Jan 6, 1931. W. A. McCULLOCH 1,787,869

GATE LATCH

Filed Dec. 22, 1928

Fig. 1.

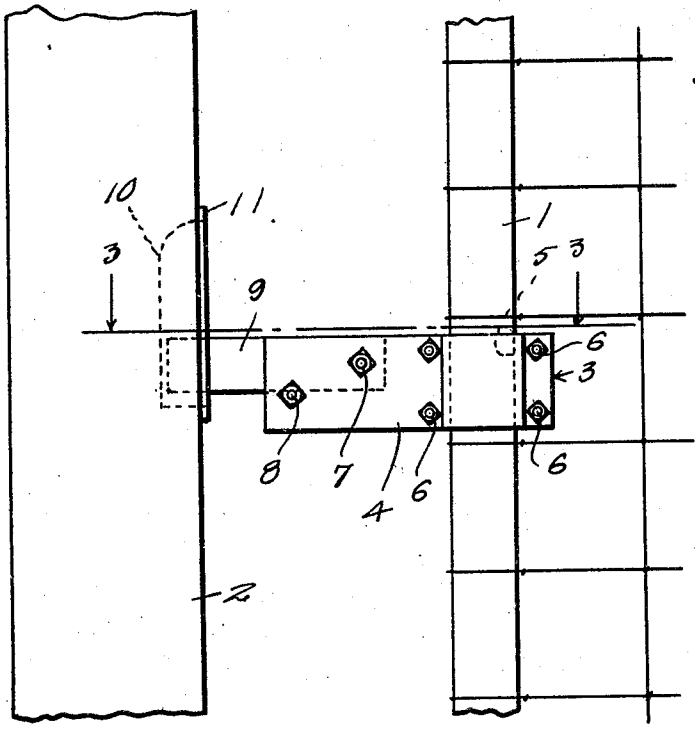
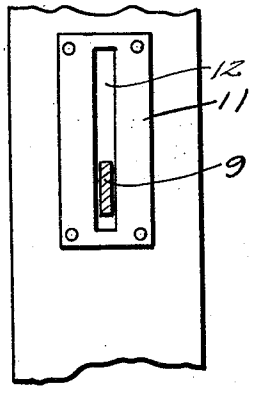


Fig. 2.



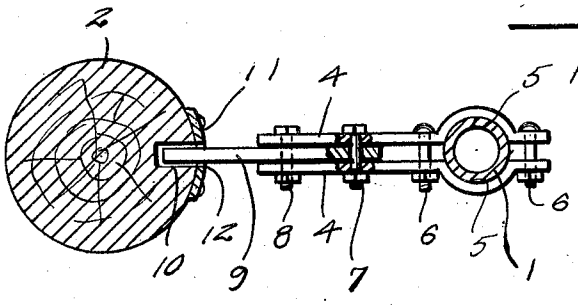


Fig. 3.

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UNITED STATES PATENT OFFICE

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GATE LATCH

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This invention relates to the class of locks and latches and pertains particularly to a gate latch.

The primary object of the present invention is to provide an improved type of latch designed particularly for attachment to a gate body to engage a post formed upon its inner face to provide a keeper.

The majority of latches are at the present time attached to a post of a gate opening to engage the gate body when the same is swung to a closed position and these latches, because they project from the gate post into the gate opening, are frequently broken off by stock or machines passing through the gate. In the present invention the latch is designed for attachment to the gate body to engage in a keeper member formed in the gate post.

Another object of the invention is to provide a latch of simple construction designed to be easily and quickly set up or removed from position and of strong and durable character.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming a part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:—

Figure 1 is a view in side elevation of the latch structure embodying this invention, showing the same applied to the forward bar of a gate and connected with a gate post.

Figure 2 is an elevational view of the inner face of the gate post showing the keeper member for the latch finger and the latch finger in transverse section.

Figure 3 is a sectional view taken substantially upon the line 3—3 of Figure 1, a fragmentary section being taken through the latch and plates at the pivot bolt.

Referring to the drawing in detail wherein like numerals of reference indicate corresponding parts throughout the several views, the numerals 1 and 2 indicate respectively a vertical gate bar and a gate post, the gate bar being shown with the latch member embodying the present invention, and indicated generally by the numeral 3, applied thereto.

As shown the latch structure comprises a pair of complementary elongated rectangular plates 4 each being formed adjacent one end to provide a transverse substantially semi-cylindrical channel 5 designed to receive the bar 1 in the manner shown.

When the plates 4 are secured to a gate bar of tubular material such as the one shown they are arranged in spaced substantially horizontal and parallel relation with the bar positioned therebetween and in the opposed channels 5. Suitable securing bolts 6 are passed through the plates on opposite sides of the bar to draw the plates together to securely clamp the same therebetween.

As shown the longer ends of the plates 4 project from the gate bar 1 toward the fence post 2 and extending through the plates adjacent the forward ends is a pivot bolt 7 and forwardly of and beneath this bolt is a transverse stop bolt 8.

A latch finger 9 having one end interposed between the extended ends of the plates 4 is traversed by the pivot bolt 7 to swing thereon and when in down position or in a position substantially parallel with the plates 4 rests upon the stop 8 in the manner shown.

The inner face of the fence post 2 is provided with a recess 10 and the face of the post has attached thereto a keeper plate 11 through which a slot 12 is formed to open into the recess 10. When the gate to which the latch is attached is in closed position and the latch finger permitted to swing downwardly the free outer end thereof will swing through the slot 12 of the plate 11 into the recess 10 and will thus latch the gate in closed position.

From the foregoing description taken in connection with the accompanying drawing it will be seen that when the latch finger 9 is swung to raised position it will be supported in rearwardly inclined position against the gate bar 1 to which its supporting

plates 4 are secured. When the gate is swung to closed position all that is necessary to secure it is to swing the latch finger over so that it will drop to rest upon the stop bolt 8 at which time the outer free end thereof will move into the recess 10 in the manner described.

While the drawing shows plate members 4 formed for attachment to the bar of a gate formed of tubular material it is of course, to be understood that I do not wish to be limited to such structure for it is apparent that the device may be as readily constructed for application to gates in which the bars are of square cross section or of any other cross sectional design.

Having thus described my invention what I claim is:—

1. A latch member of the character described comprising a pair of plates designed to be arranged in spaced side by side relation upon opposite sides of a supporting upright, said plates being formed to receive the upright, holding members connecting the plates and drawing the same to clamping engagement with the upright, a latch finger designed to engage a keeper member, having one end pivotally mounted between the forward ends of the plates, and a supporting stop member connecting between the plates forwardly of the latch member to maintain the latch in horizontal keeper engaging position.

2. A latch member of the character described comprising a pair of plates designed to be arranged in spaced side by side relation upon opposite sides of a supporting upright, said plates being formed to receive the upright, holding members connecting the plates and drawing the same to clamping engagement with the upright, a latch finger designed to engage a keeper member, having one end pivotally mounted between the forward ends of the plates, and a supporting stop member connecting the plates forwardly of the latch member to maintain the latch in horizontal keeper engaging position, said latch being positioned with respect to the plate supporting body to swing its free end into contact therewith to rest in inclined position thereagainst.

In testimony whereof I hereunto affix my signature.

WILLIAM A. McCULLOCH.