
CHARLES J. MOORE, OF VARINA, IOWA, ASSIGNOR OF ONE-HALF TO FRANK A. THOMPSON, OF VARINA, IOWA.

DOOR OR GATE LATCH.


Application filed February 12, 1902. Serial No. 23,869. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. MOORE, a citizen of the United States, and a resident of Varina, in the county of Pocahontas and State of Iowa, have invented a new and Improved Door or Gate Latch, of which the following is a full, clear, and exact description.

This invention relates to improvements in latches for doors or gates; and the object is to provide a latch of simple construction that may be readily attached to a door or gate and serve to hold the same locked in either closed or open position, the parts being so arranged that it will be practically impossible for an animal to move the latch from its locking position by rubbing against it, as sometimes happens with other locking devices.

I will describe a door or gate latch embodying my invention, and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an elevation showing part of a building and a door or gate with a latch embodying my invention as applied thereto.

Fig. 2 is a section on the line 2 2 of Fig. 1.

Fig. 3 is a section similar to Fig. 2, but showing the door locked in open position; and

Fig. 4 is a section on the line 4 4 of Fig. 3.

Referring to the drawings, 5 designates the side of a building, and 6 a door or gate.

The locking-latch consists of a bar of iron bent to form a shank portion 7, which extends through the door or gate and has on its inner end a handle 8, and at the outer end extended at right angles to the shank portion is a portion 9, which serves both as an outer handle and as a locking device, as will be hereinafter described. From the end of the part 9 the latch is turned inward, as at 10, and then outward, as at 11.

As a convenient means for attaching the latch to a door or gate the shank portion 7 has a reduced portion forming shoulders 12 and 13 at its ends. At the free edge of the door is an outwardly-opening slot 14, the width of which is substantially equal to the diameter of the reduced portion of the shank. This reduced portion, therefore, may be slid into the slot and against the rear wall thereof and hold from displacement by means of plates 15 and 16 engaging, respectively, against the inner and outer sides of the door or gate, and at the edge of the door or gate these plates 15 and 16 are connected by a cross-plate 17, which of course bears against the free edge of the door or gate. These plates 15 and 16 are provided with outwardly-opening slots 18, designated to receive the reduced portion of the shank. When in position, the plates, or rather the slots thereof, will be at right angles to the slot 14, as clearly indicated in the drawings. After placing the parts the 65 plates may be secured by screws or otherwise.

On the outer casing at the free edge of the door is a keeper, consisting of a hook 19, the shank portion of which is driven into the casing, while the outer portion is turned upward and slightly inward toward the casing, so as to prevent accidental detachment of the latch from the keeper.

For locking the door in its open position I provide a keeper 20, the shank portion of which is connected to the building or to a fence, and the hook portion, as clearly shown in Fig. 3, is turned toward the building or fence and at an angle inclined toward the 80 hinge edge of the door. This inclined portion will serve as a cam to automatically move the latch to locking position, as will be hereinafter described.

In operation to secure the door in closed 85 position by lifting or swinging the outer portion of the latch upward by taking hold of the handle 9 the part 11 may be dropped in behind the hook 19, and obviously the latch may be opened or moved to locking position 90 from either the inner or outer side of the door or gate. When swung to open position, the outer portion of the latch will fall by gravity to a substantially vertical line, and then as the part 9 engages with the incline 95 of the hook 20 it will be swung until it passes over the end of the hook and then will fall into the same by gravity. It is to be understood, however, that the hook or keeper 20 may be placed in a position similar to that of the keeper 19—that is, with the hook portion extended upward. In this event, however,
the latch must be lifted to pass the part over the hook.

It will be seen that a latch embodying my invention may be readily applied by any one, practically all the tools that are necessary being a saw to form the slot 14 and a screwdriver.

While I have shown the shank 7 and handles made in one piece, it is to be understood that one of the handles may be removably secured to the shank similarly to a door-knob, in which case the plates 15 and 16 would be provided with holes and not slots.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A latch for a gate or door, comprising a strip of metal bent to form a shank portion having a reduced part forming shoulders at the ends and adapted to be inserted in an outwardly-opening slot in the edge of the door or gate, a plate having an outwardly-opening slot for receiving said reduced portion, the slot of the plate when the plate is in position being arranged at an angle to the slot in the door thus forming a bearing in which the shank rotates axially, a handle on the inner end of the shank, and a handle and locking device on the outer end of the shank, substantially as specified.

2. A latch for a door or gate, comprising a strip of metal having a shank provided with a reduced portion adapted to enter an outwardly-opening slot in the edge of a door or gate, plates for engaging against the inner and outer sides of the door or gate, the said plates being connected at the edge of the door or gate and provided with slots to receive the said reduced portion of the shank, a handle on the inner end of the shank, a part forming a latch and handle extended at right angles from the shank, a part extended inward from said handle and latch part, a part extended outward from said inwardly-extended part, and a latch consisting of a hook bent to form an incline at its outer side, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES J. MOORE.

Witnesses:

J. A. THOMPSON,

E. B. WELLS,