(No Model.)

D. WILSON.

GATE.

No. 597,449. Patented Jan. 18, 1898.

Fig. 1.

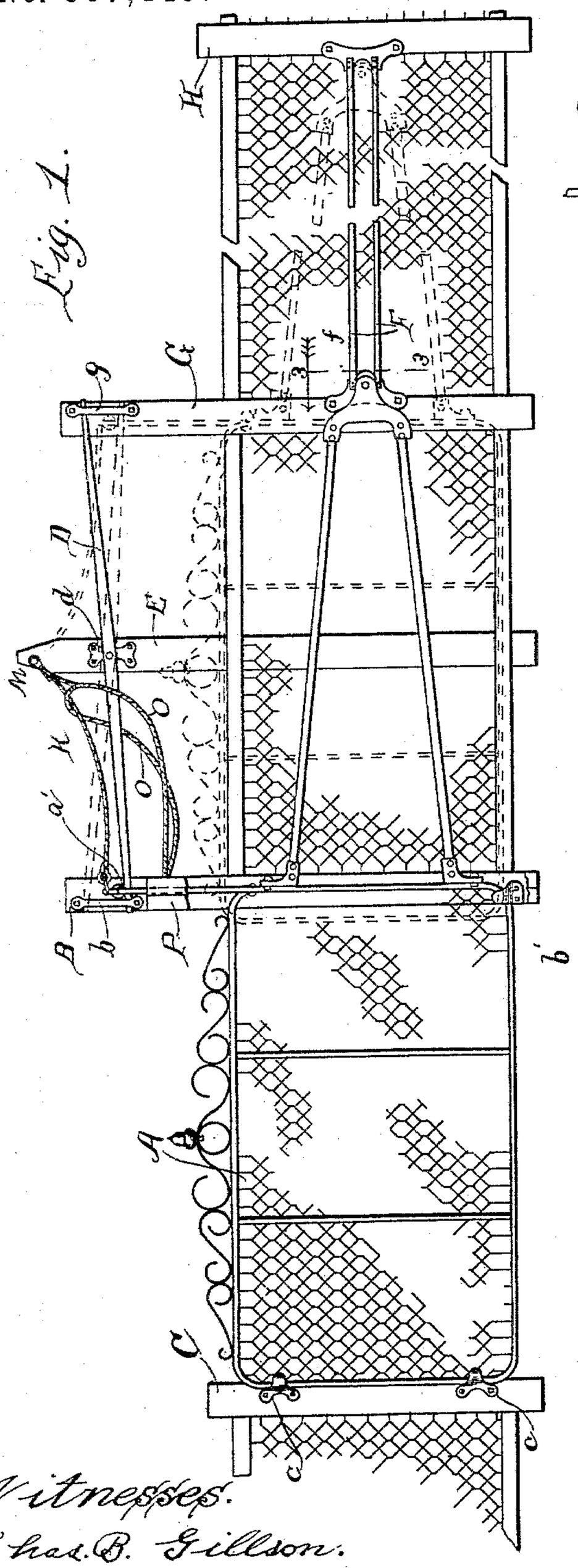

Fig. 3.

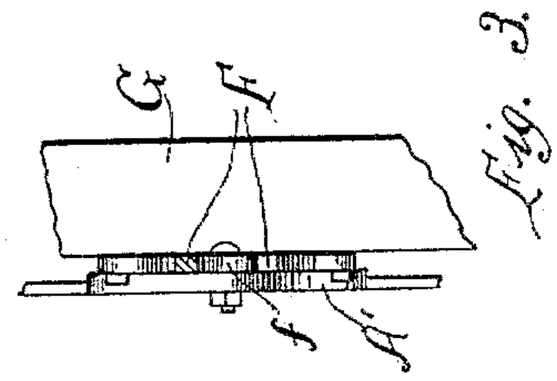

Fig. 2.

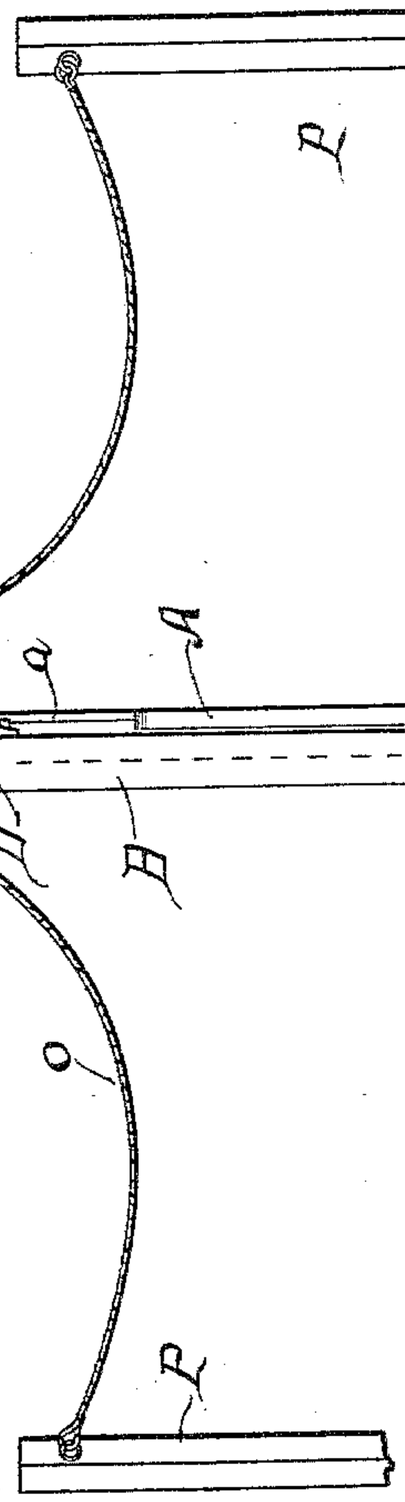

Fig. 4.

Witnesses.
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DAVID WILSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE McMULLEN WOVEN WIRE FENCE COMPANY, OF SAME PLACE.

GATE.

SPECIFICATION forming part of Letters Patent No. 597,449, dated January 18, 1898.

Application filed August 23, 1897. Serial No. 649,191. (No model.)

To all whom it may concern:

Be it known that I, DAVID WILSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gates; and I do 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to reciprocating and sliding gates, particularly to gates adapted for farm use, and especially to gates intended to be opened and closed, when desired, by the occupant of a vehicle without dismounting.

The object of the invention is to secure easy and certain action of the gate in opening and closing and cheapness of construction.

It consists in an inclined rocking track for supporting the gate, so disposed that in the initial movement of the gate either to open or close it is necessary that it be moved up the inclination until the pivotal point of the rocking track is reached and the track is tilted in the opposite direction by the weight of the gate, and the further movement of the latter is accomplished by gravity.

It consists in further details of construction and of arrangement of parts, as hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side elevation of a gate embodying my invention, a portion of the fence-frame also being shown, and the movement of the gate being indicated in dotted lines. Fig. 2 is an end elevation of the gate and of the supporting-frame. Fig. 3 is a sectional detail on the line 3 3 of Fig. 1. Fig. 4 is a detail of the pulley-block used in carrying the cord by which the gate is operated.

The gate A may be of any desired form of construction. As shown, it is made with a wrought-iron metal frame carrying a wire fabric. The gate-posts are shown at B C, and the track for carrying the gate is shown at D, being pivoted at *d* to a post E, set back from the gate-post B, and forming, if desired, a part of the frame of the fence. At the rearward end of the gate an arm *a* projects upward and carries at its upper end a roller *a'*, which rides upon the track D. This is in the form of a straight metal bar pivoted as already described and having its ends inclosed by loops *b g*, fixed, respectively, to the post B and to a post G, forming a part of the fence-frame, these loops *b g* being adapted to prevent lateral movement of the track-bar and to limit its angular movement in a vertical plane.

A tailpiece A' is fixed rigidly to the rear end of the gate A and extends back therefrom, and is provided at its rearward end with a roller *f*, running between a pair of horizontal parallel guide-bars fixed to the post G and to the adjacent fence-post H. A clip *b'*, secured to the lower end of the post B, extends upward to engage the bottom of the gate, so as to prevent its lateral movement, and clips *c c*, fixed to the post C, receive the forward edge of the gate when it is closed.

A cord K leads from the top of the arm *a* through a swiveled pulley-block M, mounted at the top of the post E, the end of the cord K being attached to a cord O, which has its ends attached to a pair of posts P P, located at the side of the driveway, one upon each side of the gate, and removed therefrom a sufficient distance so that the rope is in convenient position to be grasped by the occupant of a vehicle desiring to pass through the gate.

The gate may be opened by pulling upon either end of the cord O, so as to draw the roller *a'* up the inclined track D to the pivotal point *d*, the engagement of the roller *f* with the track F preventing the gate from oscillating about the roller *a'* as a center. When the pivot-pin *d* has been passed by the roller *a'*, the track-bar D is tilted to the position shown in dotted lines in Fig. 1 by the weight of the gate, and gravity causes the roller *a'* to run down the incline and complete the movement of the gate in opening. When the gate is open, it may be closed by pulling upon either end of the cord O until the roller *a'* has been carried past the pivot-pin *d*, when the track-bar is again tilted to the position

shown in solid lines in Fig. 1, and the further movement of the gate to close it is accomplished by gravity.

The movement of the gate is rendered comparatively easy by reason of the fact that the entire gate and its appurtenances need not be elevated, but the gate is oscillated in a vertical plane from the roller *f* as a center.

As the track-bar D is merely a straight bar of iron it is very cheap of construction, and in practice it becomes unnecessary to work up special track-bars for gates of different lengths, as it is immaterial whether or not the ends of the track-bar project beyond the loops *b g*, and hence if a gate is somewhat shorter than the standard measurement the posts B G are merely set somewhat closer together

I claim as my invention—

1. The combination with a reciprocating gate, a frame for supporting the gate, and a horizontal guideway fixed to the frame, of a rocking track-bar carried by the supporting-frame, a roller journaled in a part of the gate and running on the track-bar, and a rigid tailpiece projecting backwardly from the gate and being in pivotal and sliding engagement with the guideway.

2. The combination with a supporting-frame, a rocking track-bar pivotally secured to the frame, and fixed guide-loops for receiving the ends of the bar and limiting their movement, of a reciprocating gate, a roller secured to the rear end of the gate and running on the track-bar, a tailpiece projecting backwardly from the gate, a pair of parallel horizontal guide-bars secured to the supporting-frame and a roller secured to the tailpiece and running between the guide-bars.

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

DAVID WILSON.

Witnesses:
JNO. M. WELLS,
WINSOR CHASE.