

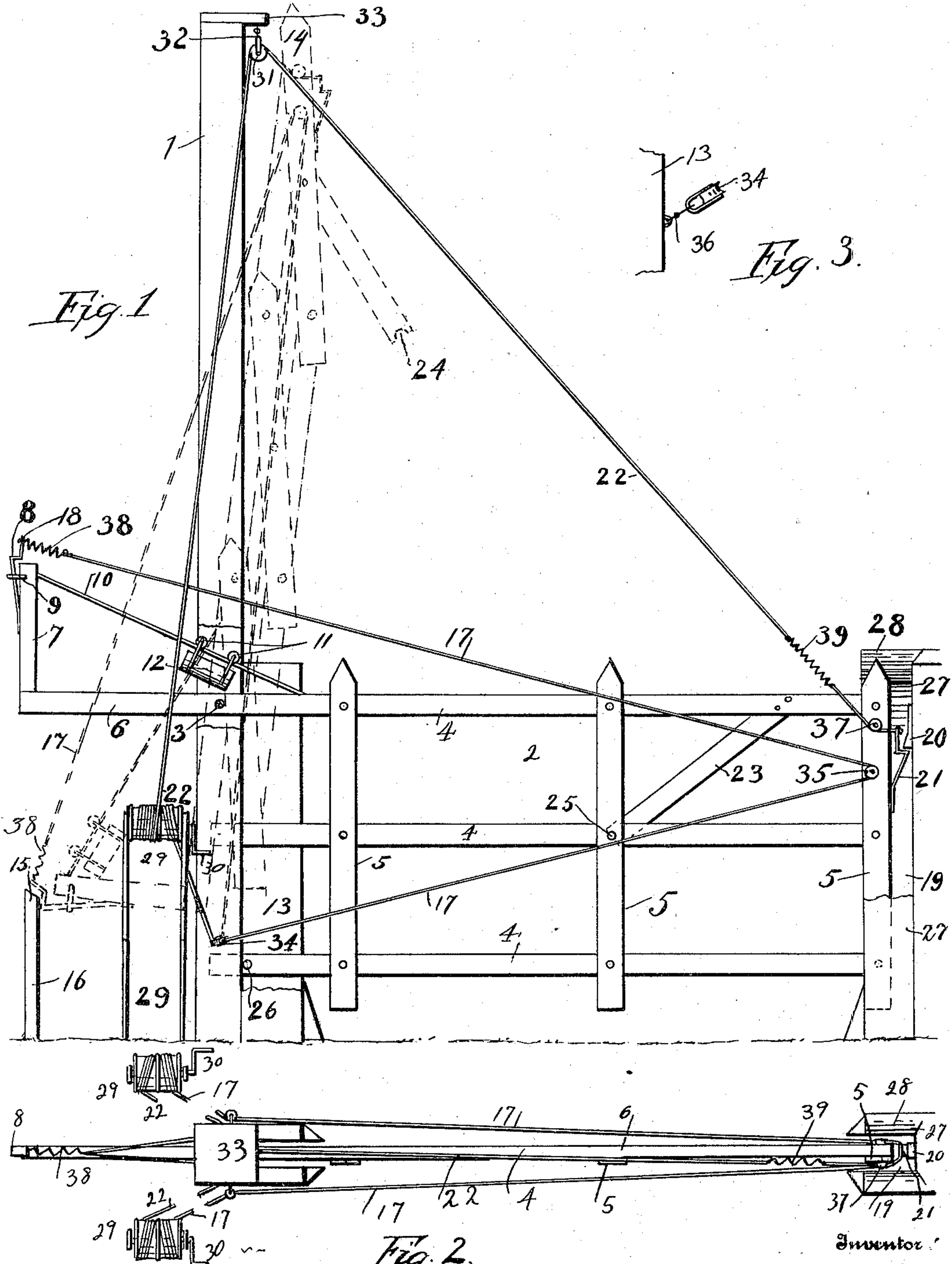
No. 611,608.

E. C. COMPHER.
TILTING GATE.

Patented Oct. 4, 1898.

(Application filed Feb. 18, 1898.)

(No Model.)



Witnesses
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Fig. 2.

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UNITED STATES PATENT OFFICE.

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TILTING GATE.

SPECIFICATION forming part of Letters Patent No. 611,608, dated October 4, 1898.

Application filed February 16, 1898. Serial No. 670,598. (No model.)

To all whom it may concern:

Be it known that I, EDWIN C. COMPHER, a citizen of the United States, residing at Leesburg, in the county of Loudoun and State of Virginia, have invented certain new and useful Improvements in Tilting Gates; and I do hereby 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.

My invention is a tilting and folding gate; and it consists of a folding panel-gate pivoted to an upright post or between two upright posts. Said panel is constructed to be tilted up the side of one or between two upright posts and to fall back between housing-posts to drop down to a latch-post and between housing-posts, with means for tilting and lowering said gate-panel and latching the same.

The drawings on the accompanying sheet is a side elevation of my gate, the black lines showing the panel down, closing the gate-opening, the dotted lines showing the panel tilted up and folded back between the housing-posts.

Figure 1 is a side elevation of my invention. Fig. 2 is a top plan view. Fig. 3 is a detail view.

My invention is described as follows:

1 represents an upright post, (but two may be used.) This post is deeply and firmly set into the ground and, if need be, braced. Between these two posts 1 gate-panel 2 is pivoted by means of the bolt 3, which passes through the said posts and the top bar 4 of the panel.

The gate-panel 2 consists of three or more horizontal bars 4, pivoted to three or more vertical pickets 5. (There may be six of these pickets, three on each side of the bars and opposite each other and pivoted by the same bolt.)

The top horizontal bar 4 has a rear extension 6, to the rear end of which is secured an upright 7, which may be either of wood or iron, and to the rear face of this upright 7 a spring-catch 8 is secured by bolts and a staple or band 9. Running from the upper end of upright 7 down to the top of the horizontal bar is an inclined rod, and running on this incline are two rollers 11, carrying a weight 12, which moves back and forth as the gate-panel is tilted or lowered. When the panel

is slightly raised, the rollers 11 carry the weight 12 to the rear end of the rod, and the panel is tilted up and folded back between the housing-posts 13, as shown by the dotted lines 14, (these two housing-posts opposite each other.) When the panel is thus tilted up and folded back, the spring-catch 8 strikes the incline 15 of the post 16, slides down against the inner face of said post, and the gate-panel is locked back until the impingement is relieved by pulling on the rope 17. When the panel is thus tilted up, the extension 18 of the catch 8 falls upon the top of the post 16, and thus said post and spring 8 operate as a cushion, preventing the panel and gate-posts from being jarred. By making the post 16 a little shorter the panel may be made to rise to a perpendicular or a little more than perpendicular, thus adapting the gate to be adjusted to grounds not level.

At the front end of the gate-panel is set a latch-post 19, to which is secured a latch-catch 20, and to the front face of the front end picket 5 is secured a spring-latch 21, which catches under latch-catch 20. This spring-latch 21 is released from contact with latch-catch 20 by pulling on the rope 22.

The gate-panel 2 has a brace 23 rigidly secured to the upper horizontal bar 4, its bifurcated end 24 (see dotted lines) abutting against bolt 25, thus preventing the panel from falling lower than a horizontal line. Through the rear end of lower horizontal bar 4 is secured a cross-pin 26 to keep said bar from slipping back when the rope 17 is pulled on.

On each side of the front picket of the panel are situated two housing-posts 27, flared at their upper ends 28, so the panel may pass easily between them.

On each side of the gate is a double drum 29, operated by a windlass 30. These drums are near the roadside, so that they may be operated by any one on horseback or in a vehicle. To one part of this drum 29 is secured one end of a rope 22. Said rope is carried thence over a swiveled pulley 31, and thence under a pulley 37 to the free end of latch-spring 21. Said pulley 31 is secured to a short chain 32, and the said chain is secured to an arm 33, extending from the top of post 1. A rope 17 has one end secured to one part of said

double drum 29, passes thence over swiveled pulley 34, thence over pulley 35 on front picket 5, and thence to the free end of spring-catch 8. The swiveled pulley 34 is secured 5 to a short chain 36, and the chain is secured to the face of post 1. The short chains 32 and 36 allow the swiveled pulleys 31 and 34 to swing in any direction, and thus accommodate themselves to any deflections the 10 ropes 17 and 22 are caused to take as they force the panel up and down. The spring-latches 8 and 21 are rendered necessary to keep winds or stock from operating the gate-panel, because it is hung so nearly on a bal- 15 ance with weight 12 that a child may raise or lower it; but when up or down the said latches hold it until operated by the said ropes. Inserted in said ropes are coil-springs 37 and 38 to keep them taut during changes 20 of weather.

The ropes, pulleys, and double drum are duplicated, one set being on each side of the gate.

Having described my invention, what I 25 claim as new, and desire to secure by Letters Patent, is—

1. The combination of post 1, provided with swiveled pulleys 31 and 34; folding gate-panel 2, having a brace 23, and rear extension 6, 30 weight 12, working on inclined rod 10; double drums 29, operated by crank-arms 30; ropes 17, secured to double drums 29, and to latch 8, and ropes 22 secured to double drums 29 and to latch 21, substantially as shown and 35 described and for the purposes set forth.

2. The combination of post 1, having arm 33; folding gate-panel 2, having brace 23, latch-spring 21, rear extension 6, upright 7, 40 and inclined rod 10; weight 12, working on said inclined rod; short chain 32 and pulley

31, depending from arm 33; short chain 36 and pulley 34, secured to the lower end of post 1; latch-post 19, having catch 20; post 16, having incline 15; spring-latch 8, secured to upright 7; ropes 17, one end secured to 45 double drums 29, passing thence over pulleys 35, and then secured to the free end of spring-latch 8; ropes 22, one end secured to double drums 29, passing thence over pulleys 31, thence under pulleys 37, and secured to the 50 free end of spring-latch 21, substantially as shown and described and for the purposes set forth.

3. The combination of post 1; arm 33; short chain 32, and pulleys 31, depending from said 55 arm; short chain 36, and pulley 34, secured to the lower end of said post 1; latch-post 19, having catch 20; gate-panel 2, having latch-spring 21, rear extension 6, upright 7, and inclined rod 10; weight 12 working on said 60 rod; spring-latch 8, secured to said upright 7; post 16, having incline 15; double drums 29, operated by windlass-arms 30; ropes 17, one end secured to said double drums, passing thence over pulleys 34 and 35, thence secured 65 to the free end of spring-latch 8; ropes 22, one end secured to double drums 29, passing thence over pulleys 31, thence under pulleys 37, and secured to the free end of spring-latch 21, and coil-springs 38 and 39 inserted in 70 ropes 17 and 22 respectively, substantially as shown and described and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN C. COMPHER.

Witnesses:

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LOUIS C. ROLLINS.