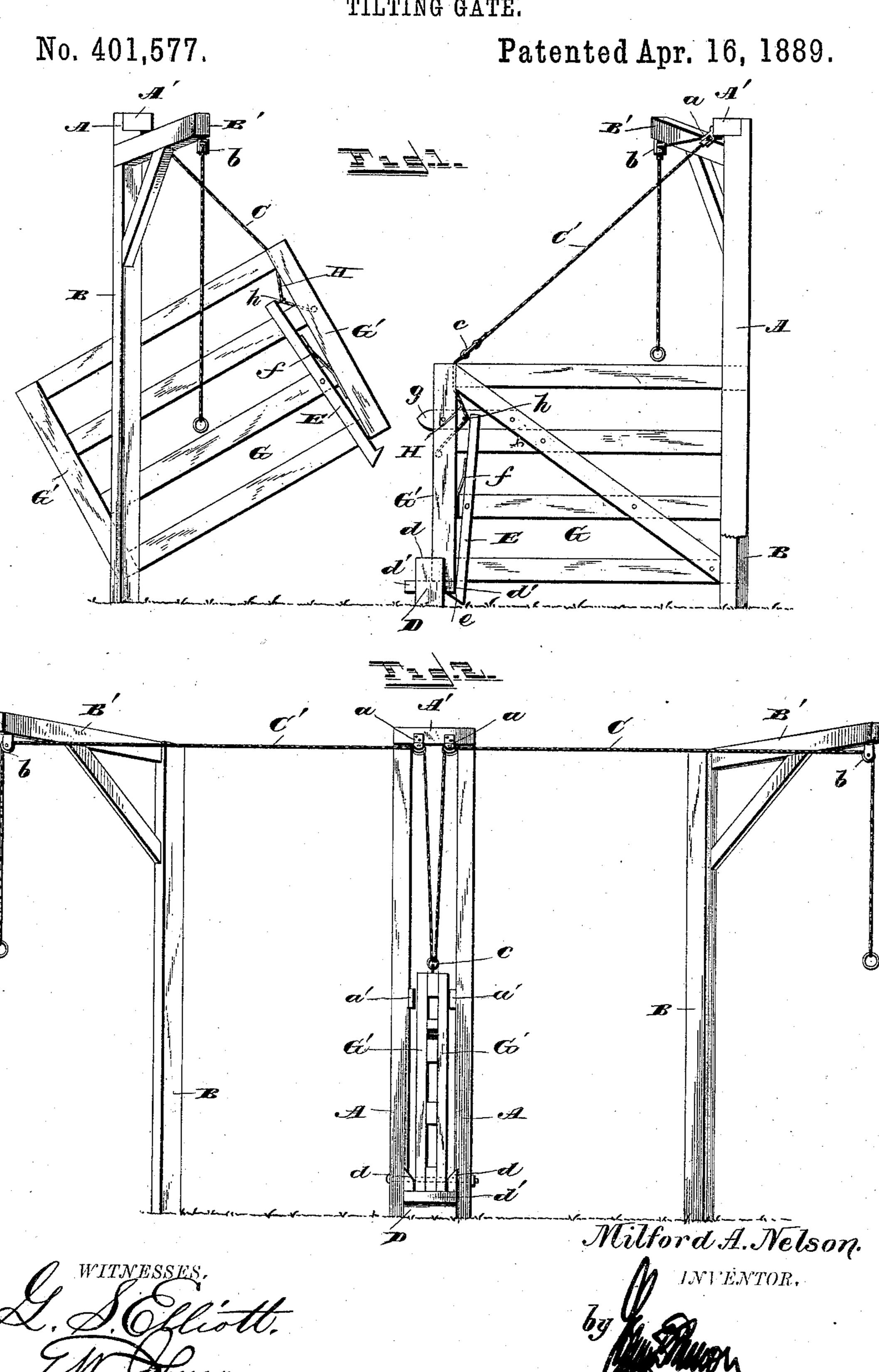
## M. A. NELSON. TILTING GATE.



## United States Patent Office.

MILFORD A. NELSON, OF LA MONTE, MISSOURI.

## TILTING GATE.

SPECIFICATION forming part of Letters Patent No. 401,577, dated April 16, 1889.

Application filed February 14, 1889. Serial No. 299,822. (No model.)

To all whom it may concern:

Be it known that I, MILFORD A. NELSON, a citizen of the United States of America, residing at La Monte, in the county of Pettis 5 and State of Missouri, have invented certain new and useful Improvements in 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 10 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 certain new and use-

ful improvements in pivoted gates.

The object of my invention is to provide a simple, cheap, and effective means whereby the gate can be raised to open the same and 20 with the same cord the latch operated.

With the above ends in view my invention consists in the construction and combination of the parts, as will be hereinafter fully set

forth and claimed.

In the accompanying drawings, Figure 1 is a side view showing a double gate embodying my invention, one of the gates being lowered, while the other is partly raised. Fig. 2 is an edge view showing one of the gates lowered.

A A refer to parallel supporting-posts, which are connected to each other by a cross-piece, A', to which are attached pulleys a a, the bearings of said pulleys being so placed that the roller will be inclined substantially at an an-35 gle of forty-five degrees to the cross-piece.

On each side of the posts A A are placed posts or uprights B B—two for each gate with outwardly-projecting arms B', the ends of which are provided with pulleys, and over 40 the pulleys b and a pass independent operating-cords C and C', which are either joined together or secured to a ring, c, immediately above the gate.

The posts A A have guide-pieces a' attached 45 to their inner sides, against which the gate will strike should there be any side movement or pressure against the same. These blocks being inclined on each edge will not impede the motion of the gate.

At the center of the roadway, midway be-

tween the gates, is placed a block, D, which has upwardly projecting side pieces, d d, the inner edges of which are beveled, and to opposite sides of this block are secured outwardly-projecting pieces d', with which the 55 lower ends of the latch-bars will engage to prevent the gates being raised.

The gates G are made of rails secured to uprights G', and one of the gates is provided between the outer uprights with an operating- 60 latch, g, which, when the gates are closed, will lie between the end uprights and the space between the rails of the opposite gate to prevent lateral movement of the inner ends of the gates when they are closed, the lower ends 65 of the gates lying between the projecting

strips d d of the block D.

E refers to latch-bars which are pivoted to the gates, the lower ends thereof being beveled and provided with catches e, which en- 70 gage with the projecting strips d' of the block D. The upper ends of these latch-bars are automatically thrown outwardly by springs f, which are suitably secured to the gate, and the upper ends of said latch-bars are pro- 75 vided with staples or rings h, through which pass cords H. The cord H is rigidly attached to the gate and passes upwardly through the staple h, and from thence through an opening in the upper part of the gate, where the end 80 is attached to a ring, c, or directly to the ends of operating-cords C and C'.

When it is desired to open the gate, it is only necessary to draw upon the free end of one of the operating-cords, and when suffi- 85 cient pressure has been exerted upon said cord the upper end of the latch-bar will be drawn inwardly to release the catch thereof from the strip d' of the block, and when the latch is released the gate will immediately 90 swing to a vertical position if the pressure upon the cord is sufficient. When it is desired to close the gate, the opposite cord is drawn upon by a slight jerk sufficient to throw the gate beyond its pivot, when it will fall by 95 gravity.

I am aware that prior to my invention it has been proposed to operate pivoted or tilting gates by cords; also, that it is not broadly new to provide a gate with a spring-latch, as 100

shown in Patent No. 187,253, dated February 13, 1877, and I do not claim the construction shown in said patent; but

What I claim as new, and desire to secure

5 by Letters Patent, is—

In combination with a pivoted gate provided with operating-cords, a pivoted spring-latch bar, E, having a staple or guide, h, near its upper end, a cord rigidly attached at one end to the gate, passed from thence through the staple attached to the upper end of the latchbar and through the gate and connected to

the operating-cords C and C', and a block, D, having a projection, d', with which the lower end of the latch-bar engages, the parts being 15 organized substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

MILFORD A. NELSON.

Witnesses:

R. E. GUTHRIE, W. D. WADE.