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MOVABLE POINT CROSSING.

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UNITED STATES PATENT OFFICE.

WILLIAM M. HENDERSON, OF STEELTON, PENNSYLVANIA.

MOVABLE-POINT CROSSING.

No. 924,063.

Specification of Letters Patent.

Patented June 8, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM M. HENDERson, a citizen of the United States, and resident of Steelton, Dauphin county, State of 5 Pennsylvania, have invented certain new and useful Improvements in Movable-Point Crossings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of 10 which—

Figure 1 is a plan view of a movable point crossing showing my invention applied thereto. Fig. 2 is an enlarged plan view, showing one of the movable point-rails em-15 bodying my invention. Fig. 3 is a section on the line v-v, Fig. 2. Fig. 4 is a section on the line x-x, Fig. 2. Fig. 5 is a section on the line y-y, Fig. 2. Fig. 6 is a section on the line z-z, Fig. 2.

The object of this invention is to provide, in the point-rails of a movable point crossing, a hard-metal point which shall be reinforced throughout its entire length by the movable point-rail; thereby insuring greater 25 strength and durability of construction than is ordinarily secured in point-rails of this

general type.

The precise character of the invention will appear from the following descrip-30 tion:—In the drawings, 1 designates the main-track rails, bent to form the "knuckle", 2, and 3 indicates the movable point-rails. From the point to some distance in the rear thereof, the head portion 35 of the point-rail, 3, is removed, as seen in the drawings. A hard metal point-forming block or piece, 4, comprising a head portion, 4^a, and a web portion, 6, respectively, is inscrted, constituting an extension of the said 40 point-rail, 3. The upper or head portion of the hard metal or point-forming piece 4 abuts against the end of the head of the point rail; and the hard metal piece 4, adjacent the end of the head of the point rail, 45 is made wider than the head of the point rail, and is extended toward the main rail and is adapted to engage the head thereof when the point-rail is moved toward the main rail. Said hard metal piece also ex-⁵⁰ tends rearwardly between the point-rail and the main rail toward the heel of the pointrail, 3, forming an extension, 5, the top of which is flush with or in the same plane as the top of the point-rail, but having its rear-⁵⁵ ward end downwardly beveled, at 7, as seen in Fig. 2, to form a pick-up for the false

flanges of guttered wheels. The web portion, 6, of the hard-metal block, 4, preferably extends beyond the end of the said extension, 5, and beneath the head of the 60 point-rail, 3, as seen in Fig. 6. It will be observed that the point-forming block, 4, is reinforced, throughout its entire length, by the web, 8, of the point rail 3, upon which web and the foot-flange, 10, the said 65 wear-block is supported, being firmly secured to said web, at suitable intervals, by means of bolts, 9. By making the web, 8, of the point-rail, 3, continuous throughout the entire length of the movable point, a 70 strong reinforcement and support is secured for the hard metal block, and the point of the rail, upon which the greatest amount of wear and strain come, is of much greater resistance and durability than would be the 75 case were no such reinforcing and supporting means present.

Having thus described my invention, I claim as new and desire to secure by Let-

ters Patent:—

1. In a movable point crossing, the combination with a main rail of a movable pointrail having a portion of its head cut away, a hard metal point-forming piece abutting against the end of the head of the point-rail 85 and having a tread portion wider than the head of the point-rail and extended toward the main rail, and means for securing the point-forming piece and the point-rail together.

2. In a movable point crossing, the combination with a main rail of a movable pointrail having a portion of its head cut away, a hard metal point-forming piece abutting against the end of the head of the point-rail 95 and having a portion wider than the head of the point-rail and extended toward the main rail, said point-forming piece having also a rearward extension flush with the top of the point-rail and located between the point- 100 rail and the main rail, and means for securing the point-forming piece and the pointrail together.

3. In a movable point crossing, the combination with a main rail of a movable point- 105 rail having a portion of its head cut away, a hard metal point-forming piece abutting against the end of the head of the point-rail and having a portion wider than the head of the point-rail and extended toward the 110 main rail, said point-forming piece having also a rearward extension flush with the top

of the point-rail and located between the point-rail and the main rail, and having its rearward end beveled downwardly, and means for securing the point-forming piece

5 and the point-rail together.

4. In a movable point crossing, the combination with a main rail of a movable pointrail having a portion of its head cut away, leaving its base and web extending beyond its head; a hard metal point-forming piece abutting against the end of the head of the point-rail and having a portion resting upon the web of the point-rail and having a tread portion wider than the head of the point-rail and extended toward the main rail; and means for securing the point-forming piece and the point-rail together.

5. In a movable point crossing, the combination with a main rail of a movable point-rail having a portion of its head cut away, leaving its base and web extending beyond its head; a hard metal point-forming piece having a web engaging the side of the web of the point-rail toward the main rail, and a head abutting against the head of the point-rail and having a tread portion wider

than the head of the point-rail and extended toward the main rail; and means for securing the point-forming piece and the point-rail together.

6. In a movable point crossing, the combination with a main rail of a movable pointrail having a portion of its head cut away, leaving its base and web extending beyond its head; a hard metal point-forming piece 35 having a web engaging the side of the web of the point-rail toward the main rail, and a head abutting against the head of the pointrail and having a portion wider than the head of the point-rail and extended toward 40 the main rail; and a portion extended rearwardly of the end of the head of the pointrail and located between the point-rail and the main rail, and means for securing the point-forming piece and the point-rail to- 45 gether.

In testimony whereof, I have hereunto affixed my signature.

WILLIAM M. HENDERSON.

Witnesses:

Bent L. Weaver, Wm. R. Miller.