

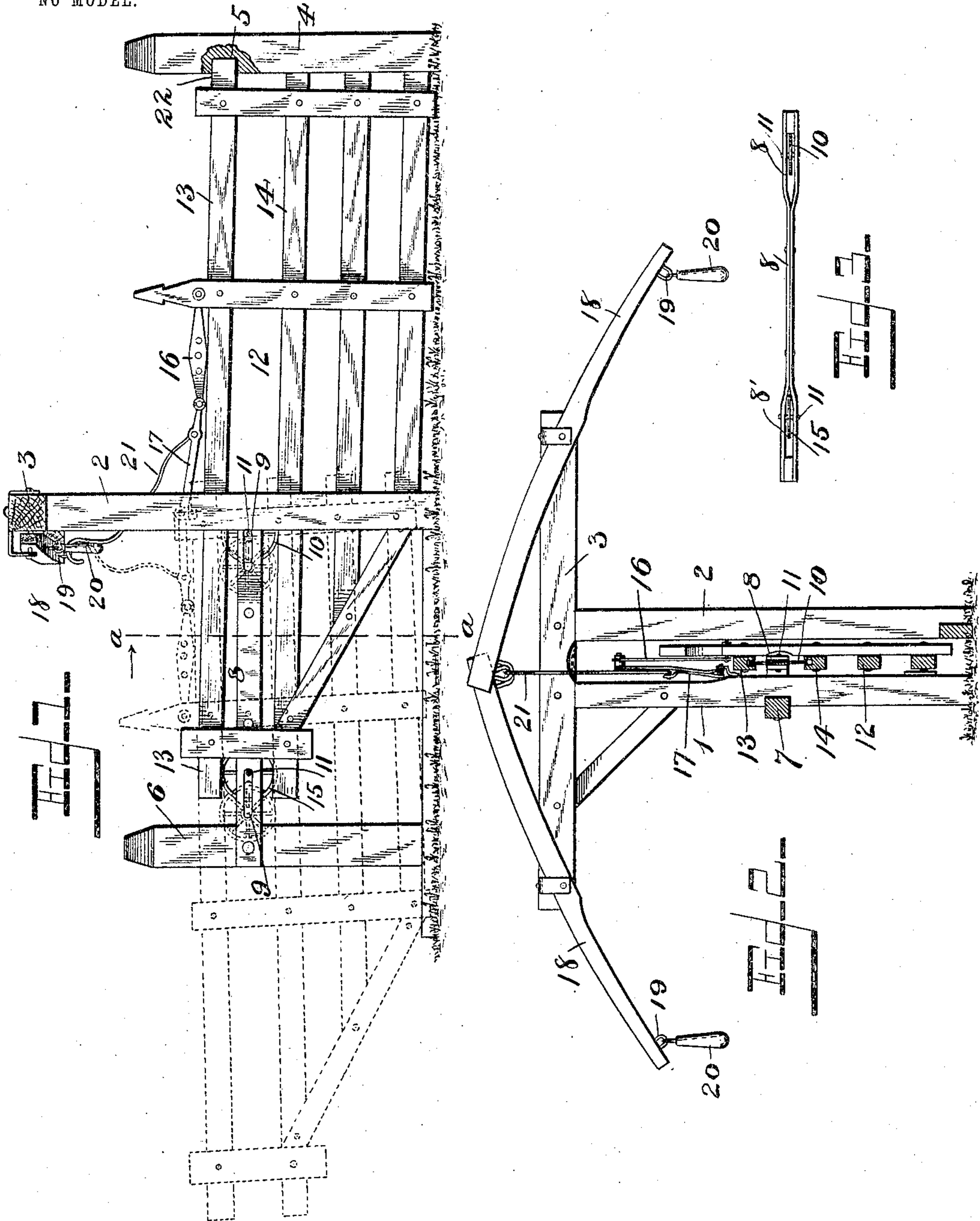
No. 770,201.

PATENTED SEPT. 13, 1904.

J. TRISLER.
SLIDING GATE.

APPLICATION FILED MAR. 31, 1904.

NO MODEL.



Witnesses
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SLIDING GATE.

SPECIFICATION forming part of Letters Patent No. 770,201, dated September 13, 1904.

Application filed March 31, 1904. Serial No. 200,918. (No model.)

To all whom it may concern:

Be it known that I, JOHN TRISLER, a citizen of the United States, residing at Fairmount, in the county of Vermilion and State of Illinois, have invented certain new and useful Improvements in Sliding 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.

My invention is an improved sliding gate and means for opening and closing the same by a single pull of a lever, the said opening and closing means serving also to lock the gate in a closed or open position; and my invention consists in the construction, arrangement, and combination of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a sliding gate embodying my improvements, showing the gate closed in full lines and open in dotted lines. Fig. 2 is a sectional view of the same, taken on the plane indicated by the line *a a* of Fig. 1. Fig. 3 is a detail top plan view of the fixed track-bar and the rolling and vertically-movable supporting-wheels carried thereby.

The posts 1 2, between which the gate operates, are provided at their upper ends with a beam 3, which projects in opposite directions therefrom. The post 4 is the one against which the gate closes and is here shown as having recesses 5 in one side. A post 6 is shown as disposed at a suitable distance from the post 1 and connected thereto by a bar 7. A track-bar 8 also connects the posts 1 and 6 and is provided with vertical longitudinal slots 8' and with horizontal longitudinal slots 9 in those portions which form the sides of said slots 8'. In the latter operate antifric-tion rolling wheels 10 15, the axles 11 of which roll in the runways formed by the slots 9.

The gate 12 has two of its bars 13 14 disposed to respectively engage the upper and lower sides of the rolling supporting-wheels, the space between the opposing sides of said bars somewhat exceeding the diameter of said wheels. The said bars are here shown as having their opposing sides channeled to receive the said wheels and retain the gate thereon.

A pair of links 16 17 have their outer ends respectively pivotally attached to the gate and the post 1 and their inner ends pivotally connected together. Levers 18 are fulcrumed at points intermediate their ends to the beam 3, at or near the ends thereof, as at 19, and are here shown as having depending handles 20 at their outer ends, flexibly connected thereto. The inner ends of said levers are connected by a link 21 to the link 17.

The supporting-wheels 10 15 are so spaced apart that when the gate is open its center of gravity is beyond the wheel 15, so that the gate is in a slightly-inclined position and is supported by the wheel 15, the lower side of the bar 13 bearing on the upper side of said wheel and the upper side of the bar 14 bearing under the lower side of the wheel 10. In this position of the gate the links 16 17 are horizontal, or substantially so. To close the gate, the outer end of one of the levers is first drawn downwardly and then released. The consequent initial upward movement of the inner end of said lever causes the link 21 to draw the inner ends of the links 16 17 upwardly, thereby starting the gate toward the post 4; the rolling supporting-wheels from which the gate is suspended facilitating the movement of the gate, as will be understood. As the gate moves toward the post 4 it first gradually assumes a horizontal position, so as to bear on both the supporting-wheels, and as its center of gravity passes the wheel 10 it inclines in the reverse direction to the original opened position, so that it is suspended solely from the wheel 10, its bar 14 bearing under the wheel 15, so that the gate continues to move toward the post by its own gravity, as will be understood. The width of the slots 9 is such as to permit the axles of the supporting-wheels, and hence said wheels also, to rise and fall to some extent to increase the inclination of the gate, and hence its gravitating action, as it moves in opposite directions. As the gate nears the post 4 the links 16 17 resume their original approximately horizontal extended position. The gate has projections 22, here shown as prolongations of the gate-bars, which enter the recesses of the post 4 when the gate is closed. It will be understood

that the gate may be moved in either direction in the same manner.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

In combination with a fixed track-bar provided with longitudinally-disposed slots, the upper and lower sides of which are horizontal, and supporting-wheels having axles revoluble

and movable longitudinally and also vertically in said slots, a sliding gate having longitudinal bars to alternately engage the upper and lower sides of the said wheels, the latter being so spaced apart by the slots, and the length of the gate being such that the weight of the gate is shifted from one wheel to the other and one of the wheels is moved vertically by the gate and the latter becomes inclined as it moves in either direction, for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN TRISLER.

Witnesses:

W. C. HAWKINS,
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