

S. BARNES.  
Railway-Gate.

No. 207,154.

Patented Aug. 20, 1878.

FIG. 1.

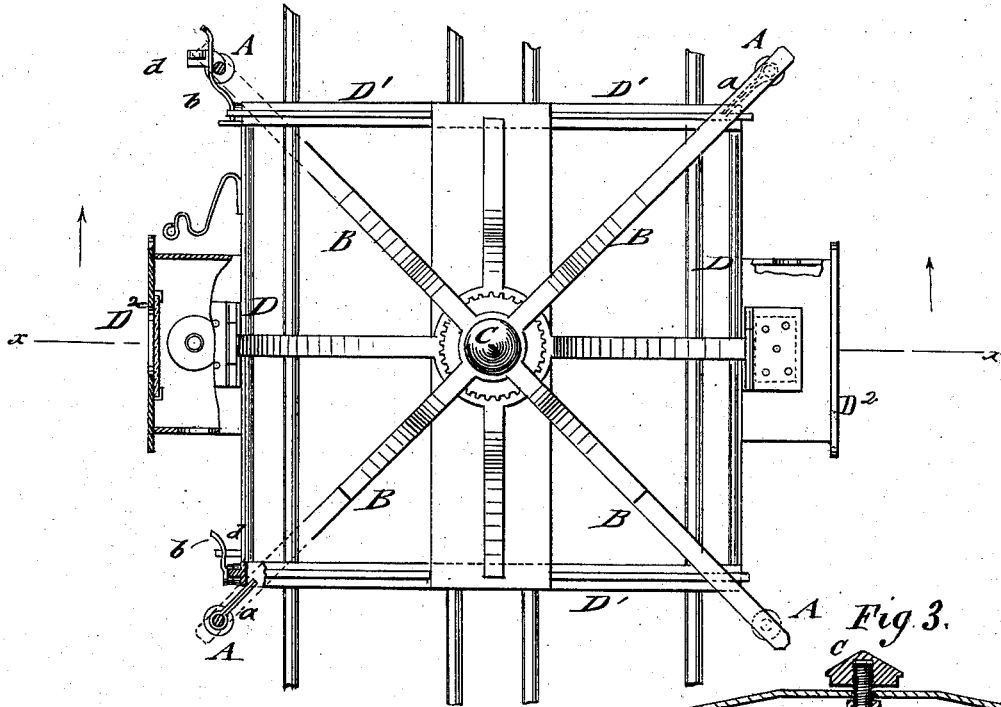


Fig. 3.

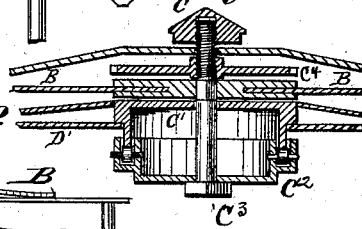
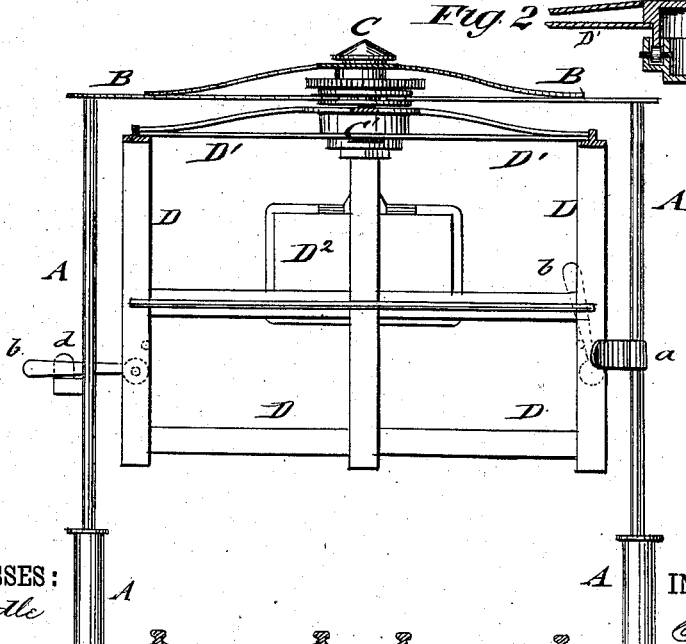


FIG. 2.



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# UNITED STATES PATENT OFFICE.

STEPHEN BARNES, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN RAILWAY-GATES.

Specification forming part of Letters Patent No. **207,154**, dated August 20, 1878; application filed March 20, 1878.

*To all whom it may concern:*

Be it known that I, STEPHEN BARNES, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and Improved Revolving Safety-Gate for Railroads, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view, partly in section, and Fig. 2 an elevation, partly in section, showing my improved gate for railroad-crossings in position for closing the track. Fig. 3 is a detail sectional view of the central bearing or pivot of the gate-frame.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved gate for railroad-crossings that closes either the road at both sides of the railroad-track or the track, admitting of the crossing of vehicles or not, according as the gate is set in either direction, the gate being held in either position in reliable manner, and arranged to signal to the approaching train or to the vehicles the actual position of the gate.

The invention consists of a double gate that is hung to a center bearing of a square frame supported on posts at both sides of the track, the gates being provided with signaling devices, and capable of being locked to the posts, whether placed in position across the roadway or across the track.

Referring to the drawing, A represents the supporting-posts, which are set into the ground equidistantly from each other at both sides of the track and of the road crossing the same, so as to form between them a regular square. The tops of the posts are connected by diagonal braces B, that support a square top frame, D<sup>1</sup>, carrying two parallel gates, D, which extend vertically downward from the top frame. Said top frame is provided with a central hub or collar, C<sup>1</sup>, which fits and turns in a cap-piece, C<sup>2</sup>, of a screw-rod, C<sup>3</sup>. Said screw passes through the braces B of the stationary supporting-frame, and it is secured thereto by means of a top nut, C. The screw-bolt is also provided with a square portion, so as to prevent it from turning in the stationary supporting-frame, the portion which receives the collar C<sup>1</sup> being made cylindrical, however, in

order to permit the gate-frame to revolve. A notched or toothed hand-wheel or nut, C<sup>4</sup>, is applied to the screw-rod for the purpose of moving the same, as will be readily understood by reference to Fig. 3 of the drawing.

The gates are provided with signal-lanterns D<sup>2</sup> or other signaling devices, that indicate, by suitable colors or alarm-bells, the position of the gates during the day, and by colored lights at night.

The revolving gates may be readily placed in position, so as to close the roadway and prevent the passage of vehicles over the track, the track being then free for the passage of trains. By swinging the gates across the track or tracks the road is free for the passage of vehicles and the track closed against the passage of the trains, the signal devices giving in either position warning to vehicles or trains approaching from either side toward the gates, so as to prevent any danger of collisions.

Two diagonal posts, A, are provided with stop-plates, a, against which the gates bear on being swung in either position, while one of the gates is provided with swinging end latches b, that lock on recessed supports d of the posts A, so as to retain the gates rigidly in position across the track or road. Both latches may be locked to the same post, forming thus a very simple locking device for the gates.

The great advantage of the gates consists in the fact that either the track or the road may be closed by the gates, and thereby, in connection with the signals, the possibility of danger and wrecking obviated to a great extent.

While I prefer the form of central bearing previously described, and illustrated in the drawing, I may hang the gate-frame in any other preferred manner, provided the bearing is constructed so as to permit the gates to swing readily from a position at right angles to the track to one parallel thereto, and vice versa.

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

1. A revolving gate for railway-crossings consisting of a top frame having two parallel gates, and a stationary frame having a center bearing for supporting said top frame and

gates, substantially as and for the purpose set forth.

2. The combination of the signal-lanterns D<sup>2</sup> with the revolving gates D and supporting-frame D<sup>1</sup>, substantially as and for the purpose set forth.

3. The combination of the revolving gates, having pivot-latches, with the supporting-

posts, having stopping and locking devices for securing the gates in position across the track or road, substantially as set forth.

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Witnesses:

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