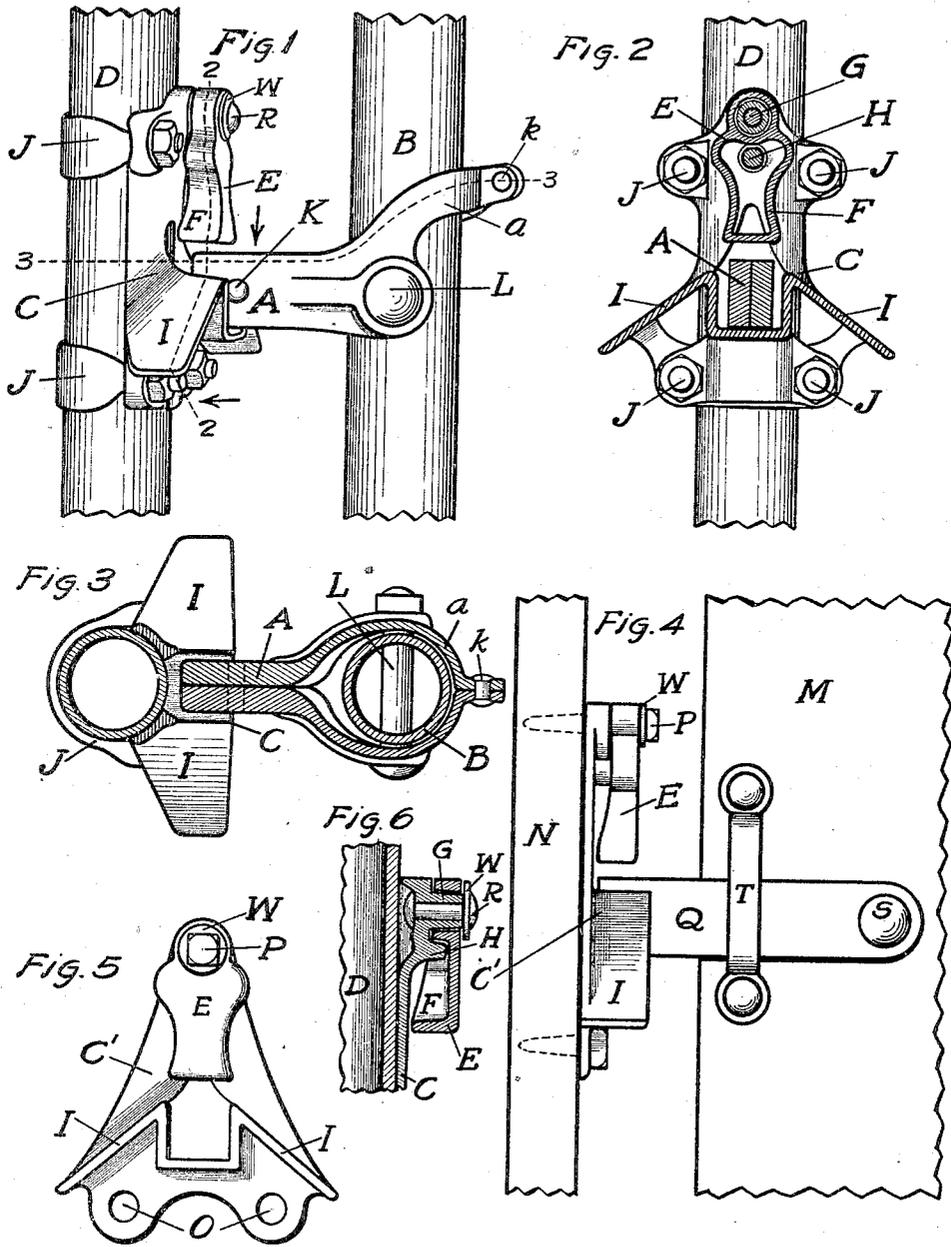


W. LOUDEN,
 GATE LATCH,
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WITNESSES:

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GATE-LATCH.

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To all whom it may concern:

Be it known that I, WILLIAM LOUDEN, a citizen of the United States, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented a new and useful Improvement in Gate-Latches, of which the following is a specification.

My invention relates to gate latches which will operate in opposite directions, and it consists of means to prevent the latch from passing by its catch without latching and to hold the latch in its catch, and of other features which will be hereafter described and which will be definitely set forth in the claims.

In the accompanying drawings, Figure 1 is a side perspective of a latch embodying my invention. Fig. 2 is a vertical section on line 2—2 of Fig. 1, and Fig. 3 is a horizontal section on line 3—3 of Fig. 1, looking in the direction of the arrow in both cases. Fig. 4 is a side view of a modified form of the invention. Fig. 5 is a detail view of same. Fig. 6 is a vertical section which will be explained hereafter.

Referring to the drawing, A is a latch pivoted to a tubular member B which is intended to represent a section of a gate frame.

C is a catch which is secured to a tubular member D which is intended to represent a section of a gate post, the catch being adapted to receive the latch A.

E is a pendent member pivotally hung at its upper end on a boss G on the upper end of the body of the catch C. The member E is channeled on its inner side, or in other words, is provided with an inwardly extending flange F on its bottom and sides. The upper portions of the sides of the flanges are preferably curved outwardly, as shown in the drawing, and in the center of this outwardly curved portion of the flange an outwardly projecting pin H is located on the upper portion of the catch C immediately below the boss G. This pin is adapted to come in contact with the outwardly curved portion of the flange F and will arrest the movement of the member E when

swung to a certain position in either direction.

The gate of which the member B is a portion, being swung to the catch C, the latch A will slide up the incline I on the side of the catch next to it and will come in contact with the lower end of the member E and will push it before it until one of the adjacent portions of the flange F comes in contact with the pin H, which will arrest its further movement. The latch will then drop into the notch or recess between the inclines I, and the member E will swing to a central position over the end of the latch in the recess, as most plainly shown in Fig. 2. The latch will now be securely held in the recess of the catch and cannot be removed therefrom until the member E is swung to one side, which will permit it to be lifted out of the recess to open the gate. It will be seen that the member E may be swung to either side desired, so that the latch may be lifted out of the recess on either side desired, and the gate may be opened in that direction.

It makes no difference in which direction the latch may approach the catch it will slide up the incline I on that side, and will push the pendent E over until the adjacent portion of the flange F comes in contact with the pin H, when the further movement of the latch will be arrested. The latch will then drop into the recess of the catch and the member E will swing back over it and hold it in latched position.

The pendent being wider immediately below its pivot where the pin H is located than at its lower end will permit it to swing a sufficient distance before the pin comes in contact with its flange where it is outwardly curved, (thus arresting its further movement) to allow the latch to drop into the recess. By this arrangement the latch will be effectually prevented from passing through or by the catch without first latching, and the pendent will have to be swung to one side before the latch can pass to the other side of the catch.

When tubular or other similar material,

cylindrical in cross section, is used, the catch will be made to fit said material and will be preferably secured thereto by clip bolts J passed through openings in lugs formed on the edges of the catch. A bolt or rivet R provided with a washer W is secured to the boss G to hold the member E thereon while permitting it to swing freely to either side within the limits permitted by the flange E and the pin H.

The latch A is preferably made of two equal parts, one right and the other left, secured together by rivets K and L. It is adapted to straddle the member B and is pivoted thereto by a bolt L. The end a of the latch which surrounds the member B is preferably extended upwardly or arched, as shown in Fig. 1, and is arranged to come in contact with said member when the body of the latch is in lowered position, thus forming a stop to prevent the latch from dropping below the inclines I. The catch is easily adjusted up or down on the member D by loosening the clip bolts J, and may be readily adjusted to the proper position at any time for the latch to contact with the inclines of the catch.

When material having flat surfaces is used for the gate and the gate post, such as that shown by M and N in Figs. 4 and 5, the latch and the base of the catch will have to be modified to suit the requirements. The base of the catch C' will be made flat and provided with holes O for the admission of screws or bolts to fasten it to the post N. A lag screw P provided with a washer W may also be used to hold the member E on the boss G, and passing therethrough to fasten the upper end of the catch to the post N.

When flat material is used for the gate, as at M, a flat bar Q may be used for the latch and be pivoted to the gate at S. In this construction means should be used to limit the movement of the latch bar Q, such for instance as the bracket or keeper T.

Fig. 6 is a vertical transverse section through the member E, the upper end of the catch C, and the adjacent portion of the post D. This figure shows plainly the pin H and the boss G, and how the rivet R is secured in place. The construction is simple and inexpensive, as well as durable and effective.

What I claim is:

1. In gate latches, a catch set at substantially right angles to the latch, and having an upwardly inclined face on each side with a recess between the inner and upper ends of the inclines, the latch being adapted to slide up the inclines on either side and drop into the recess, and a pendent member pivoted above the recess whereby it will normally stand over and hold the latch in the recess, and be swung to the side in removing it therefrom.

2. In a device of the character described, a pivoted latch, a catch set at substantially right angles to the free end of the latch, and having an upwardly inclined face on each side with a recess between their inner and upper ends, the free end of the latch being adapted to slide up either of the inclines and drop into the recess between them, and a pendent member pivoted to a boss on the upper end of the body of the catch and adapted to stand normally over the recess whereby it will hold the end of the latch in the recess of the catch and be swung to either side to remove the latch therefrom.

3. In a device of the character described, a catch having an upwardly inclined face on each side with a recess between their inner and upper ends, a pendent member pivoted to the upper end of the body of the catch, and adapted to stand normally over the recess, a pin on the catch below the pivot of the pendant, flanges on the sides of the pendant adapted to come in contact with the pin and arrest the movement of the pendant at a certain point in either direction and a pivoted latch having its free end adapted to slide up the incline of the catch on either side and push the pendant as far as it will go to the side and then drop into the recess of the catch, when the pendant will swing back to its normal position and hold the latch in the recess of the catch.

4. In a device of the character described, a catch having an upwardly inclined face on each side with a recess between their inner and upper ends, a pendent member pivoted to the upper end of the catch and adapted to stand normally over the recess, a pin on the catch below the pivot of the pendant, curved out flanges on the sides of the pendant adapted to come in contact with the pin and arrest the movement of the pendant at a certain point in either direction and a pivoted latch having its free end adapted to slide up the incline of the catch on either side and push the pendant as far as it will go to the side and then drop into the recess of the catch, when the pendant will swing back to its normal position and hold the latch in the recess of the catch.

5. In a device of the character described, a catch adapted to be secured to a gate post and having an upwardly inclined face on each side, and a latch comprising two parts riveted together, and adapted to straddle an adjacent portion of a gate frame, and be pivoted thereto, the free end of the latch being adapted to slide up the inclined faces of the catch and drop into the recess between the inclines and means to limit the vertical movement of the latch on the gate frame.

6. In a device of the character described, a catch adapted to be secured to a gate post and having an upwardly inclined face on each side, and a latch comprising two parts

riveted together, and adapted to straddle an adjacent portion of a gate frame, and be pivoted thereto, the pivoted ends of the parts which straddle the gate frame having
5 upwardly inclined extensions joined together so as to come in contact with opposite side of the frame member and form a stop to

limit the downward movement of the free end of the latch.

Fairfield, Iowa, Feb. 5, 1916.

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Witnesses:

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