

R. YALE.
Gate.

No. 199,341.

Patented Jan. 15, 1878.

Fig. 1

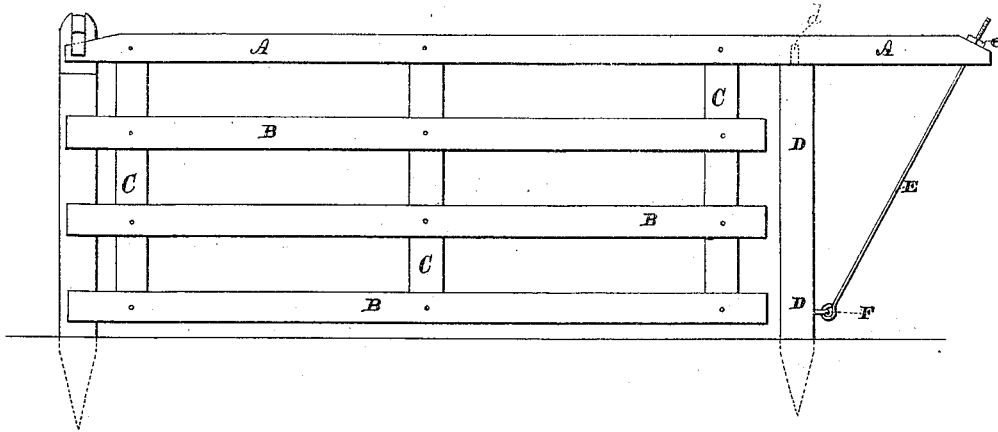
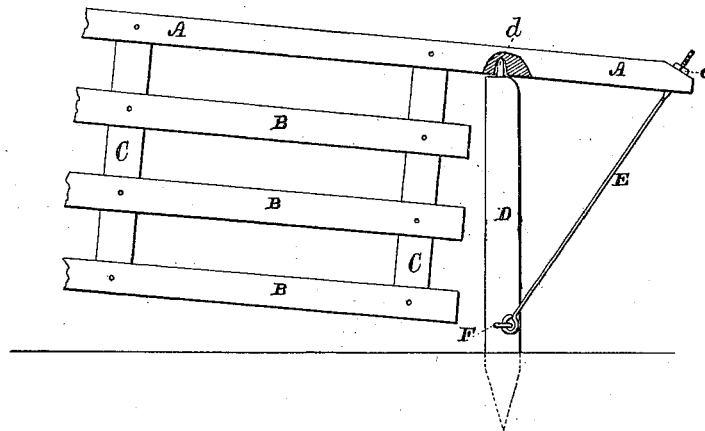


Fig. 2.



WITNESSES-

Jack Kitchinson.
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INVENTOR-

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UNITED STATES PATENT OFFICE.

ROBERT YALE, OF AFTON, NEW YORK.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **199,341**, dated January 15, 1878; application filed October 17, 1877.

To all whom it may concern:

Be it known that I, ROBERT YALE, of Afton, in the county of Chenango, and in the State of New York, have invented certain new and useful Improvements in Gates; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an elevation of the side of my improved gate, and Fig. 2 is a like view of the same when swung open.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to suspend a gate upon a post in such a manner as to enable it to be easily and freely swung open, all sagging of its outer end prevented, and said gate caused to automatically close; to which end it consists in the means employed for suspending the gate to or upon its pivotal post, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents the top rail, B and B the lower horizontal rails, and C the vertical bars, of a gate of ordinary form and construction.

The top rail A extends rearward about one-third the length of the gate, and, at a point just in rear of the rear ends of the rails B, rests upon the upper end of a post, D, where it is held in place horizontally, by means of a pivotal stud, *d*, that is secured within and projects upward from said post, and fits into a corresponding opening in said rail.

The rear end of the rail A is cut away upon a rearward and downward inclining line, and through such portion passes the upper threaded end of a rod, E, which rod, at its lower end, is pivoted to or upon an eyebolt, F, that is secured within and projects horizontally rearward from near the lower end of the post D.

A nut, *e*, placed upon the upper threaded end of the rod E, bearing against the inclined face of the rear end of the rail A, insures the relative positions of said parts, and enables such portion of said rail to be depressed or

elevated, so as to cause the outer end of the gate to be correspondingly raised or lowered.

As thus arranged, it will be seen that the weight of the front end of the gate is sustained by the rod E, while, as the lower end of said rod is pivoted to or upon the post D, nearly in a line horizontally with the pivotal bearing *d*, said gate is permitted to swing open with nearly or quite the same freedom as though ordinary hinges were employed as pivotal bearings.

In consequence of the slight variation in horizontal position of the pivotal bearing-pin *d* and the eyebolt F, the rod E causes the rear end of the rail A to be depressed and the outer end of the gate to be raised as said gate is opened, the amount of such elevation being sufficient to cause the latter to close automatically when released.

Whenever the weight of the gate or the action of water or frost has caused the post D to change its position, said gate may be leveled up again by turning the nut *e* upon the rod E, as before explained.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

As a means for suspending the gate to or from the post D, the rearward-extended top rail A, resting upon said post, and pivoted thereto by the stud *d*, the rod E, having its threaded upper end passed through the rear end of said rail, and secured in place by the nut *e*, and the eyebolt F, secured within the lower end and rear side of said post, and having pivoted thereon the lower end of said rod, said parts being combined to operate in the manner and for the purpose substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 15th day of September, 1877.

ROBERT YALE. [L. S.]

Witnesses:

MARSHALL G. HILL,
RUSSELL W. GALLUP.