Dec. 19, 1950 A. B. CLEAVE 2,534,414

GATE LATCH KEEPER

Filed Feb. 16, 1948

Fig. 1.

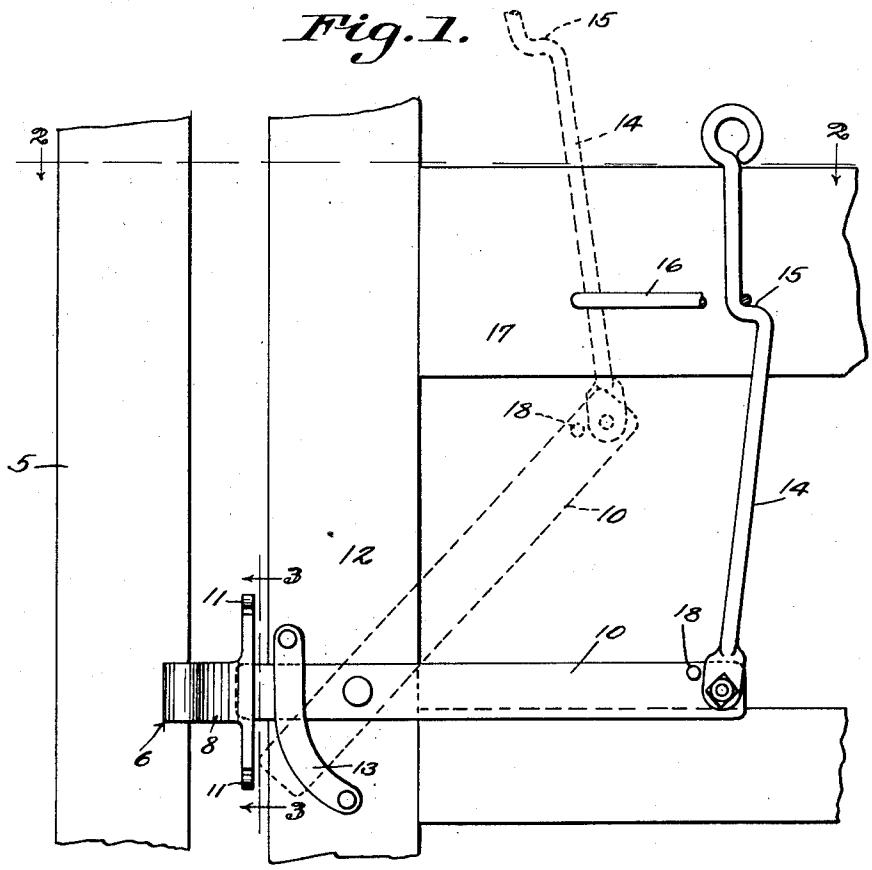
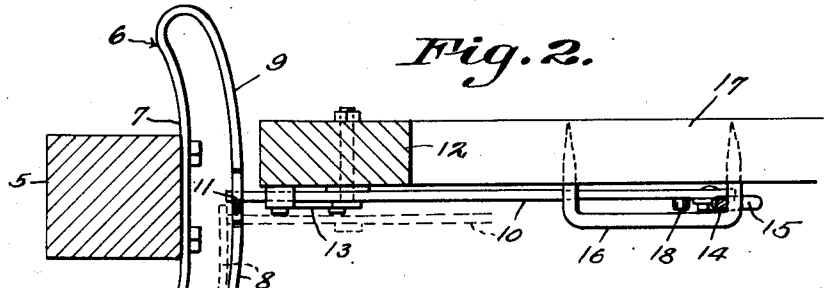


Fig. 2.



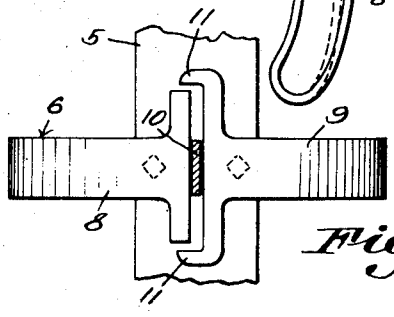


Fig. 3.

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GATE LATCH KEEPER

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3 Claims. (Cl. 292—341.15)

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This invention relates to gate latches, the primary object of the invention being to provide a gate latch which will securely latch a gate in its closed position, means being provided to prevent the gate from being opened by pressure directed to the lower edge thereof, as by animals attempting to pass under the gate, which pressure would elevate the pivoted latch arm from its keeper.

Another object of the invention is to provide a two-way gate latch, or a latch which will operate when the gate is swung either inwardly or outwardly.

Still another object of the invention is to provide remote control means for the latch arm, so that the latch arm may be actuated from a point adjacent to the upper edge of the gate.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing:

Figure 1 is a fragmental elevational view of a two-way gate latch constructed in accordance with the invention, the latch arm being shown in its open position in dotted lines.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 1.

Referring to the drawing in detail, the reference character 5 indicates a gate post which carries the keeper 6, the keeper extending forwardly from the inner surface of the gate post, as clearly shown by Fig. 2 of the drawing.

The keeper comprises a length of spring metal bent upon itself to provide the arm 7 and spring arms 8 and 9, the spring arms 8 and 9 having their free ends spaced apart a distance to receive the latch arm 10 that cooperates with the keeper in securing the gate in its closed position. As clearly shown by Fig. 3 of the drawing, the free end of the arm 8 is T-shaped, while the free end of the arm 9 is substantially U-shaped, the right angled ends 11 of the free end of the arm 9 overlying the upper and lower ends of the T-shaped end of the arm 8, substantially closing the space at the upper and lower ends of the arms 8 and 9, so that the latch arm 10 will be prevented from passing from the space between the adjacent ends of the spring arms 8

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and 9, at the top thereof, if the gate is raised by animals attempting to squeeze under the gate. It will also be noted that the latch arm 10 will be held against displacement at the bottom of the space between the ends of the arms 8 and 9. The latch arm 10 is pivotally mounted on the end bar 12 of the gate structure, the forward end of the latch arm extending to a point between the adjacent ends of the arms 8 and 9 to secure the gate in a closed position. A curved guide arm 13 is secured in spaced relation with the end bar 12 under which the forward end of the latch arm 10 operates, the guide arm also acting as a means to brace the arm 10 against strain directed to the gate by animals pressing against the gate in an effort to open the same.

Pivotally connected to the inner end of the latch arm 10 is an operating rod 14, which is formed with an offset portion 15 adapted to fit against one end of the retaining staple 16, which is elongated and driven into the horizontal bar 17 forming a part of the gate structure. Thus, it will be seen that when the operating rod 14 has been moved so that the offset portion 15 thereof engages one end of the staple 16, the latch arm 10 will be held in its horizontal or latching position until it has been moved within the staple 16 to disengage the end thereof.

A stop pin 18 is positioned on the latch arm 10 adjacent to the pivoted end of the operating rod 14, to thereby restrict pivotal movement of the operating rod.

From the foregoing it will be seen that a gate equipped with a latch as described, may be moved to its closed position, the forward end of the latch arm moving over one of the arms 8 or 9, according to the direction of movement of the gate, the keeper arm being braced inwardly by the action of the latch arm. After the forward end of the latch arm passes into the space between the ends of the keeper arms 8 and 9, the latch arm will then be held against movement within the space, the latch arm contacting with the ends of the arms 8 and 9. Should it be desired to open the gate, it is only necessary to move the operating rod upwardly lifting the inner end of the latch arm 10, releasing the forward end of the latch arm from the space.

When the latch arm is held between the ends of the arms 8 and 9, vertical movement of the gate beyond a predetermined point, will be prevented, due to the engagement of the latch arm with a right-angled end 11 of the arm 9.

Having thus described the invention, what is claimed is:

1. In a gate latch, a keeper comprising a length of spring metal material bent upon itself providing spring arms having their free ends in alignment and spaced apart providing a keeper space, right-angled ends formed on one of the spring arms overlying the space between the spring arms, said keeper space adapted to receive a latch arm mounted on the gate, the free end of the latch arm being movable over the spring arms passing into the space between the spring arms, the ends of the space between the spring arms being closed by the right-angled ends, restricting vertical movement of the latch arm within the keeper space.

2. In a gate latch, a keeper comprising a length of spring metal bent upon itself providing spring arms having their free ends in alignment and spaced apart providing a keeper space, a T-shaped end on one spring arm, lugs formed on the adjacent end of the opposite spring arm, overlying the ends of said T-shaped end of the keeper, said lugs guarding the ends of the keeper space restricting vertical movement of a latch arm, between the ends of the spring arms.

3. In a gate latch, a keeper comprising a length of spring metal bent upon itself providing spring arms having their free ends in alignment and spaced apart providing a keeper space, lugs extending from one of the spring arms, substantially closing the ends of the keeper space, restricting vertical movement of a gate latch arm disposed within the keeper space.

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