F. JENTZ.

GATE LATCH.

APPLICATION FILED FEB. 27, 1904.

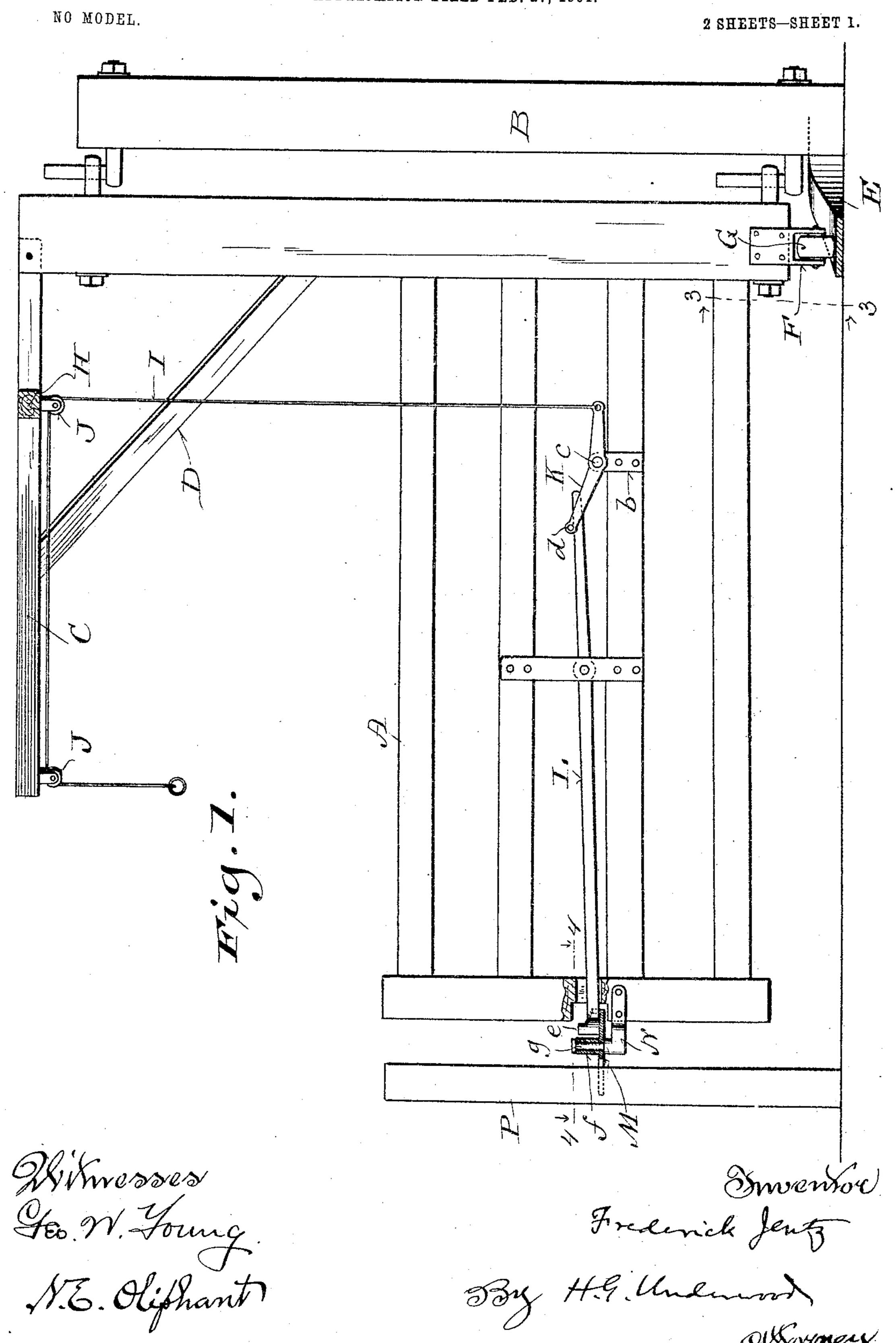


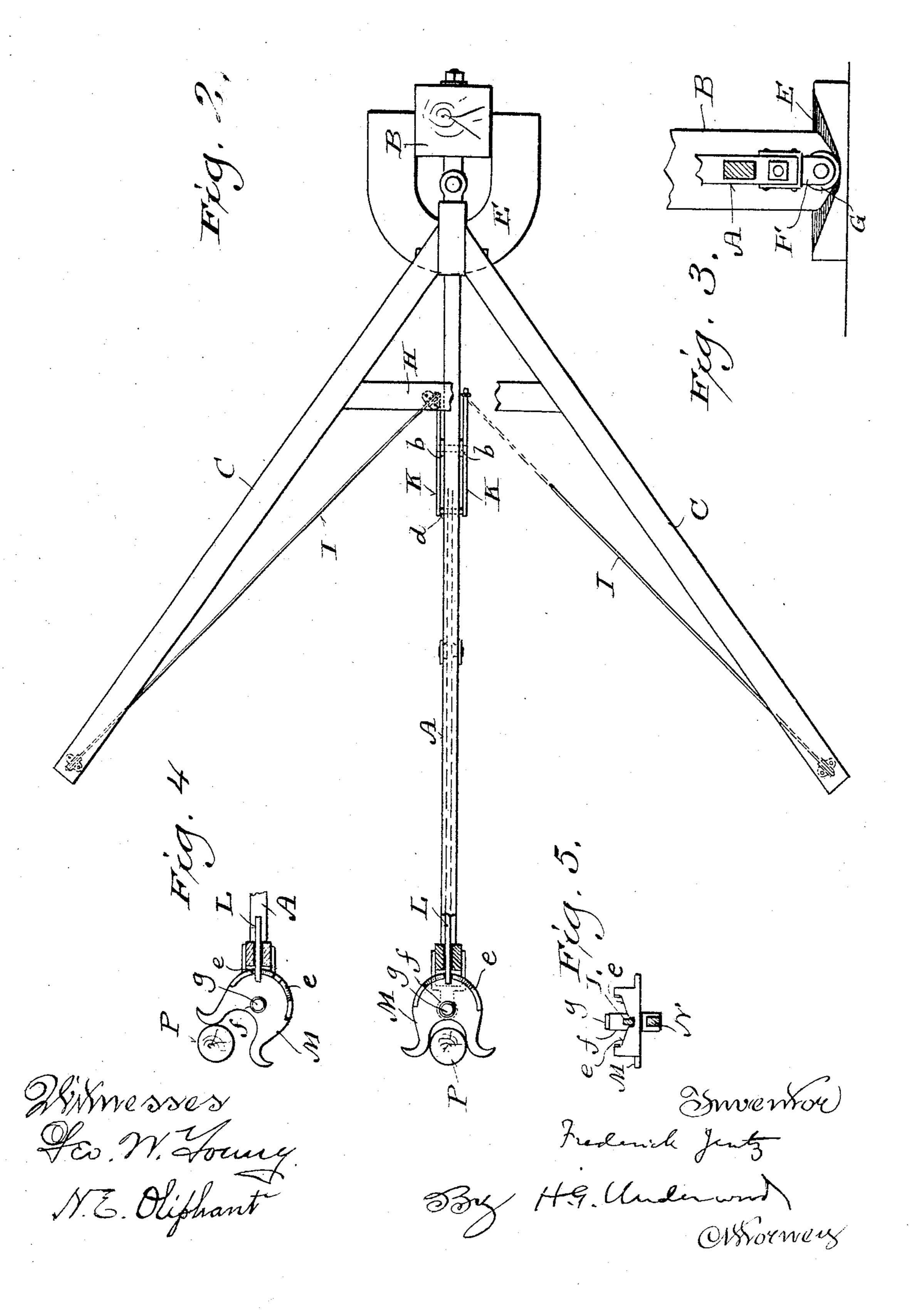
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NO MODEL.

2 SHEETS-SHEET 2.



United States Patent Office.

FREDERICK JENTZ, OF ROBBINS, MICHIGAN.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 770,968, dated September 27, 1904.

Application filed February 27,1904. Serial No. 195,510. (No model.)

To all whom it may concern:

Be it known that I, Frederick Jentz, a citizen of the United States, and a resident of Robbins, in the county of Ontonagon and State of Michigan, have invented certain new and useful Improvements in Gate-Latches; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide simple economical latch mechanism especially designed for self-closing gates, each of which may be readily opened by an operator on foot or horseback or in a conveyance.

Hence said invention consists in certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a front
elevation of a self-closing gate provided with
latch mechanism in accordance with my invention, the gate-latch, a gate-arm, and a
track in the view being shown in section; Fig.
2, a plan view of the gate and latch mechanism, partly in horizontal section; Fig. 3, an
elevation of a fragment of the gate, partly in
section, this view being indicated by line 3 3
in the first figure of the series; Fig. 4, a detail view, partly in section, as indicated by
lines 4 4 in said first figure, the same illustrating the latch in position to permit opening of the gate; and Fig. 5, a detail partly-sectional elevation of the latch mechanism.

Referring by letter to the drawings, A in-35 dicates a gate having hook-and-eye hinge connection with a post B, and the hinge-stile of said gate is upwardly extended a suitable distance. Made fast to the hinge-stile at any suitable elevation above the upper bar of the 4° gate are diverging arms C, and struts D are employed in connection with said stile and arms. Inclining in opposite directions from the center of the hinge-post B is a lower semicircular track E, and suspended by a hanger 45 F in connection with the hinge-stile of the gate is a roller G in contact with the track. Connecting the arms C is a horizontal brace H, and flexible devices I, such as cables or chains, are trained on pulleys J, suspended 5° from said arms and brace. A bar of the gate |

is provided with bearings b for a pivot c, connecting a pair of lever-arms K, each of which is connected at one end with one of the flexible devices aforesaid, the other ends of said levers being joined to a pin d, that bears on 55 another lever L, fulcrumed between vertical straps made fast to bars of said gate. The lever L is normally engaged with a vertical center notch in a semicircular vertically-disposed flange e of a forked plate M, having an 60 upwardly-extending hollow center boss f, loose on a pivot-stud g of a bracket N, attached to the short stile of the gate. The plate-flange e is partly inclined in opposite directions from its center notch, and the fork 65 of the plate is gradually widened at its mouth.

The plate M constitutes the gate-latch, and a post P is arranged to be engaged with the fork of said plate or latch when the gate is closed. The lever L is tilted out of the latch- 70 notch when it is desirable to open the gate, and swing of said gate results in pivotal play of said latch to clear the post P, said lever being then rested on one or the other incline of the latch-flange. The lever may be tilted 75 by a pull of either of the flexible devices I when the operator is on horseback or in a conveyance, and continued hold upon said flexible device results in swing of the gate ahead of said operator while the latter proceeds on 80 his way. When the gate is swinging open, the roller G travels up an incline of the track E, and said gate being released it automatically swings back to normal position, the latch striking the post P and swinging on its pivot 85 to engage said post, the lever L finding its way into the flange-notch of said latch to lock the aforesaid gate.

Having thus described my invention, what I claim as new, and desire to secure by Letters 90 Patent, is—

1. The combination of a swing-gate having a stile thereof provided with a bracket, a horizontal forked plate having pivotal play on the bracket and provided with a vertically-disposed and centrally-notched semicircular flange inclined in opposite directions from the notch, a post arranged to be engaged by the fork of the plate when the gate is closed, and a lever in fulcrum connection with said gate 100

to engage the flange-notch of said plate when

the latter is caught by the post.

2. The combination of a swing-gate having a stile thereof provided with a bracket, a horizontal forked plate having pivotal play on the bracket and provided with a vertically-disposed and centrally-notched semicircular flange inclined in opposite directions from the notch, a post arranged to be engaged by the fork of the plate when the gate is closed, a lever in fulcrum connection with said gate to engage the flange-notch of said plate when

the latter is caught by the post, and means in connection with the lever for tilting the same out of said notch at a distance in opposite directions from the closed gate.

In testimony that I claim the foregoing I have hereunto set my hand, at Eagle River, in the county of Vilas and State of Wisconsin, in the presence of two witnesses.

FREDERICK JENTZ.

Witnesses:
Fred Morey,
Alex. Higgins.