(No Model.)

C. TALBOT.

GATE.

No. 481,078. Patented Aug. 16, 1892.

Fig. 1.

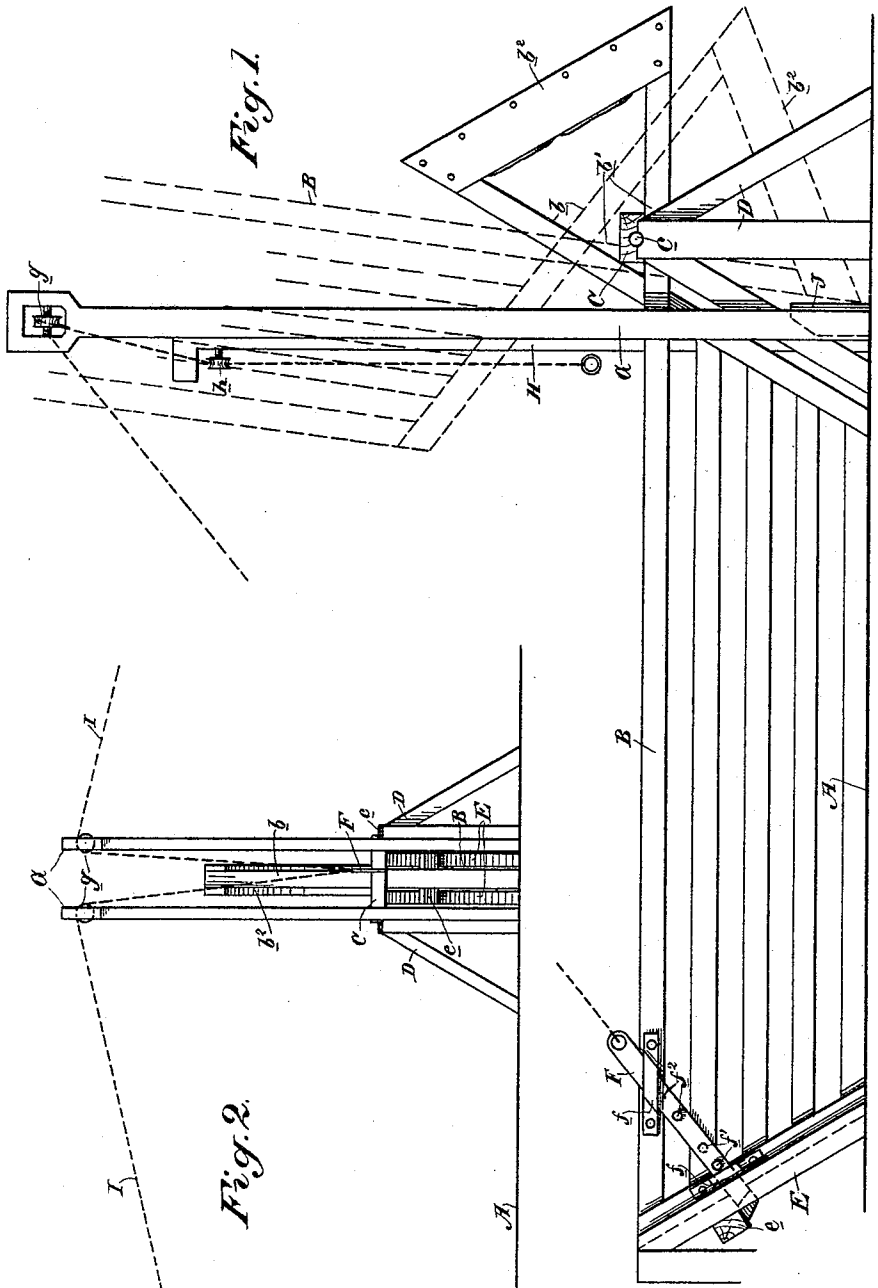
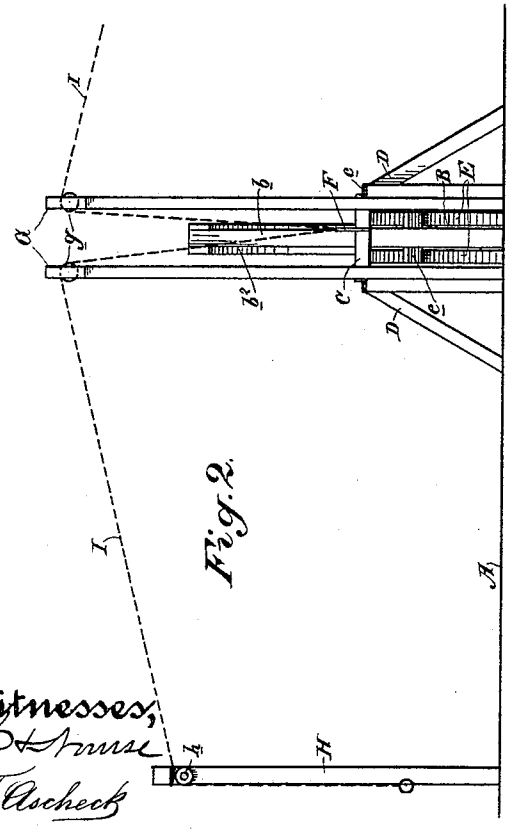


Fig. 2.



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UNITED STATES PATENT OFFICE.

COLEMAN TALBOT, OF SANTA ROSA, CALIFORNIA, ASSIGNOR OF ONE-HALF TO JOSEPH M. TALBOT, OF SAME PLACE.

GATE.

SPECIFICATION forming part of Letters Patent No. 481,078, dated August 16, 1892.

Application filed April 6, 1892. Serial No. 428,093. (No model.)

To all whom it may concern:

Be it known that I, COLEMAN TALBOT, a citizen of the United States, residing at Santa Rosa, Sonoma county, State of California, have invented an Improvement in Gates; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of gates pivoted horizontally at one end, whereby they swing in a vertical arc to open and close, being actuated thereto by a suitable arrangement of operating-ropes assisted by a counterbalance-weight.

My invention consists of the constructions and combinations of devices which I shall hereinafter fully describe and claim.

The object of my invention is to provide a simple and easily-operated gate which can be opened and closed by the traveler without having to alight from his vehicle or other conveyance.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is an elevation of my gate, the dotted lines showing the position when opened. Fig. 2 is an end view of the gate.

A is the roadway.

B is the gate. This is made longer on top than on the bottom, its end bars diverging upwardly, as shown. The inner end bar is extended, as shown at *b*, and the top rail or bar at said end is likewise extended, as shown at *b'*. The ends of these extensions are connected by a box b^2, which completes a triangular frame and forms a receptacle in which the counterbalance-weight W is carried and in which it can be adjusted, as I shall presently explain. The gate at its inner top end is provided with a horizontal transverse journal-bar C, the end pins *c* of which are pivoted in the tops of separated standards D. The outer end of the gate fits down between correspondingly-inclined guides E, which carry the transverse latch-stop *e*.

To the side of the gate is secured a sliding gravity-latch F, set at such an inclination that its lower end enters under the latch-stop at a right angle, and thus presents a full and firm resistance to the opening of the gate. The latch is mounted in upper and lower guides *f* on the gate, through which it plays freely. Its downward movement is limited by a stop *f'* coming in contact with the lower guide, and its upward movement is limited by a stop f^2 coming in contact with the upper guide. Between these limits the latch can move far enough to engage and to remove from the latch-stop *e*. On each side of the inner end of the gate are tall posts G, in the tops of which are pulleys *g*. Other posts H are located one up and one down the road, and these have pulleys *h*.

I I are ropes. These are secured at one end to the upper end of the sliding gravity-latch. They thence extend upwardly and separating pass through pulleys *g* and *h*, their ends hanging down within reach of the traveler.

J is a limiting-stop for the gate when opened. Against this the end of the weight-frame strikes when the gate is swung upwardly.

The operation is as follows: The traveler approaching the closed gate seizes and pulls down upon rope I. The first effect is to lift the latch from its engagement. This is easily done, because the pull is in the direct line of movement of the inclined latch. When the latch comes to its upper stop, the pull on the rope lifts the gate, which swings upwardly and backwardly through a vertical arc. The pull should be a sharp quick one, sufficient to give the gate momentum enough to carry it over the vertical center and then to let the counterbalance-weight carry it past said center. In this position it will remain. The roadway being now open, the traveler passes on, and when he reaches the other rope I he pulls upon it sharply and quickly, and the gate is thereby brought back over the center and drops down to its closed position, the latch sliding down by gravity to its engagement. The flaring shape of the gate requiring the inclined guide E, which in turn necessitates the inclined latch-stop *e*, provides for the arrangement of the latch in the best position, so that it will be pulled upon in the line of its movement, and it cannot possibly cramp or bind, its engagement with the latch-stop *e* being of the simplest character—namely, merely passing under it. This shape of the gate also provides for the

simple construction of the weight frame and box, the latter of which being long renders it possible to so adjust the weight as to quantity and position as exactly to suit the requirements of any particular gate. The hanging of the gate is also simple, and in closing the jar is equally distributed. The arrangement of the operating-ropes is simple and effective.

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

1. The vertically-swinging gate pivoted horizontally at its inner end and having the inclined end bar, with an extension, a top rail or bar with an extension, and a weight-box connecting the ends of said extensions beyond the line of pivot of the gate, substantially as herein described.

2. The gate having the upwardly-diverging end bars, the inner one of which has an extension, the top rail or bar, with an extension, the weight-box connecting the ends of said extensions, and a horizontal pivot-bar at the inner end of the gate-top, in combination with the standards upon which said bar is pivoted, the inclined guides for the outer end of the gate, and the fixed stop for its weight-frame at the inner end, substantially as herein described.

3. The vertically-swinging gate pivoted horizontally at its inner end and having the inclined bar at its outer end, in combination with the corresponding inclined guide E, with latch-stop *e*, and the inclined gravity-latch on the gate, adapted to pass its lower end under said stop, substantially as herein described.

4. The vertically-swinging gate pivoted horizontally at its inner end and having the inclined bar at its outer end, in combination with the corresponding inclined guide E, with latch-stop *e*, the inclined gravity-latch on the gate, adapted to pass its lower end under said stop, said latch having a stop for limiting its movement, and the operating-ropes secured to said latch and passing over suitable guide-pulleys, substantially as herein described.

5. The vertically-swinging gate pivoted horizontally at its inner end, said gate having the upwardly-divergent end bars, the inner one of which has an extension, a top rail or bar with an extension, and a weight-box connecting the ends of said extension beyond the line of pivot of the gate, in combination with the inclined guide E for the outer end of the gate, the latch-stop *e* thereon, the sliding inclined gravity-latch on the gate, having suitable stops, and the operating-ropes I, secured to the latch and passing over suitable guide-pulleys, substantially as herein described.

In witness whereof I have hereunto set my hand.

COLEMAN TALBOT.

Witnesses:
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