

P. FRANTZ.
GATE LATCH.

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1,014,290.

Patented Jan. 9, 1912.

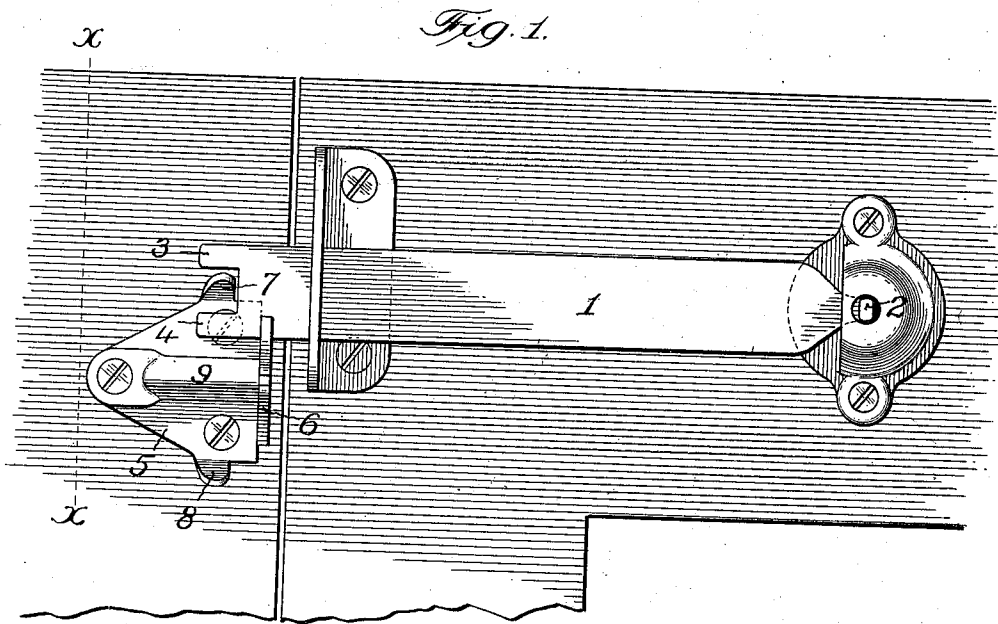


Fig. 2.

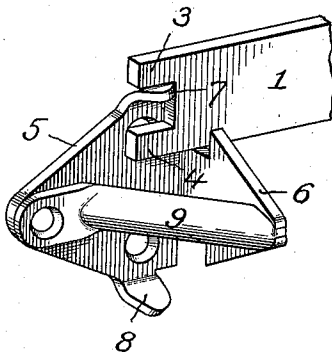
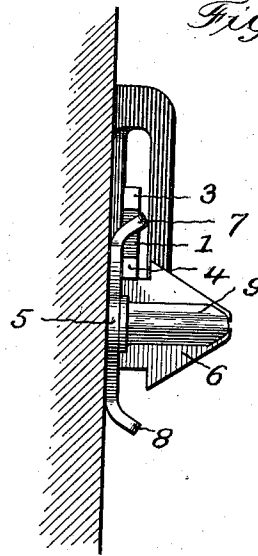


Fig. 3.



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UNITED STATES PATENT OFFICE.

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GATE-LATCH.

1,014,290.

Specification of Letters Patent.

Patented Jan. 9, 1912.

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To all whom it may concern:

Be it known that I, PETER FRANTZ, a citizen of the United States of America, and a resident of Sterling, in the county of Whiteside, State of Illinois, have invented certain new and useful Improvements in Gate-Latches, of which the following is a specification.

This invention relates to that class of gate latches in which the free end of a latch bar pivoted to the gate is adapted to strike an inclined engaging member or keeper carried by the gate post, and by engagement with said keeper hold the gate in a closed condition. And the present improvement has for its object to provide a simple and efficient structural formation of the latch bar and keeper of a gate latch, combining the features of compactness, strength and cheapness, and which is adapted to insure effective initial engagement in the ordinary slamming of the gate to effect a closure, all as will hereinafter more fully appear.

In the accompanying drawings:—Figure 1, is an elevation of a gate latch embodying the present improvements. Fig. 2 is a transverse sectional elevation on line *x—x*, Fig. 1. Fig. 3, is a detail perspective view of the keeper, with a portion of the latch bar in engagement therewith.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 represents the ordinary latch bar having a pivot stud 2 at one end by which it is pivotally secured to the gate in any ordinary manner which permits of a limited vertical oscillation of the latch bar. In the present improvement the other end of the latch bar is recessed to form upper and lower toes 3 and 4, as shown and for the purpose hereinafter stated.

5 is the attaching base of the keeper piece, preferably of the triangle plate form shown, and formed with the usual orifices for the passage of attaching screws or bolts. At one end said base is provided with an arrow shaped flange or catch piece 6, located midway the height of the base 5 and projecting at right-angles to the same. As so arranged the keeper is of a reversible nature, with the inclined surface of the forward part of the catch flange that is uppermost, adapted

to receive the glancing impact of the free end of the latch bar 1, to move it upwardly and so that as the latch bar nears the end of its travel it will drop by gravity behind the barb of the catch flange 6, which is uppermost to hold the gate closed.

A material feature of the present invention, involves in connection with the described type of keeper pieces and their arrow shape catch flange 6, of upper and lower inclined deflecting lugs 7 and 8, on the attaching base 5. In the present construction said lugs 7 and 8 are located to one side of the arrow shape catch flange 6, as shown, and as so arranged, and with the latch bar 1 recessed in the manner before described, the operation of the parts in a closing movement of the gate is as follows:—The recess in the free end of the latch bar 1 will pass freely over the particular deflecting lug 7 or 8 which is uppermost, while the toe 3 or 4 of said latch bar which is lowermost moves against the under face of the particular deflecting lug aforesaid to be deflected downward and cause an effective engagement of the main portion of the latch bar behind the above described barb of the arrow shape flange 6, and in so doing very effectively prevents any rebound of the latch bar into an unlatched condition. The purpose of locating the deflecting lugs 7 and 8 to one side of the catch flange 6 is to permit, in connection with the toe formation of the latch bar 1, of a much closer relation of said lugs upon the base plate 5, with a corresponding reduction in the size and cost of the keeper piece. As so constructed the full cross sectional area of the latch bar is retained at the point of engagement between the same and the keeper piece.

9 is a diagonal brace extending from a remote end of the base plate 5 to the point of the keeper flange 6, to provide added stiffness to said flange and prevent accidental deflection of the same from its proper position in actual use.

Having thus fully described my said invention what I claim as new and desire to secure by Letters Patent, is:—

1. A latch, comprising in combination, a pivoted latch bar, and a keeper member formed with an attaching base having a lateral arrow shaped catch flange at one end

and an inclined deflecting lug arranged above and to one side of the keeper flange aforesaid, substantially as set forth.

2. A latch comprising in combination, a
5 pivoted latch bar, and a keeper member
formed with an attaching base having a lateral arrow shaped catch flange arranged centrally at one end and a pair of inclined
deflecting lugs arranged symmetrically
10 above and below said keeper flange and to one side of the same, substantially as set forth.

3. A latch comprising in combination, a
pivoted latch bar the free end of which is
15 recessed to form a pair of toes, and a keeper member formed with an attaching base having a lateral arrow shaped catch flange at one end and an inclined deflecting lug arranged above and to one side of the keeper
20 flange aforesaid and adapted to engage the lowermost of the toes of the latch bar, substantially as set forth.

4. A latch, comprising in combination, a
25 pivoted latch bar the free end of which is recessed to form a pair of toes, and a keeper member formed with an attaching base having a lateral arrow shaped catch flange arranged centrally at one end and a pair of inclined deflecting lugs arranged symmet-

rically above and below said keeper flange 36 and to one side of the same, substantially as set forth.

5. A latch comprising in combination, a
pivoted latch bar, and a keeper member
formed with an attaching base having a lateral arrow shaped catch flange at one end,
35 an inclined deflecting lug arranged above and to one side of said keeper flange and a diagonal brace extending from a remote end of the base to the point of the keeper flange, 40 substantially as set forth.

6. A latch comprising in combination, a
pivoted latch bar, and a keeper member
formed with an attaching base having a lateral arrow shaped catch flange arranged
45 centrally at one end, a pair of inclined deflecting lugs arranged symmetrically above and below said keeper flange and a diagonal brace extending from a remote end of the base to the point of the keeper flange, sub-
50 stantially as set forth.

Signed at Chicago, Illinois, this 3rd day of March, 1911.

PETER FRANTZ.

Witnesses:

ROBERT BURNS,
HENRY MOE.

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