J. A. PLANTE.

ADJUSTABLE LOCK STRIKE.

APPLICATION FILED OCT. 8, 1917.

1,317,218. Patented Sept. 30, 1919.

Fig. 1.

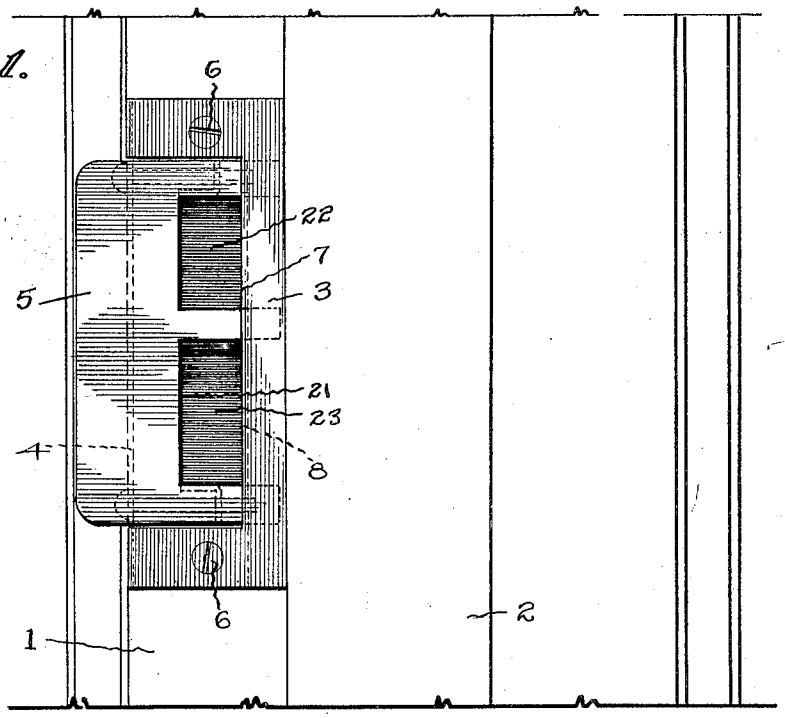


Fig. 3.

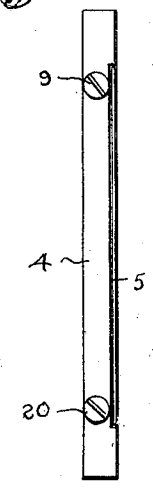


Fig. 4.

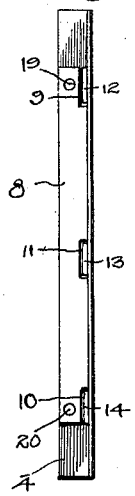
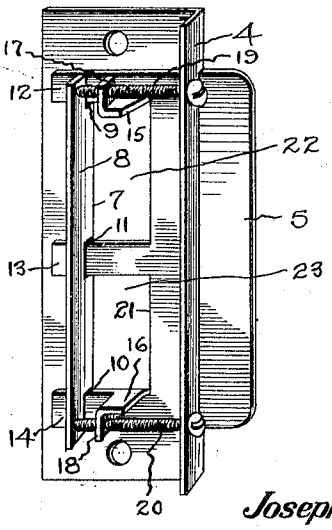


Fig. 2.



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ADJUSTABLE LOCK-STRIKE.

1,317,218. Specification of Letters Patent. Patented Sept. 30, 1919.

Application filed October 8, 1917. Serial No. 195,227.

To all whom it may concern:

Be it known that I, JOSEPH A. PLANTE, a citizen of the Dominion of Canada, and a resident of the city and county of San Francisco, State of California, have made a new and useful invention—to wit, Improvements in Adjustable Lock-Strikes; and I do hereby declare the following to be a full, clear, concise, and exact description of the same.

The invention relates particularly to strike plates for door locks and has for its principal object the adjustability of the strike plate to meet the latch or bolt of the adjacent door lock in its engagement with the strike plate. Other objects and advantages will appear as this description progresses.

In this specification and the annexed drawings, the invention is illustrated in the form considered to be the best, but it is to be understood that the invention is not limited to such form, because it may be embodied in other forms, and it is also to be understood that in and by the claims following the description it is desired to cover the invention in whatever form it may be embodied.

In the accompanying one sheet of drawings:

Figure 1 is a front elevation of a lock strike constructed in accordance with this invention, installed in a section of the door jamb shown diagrammatically.

Fig. 2 is a detail in perspective looking at the back of the lock strike assembly.

Fig. 3 is an end view of the same looking toward the front edge.

Fig. 4 is a similar view looking toward the rear edge.

The most common form of door fastening consists of a suitable lock having a latch and a bolt, mortised into the edge of the door flush with the surface thereof, except for the spring latch protruding therefrom and controlled by the door knob. This latch and bolt engage a plate gained into the door jamb 1 adjacent to the stop 2, whereby the abutment of the door against the stop 2 alines the latch and the bolt with the opening in the plate. It requires considerable mechanical skill upon the part of the carpenter to affix this plate so as to accurately engage the latch and bolt, requiring time consuming measurements, good judgment and careful mechanical work. Even when so hung in the first instance, the usual settling of buildings, warping of doors, shrinkage and the like, are very apt to disaline the lock and the plate, requiring mutilation of the door jamb to readjust the plate gained therein or the filing away of a portion of the plate as required to restore the proper relation of the parts. Such filing away of the plate is objectionable because the original disalinement may be caused by swelling of the door or the door frame followed by shrinkage, which would permit rattling of the door latch or bolt within the plate. The disadvantages above recited and others are eliminated by the use of an adjustable strike plate in accordance with this invention.

In detail the construction illustrated in the drawings includes the jamb plate 3 having the angular rim flange 4 cut away to receive the strike plate 5, the jamb plate is installed by being gained into the jamb 1, to which it is secured by the screws 6—6, the rim flange 4 overhanging the edge of the jamb. (See Fig 1). The jamb is cut away behind the plate to provide the necessary recess for the entrance of the door latch and bolt, which is common to the installation of the ordinary lock strike. The cut away portion of the jamb plate extends into the flange 4 a depth equal to the thickness of the strike plate, whereby the exposed surface of the strike plate and the surface of the jamb plate 3 are flush at this point.

The cut away portion or core of the jamb plate is not severed on the line 7, but is bent downward to form the flange 8 parallel with the flange 4 and is notched at 9 and 10 and slotted at 11 to receive the longitudinal extensions 12, 13, and 14 extending therethrough to guide the strike plate in its lateral adjustment. The angular lugs 15 and 16 are also stuck down out of the body of the strike plate 5 (see Fig. 2) and have threaded extensions 17 and 18 parallel with the notched flange 8.

The plate 4 is provided with holes to receive the screws 19 and 20 swiveling therein and engaging the threads in the plates 17 and 18 extending through holes provided in the flange 8 on the rear side of which they

are riveted over, which coöperating with the heads of the screws prevents their longitudinal movement, while swiveling freely in the flanges 4 and 8. The screws 19 and 20 thus held against longitudinal movement act through the plate 17 and 18 to move the strike plate 5 back and forth, in accordance with the rotation of the screws 19 and 20. The inner edge 21 of the strike plate which is parallel with and spaced from the edge 7 of the jamb plate, forms a vertical slot for the reception of the latch and the bolt of the door lock, not shown. The central division 13 divides this opening into recesses 22 and 23 for the reception of the latch and the bolt respectively. It is obvious however that this division 13 could be omitted. It would also be unnecessary in the form of strike plate for use in connection with locks not having a positive key bolt, but in which the spring latch is locked from withdrawal by mechanism within the lock, in which case but a single opening such as 22 only is required in the jamb.

It is manifest that merely reasonable care and fair skill are required to properly install such an adjustable strike plate as described, care being used that the jamb plate 3 be reasonably near the proper vertical level to engage the latch and the bolt. The openings 22 and 23 usually are longer than necessary to allow for sagging of the door within the frame.

The lateral location of the edge 21 of the strike plate is adjusted by means of the screws 19 and 20 for the proper engagement of the latch and the bolt. This adjustment can be made at any time by any unskilled person of sufficient mechanical ability to use a screw driver. The heads of the screws 19 and 20 being at all times exposed within the room; a simple turn to right or left will move the strike plate in or out for the proper engagement of the latch. Two screws are preferred as preserving better alinement of the parts; but a single screw or its equivalent would serve.

Modifications within the purview of this invention are contemplated in the production of lock strikes of cast, or heavier material than that shown or in meeting special requirements.

What I claim and desire to secure by Letters Patent is:

1. A lock strike including a jamb plate having an external rim flange and a notched internal flange thereon; a screw swiveled in one of said flanges; a strike plate having extensions guided in the notches in said notched plate, and engaging said screws.

2. A lock strike including a jamb plate having an external rim flange and a notched internal flange integrally formed thereon; screw means swiveled on both of said flanges; a strike plate having extensions engaging the notches in said notched flange, and having integral lugs engaging said screw means.

3. A lock strike including a jamb plate having an external extension bent at a right angle thereto; a slot formed in said jamb plate having the metal flange therefrom bent parallel to said first mentioned extension; notches cut in the ends of said flange; screw means swiveled through the extension and flange; a strike plate having extensions thereon engaging the notches in said notched flange and having integral lugs thereon engaging said screw means, between the extension and flange of the jamb plate, whereby the strike plate can be adjustably positioned across the slot in the jamb plate.

4. A lock strike consisting of the combination of a stationary jamb plate and an adjustable strike plate held therein; a slot formed in said jamb plate and having the core therefrom bent at a right angle thereto to form a flange; an exposed extension on said jamb plate parallel with the flange for limiting the lateral movement of said jamb plate; screws extending through said exposed extension and flange and swivelly held therein; and lugs on said strike plate, between the extension and flange of the jamb plate engaging said screws for adjusting the position of said strike plate with relation to the slot in the jamb plate.

In testimony whereof, I have hereunto set my hand at San Francisco, California, this 29th day of September, 1917.

JOSEPH A. PLANTE.

In presence of—
BALDWIN VALE,
A. J. HENRY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."