

No. 865,844.

PATENTED SEPT. 10, 1907.

A. A. ADAMS.  
GATE LATCH.

APPLICATION FILED JAN. 29, 1907.

FIG. 1

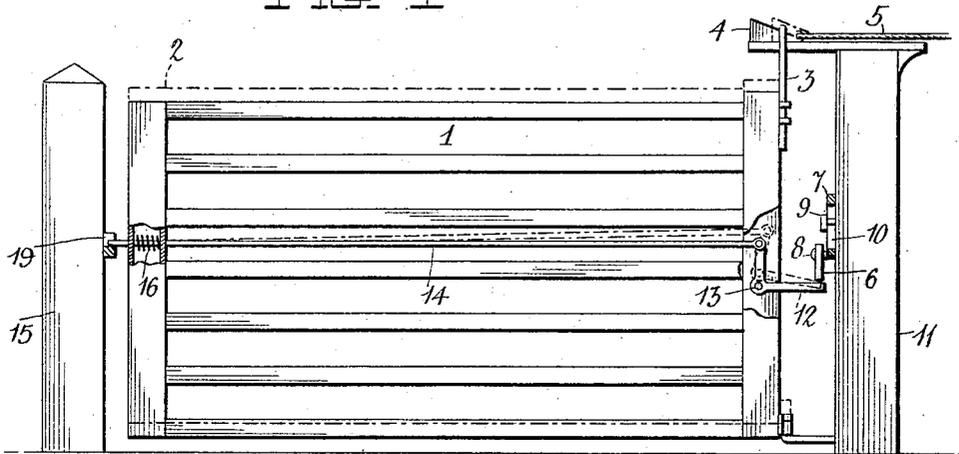


FIG. 2

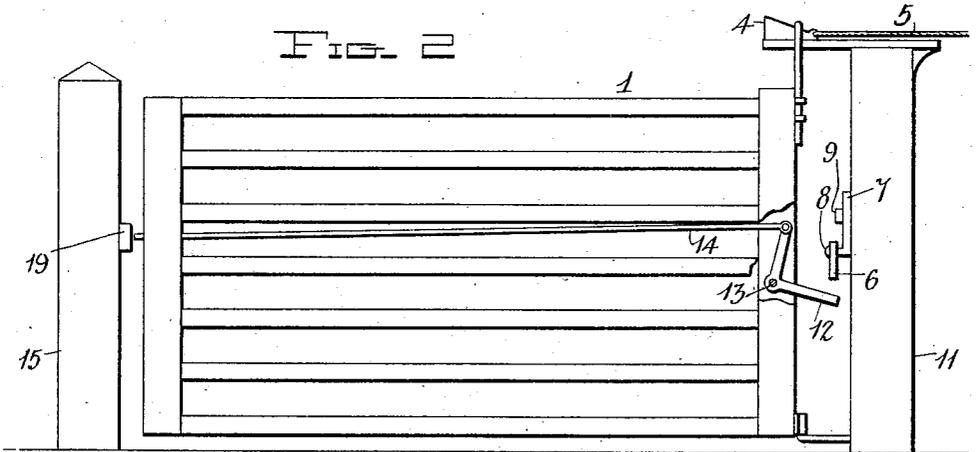


FIG. 3

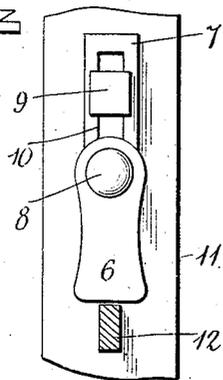
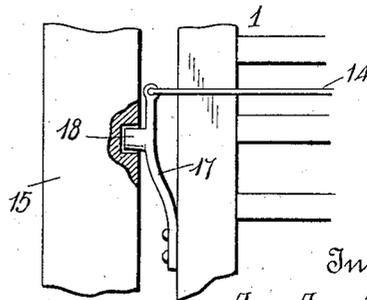


FIG. 4



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## GATE-LATCH.

No. 865,844.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed January 29, 1907. Serial No. 354,710.

To all whom it may concern:

Be it known that I, ALLEN A. ADAMS, a citizen of the United States, residing at Berryton, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Gate-Latches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to gate latches and more particularly to that class of such devices which are adapted for use with what are known as automatic or self-closing gates.

It has for its object to provide a device of this kind which will be simple and efficient and can be applied to ordinary gates with little trouble or expense.

The accompanying drawings illustrate the invention, in which:—

Figure 1 is an elevation, partly in section, of a gate provided with one form of my invention, the gate being shown closed in full lines and ready to be opened in dotted lines; Fig. 2 is a similar view, showing the gate in the act of being closed; Fig. 3 is an elevation of a portion of the hinge post, showing my improved lock mechanism in position; and Fig. 4 is a broken elevation of a portion of the gate and the latching post showing a different form of latching mechanism.

Referring more particularly to the drawings, which are for illustrative purposes only and therefore are not drawn to scale, 1 indicates the gate which may be of any suitable form and construction. It is provided with any suitable hinge mechanism which is adapted to lift the gate vertically, as shown in dotted lines at 2 in Fig. 1. In the form of hinge shown in the drawings the upper hinge member 3 is adapted to be raised vertically as by a cam 4 and any suitable actuating mechanism as the ordinary cord 5.

The locking mechanism consists of a plate 6, which is pivotally-mounted upon a vertically-movable member 7, said member being preferably provided at its lower end with a bolt or projection 8 for the reception of the plate 6. The member 7 can be secured in any desired manner but preferably by means of a bolt or lag screw 9, which projects through a slot 10 into the post 11.

Movably - mounted upon the gate at its hinged end in position for being engaged by the plate 6 is a trip 12, preferably in the form of an angle lever pivoted at 13. Connected with the upper end of said lever is a rod 14, which extends to the free end of the gate where it is provided with means for engaging with the latch post 15 and being thereby moved longitudinally toward the hinge post. It is also provided with means for moving it in the opposite direction, which will cause the outer end of the lever 12 to be normally held in position for engaging the plate 6. The means for moving the rod in

this latter direction preferably consists of a coiled spring 16 near its free end, or the rod may be connected with the free end of a spring 17, which is secured to the head of the gate so as to normally hold the lever 12 in its operative position and also cause a lip or projection 18 upon said spring to be in position for engaging with the latch post when the gate is closed.

In operating a gate provided with my improved latch as above described, the gate is raised vertically, which will cause the end of the lever 12 to engage with the plate 6 and thereby withdraw the free end of the rod 14 or the latch connected therewith when the latter is used, from engagement with the catch 19, which will release the free end of the gate and permit of its being swung into its open position in the usual manner. By pivotally-mounting the plate 6 it will be seen that as the gate swings upon its hinge in being thus opened, the plate will swing upon its pivot so long as the lever 12 is engaged therewith but as soon as it is disengaged from said lever the plate will swing downwardly into its normal position ready for being engaged by said lever when the gate is to be again opened.

In closing the gate, its free end is swung around so as to cause the free end of the rod 14 or the lip 18 when the spring 17 is used, to engage with the catch 19, or the side of the post as the case may be, which will move the rod 14 longitudinally toward the hinge post and thereby swing the outer end of the lever 12 downward so that it will not engage with the plate 6 until after the gate has fully closed and its latch has dropped into the catch upon the catch post.

From the foregoing it will be seen that my improved fastening device is very simple and efficient and can be readily applied to the gate as the lever 12 may be secured within the hinged end of the gate or upon one side of it, as can also be done with the spring connection at the free end of the rod.

Other changes or modifications that will come within the scope of the appended claims can be made without departing from the spirit of my invention.

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

1. In a gate, a hinge post, a gate pivotally and vertically movably mounted thereon, latching mechanism on said gate, and means on said post for being engaged by said latching mechanism when the gate is raised vertically.
2. In a gate, a post, a gate pivotally and vertically movably mounted thereon and provided with latching mechanism, a plate pivotally mounted on said post in position for being engaged by the latching mechanism and actuating the same when the gate is raised vertically.
3. In a gate, a post, a gate pivotally and vertically movably mounted thereon, a slotted member provided at its lower end with a projection, a bolt through said slot, a plate pivotally-mounted on said projection, and latching mechanism upon the gate in position for engaging with said plate when the gate is raised vertically.

4. In a gate, a post provided with locking mechanism, a gate pivotally and vertically-mounted upon the post, an elbow lever pivotally-mounted on the gate in position for engaging with said locking mechanism, and latching mechanism connected with said lever.
5. In a gate, a post provided with locking mechanism, a gate pivotally and vertically mounted on said post, an elbow lever pivotally-mounted on the gate in position for engaging said locking mechanism, a longitudinally movable rod mounted on the gate, one end of which is con-
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nected with said lever and the free end is provided with spring mechanism for normally-holding the outer end of said lever in engagement with said plate.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALLEN A. ADAMS.

Witnesses:

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