

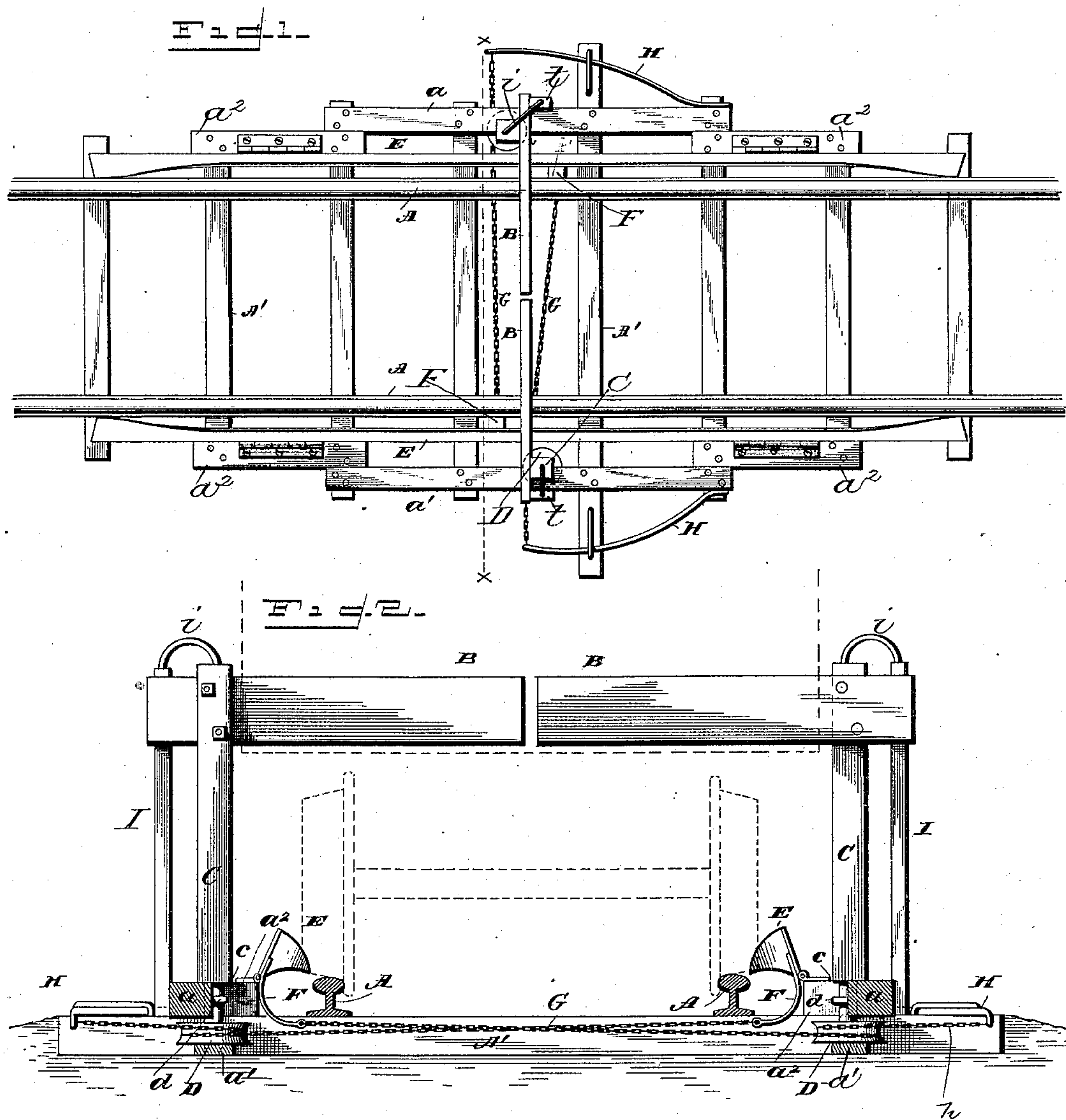
(No Model.)

B. E. WELLS.

RAILROAD GATE.

No. 369,624.

Patented Sept. 6, 1887.



Benager E. Wells.

WITNESSES

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# UNITED STATES PATENT OFFICE.

BENAGER E. WELLS, OF BYRON, NEBRASKA.

## RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 369,624, dated September 6, 1887.

Application filed June 16, 1887. Serial No. 241,514. (No model.)

*To all whom it may concern:*

Be it known that I, BENAGER E. WELLS, a citizen of the United States of America, residing at Byron, in the county of Thayer and State of Nebraska, have invented certain new and useful Improvements in Railroad-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 certain new and useful improvements in railway-gates, the object of my invention being to provide a railway-gate which will be simple, cheap, and effective, and not liable to get out of order, the same being adapted to be operated by a train when it approaches the gate.

With the above object in view my invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a plan view of a railway-gate constructed in accordance with my improvement, and Fig. 2 is a vertical sectional view taken through the line *xx* of Fig. 1.

In the accompanying drawings, A refers to the rails of the track, which are supported upon cross-ties A', said cross-ties adjacent to the gate being connected to each other on their upper edges by beams *a*, which extend parallel with the rails, while the under sides of the ties A' are connected by beams *a'*.

B B refer to the horizontal portions of the gates which may consist of a series of horizontal bars, which are rigidly attached to the posts C, which posts are provided, near their lower ends, with shoulders *c*, which lie above recesses formed in the beams *a*. The lower or circular portions of the posts turn in the recesses, within which they are held by suitable staples, *d*. Beneath the beams *a* the posts are provided with pulleys D, which are rigidly attached thereto, and beneath the pulleys the posts C have bearings in the beams *a'*, by which

means the gate-posts are held in a vertical position and are free to turn in their bearings. The beams *a*, which are located above the ties, are provided with inwardly-projecting portions *a*<sup>2</sup>, which terminate on each side of the pulleys D, and to these projecting portions are pivotally attached or hinged metallic plates E, the ends of which are curved downwardly, so that they will be normally at right angles with the railroad-tracks, while their center portions occupy a vertical position and are practically parallel with the aforesaid tracks. These plates E, hereinbefore referred to, are provided with curved or bent arms F, which are rigidly attached thereto, and to the ends of these arms, which normally project toward the rail, are attached chains or other suitable flexible connections, G, which extend from the arms F to the pulleys D, attached to the gate-posts opposite thereto, so that when the plates E are depressed the gate-posts will be turned so as to swing the gates B B parallel with the tracks.

To hold the gate in a closed position, as shown in the drawings, I attach to the outer vertical edges of the beams *a* springs H, said springs passing through guides or loops attached to one of the cross-ties. To the ends of these springs H H are attached the chains *h*, which are passed partially around the pulleys D, the spring-pressure holding the gates normally closed.

It will be understood that while I refer to a chain, G, connecting arm F with the pulley D at the opposite side of the track, and another chain, *h*, connecting this pulley with its actuating-spring H, that these connections may consist of a single chain leading from arm F around the pulley and thence to the spring, as by either arrangement the operation would be the same.

In order to prevent the gates swinging beyond a position at right angles with the railroad-track, I provide vertical posts I, against which the projecting ends of the gates will abut, and, if desired, these posts or stops I may be provided with bent bars *i*, which will engage with the top of the post C and help to hold the same in a vertical position. The gates are normally held in a closed position by the



action of the springs, and when a train approaches the gates the wheels will ride upon the curved plates E and depress the same, so as to bring the center portions thereof from a nearly vertical to a horizontal position, which movement will cause the gates to fly open and remain parallel with the tracks until the pressure has been removed from the plates. As soon as the pressure is removed, the gates will be closed automatically.

I claim—

1. In a railroad-gate, the combination, substantially as described, of the gates, pivoted supporting-posts provided with pulleys, curved plates pivoted parallel to the rails of a track and provided with curved bars F, springs secured at one end to a fixed point, and flexible connections secured at one end to arms F and passing thence around the pulleys of the opposite posts, and secured at their other ends to the free ends of the springs.

2. The combination, in a railroad-gate, of the pivoted posts C, suitably supported in a vertical position and provided with pulleys D, chains attached to the pulleys and connected to springs, which serve normally to hold the gates in a closed position, plates E, having curved ends, bars F, rigidly attached to said plates and provided with chains, which extend under the tracks and round the pulleys D, and vertical posts or stops I, against which the outwardly-projecting ends of the gates abut, 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.

BENAGER E. WELLS.

Witnesses:

W. T. STEWART,  
JOHN RILEY.