striker and thus rigidly hold the latter in its adjusted position. The longitudinal groove 9 is of such width that the screw acts also as a guide for guiding and steadying the catch-plate in its movements, and for rendering the device more stable in practical use.

To secure the desired quantity of metal at the point where the screw-socket 12 is formed, I preferably cast an enlarged portion 14 upon the housing 5. I have here illustrated the screw-threaded socket 12 as arranged in the bottom wall of the housing 5, but obviously the screw-socket and the screw may be arranged at any side of the housing.

The nose of the catch-plate or striker is beveled, so that the latch 2 will be automatically

raised in closing the door, and then fall into engagement with the vertical face of the catch-plate or striker, as in ordinary latches.

By providing the base-plate 4 with a horizontal housing 5, the shank of the catch-plate or striker is accurately guided and steadied; and, by means of the set-screw, the catch plate or striker can be rigidly clamped in any desired position of adjustment as occasion may demand to compensate for shrinking or swelling of the door, or the door frame; and, furthermore, when the door is closed, the set-screw can be conveniently reached and operated for effecting the required adjustment of the catch-plate or striker.

The improved device is particularly designed for use with rim latches secured to the outer side of a door and adapted to engage a catch-plate or striker attached to the outer surface of the door frame or refrigerator, the construction being such that the catch-plate or striker can be accurately adjusted to compensate for swelling or shrinking, and to insure the correct engagement of the latch with the catch-plate or striker for the proper closure of the door to exclude the external atmosphere and prevent the escape of cold from within.

To limit the outward sliding movement of the catch-plate or striker and to prevent its displacement therefrom, I provide the inner end of the shank 6 with a lip or lug 15 which can be bent laterally or downward behind a shoulder 16, in the housing, so that the catch-plate or striker cannot be entirely withdrawn from the housing unless the lip or lug be bent upward to avoid the shoulder.

A very useful feature of my invention resides in the facility and rapidity with which the catch-plate or striker can be adjusted, as

it is simply necessary to impart a partial rotation to the screw for releasing the catch-plate or striker when the latter can be accurately and quickly adjusted to the desired position, and subsequently clamped in this position by a slight rotation of the screw. In this respect my invention differs from a catch-plate having a screw-threaded connection with a screw which is journaled in a striker frame.

Having thus described my invention, what I claim is—

1. The combination of a striker having an outwardly projecting housing provided with a screw threaded socket in one wall, a catch-plate or striker adjustable horizontally in the housing and over which the latch rides to engage said catch-plate or striker, and a screw having a screw-threaded connection with the screw-socket of the housing and bearing at its inner end against the surface of the catch-plate or striker to clamp the latter in a fixed position, substantially as described.

2. The combination of a base-plate having a housing projecting outward therefrom and provided with a screw-socket in one wall, a catch-plate or striker having a longitudinally grooved shank which fits into the housing and is adjustable horizontally therein, and a screw having a screw-threaded connection with the screw-socket of the housing and bearing at its inner end in the grooved part of the said shank to clamp the catch-plate or striker in a fixed position, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN K. CLARK.

Witnesses:

SMITH W. CRAINE,
KIMBALL V. CLARK.