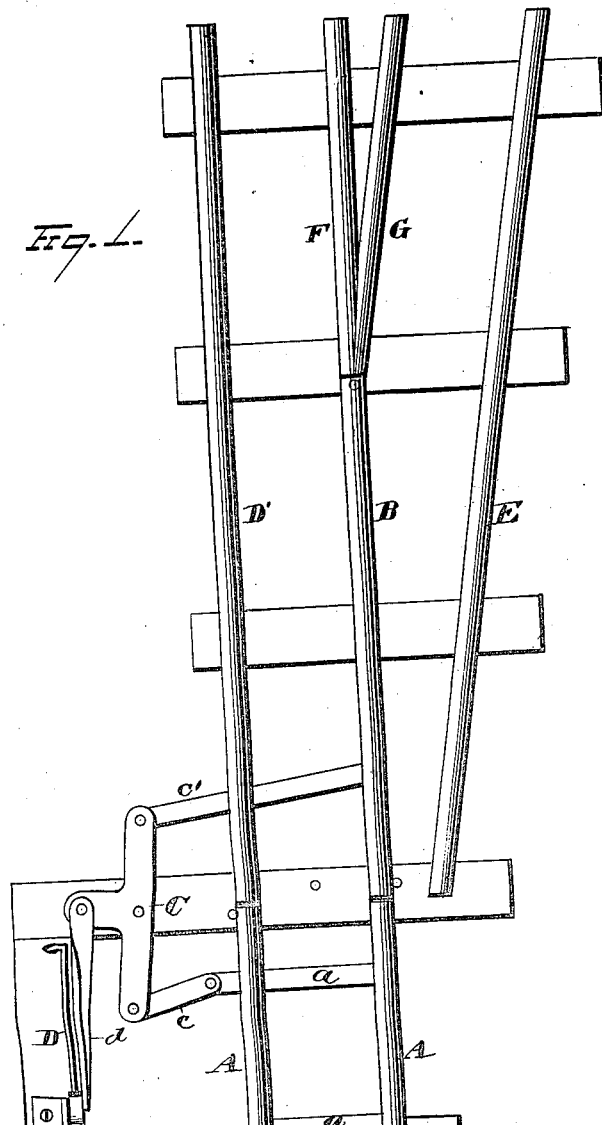


Railway-Switch.

No. 205,483.

Patented July 2, 1878.



UNITED STATES PATENT OFFICE.

LAMAR T. HAY, OF XENIA, OHIO.

IMPROVEMENT IN RAILWAY-SWITCHES.

Specification forming part of Letters Patent No. **205,483**, dated July 2, 1878; application filed December 11, 1877.

To all whom it may concern:

Be it known that I, LAMAR T. HAY, of Xenia, in the county of Greene and State of Ohio, have invented certain new and useful Improvements in Railway-Switches; 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 it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to certain improvements in railway-switches, and is designed to provide simple and efficient mechanism for simultaneously switching the movable section of the main line of rails and the inner rail of the adjacent section of the main line. The latter rail is pivoted to the track-bed at its end opposite to that of its connection with the movable section, the same as is respectively the case with said section. This movable main-line rail constitutes the inner siding-rail when it is switched so as to be brought in alignment with the siding-track; and the connection of the two lines of track, constructed as shown, is made or broken by a switch-lever connection and three-armed lever, engaging, by connecting-links, with the movable section and the movable rail.

My improvement consists in the parts and combination of parts that are hereinafter described and claimed.

In the drawings, Figure 1 represents the movable section in alignment with main-line rails. Fig. 2 shows the section in connecting line with the siding-track.

The movable section A of the main line of track may have its two rails secured at one end to the bed of the track, in any suitable way, to admit of the opposite or swinging ends of the said rails to move freely. In the drawings I show the said rail ends as being respectively pivoted to the bed, and this is my preferable way.

The two rails of the section are connected by metallic bars *a*, to the end of one of which nearest the switch-junction is pivoted the connecting-link *c*.

The inner rail B of the main track is adapted to have free sliding movement, the same as the movable section A, and it aligns with either of the two rails of the movable section,

as the case may be. The swinging or switch end of this movable rail B is actuated by the connecting-link *c'*, which latter, together with link *c*, are respectively engaged, by loose joint-connection, to the free opposite ends of the three-armed crank-lever C. This lever C is engaged by connection *d* with the switch-lever D, and is adapted to be operated thereby, so as to throw the movable section in or out of line with the main track, and simultaneously with such movement the movable rail B is moved in the opposite direction, so as to connect with the inner or outer rail of the movable section.

The construction and action of these connecting parts are such as to cause the free ends of the two rails of the movable section and that of the movable rail B to move a distance respectively equal to one-half the width of the track-bed; and the two positions of the movable section A and rail B are shown in the figures of the drawing.

The exterior rail D' of the main track, as well as the exterior rail E of the siding, are of the usual length, and fixed to their respective beds.

The movable section A and movable rail B are preferably about half the length of said long rails; but the exact length of any of the rails is immaterial to my invention.

The short inner rail F of the main track is fixed, as is also the short inner rail G of the siding, the two being parallel with the outer rails of their respective tracks.

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

In a railway-switch, the combination, with links *c c'*, respectively pivoted to bar *a*, connecting the switch-rails A and movable rail B, of the three-armed lever C, directly operating said links, and the switch-lever D, which latter engages, by connection *d*, with the actuating-arm of said lever C, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of December, 1877.

LAMAR T. HAY.

Witnesses:

A. T. LEE,
R. M. SMART.

UNITED STATES PATENT OFFICE.

GEBHARD HOFLE AND ADOLPH HOMEIER, OF BELLEVILLE, ILLINOIS.

IMPROVEMENT IN PHOTOGRAPHIC NEGATIVES.

Specification forming part of Letters Patent No. **205,484**, dated July 2, 1878; application filed April 9, 1878.

To all whom it may concern:

Be it known that we, GEBHARD HOFLE and ADOLPH HOMEIER, of Belleville, in the county of St. Clair and State of Illinois, have invented certain Improvements in Photographic Negatives, of which the following is a full, clear, and exact description.

This invention consists in the use of a ground-glass surface to receive the photograph negative picture.

In carrying out our invention, we use a ground-glass plate to receive the photographic chemicals used to form the picture. In use the glass plate can have one or both of its surfaces ground or roughened.

By the use of a ground-glass surface, owing to its semi-transparency, a softer, more brilliant, and cleaner appearance is imparted to a print made therefrom than can be obtained from an ordinary plain-glass negative.

The roughness of the surface of our im-

proved negative glass has the additional advantage that it facilitates the retouching of the negative, as the retouching material will readily adhere to its surface without any preliminary preparation. With the ordinary plain-glass negative it is required to roughen the surface where a retouching is required before the retouching material will adhere to the same.

We claim as new and desire to secure by Letters Patent—

A photographic negative consisting of a glass plate having a ground-glass surface, and provided with a sensitized coating for the reception of the photographic image, substantially as and for the purpose set forth.

GEBHARD HOFLE.

ADOLPH HOMEIER.

Witnesses:

MARTIN MEDART,

ROBERT BURNS.