

(No Model.)

H. O. WOOD & S. S. SMITH.
RAILROAD GATE.

No. 452,301.

Patented May 12, 1891.

Fig. 1.

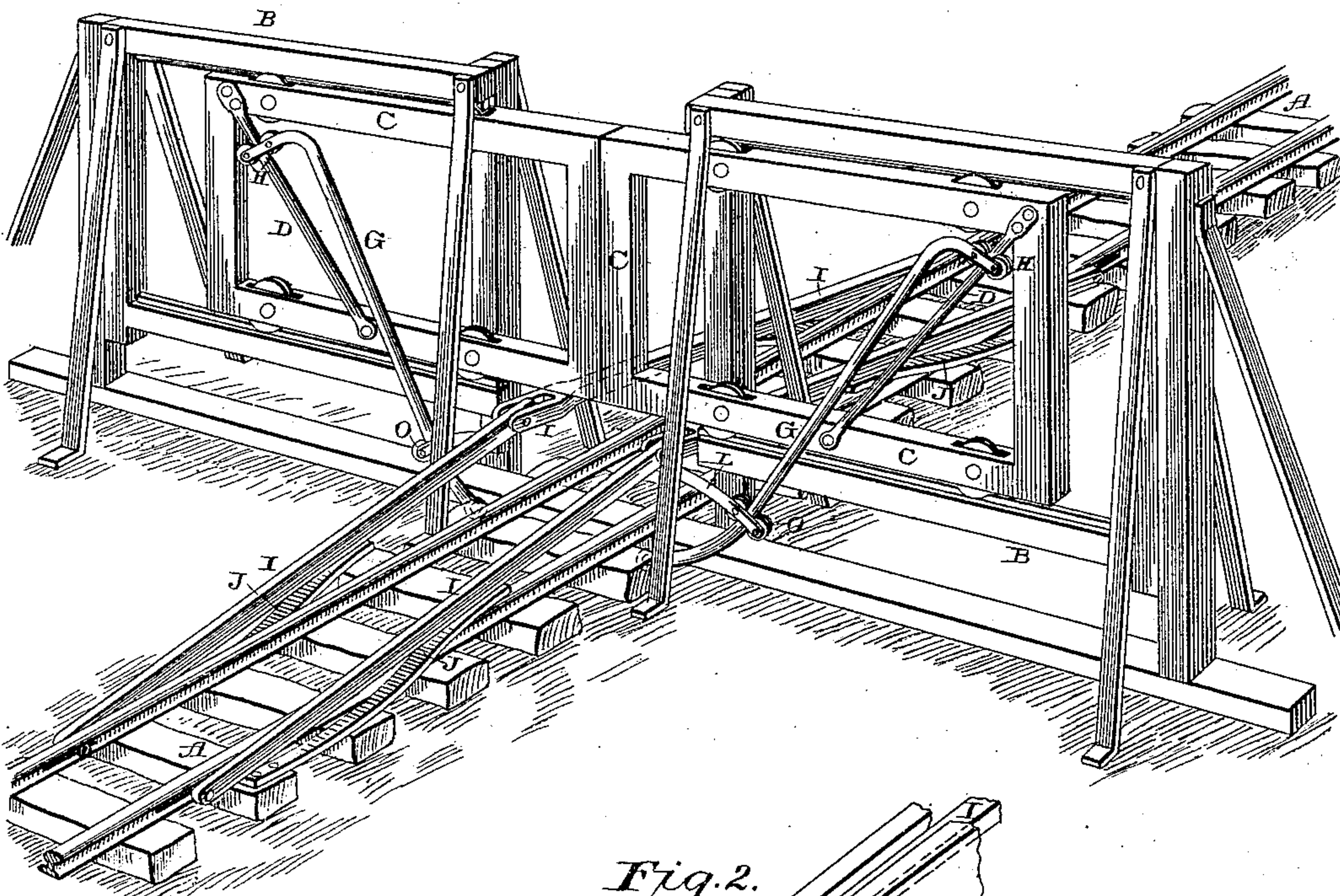
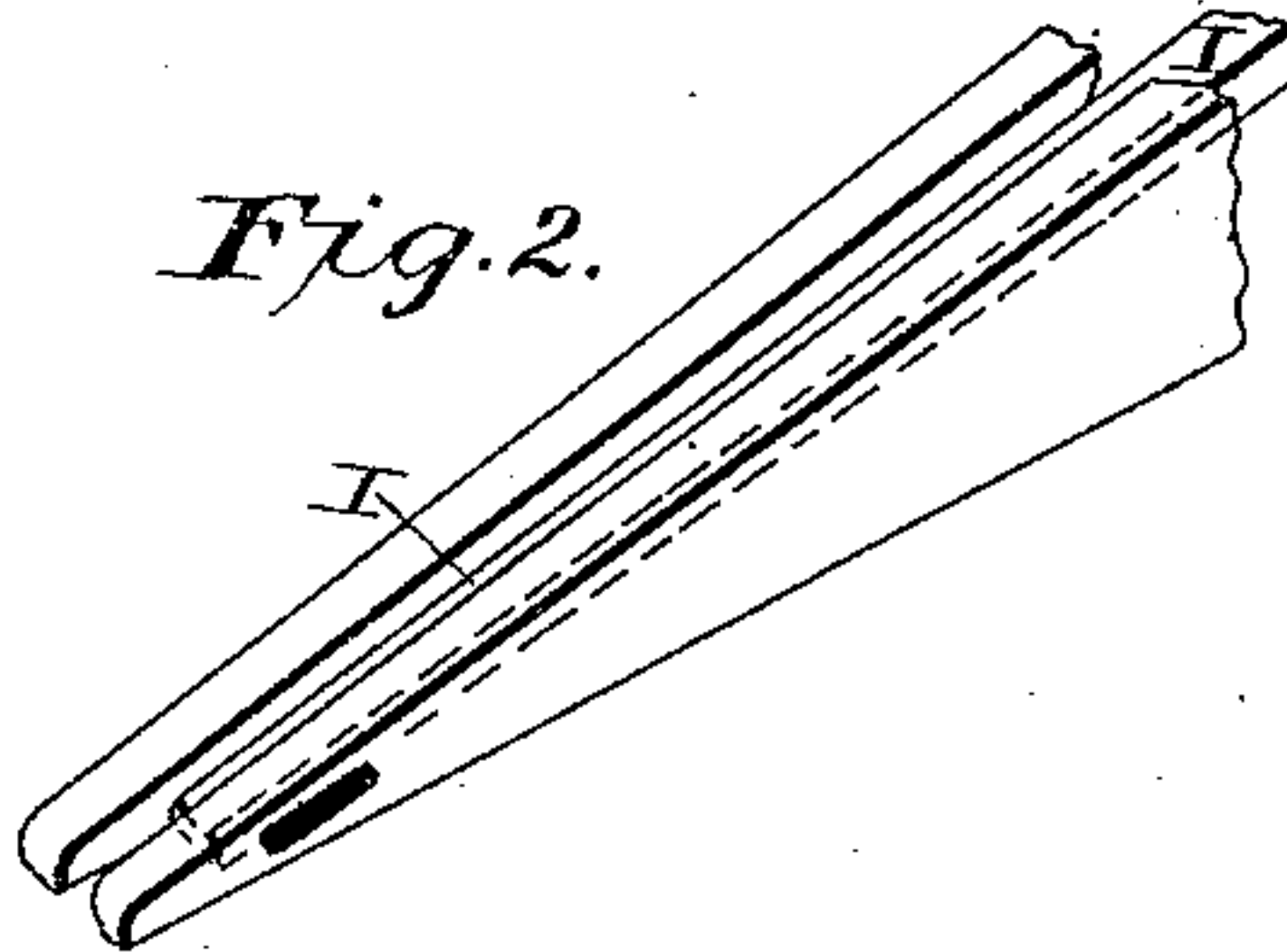


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 452,301, dated May 12, 1891.

Application filed January 6, 1891. Serial No. 376,882. (No model.)

To all whom it may concern:

Be it known that we, HORACE OVERALL WOOD and SANFORD SANDERS SMITH, of Vernon, in the county of Wilbarger and State of Texas, have invented certain new and useful Improvements in Automatic Railway and Farm Gates; and we 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in automatic railroad and farm gates; and it consists in the combination and arrangement of parts, which will be fully described hereinafter.

The object of our invention is to provide gates which automatically open at the approach of a train and again close after the train has passed through, and thus dispense with the services of some one to open and close the gates for every train.

Figure 1 is a perspective view of a railway-gate which embodies our invention. Fig. 2 is a detached perspective view of the outer end of one of the levers I, showing how it is supported when the gate is used as a farm-gate.

A represents the railroad-tracks, B two supporting-frames placed upon opposite sides of the track, and C the two gates which move back and forth in the frame B and meet at their inner ends over the center of the track, as shown. Secured to each of the gates C is a diagonal rod D, with which the upper end of a lever G engages. To the upper end of the lever G are connected two friction-rollers H, which catch upon opposite sides of the diagonal lever D, so that the upper end of the lever will move freely back and forth up and down upon the rods D as the gates C are being moved back and forth in their frames B. Both of the levers G are pivoted at their lower ends upon any suitable supports, so that they can be moved through a portion of a circle for the purpose of opening and closing the gates for each train.

Pivoted alongside of each of the rails of the track is a lever I, which is operated by the

flanges of the car-wheels, and under which levers are placed suitable springs J for returning them to position when they are left free to move by the passage of the train beyond them. Each of these levers I is pivoted at its outer end to the side of the track or any other suitable support, and their inner ends make loose connection with corresponding levers which extend from the opposite side of the gate. These levers are connected, so that when one is operated from either side of the gate the other will be correspondingly operated at the same time. As the flanges of the wheels depress these levers I at their inner ends, the arms or levers L, also provided with friction-rollers O at their outer ends, depress the levers G, and as these levers G are forced downward and backward the gates C are automatically opened, so that a train can pass through between them. When the springs return the inner ends of the levers I to position, the arms or levers L raise the levers G, and these levers close the gates after the train has passed through. The rollers O, journaled in the lower end of the levers L, catch against opposite sides of the levers G, and thus vibrate them upon their pivots for the purpose of causing them to operate the gates C. No matter from which side of the gate the train approaches, the flanges of the wheels depress the inner ends of the levers I, and these levers in moving at their inner ends cause the arms L and levers G to first open the gates and then close them as soon as the wheels leave the levers I free to move, and thus dispense with all necessity of some one to open and close the gates at the passage of each train.

When the gate is to be used as a farm-gate, scantlings M are placed on either side of the bar I, on which the wagon-wheels run, so as to keep the wagon-wheels on the bars. The scantlings and the spring-actuated levers are held in place by bolts, which are passed through their ends, the inner ends of the bolts being made to pass through slots for the purpose of keeping the levers or scantlings in position. When the gates are used as railway-gates, they form a stock-guard, which will do away with the old-style cattle-guard where fences abut against the railroad.

Having thus described our invention, we claim—

The combination of the supporting-frames, the sliding gates which move thereon, the diagonal rods secured to the gates, the pivoted levers G, the spring-actuated pivoted levers I, placed beside the rails, and the arms or levers L, connected to the inner ends of the levers I, the upper ends of the levers G and the lower
10 ends of the arms or levers L being provided

with friction-rollers, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

HORACE OVERALL WOOD.
SANFORD SANDERS SMITH.

Witnesses:

J. A. WHITE,
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