

(Model.)

W. S. CASTOR.
AUTOMATIC TILTING GATE.

No. 268,080.

Patented Nov. 28, 1882.

Fig. 1.

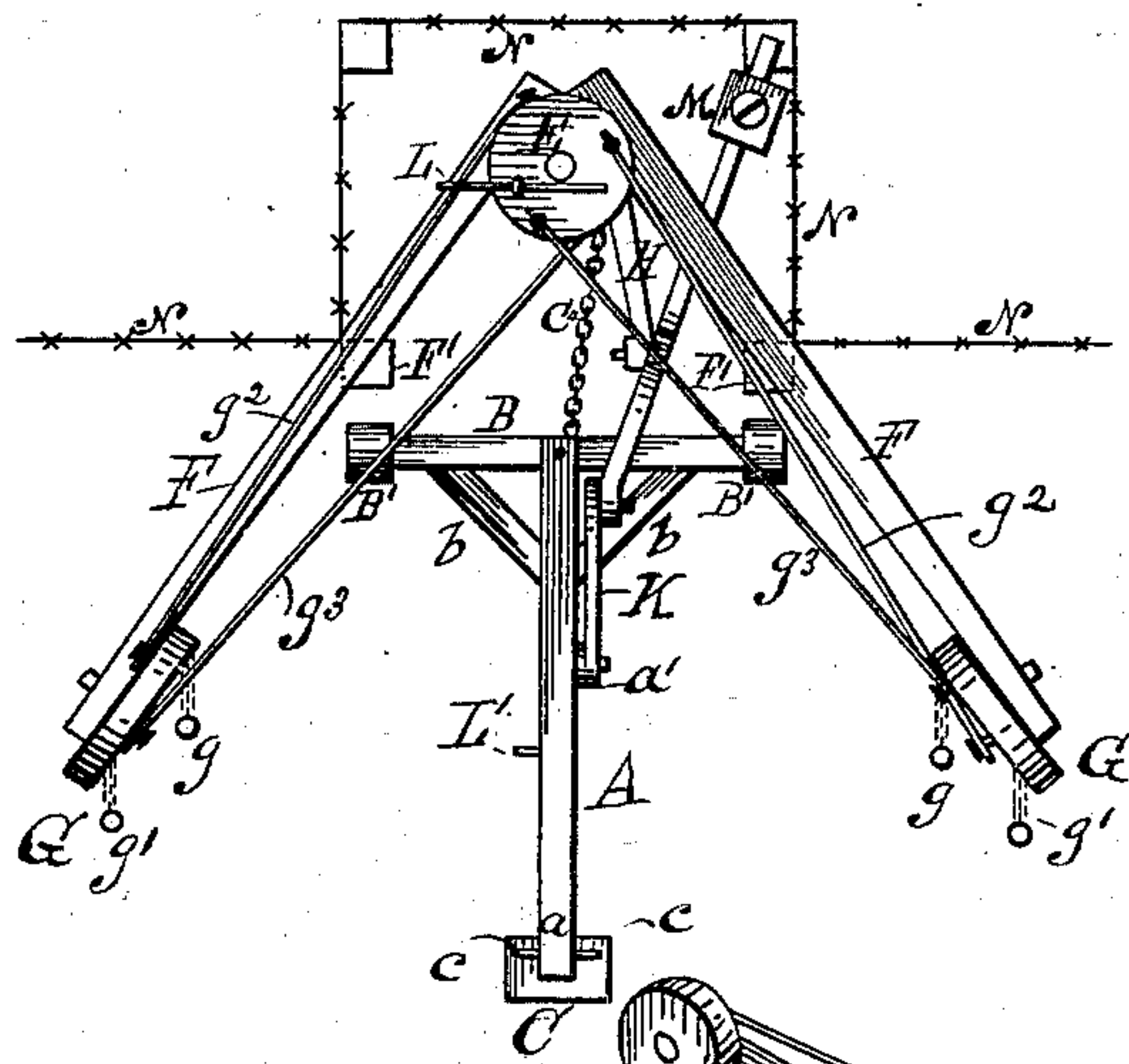


Fig. 2.

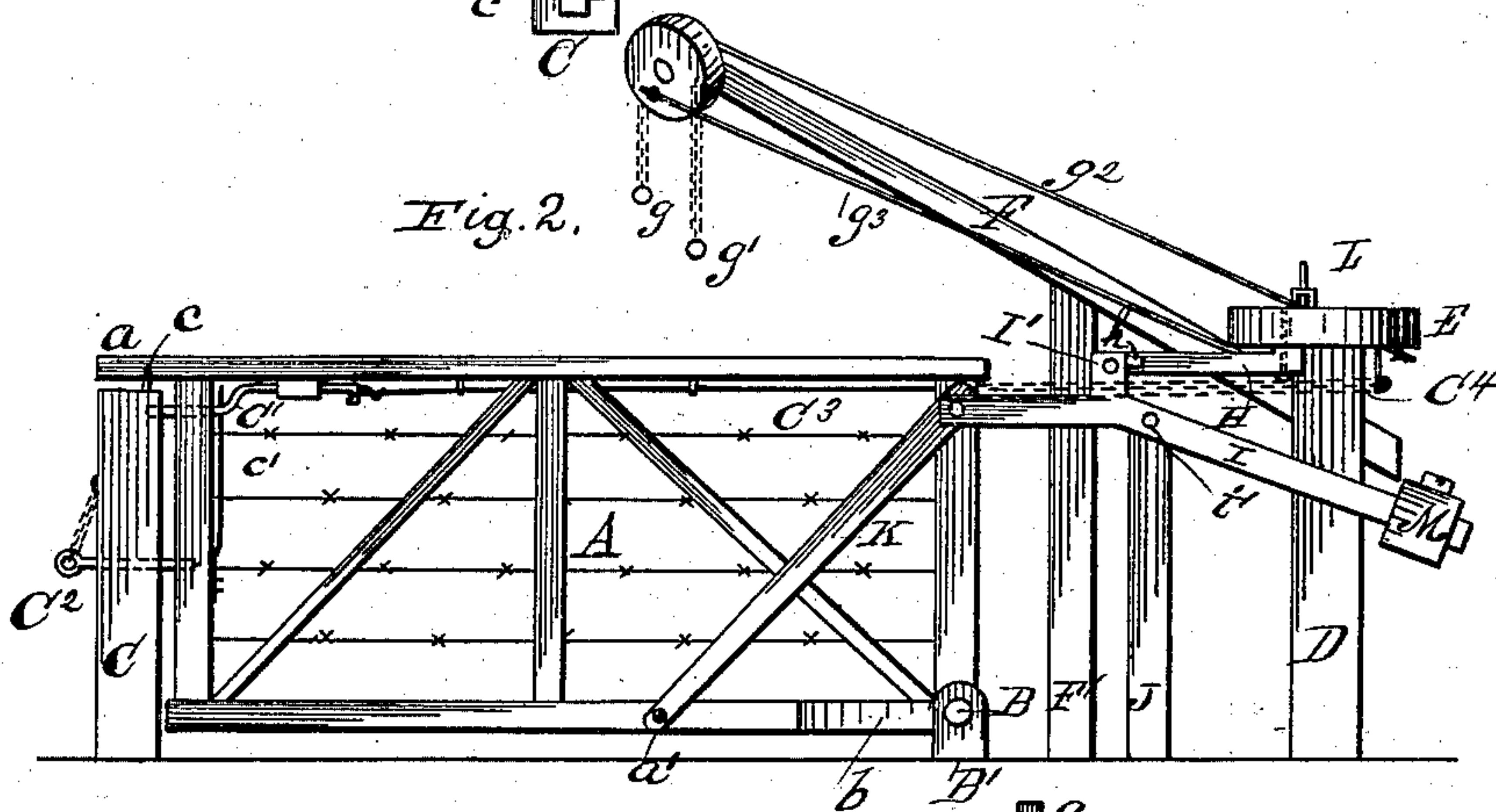
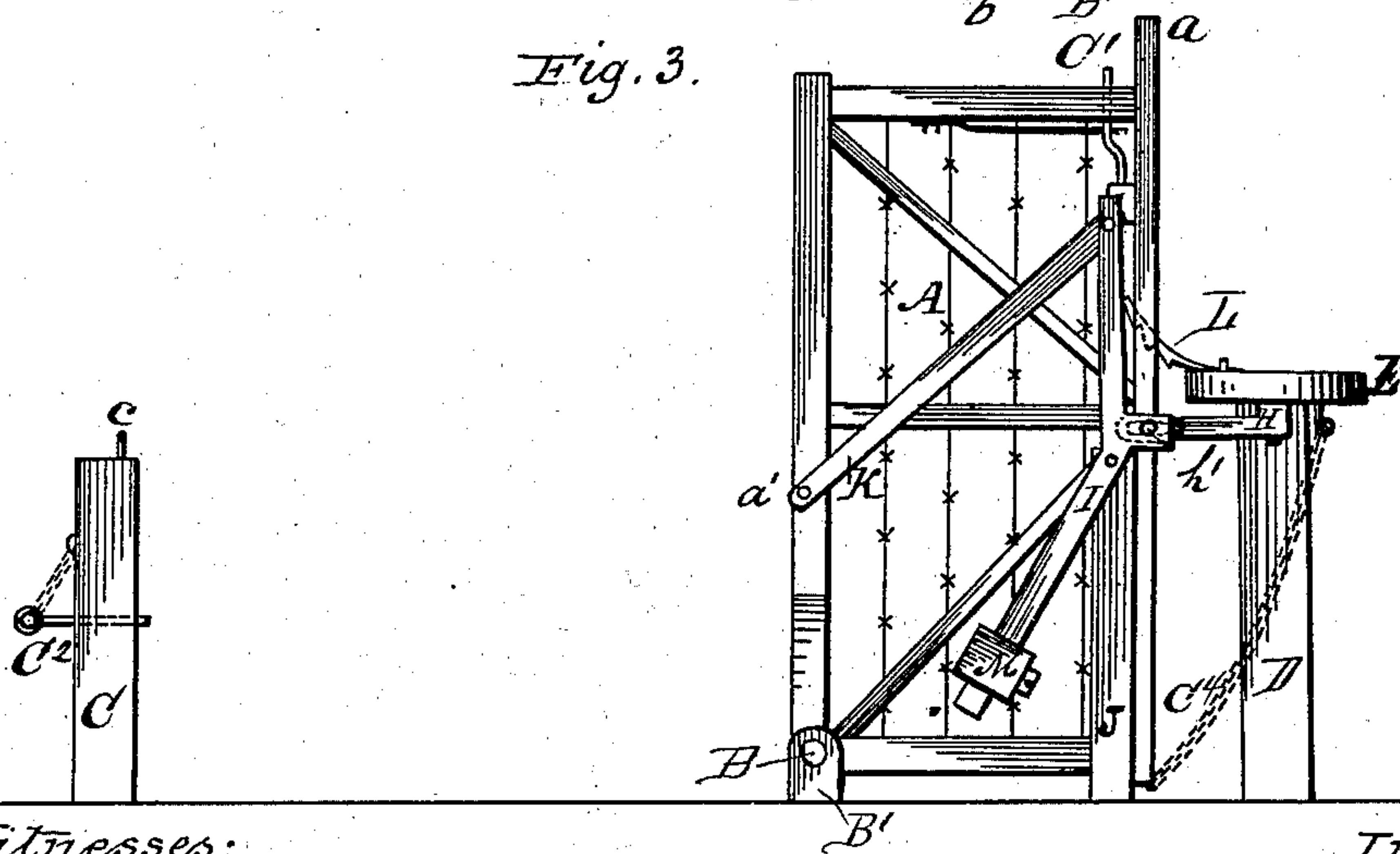


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM S. CASTOR, OF MARSTON, ILLINOIS.

AUTOMATIC TILTING GATE.

SPECIFICATION forming part of Letters Patent No. 268,080, dated November 28, 1882.

Application filed September 28, 1882. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM S. CASTOR, a citizen of the United States of America, residing at Marston, in the county of Mercer and State of Illinois, have invented certain new and useful Improvements in Automatic 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to tilting gates; and it consists in certain features hereinafter described, and specifically set forth in the claims.

Referring to the drawings, Figure 1 is a plan, Fig. 2 a side elevation of the gate closed, and Fig. 3 a side elevation of the same open, certain parts being removed for clearness of illustration.

Like letters refer to like parts in all the figures.

A represents the gate proper, which in this instance comprises a top and bottom rail mortised onto posts and suitably braced, the intermediate rails being formed of barbed wire, although any desired construction may be substituted for that of the gate herein shown. At the inner lower corner the gate is supported on a pivot-bar, B, and is laterally braced, as at *b b*. The pivot-bar turns in short posts *B' B'*, and the upper rail of the gate is extended, so that when closed said extension forms a rest or support, *a*, for that end of the gate, and in the act of closing the gate the extension *a* guides the gate by the action of the forked rods *c*, so that the bolt *C'*, pressed by the spring *c'*, shall enter a hole in the latch-post C. An additional bolt, *C²*, is secured to the post C for the purpose of permanently locking the gate, when desired, so as to prevent stock from opening it.

At the rear of and in line with the gate is a post, D, and pivoted to the top thereof, in horizontal position, is a pulley, E, and from said post extend to points over the center of the driveway two beams, F, for supporting two vertical pulleys, G, said beams being also supported by two posts, *F'*, as shown. Each of

the two pulleys G is provided with two drop chains, cords, rods, or ropes, *g g'*, and is connected to the pulley E by two chains, cords, rods, or ropes, *g² g³*, whereby when the drop-rope *g* is pulled by a passer-by, either when mounted or on foot, the rope, rod, or chain *g²* is drawn so as to partially rotate the horizontal pulley E in one direction, and when the drop-rope *g'* is pulled the rod or rope *g³* is drawn and partially rotates the pulley E in the opposite direction.

To the under surface of the pulley E is pivotally secured a connecting rod or arm, H, the opposite end of which is slotted at *h* and rides a pin, *h'*, secured in an arm, I', of a lever, I, pivotally supported to a post, J, and connected at its inner end, pivotally, to a connecting rod or arm, K, which is pivotally secured to the lower rail of the gate at *a'*. The outer arm of the lever I is weighted sufficiently to counterbalance the gate on the pivot-bar B. A rod, *C³*, is located along and under the top rail of the gate, and is connected to a chain, *C⁴*, secured to the pulley E, and upon the upper surface of said pulley is a latch, L, adapted to catch a pin or bolt, *L'*, projecting from the side of the top rail of the gate when in an open condition. This latch is disposed radially upon the pulley E, so that as it rotates the latch is carried upon and off from the pin *L'* when the pulleys G are operated by the drop-ropes *g* and *g'*, as hereinbefore explained. Now, it is apparent that when the drop-rope *g* is pulled on either side of approach, the rope, rod, or chain *g²* will rotate pulley E, and by means of the chain which is affected first, because of the slot *h* of arm H, will the bolt *C'* be withdrawn from the post C, and then through the medium of the arm H, the lever I, and arm K the gate is raised to a vertical position, as shown clearly in Fig. 3. By pulling the drop-rope *g'* a reversal of these movements is occasioned and the gate is closed. A barbed fence, N, may be used to protect the gate from injury by stock. The gate being counterbalanced by the weight M, the amount of power required to operate the same is reduced to the minimum, so that a mere child can open and close it, and by the peculiar connection of the vertical and horizontal pulleys less than a quarter-revolution of the same will open and close the gate, so

that, taking into consideration the fact that no drifting of snow is likely to interfere with its operation, it possesses desirable advantages.

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

1. In a tilting gate, the combination of the short posts B, the posts J and D, the counter-balanced lever I, the arms K, I', and H, the pulley E, and means for operating the same, substantially as shown and described.

2. In a tilting gate, the combination of the post D, provided with the horizontal pulley E, the beams F, provided with the vertical pul-

leys C, and the cords (or their described equivalents) g g' g^2 g^3 , the arms H K, lever I, weight M, and chain C⁴, substantially as shown and described.

3. The combination of the post D, pulley E, and latch L with the gate A, provided with the pin L', substantially as shown and described.

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

WILLIAM S. CASTOR.

Witnesses:

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