

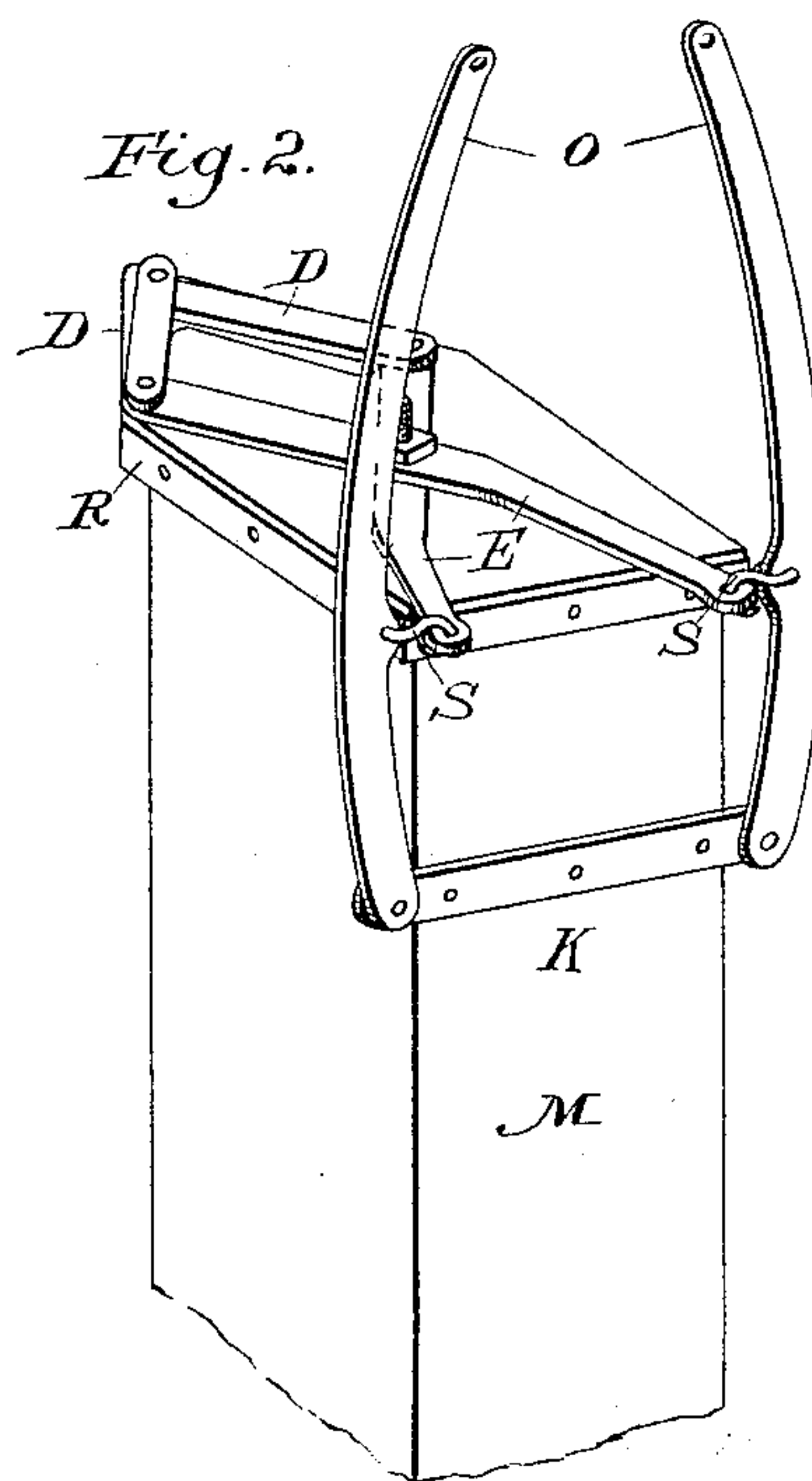
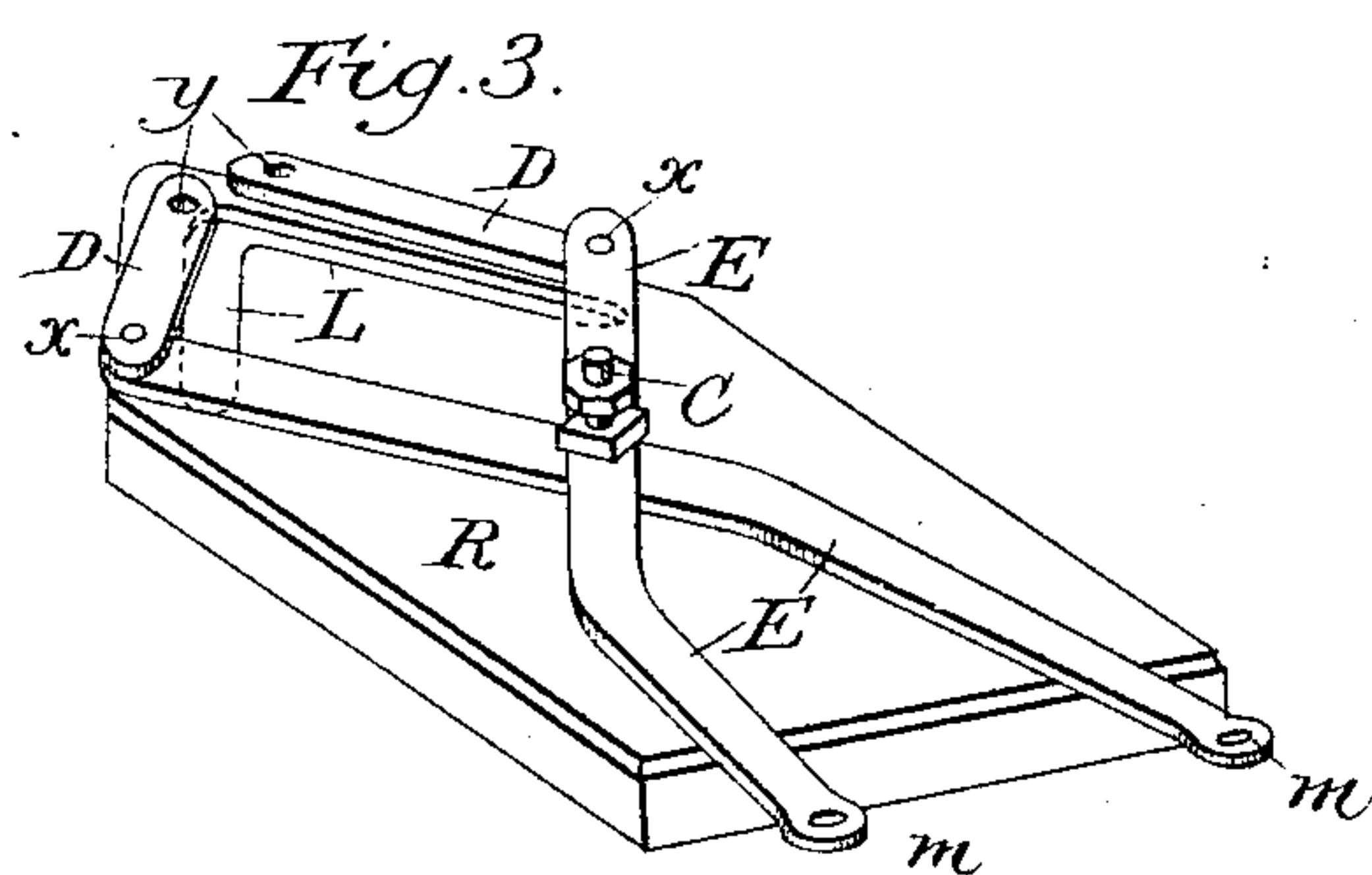
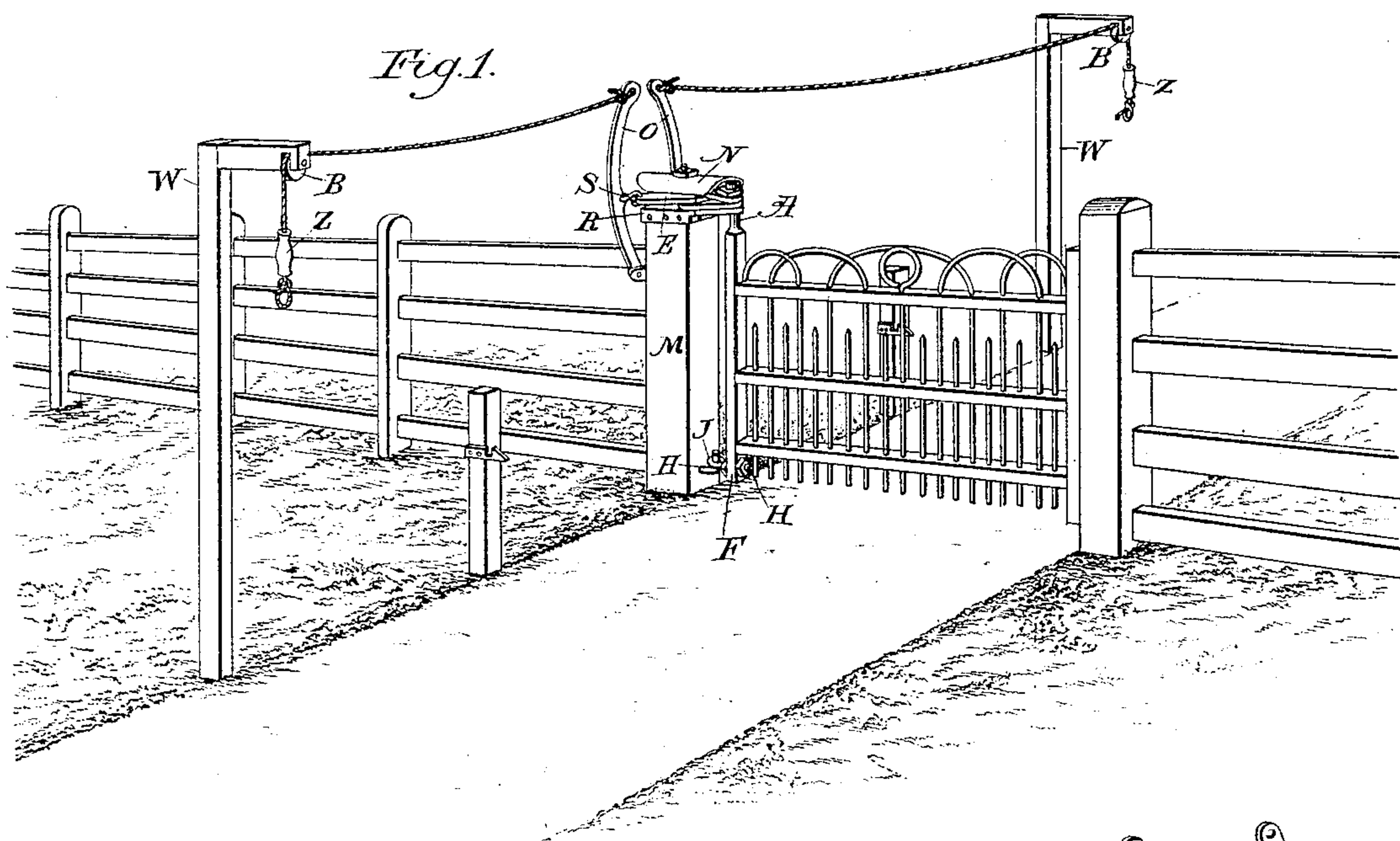
(No Model.)

J. M. GUSTIN.

OPENING AND CLOSING DRIVE GATES.

No. 389,219.

Patented Sept. 11, 1888.



Witnesses:

*L. W. Granger,*  
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Inventor.

*Jonathan M. Gustin.*



# UNITED STATES PATENT OFFICE.

JONATHAN M. GUSTIN, OF WILMINGTON, OHIO.

## OPENING AND CLOSING DRIVE-GATES.

SPECIFICATION forming part of Letters Patent No. 389,219, dated September 11, 1888.

Application filed February 3, 1887. Serial No. 226,483. (No model.)

*To all whom it may concern:*

Be it known that I, JONATHAN M. GUSTIN, a citizen of the United States, residing at Wilmington, in the county of Clinton and State of Ohio, have invented a new and useful Device for Hanging, Opening, and Closing Drive-Gates, of which the following is a specification.

My invention relates to improvements in hanging, opening, and closing drive-gates; and the objects of my invention are, first, to provide a device for giving motion to the top hinge of a gate to open or close the same; second, to provide easy adjustment of the gate by the lower hinge, and, third, to protect the moving part from sleet and snow or rain, and to provide easy motion of the draw cords or wires by means of pulleys. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a general perspective view of the gate and its connections; Fig. 2, a rear and top view of the post M and the parts of the device attached thereto after the roof N has been removed; and Fig. 3 a larger view of the plate R, cross-levers E E, links D D, and fulcrum-bolt C.

Similar letters refer to similar parts throughout the several views.

R is a metal plate formed with flanges at the bottom to fit the top of the post M, and with holes in the flange for screws or nails to fasten it to the post. The end next the gate is angular in shape, and in this end is an angular slot, L, in which the top pivot, A, of the gate is conducted to desired points by levers E E and links D D. Near the center of plate R is the fulcrum-bolt C of the levers E E, which bolt is provided with screw-threads and two nuts, one to secure the levers E E to their proper place and the other to secure the roof N. The links D D are attached to the levers E E by bolts or rivets X X, and each has a hole, y, to receive the top pivot, A, of the gate. When either lever E is moved, the quadrilateral connection of the levers and links causes the pivot A to move in the slot L, unlatching the gate and at the same time throwing it open or shut. Each of the levers E E is provided with a hole, m, to attach connecting-links S S. If the post M is high enough, the rope or wire can or may be attached directly to the levers E E.

To elevate the rope or wire, the upright levers O O are connected at the lower end by

bolts or rivets to a transverse bar, K, secured to the back of the post M. The upright levers O O are provided with holes to receive the connecting-links S S, and at the top are holes to receive ropes or wires, which pass out over anti-friction pulleys B B, suspended from posts W. To these ropes or wires are attached the weights Z Z, that take up the slack.

The posts W W are set at any desired position, so that a person either on horseback or in a wagon can open or close the gate at will.

The gate can also be opened or closed as an ordinary hinge-gate.

The lower hinge-pivot, J, is placed in a line perpendicular to the middle of the line which joins the extremities of the slot L, which enables the gate to be closed with as much force as it can be opened. The eyebolt H is provided with screw-threads and two nuts, one on each side of the stile F of the gate, through which stile the bolt passes. By the manipulation of these nuts the gate is easily and accurately adjusted.

I am aware that prior to my invention devices have been made to open and close gates with ropes or wires. I therefore do not claim such a combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with a gate, a plate supported upon the hinge post M, provided with a slot for the guidance of the upper pintle and with a fulcrum-bolt, a pair of crossed levers pivoted upon said fulcrum-bolt, a link connecting the inner end of each lever to the upper pintle of the gate, and means for operating the levers, all substantially as described.

2. In combination with a gate having a pintle at the top of its hinge-stile, a plate supported upon the hinge-post, provided with a V-shaped slot to guide the upper pintle and with a fulcrum-bolt, a pair of crossed angle-levers pivoted upon said fulcrum-bolt, a link connecting the inner end of each lever to the gate-pintle, a pair of upright levers pivoted upon the hinge-post and connected to the other ends of the crossed levers, and operating-cords extending along the roadside from the free ends of the vertical levers, all substantially as described.

JONATHAN M. GUSTIN.

Witnesses:

ELIJAH NORDYKE,  
C. C. REYNOLDS.