

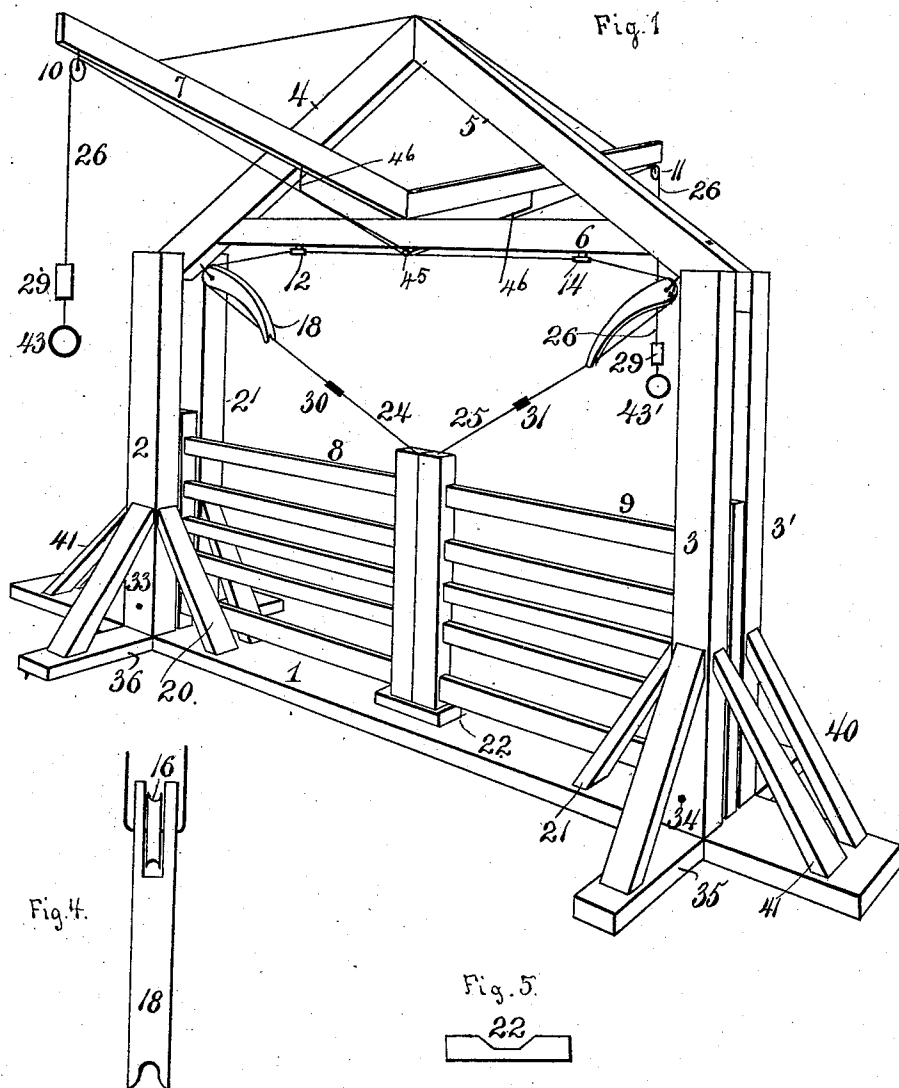
(No Model.)

2 Sheets—Sheet 1.

L. C. FISHER & A. C. BAYLISS.
TILTING GATE.

No. 576,104.

Patented Feb. 2, 1897.



WITNESSES:
Walter E. Allen.
Lillian L. Dietz

Lewis C. Fisher.
Arthur C. Bayliss.

INVENTORS.

BY *C. D. Campbell*
ATTORNEY

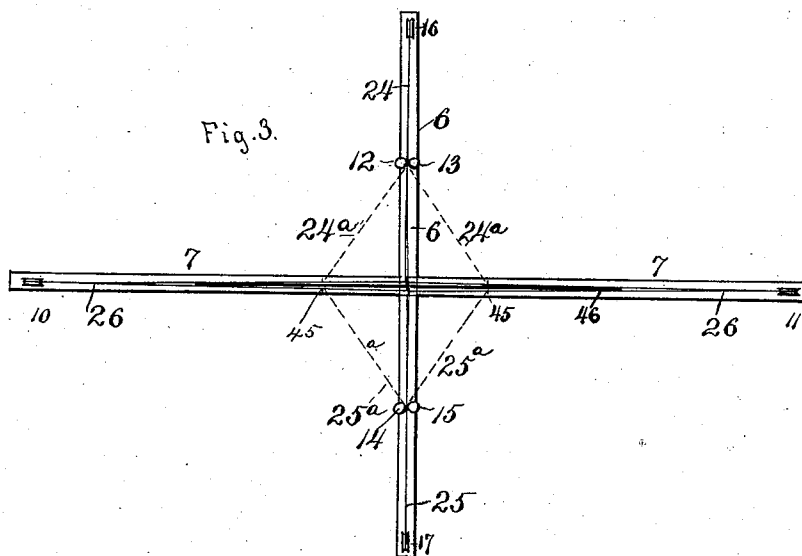
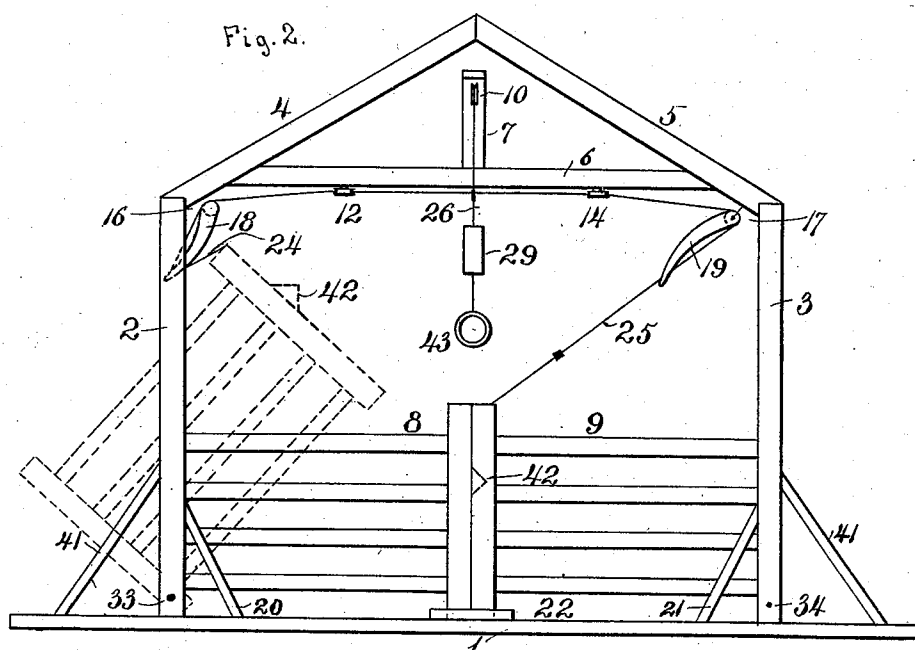
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UNITED STATES PATENT OFFICE.

LEWIS C. FISHER AND ARTHUR C. BAYLISS, OF NEAR WEST MANSFIELD,
OHIO.

TILTING GATE.

SPECIFICATION forming part of Letters Patent No. 576,104, dated February 2, 1897.

Application filed November 23, 1894. Serial No. 529,720. (No model.)

To all whom it may concern:

Be it known that we, LEWIS C. FISHER and ARTHUR C. BAYLISS, citizens of the United States, residing near West Mansfield, in the county of Logan and State of Ohio, have invented a new and useful Improvement in Tilting Gates, of which the following is a specification.

Our invention relates to certain new and useful improvements in gates.

In the drawings, Figure 1 is a perspective view of our improved tilting gate, the gates being shut. Fig. 2 is a front view of the same, showing one of the gates in the act of opening in dotted lines. Fig. 3 is a bottom view of the arrangement of cords and pulleys, the operating position of the pull-ropes and ring being indicated in dotted lines. Fig. 4 is a front view of one of the combined swinging fingers and pulleys. Fig. 5 is a sectional view of the rest for the inner ends of the gates.

1 is a main sill having cross-pieces 35 and 36. Mounted on the sill are posts or uprights 2 2' and 3 3', which are connected at their upper ends by an arch formed of timbers 4 5, braced by a cross-piece 6.

Extending at right angles to the cross-piece is a beam 7, inclined in opposite directions and carrying at its opposite ends pulleys 10 11, from which are suspended the ends 26 of the operating-ropes, having handholds 43 43' on their lower ends and counterbalance-weights 29 located between the pulleys and the handles.

Attached to the cross-piece 6 are four pulleys 12 13 and 14 15, and attached to the timbers 4 and 5 near their outer ends are pulleys 16 and 17.

8 and 9 are a pair of gates pivoted near their outer lower corners to the frame by pivots 33 and 34, and their outer ends, when the gates are closed, are held in position between the posts 2 2' and 3 3', respectively, while their adjacent inner ends at the bottom sit in the outwardly-beveled center slot of the rest 22.

To the tops of the gates, at their inner ends, are attached the ends 24 and 25 of the operating-ropes, which pass, respectively, through recesses in the fingers 18 and 19 (which are pivoted on the axis of the pulleys 16 and 17) and thence pass over the pulleys 16 and 17,

respectively, toward each other, where the ends of the ropes are separated. The separated parts 24^a of the rope end 24 pass between the intermediate pulleys 12 13, and the separated parts of the rope end 25 pass between the intermediate pulleys 14 15. The separated parts of the ropes are passed, respectively, toward the pulleys 10 and 11 through the ring 45, adapted to slide on the wire rod or guide 46, where the separated part of one rope is joined to the ring with a separated part of the other rope, and whence the united ends 26 pass down over the pulleys 10 and 11 in convenient position to be reached from a vehicle or the ground.

Extending out from each side of the posts 2 2' and 3 3' are braces or guides 20 21 on the inside and braces 40 41 on the outside of the posts. These braces are separated at the top and approach each other at the bottom until there is just enough space between them to accommodate the gates. As the center slot of the rest 22 is beveled outward, when the projecting parts of the front pieces of the gates strike the bevels of the slot they will be guided to the center of the rest and the gates will be held in line.

On the inside part of one of the front pieces of the gates is a wedge-shaped projection 42, that when the gates are closed fits in a V-shaped groove in the front piece of the opposite gate, holding the gates securely together and in line. On the ends of the ropes, near where the ropes are attached to the gate, are stops 30 31.

The operation of our device is as follows: A person on foot, horseback, or in a vehicle, approaching the gate, seizes the handhold 43 or 43' and pulls down on the operating-ropes. This action raises the inner ends of the gates, swinging the gates over their pivots until the stops 30 31 strike the swinging fingers 18 19, when the direction of the pull on the gates is changed from a line from the pulleys 16 17 to the tops of the gates to a line from the free end of the fingers 18 19 to the tops of the gates, and above these points from the pulleys to the bottom or free ends of the fingers. The fingers are thus pulled around on their axis to points past the centers of revolution of the gates, as shown in dotted lines in Fig.

2, carrying the gates over their centers, positively insuring their going back into position out of the way. The counterbalance-weights 29, attached to the ropes, are regulated in 5 weight to suit the weight of the gates, and thus counterbalance the latter. They can be made to balance the weight of the gates so evenly that a very slight pull throws the gates over, and at the same time they prevent the 10 gates going over too violently.

Having thus described our invention, the following is what we claim as new therein and desire to secure by Letters Patent:

1. A tilting gate comprising uprights, the 15 arch provided with a cross-piece, the beam extending transversely of the cross-piece, having a guide-rod secured thereto, the ring carried by the guide-rod, the pulleys located on the cross-piece, the pulleyssuspended from 20 the ends of the arch, the pulleys on the end of the beam, the pivoted fingers embracing

the pulleys on the ends of the arch and suspended from their supports, the gates pivoted to the uprights, and the operating-ropes having stops for engaging the fingers, and connected with the gates, extending therefrom 25 over the arch-pulleys, between the cross-piece pulleys, through the ring and over the beam-pulleys; substantially as described.

2. The combination with the operating- 30 ropes of a tilting gate; of the suspended pivoted fingers bearing on the ropes, and the stops located on the ropes and engaging the fingers for carrying the gates positively beyond their centers; substantially as de- 35 scribed.

LEWIS C. FISHER.
ARTHUR C. BAYLISS.

Witnesses:

E. K. CAMPBELL,
NED CAMPBELL.