

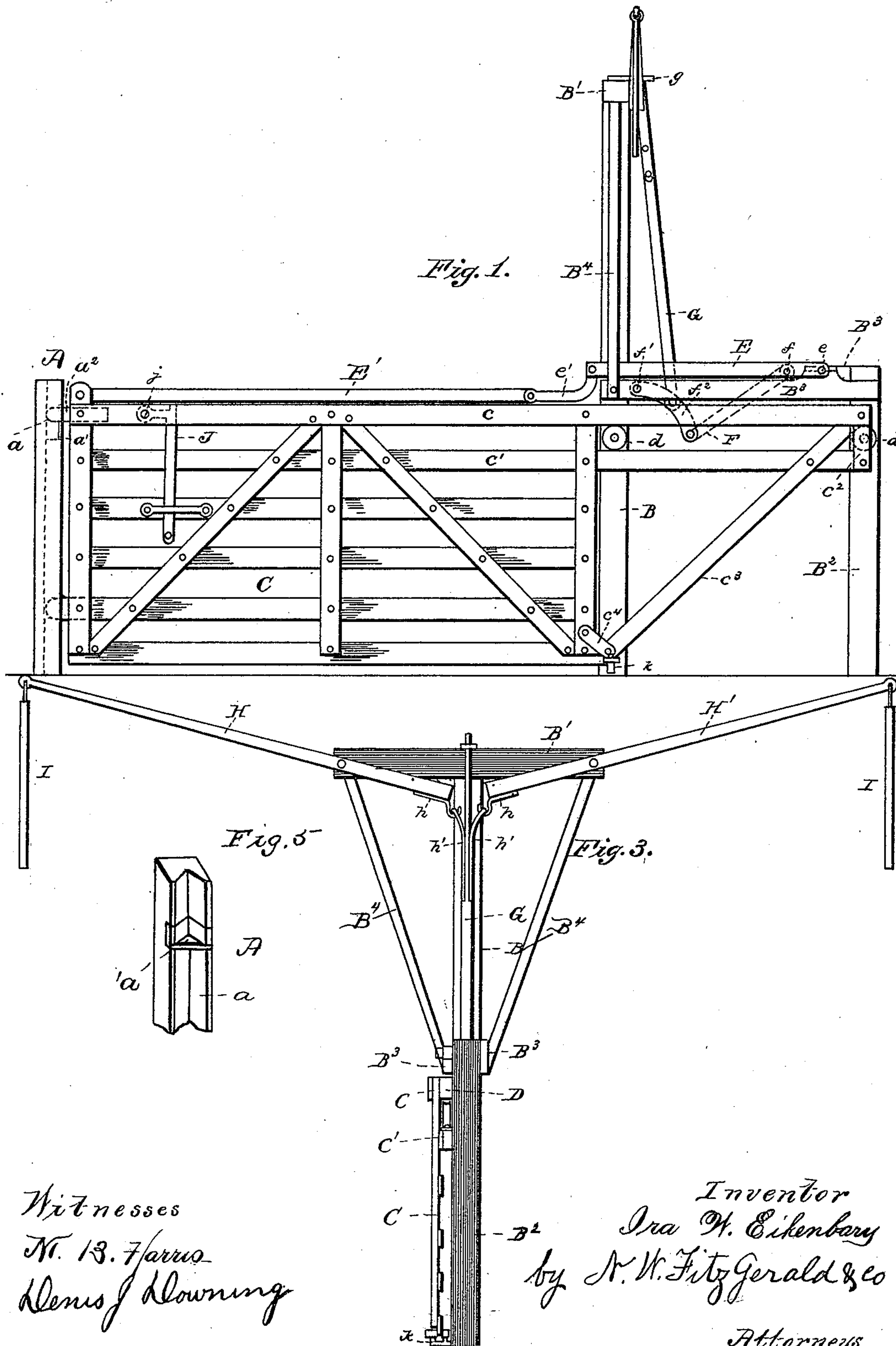
(No Model.)

2 Sheets—Sheet 1.

I. W. EIKENBARY.  
AUTOMATIC SLIDING GATE.

No. 438,914.

Patented Oct. 21, 1890.



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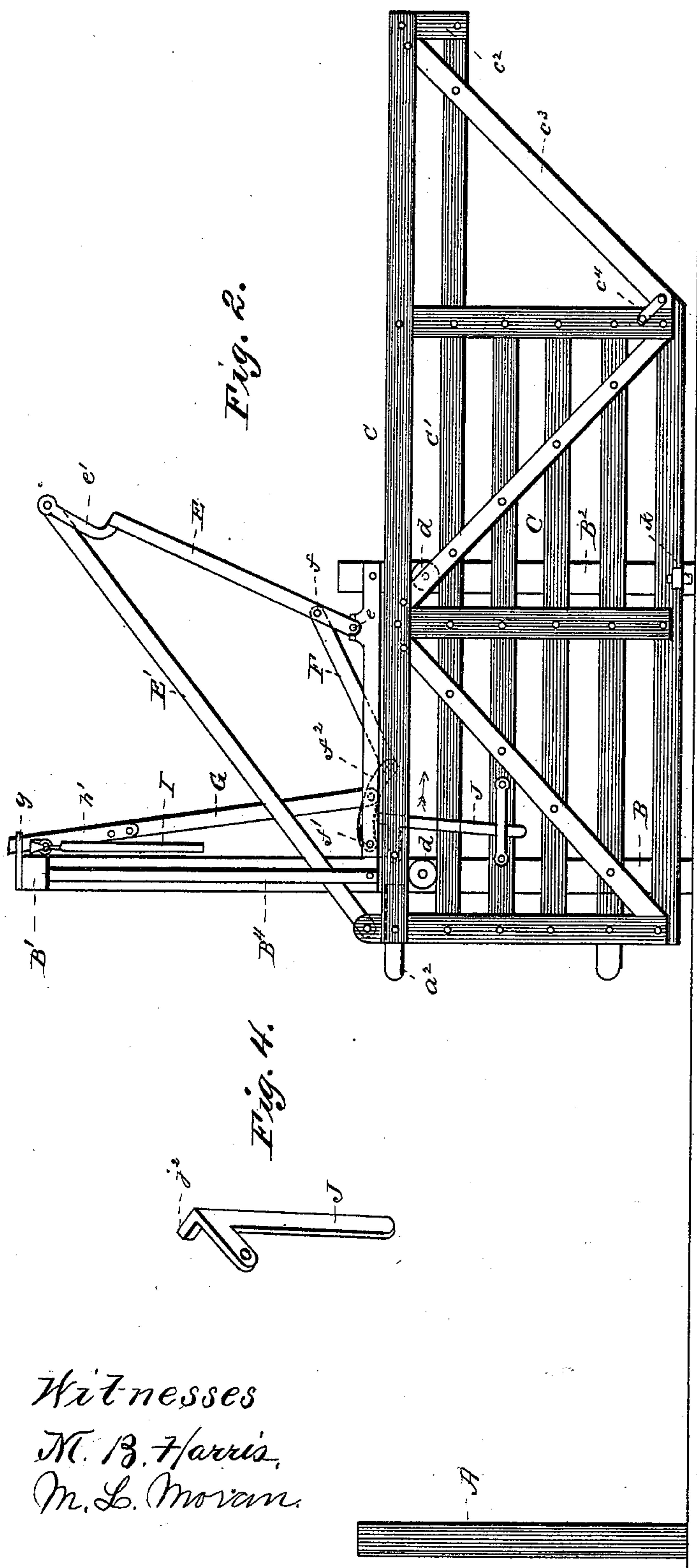
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2 Sheets—Sheet 2.

I. W. EIKENBARY.  
AUTOMATIC SLIDING GATE.

No. 438,914.

Patented Oct. 21, 1890.



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# UNITED STATES PATENT OFFICE.

IRA W. EIKENBARY, OF WARREN, INDIANA.

## AUTOMATIC SLIDING GATE.

SPECIFICATION forming part of Letters Patent No. 438,914, dated October 21, 1890.

Application filed May 15, 1890. Serial No. 351,852. (No model.)

*To all whom it may concern:*

Be it known that I, IRA W. EIKENBARY, a citizen of the United States of America, residing at Warren, in the county of Huntington and State of Indiana, have invented certain new and useful Improvements in Automatic Sliding Gates, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to automatic sliding gates; and it consists in the construction and novel arrangements of parts, as hereinafter more fully set forth, illustrated in the accompanying drawings, and pointed out in the appended claims.

The objects of my invention are to make certain improvements in the general construction of the gate and its connections, for which Letters Patent were granted to me April 29, 1890, and numbered 426,787; further, to provide a novel means of opening the gate by a person on foot desiring to pass therethrough.

In the drawings, Figure 1 is a side view of my improved gate in a closed position. Fig. 2 is a similar view, the gate being shown open. Fig. 3 is an end view of the same, looking from the brace-post. Fig. 4 is a detail view of the arm J. Fig. 5 is a detail view of the latch-post, showing holder  $a'$ .

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, the letter A designates the latch-post, secured in the ground at one side of the roadway and provided with a longitudinal V-shaped groove  $a$ , at a proper point wherein is secured the holder  $a'$ , adapted to receive the projecting end of the bar  $a^2$ , secured between the upper rails of the gate, and in connection with the projecting end of one of the lower rails of the gate designed to enter the V-shaped groove and prevent lateral play when the gate is closed.

At one side of the roadway, opposite the latch-post A, is secured the lever-post B, which is about twice the height of the latch-post, and has secured upon its upper end, and running parallel with the roadway, a cross-bar  $B'$ . On one side of the roadway, at a suitable distance from the lever-post and in line with the same, I erect a brace-post  $B^2$ . The brace-post is connected to the lever-post by the parallel

bars  $B^3$ , and in order that the bar  $B'$  may be securely braced at its upper end braces  $B^4$  are employed, which are secured to the bar  $B'$  at its outer ends and to the lever-post at a point just above the gate.

The letter C designates a gate of the usual well-known construction, the two upper rails  $c$   $c'$  of which are made somewhat longer than the gate proper and are secured at their outer ends by a short bar  $c^2$ , and to strengthen thoroughly the outer ends of said rails a diagonal brace  $c^3$  is employed, which at its lower end is secured to the gate by a metallic plate  $c^4$ .

Parallel with the top rail C of the gate and of an equal length is a bar D, which is secured at one end to the bar  $c^2$  and to the vertical rails of the gate. Journaled upon suitable pins extending laterally from the lever and brace-posts are rollers  $d$ , which when the gate is in position work between the rails  $c'$  and D, and to prevent wear upon said rails metallic strips are placed upon them, as shown. Journaled on a shaft  $e$ , working in bearings formed in the outer ends of the bars  $B^3$ , is a bifurcated lever E, provided at its opposite end with a curved arm  $e'$ , having pivoted in its bifurcated end a bar  $E'$ , the opposite end of which is pivoted between the upper extended ends of the outer vertical rails of the gate, and when the gate is in a closed position is designed to rest upon the top of the gate, as shown in Fig. 1. Pivoted upon a pin  $f$  in the bifurcated lever E is an arm F, which in turn is connected to a pin  $f'$ , secured in the parallel bars  $B^3$  by means of the links  $f^2$ .

In order that the bar  $E'$  and the lever E may be raised, thereby allowing the gate to be slid open, I pivot between the links  $f^2$  one end of a vertical lever G, which passes upward through a guide-eye  $g$ , secured upon the upper face of the bar  $B'$ .

The letters H H' designate the operating-levers, fulcrumed near their inner ends to the bar B and provided at their inner ends and upon their lower face with hooks  $h$ , which engage suitable eyes formed in the ends of the leaf-springs  $h'$ , secured to the vertical lever G. The operating-levers H H' are provided at their outer ends with depending handles I.

To allow the bar  $E'$  to be readily raised and the gate to be opened by a person on foot, I



pivot upon a pin  $j$ , between the rails C and D, an arm J, which is provided at its bent portion with a laterally-extending projection  $j^2$ , designed to bear against the underside of the bar E' and raise the same when the arm J is moved in the direction indicated by the arrow. For limiting the movement of the free end of the arm J a keeper is employed, as shown in Figs. 1 and 2.

To prevent the gate from vibrating at its lower edge, I secure to the lever-post below the gate a laterally-extending arm provided with the angularly-bent portion  $k$ , upon which is journaled an anti-friction roller, the periphery of which is adapted to bear against the lower rail of the gate.

The operation of my improved automatic sliding gate, taken in connection with the above description and accompanying drawings, may be briefly described as follows: Assuming that the gate is in a closed position and it is desired to open the same, pulling down on one of the levers H will, through the media of the vertical rod G, links  $f^2$ , and arm F, cause the lever E and bar E' to rise and cause the gate to slide or roll open. This permits the team to pass through, after which the driver pushes upward on the end of the second operating-handle and thereby closes the gate. Should a person on foot desire to pass through the gate, by throwing the arm J in the direction indicated by the arrow he will cause the projection  $j$  to bear against the underside of the bar E' and raise the same, when the gate may be opened.

In order that the pivotal point of the lever E' may be below the pivotal point of the bifurcated lever E, the arm  $e'$  is given a downward curve, as shown in Fig. 1. This, when the gate is in a closed position, prevents stock from opening the same.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. In an automatic sliding gate, the combination, with the brace, the lever and latch posts, and the gate carried by rollers secured to the lever and brace posts, of the bifurcated lever having pivoted thereto a curved arm, the bar E', pivoted at its outer end to the gate and at its inner end to the curved arm, and the arm J, connected at its upper end to the gate and provided with a projection adapted to bear against the under side of the bar E', for the purpose specified.

2. The combination, with the gate mounted on rollers carried by the lever and brace posts and the parallel braces secured to the lever and brace posts, of an arm pivoted between the upper rails of the gate and provided with a projection adapted to bear against a bar pivoted to said gate and to a lever secured to the parallel braces B<sup>3</sup>, whereby said bar is raised and the gate allowed to open, substantially as described.

3. In a gate, the combination, with the lever and brace posts, the gate carried thereby, and parallel horizontal braces uniting the levers and brace-post above the gate, of the vertical rod passing through a guide-eye at the top of the lever-post and provided with leaf-springs engaging hooks on the operating-levers, and links secured upon a pin journaled in bearings formed on the parallel braces and having a hinged lever-connection with the outer end of the gate, substantially as described.

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

IRA W. EIKENBARY.

Witnesses:

HENRY K. GROVES,  
WILLIAM I. EIKENBARY.