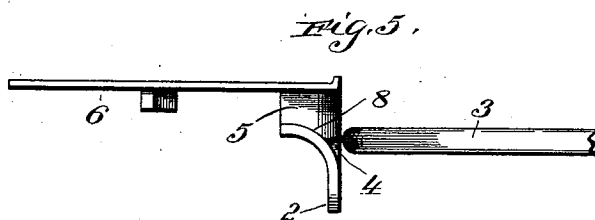
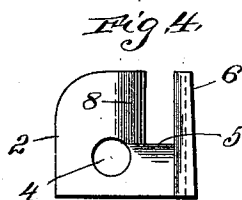
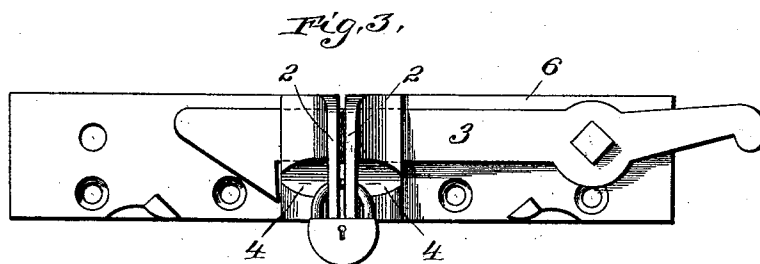
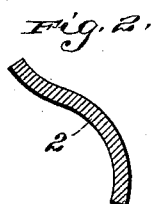
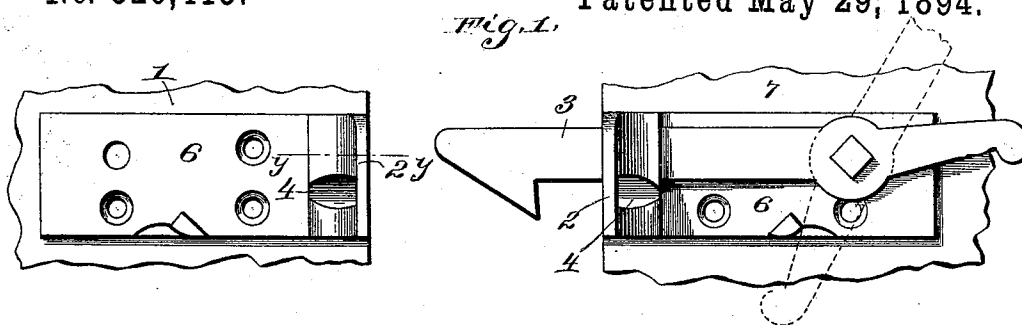


(Model.)

A. DILLENBACK.
SLIDING DOOR LOCK.

No. 520,415.

Patented May 29, 1894.



Witnesses:
A. M. Turner.
J. F. Harris.

Inventor:
Alonzo Dillenback
By H. M. Brown
his atty.

UNITED STATES PATENT OFFICE.

ALONZO DILLENBACK, OF PALATINE BRIDGE, NEW YORK.

SLIDING-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 520,415, dated May 29, 1894

Application filed May 5, 1893. Serial No. 473,165. (Model.)

To all whom it may concern:

Be it known that I, ALONZO DILLENBACK, a citizen of the United States, residing at Palatine Bridge, Montgomery county, New York, have invented certain new and useful Improvements in Door-Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a new and improved latch for doors, gates, &c.

In the drawings Figure 1 shows a front elevation of my latch attached to a portion of a sliding door, and the keeper attached to the door post; Fig. 2 a longitudinal sectional view of one form of one of the ears shown in plan that the curvature of the ear may be seen; Fig. 3 a front elevation of my latch as it appears when latched and a padlock locking the ears together; Fig. 4 a face elevation of one of my ears clearly showing the curvature of the ear, the base of the same and the base plate, and Fig. 5, a plan view of the base plate, the ear and the base of the ear and the latch shown as being out of truth with the opening between the ear and base plate.

To the door post 1 I preferably attach my keeper which consists of a base plate 6, foot or base 5, and the ear 2, the ear having an opening 4 for the link of a pad or other lock. The face of the ear 2 on the door post 1, which faces or is presented to the nose of the latch 3 is curved, slanting or rounded, as is seen by reference to Fig. 2 and to 8, 8, in Figs. 4 and 5, Fig. 2 being a longitudinal sectional view of the ear taken on line Y. Y. in Fig. 1, shown in plan view. The latch 3 is pivoted the door 7 or its base plate 6 or to both as may be desired, and is arranged so as to swing upwardly out of its keeper, and to lie in an inclined position as shown by the dotted lines in Fig. 1, so as to be out of the way when the door is opened and so that nothing can catch upon its nose in passing through the open door way. The ear 2 on the base plate on the door 7 is preferably similar to the one on the door post 1.

Heretofore, in all door latches known to me

using a figure 4 latch on sliding doors and having ears of the nature shown at 2, the latch would enter the keeper so long as the door was in truth, but when the door was sprung or otherwise pressed or bulged outward, then the nose of the latch would simply strike against the face of the ear and would not enter the keeper because the face of the ear was practically a plain surface and did not act as a guide to the nose of the latch to guide it into the keeper. This was a serious defect with such latches. To remedy this defect I provide the ear on my keeper with a round- ing, slanting or curved forward surface or face as shown at 8 in Figs. 4 and 5. Looking at Fig. 5, it will be seen that the nose of the latch 3 has presented itself to the face of the ear 2, which is the ear attached to the door post in Fig. 1, out of line with the opening in the keeper, and is striking against the rounded face of the ear 2. If the face against which the nose is seen to be striking was a simple flat or plain surface, the nose of the latch would not enter the keeper, but as the surface 8 is curved and the curve 8 leads to the opening in the keeper designed for the latch, the nose of the latch will follow the curve and enter the keeper, and this will be the case even though the material of the door is compelled to bend or give to accommodate the latch. The latch will, therefore, never fail to operate under any conditions likely to be presented in the way of warped, sprung or illy hung sliding doors.

It will be noticed, that as my keepers have similar ears 2, 2, the latch may be pivoted to either the door or to the door post as may be desired and the latch will operate equally well in either position. The operation is as follows: The apparatus being in position on the door and door post, the door is slid until the latch enters the keeper when the latch will engage with the foot 5 and the door will be latched, when a pad or other lock may be used in fastening the ears together. In opening the door the latch 3 is swung upward out of the keeper until it lies in practically the position shown by the dotted lines in Fig. 1, when it will be out of the way and will not catch on objects passing through the doorway. If the door should be warped or in any manner out of truth so as to be bulged outward

so the latch would not directly enter the opening in the keeper, its nose will strike against the curved surface 8 of the ear 2 and will be guided into the proper position in the keeper and will latch the door.

What I claim is—

1. A door latch or fastener having a keeper with a foot arranged to receive and retain a latch, and an ear rising above the foot and forming a notch into which and out of which the latch may be downwardly and upwardly swung and also longitudinally entered, the face of the ear on the keeper presented to the nose of the latch as it is longitudinally entered in the keeper sloping toward the opening or notch therein, in order that the latch may be guided into said keeper when out of truth with the notch therein, substantially as described.

2. A door latch or fastening having a keeper with a foot arranged to receive and retain a latch and an ear, which together with the foot forms a notch or opening into which and out of which the latch may be longitudinally entered, the face of the ear presented to the nose of the latch as it is longitudinally entered in the notch or opening, sloping toward the opening or notch in order that the latch may be guided into said keeper when out of truth with the notch or opening therein, substantially as described.

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

ALONZO DILLENBACK.

Witnesses:

W. M. BROWN,
A. M. TURNER.