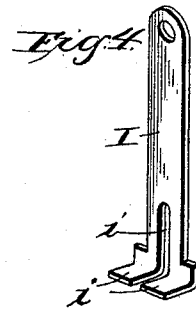
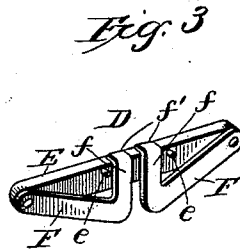
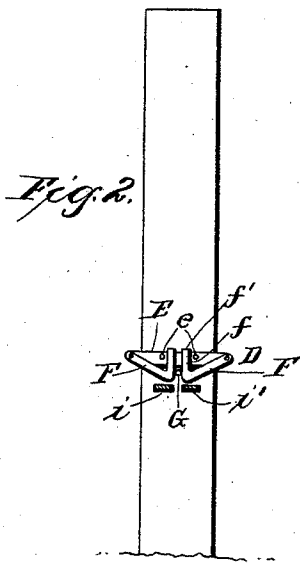
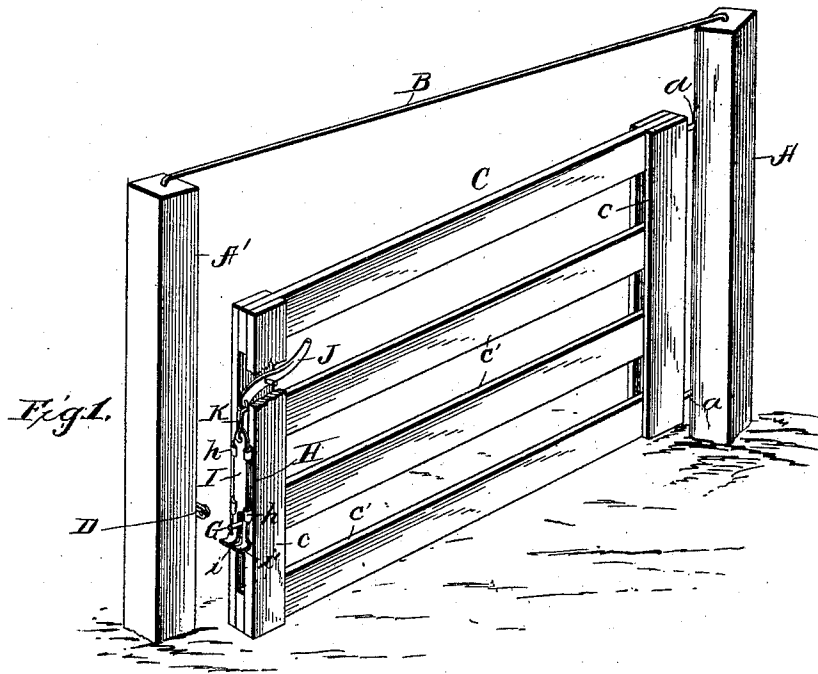


(No Model.)

W. BROWN.
GATE LATCH.

No. 474,362.

Patented May 10, 1892.



Witnesses

E. C. Wierdeman,
D. D., Ashthampton.

Inventor

By *his* Attorneys, *W^m Brown*

Chas. Snow & Co

UNITED STATES PATENT OFFICE.

WILLIAM BROWN, OF REILY SPRINGS, TEXAS.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 474,362, dated May 10, 1892.

Application filed November 21, 1891. Serial No. 412,611. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BROWN, a citizen of the United States, residing at Reily Springs, in the county of Hopkins and State of Texas, have invented a new and useful Gate-Latch, of which the following is a specification.

This invention relates to gate-latches; and it has for its object to provide a device of this character which will be simple in construction and efficient in operation, and to provide a gate-latch that not only permits the gate to be opened in both directions, but also prevents the same from being opened or lifted from its hinges by the stock, and also a latch that can be easily manipulated without dismounting from the horse.

With these and other objects in view, which will readily appear as the nature of the invention is fully understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view, partly in section, constructed in accordance with my invention, the gate being partly open. Fig. 2 is a vertical transverse section directly in front of the latch and latch-raising device. Fig. 3 is a detail in perspective of the latch. Fig. 4 is a similar view of the latch-raising plate.

Referring to the accompanying drawings, A A' represent the ordinary gate and latch posts, respectively, of the ordinary construction and suitably bedded in the ordinary manner, and are braced by the top connecting brace rod or bar B, holding the same in their vertical positions and preventing the same from sagging on account of the weight of the gate. One of the posts A is turned cornerwise and provided with the oppositely-disposed hooks *a*, located in one corner thereof and adapted to receive the eyes of an ordinary swinging gate C, provided with the ordinary end rails *c* and the horizontal rails *c'*, constructed together in the usual manner, and by the disposition of the hinge-post and the opposite turned hooks therein it can be readily seen that the gate cannot be lifted from its hinges, nor is a space left between the eye-carrying end rail of the gate and the corner of the post to leave room for stock to put

their heads between the gate and the post. The opposite post A' is provided with a latch D, designed to secure the gate in its closed position and to allow the same to be swung to either side of the post. Said latch D comprises a horizontal bar E, secured horizontally to the inner face of said post and provided with the inwardly-projecting stops or pins *e*, the function of which will readily appear. The said horizontal bar E extends slightly to either side of said latch-post and has pivoted to each extending end thereof the inwardly-extending drop-latches F, each of which extends downwardly from their pivotal connection with said horizontal bar, and are provided with the vertical shoulder portions *f*, turned upwardly at an angle from the inclined portions of the latch and leaving a space between which the latch-pin of the gate is secured after riding over either of the inclined portions of either latch, and said vertical shoulder portions *f* terminate in inwardly-turned ends or stops *f'*, that bear upon the top of said horizontal bar and regulate the downward movement of said latches, which drop of their own weight after the latch-pin has ridden over the same, and said latches are regulated in their upward movement by the stop-pins *e* impinging against the inclined portions thereof.

The end rail *c* of the swinging gate opposite the end to which the hinges are located is provided with the outwardly-projecting latch-pin G, that is adapted to ride over either of said drop or gravity latches and engage behind the vertical shoulder portions thereof, thus effectually preventing the gate from swinging to either side. Directly above said latch-pin and upon the outer face of the end rail upon which the same is located is secured the guide-plate H, provided with the opposite pairs of guide lugs or flanges *h*, between which travel the latch-raising plate I, which is held in its movement over said plate and between the guide-lugs thereof. The said latch-raising plate I is provided at its lower end with a longitudinal slot *i*, that is adapted to work over the latch-pin and allow said plate to project normally below said pin, and said plate is provided at its extreme lower end upon either side of said slot with the outward-turned ends or shoulders *i'*, that normally lie directly beneath the inner ends of each drop-

latch, or the point at which the vertical shoulder portion thereof rises, or is turned from the downwardly-inclined portions thereof. The upper end of said latch-raising plate I is connected with a pivoted hand-lever J by means of a link K, connecting said upper end of the latch-plate with the inner end of said hand-lever, which may be pivoted within the end rail of the gate and project between the rails, or may be suitably pivoted upon the top of the gate for convenience of manipulation, being regulated according to the length of the connecting-link. It can be readily seen that by pressing the hand-lever J downwardly that the latch-raising plate draws each drop-latch out of the path of the pin and thus allows the gate to be readily opened, while said latch-plate when in its normal position beneath the plane of the latch-pin does not interfere with the engagement of said pin with the latches, as will be quite evident.

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

1. In a gate-latch, the combination, with the gate-posts and a swinging gate hinged thereto and provided with an outwardly-projecting latch-pin, of a latch secured to one of said posts and comprising a horizontal bar extending to either side of said posts, drop or gravity latches pivoted to each end of the bar and provided with inwardly and downwardly inclined portions terminating short of each other, and the vertical shoulder portions arising from the inner ends of said inclined portions and having flanged ends forming stops adapted to rest upon the top of said bar, and stop-pins projecting from said bar and regulating the upward movement of said latches,

and a latch-raising plate sliding above said latch-pin on the gate and adapted to raise said latches above the plane of the pin, substantially as set forth.

2. In a gate-latch, the combination, with the gate and posts, of a double drop-latch having downwardly-inclined portions terminating short of each other and vertical shoulder portions arising from said inclined portions parallel with each other, a latch-pin projecting from said gate and adapted to engage said latches, a guide-plate secured to the gate above the latch-pin and provided with in-turned guide flanges or lugs, a latch-raising plate mounted within said guide-lug and provided with a slot to work over said pin and with outturned shoulders or flanges at its lower end adapted to normally take beneath the inner end of each latch, and an operating-lever pivoted to said gate and connected with the upper end of said latch-raising plate, substantially as set forth.

3. In a gate-latch, a drop-latch having downwardly-inclined portions terminating short of each other and shoulder portions arising from said inclined portions, a latch-pin projecting from the gate and adapted to engage between the shoulders of said opposing latches, and a latch-raising plate sliding above the latch-pin and adapted to raise said latches above the plane thereof, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM BROWN.

Witnesses:

W. H. LEER,
C. E. SMITH.