

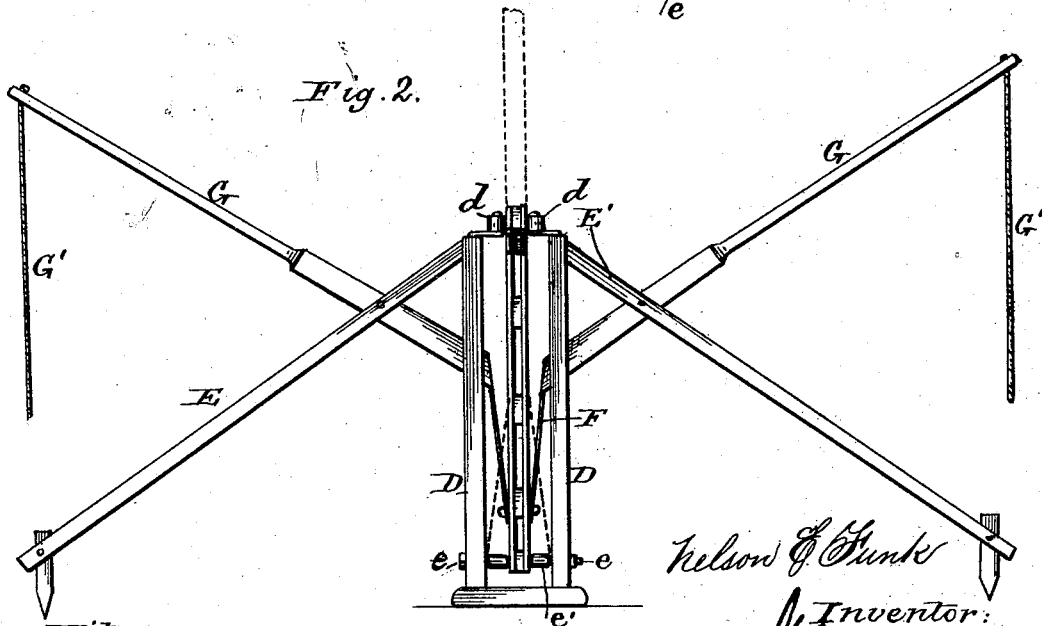
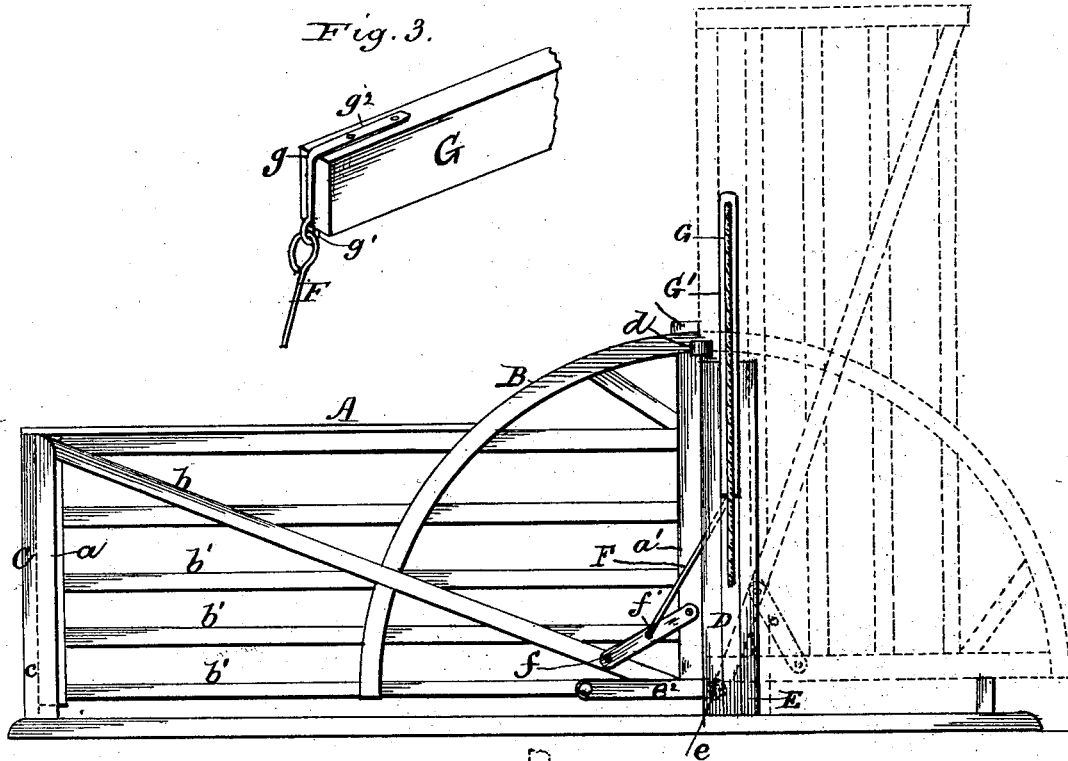
(No Model.)

N. E. FUNK.

GATE.

No. 301,813.

Patented July 8, 1884.
Fig. 1.



Witnesses:

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UNITED STATES PATENT OFFICE.

NELSON E. FUNK, OF ELKHART, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 301,813, dated July 8, 1884.

Application filed November 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, NELSON E. FUNK, a citizen of the United States of America, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in 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 gates; and it consists in the improvements hereinafter fully described and set forth.

In the accompanying drawings, which illustrate my invention, Figure 1 is a side view showing my gate closed in full lines and open in dotted lines. Fig. 2 is an end view also showing the gate open in dotted lines. Fig. 3 is a detailed perspective view of one of the ends of the operating-lever.

A represents a gate, which is provided with a front upright, *a*, and a rear upright, *a'*, which is of greater length or height than the front upright. These uprights or posts are rigidly braced to each other by the bar *b*, which extends from the top of the front upright, *a*, to the lower portion of the rear upright, *a'*, and is securely attached to the bars *b'* at the points where it intersects the same.

From the upper portion of the rear post or upright, *a'*, extending downwardly, is a segmental guide and brace, *B*, which is made in two parts, so as to provide a smooth bearing-surface for the anti-friction rollers, as will be hereinafter set forth. The gate-post *C*, adjacent to the front end, *a*, of the gate, is provided with side pieces, *c*, within which the gate will rest when the same is closed, these side pieces being attached to the main post. The rear upright of the gate proper is pivoted between two vertical posts, *D D*, which are similar in construction, and these posts extend upwardly nearly to the top of the segmental brace *B*, attached to the gate, and are provided with anti-friction rollers *d*, which are secured to the top of the posts, by means of vertical pivots or bolts, in such a position that the

rollers will bear upon the sides of the segment *B*. The posts *D D* are thoroughly braced by the inclined stays *E E'*. The posts *D D* are placed at a sufficient width or distance from each other to allow the gate and its operating mechanism to lie between the same without interfering with the operation thereof, and the gate is secured at its lower corner to the posts *D D* by means of a transverse horizontal pivot, *e*, which is encircled adjacent to the gate by collars *e'*, which will hold the same centrally between the posts. The gate is also provided with straps or braces *e''*, which are secured to the lower rail of the gate, and are provided at their ends with perforations through which passes the pivot *e*. These straps diverge from the point at which they are attached to the lower rail of the gate to the inner side of the posts *D D*, and serve as braces, so as to prevent a sidewise movement of the gate.

Attached to the upright *a'* of the gate and to the inclined brace *b* are bars or straps *f*, which incline downwardly from the upright *a'*, as shown in Fig. 1 of the accompanying drawings. These bars or straps are provided near their central portion and in front of the upright *a'* with a perforation, *f'*, in which is secured the rod *F*, which is attached to the lever for opening and closing the gate. The posts *D* are provided, with vertical slots, through which pass the ends of the operating-levers, and the inclined braces *E E'* are also slotted for the same purpose, and within the slots in these inclined braces are pivoted the arms *G*. These arms are provided at their ends, as shown in Fig. 3, with grooves, in which will lie a portion of the strap *g*, which is provided at its lower end with an eye, *g'*, and at its opposite end with a flattened portion, *g''*, by means of which the strap is secured to the end of the operating-lever.

Within the eye *g'* is secured or hooked the end of the connecting-rod *F*, the lower end of the same being hooked within the perforation *f'* in the bar *f*. The other ends of the levers *G* are provided with pull-ropes *G' G'*.

My gate operates in substantially the same manner as that shown in the patent hereinbefore referred to, and among its advantages may be noted that the posts do not extend above

the top of the gate, and the operating-levers are pivoted below the same, and the connecting-bar F, being attached to the plate *f*, secures strength and insures ease in opening and closing the same. The plates *c*² also serve to hold the gate on a line with the post. It is also evident that the guide and rollers will insure the vertical movement. The inclined braces EE' not only serve to support the posts BB, but also afford bearings for the operating-levers.

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

1. In combination with the gate A, provided with a segmental guide, B, the bars *c*² and *f*, and posts D D, provided at their upper ends with anti-friction rollers, and operating means consisting of levers provided at their ends with connecting-bars F, the parts being

organized substantially as shown, and for the purpose set forth.

2. In combination with the posts D D, provided at their upper ends with anti-friction rollers and inclined braces E, having pivoted thereto operating-levers which pass through slots in the braces and posts, the gate A, pivoted between said posts and provided with a segmental guide, B, a brace, *c*², encircling the pivot, and a connecting-bar, F, attached to the brace *f*, the parts being organized substantially as shown, and for the purpose set forth.

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

NELSON E. FUNK.

Witnesses:

GORDON BEACH,
SAMUEL NOYES.