

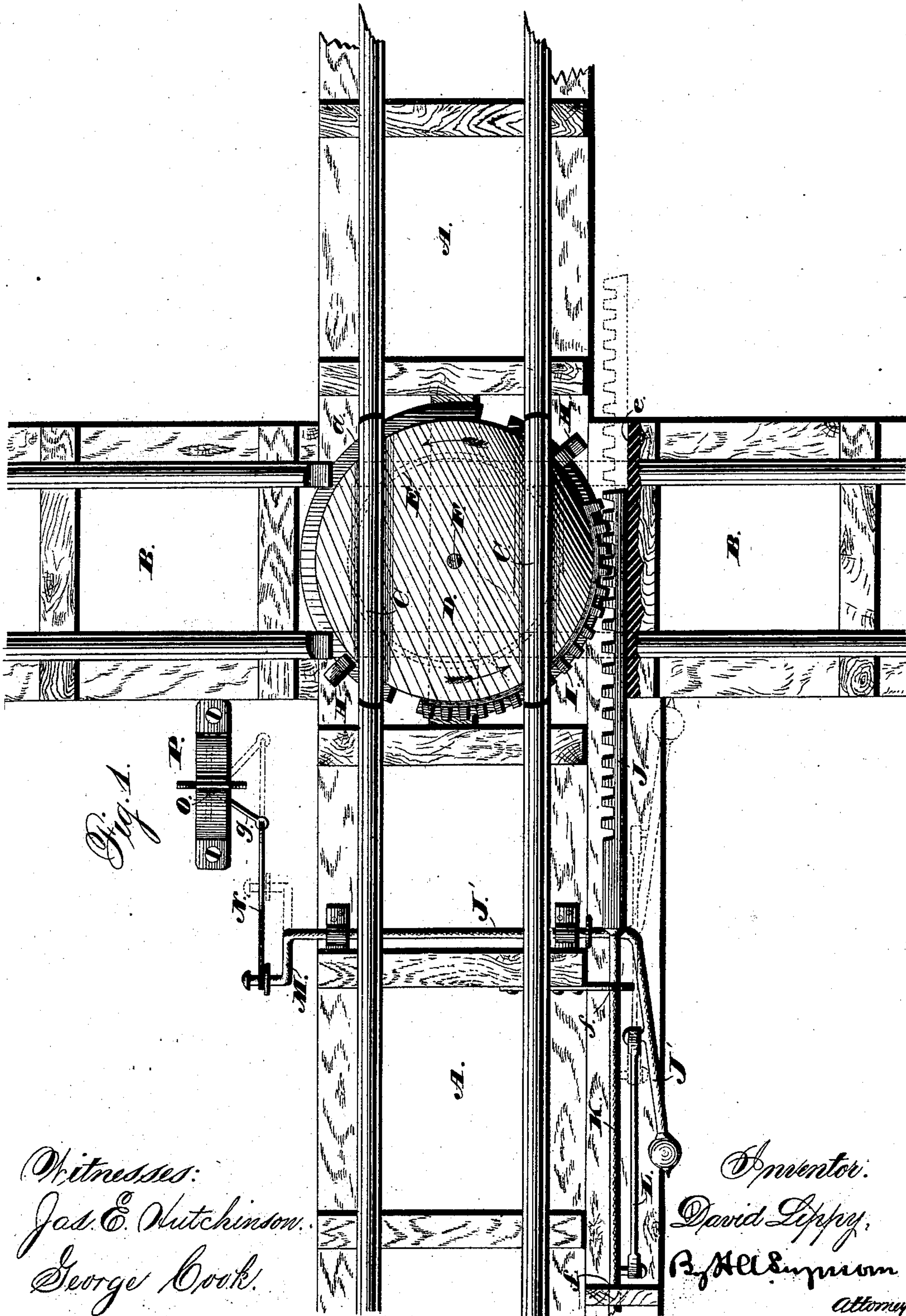
(No Model.)

2 Sheets—Sheet 1.

D. LIPPY.
RAILROAD CROSSING.

No. 273,112.

Patented Feb. 27, 1883.



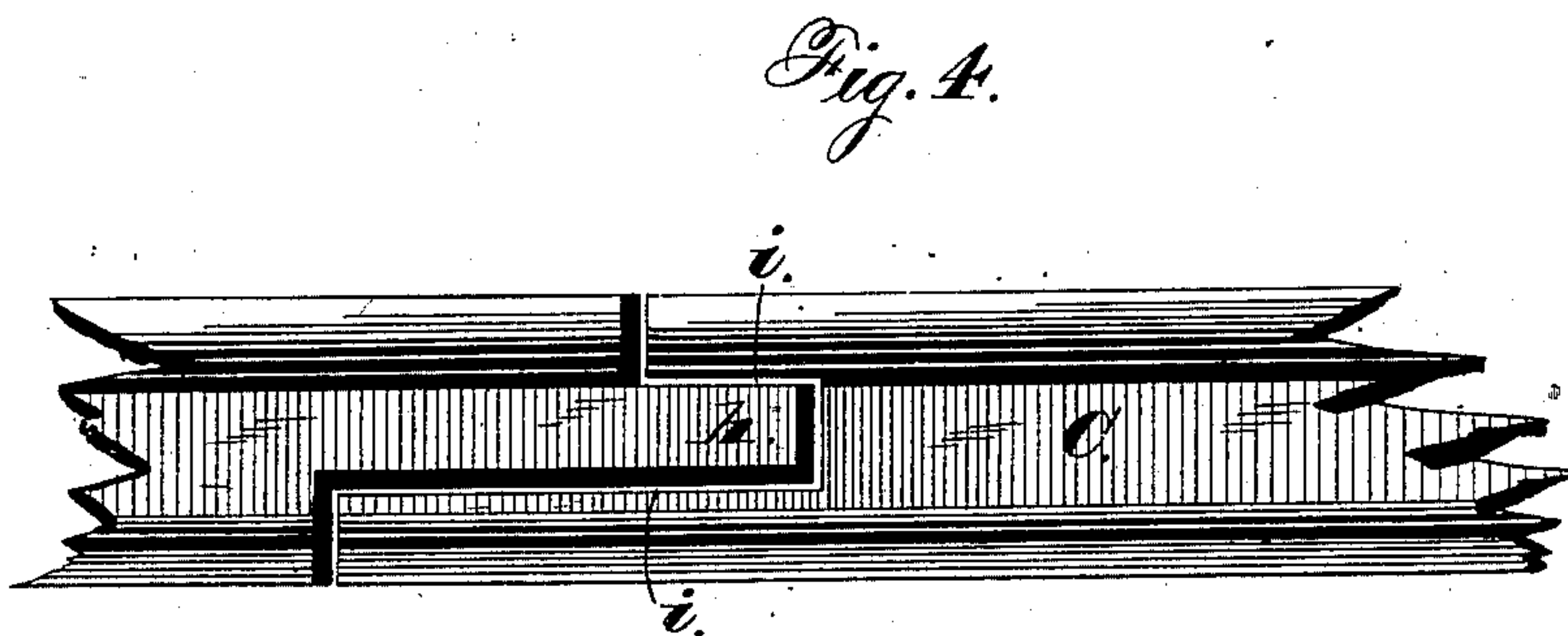
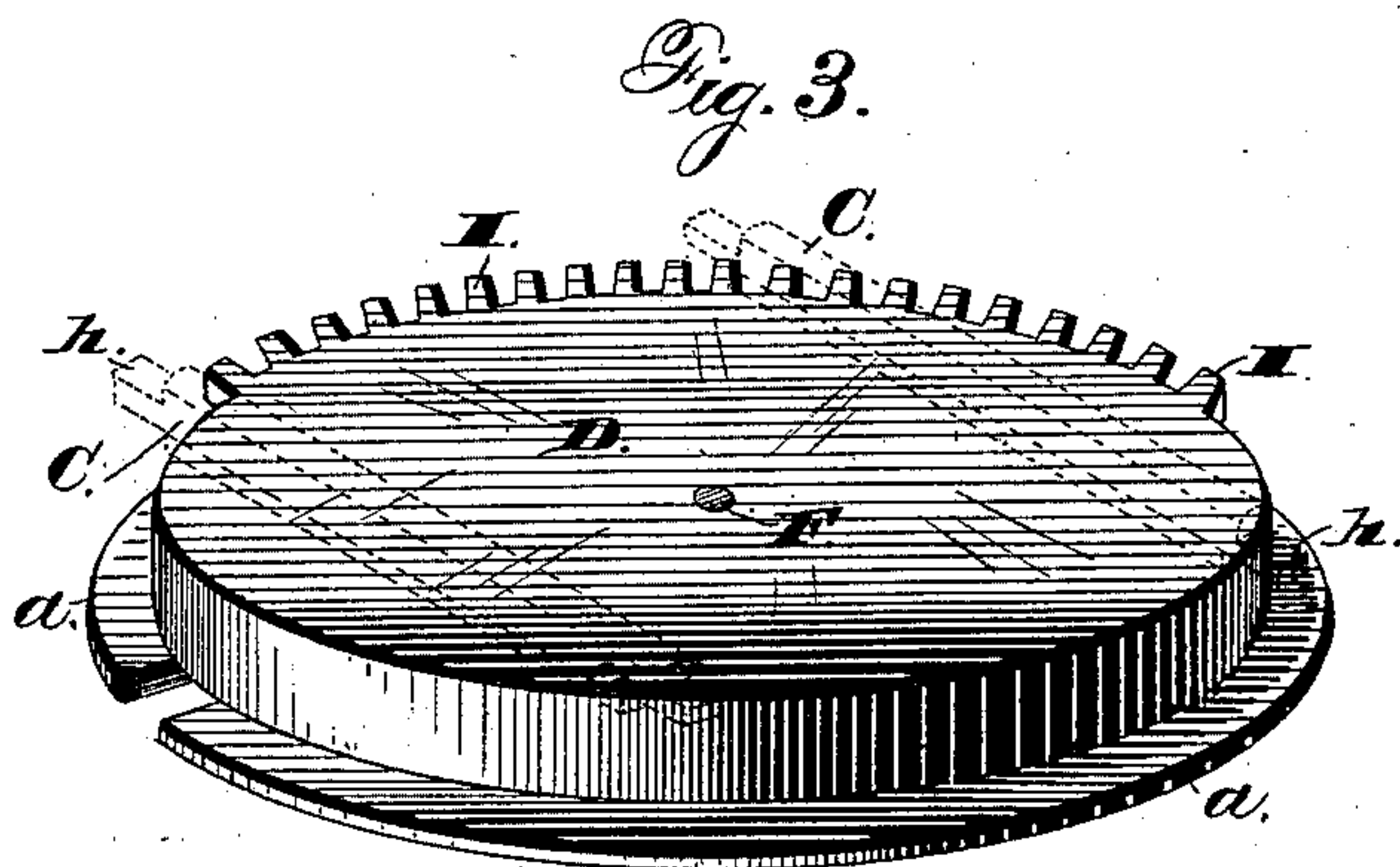
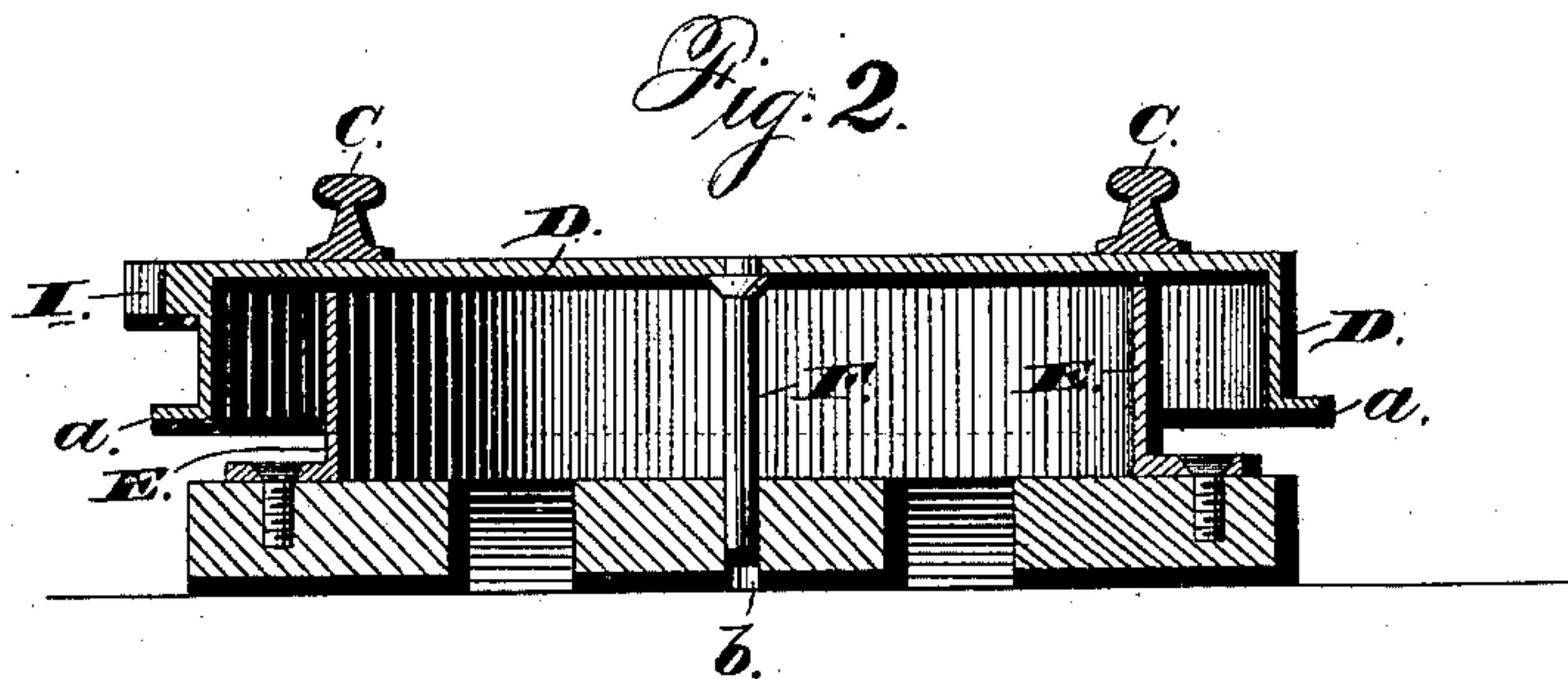
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2 Sheets—Sheet 2.

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RAILROAD CROSSING.

No. 273,112.

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Witnesses.
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Inventor.
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UNITED STATES PATENT OFFICE.

DAVID LIPPY, OF MANSFIELD, OHIO, ASSIGNOR OF TWO-THIRDS TO THOMAS HUBER AND WILLIAM HUBER, OF SAME PLACE.

RAILROAD-CROSSING.

SPECIFICATION forming part of Letters Patent No. 273,112, dated February 27, 1883.

Application filed October 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, DAVID LIPPY, of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful
5 Improvements in Railroad-Crossings; 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 pertains to make and use the same.

10 My invention relates to an improvement in railroad-crossings, the object of the same being to provide simple and efficient means whereby any one of a series of tracks situated in the same horizontal plane can be made continuous
15 without the use of the ordinary frog; and with these ends in view my invention consists in certain details in construction and combinations of parts, as will be more fully described, and pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a plan view of my improvement, with a portion of one of the tracks cut away to show the operating mechanism. Fig. 2 is a vertical sectional view through the movable platform and
25 its supporting-base. Fig. 3 is a detached view of the movable table; and Fig. 4 is a view in side elevation, showing the manner of connecting the movable and rigid rails together.

A B represent two trackways running at
30 right or any other necessary angle to each other, and C a movable trackway situated at the point of crossing of the two tracks, and adapted by the mechanism to be hereinafter described to be turned so as to register with
35 either track and form a continuous way. This movable track is rigidly secured to the upper surface of the circular metallic platform D, which latter is centrally hollowed out, and is provided at its lower edge with the outwardly-
40 extending peripheral flange *a*. This platform is supported on the circular metallic base or ring E, which latter is rigidly secured in position to the ties, or any other suitable means, and said platform is provided centrally on its
45 inner surface with the downwardly-extending pivotal arm F, which latter is adapted to rest in a suitable socket, *b*, and form the axis of the platform. The platform D is placed in position on the ring E, with its pivotal arm F in
50 the socket *b*, and is held thereon against dis-

placement by the lock-plates H, which latter are rigidly secured in position alongside of the platform and extend over the outwardly-projecting flange *a* thereof. The platform D is provided on one side, immediately under the
55 trackway O, with a segment-gear, I, with which the rack J meshes. This segment-gear is sufficiently long to turn the table the necessary distance, and the rack-bar J is adapted to be moved longitudinally just the necessary dis-
60 tance to turn the movable track or rails from one trackway to the other, and hence when the bent operating-lever J' is lying away from the trackway B the track A is made continu-
65 ous, and when lying toward or near to the track B the said track B is made continuous. This rack-bar is adapted to move in suitable bearings, *e*, transversely across the trackway B, and is connected at its rear end to the op-
70 erating-rod K. This rod moves in the bearings *f*, and is connected by the link L to the operating-lever J'. This lever J' is bent as shown in the drawings, passes transversely under the trackway A, and is provided on its
75 outer end with the crank M, to which one end of the link N is pivotally secured. The opposite end of this link is connected to the finger
80 *g* of the upright signal-arm O. This signal-arm is provided at its upper end with an ordinary colored signal, P, which moves simul-
85 taneously with the movable trackway, and indicates to the engineer the position of the movable track.

Suppose, for the sake of illustration, that the trackway A is broken and the trackway B
85 unbroken; then the signal P will be presented full-face to the engineer approaching from either direction on the trackway A, and will be presented edgewise to one approaching the
90 crossing on the trackway B. Now, when the lever J' is turned toward the trackway B, the rack-bar is also moved toward the same trackway and turns the table D partly around until the movable track C registers with the track
95 B. During this latter operation the signal P has been also moved or turned so as to present a full face to an engineer approaching the crossing on the track B, and will be edgewise to the trackway A. The rails composing the
100 movable trackway are slightly longer than the

table and project therefrom at both ends. The opposite ends of these rails are each provided with a tongue, *h*, while the inner ends of all the rails composing the trackways A and B are each provided with a groove, *i*, in which the corresponding tongue of the movable rails enters. By this means a neat and uniform joint or connection between the rigid and movable ways is effected, and all jarring experienced while passing over the frogs now in use is obviated. The rack-bar and segment-gear are situated a distance above the ground, and, if necessary, can be housed in to protect them from the weather.

My invention is simple in construction, is durable and efficient in use, and can be manufactured and placed in position at a comparatively small cost.

It is evident that slight changes in the construction and relative arrangement of the operating-levers might be resorted to without departing from the spirit of my invention; and hence I would have it understood that I do not limit myself to the exact construction shown and described, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. The combination, with two or more trackways running toward each other at a right or any other angle, of a movable platform having rails secured thereto, which latter are adapted to register with either track and form a continuous way, a segment-gear secured to the platform, a rack-bar supported in guides adjacent to said segment-gear to engage the latter, and an operating-lever, substantially as set forth.

2. The combination, with two or more trackways running toward each other at a right or any other angle, of a movable platform situated at the point where the trackways meet, rails secured to the movable platform and adapted to register with either trackway, a segment-gear secured to the movable platform, a rack-bar engaging therewith and adapted to slide in guides, and a sliding rod connected to said rack-bar and supported in suitable guides

and connected to an operating-lever, substantially as set forth.

3. The combination, with a series of two or more trackways running toward each other at right or any other suitable angles, of a movable platform situated at the point where the tracks come together, rails rigidly secured on the upper face of the movable platform and adapted to register with either track and form a continuous way, a segment-gear secured to the movable platform, a rack meshing with said segment-gear, a signal secured to an upright arm, and levers and links for simultaneously moving said platform and signal, substantially as set forth.

4. The combination, with a series of trackways running toward each other at right or any other angles, the rails composing said ways being provided at their points of crossing with grooves, of a movable platform having two rails thereon the ends of which are provided with tongues adapted to register with the grooves, substantially as set forth.

5. The combination, with two or more trackways running toward each other at a right or any other angle, of a movable platform constructed as described, and provided with a depending arm, the lower end of which is adapted to rest in a socket and form the axis of the movable platform, a ring for supporting the platform, devices for locking the platform upon the ring, and means for turning the platform, substantially as described.

6. The combination, with two or more trackways running toward each other at right or any suitable angle, of a movable platform constructed as described, and provided with an outwardly-extending flange, lock plates for holding the platform in position, a ring for supporting the platform, a depending arm which forms the axis of the platform, and segment-gear and rack for turning the platform, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

DAVID LIPPY.

Witnesses:

M. W. MASON,

GEORGE W. STATLER.