G. M. ERVIN.
SPLIT SWITCH.
PPLICATION FILED APR. 22, 19

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## UNITED STATES PATENT OFFICE.

GEORGE M. ERVIN, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE LORAIN STEEL COMPANY, A CORPORATION OF PENNSYLVANIA.

## SPLIT SWITCH.

No. 869,298.

Specification of Letters Patent.

Patented Oct. 29, 1907.

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To all whom it may concern:

Be it known that I, George M. Ervin, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Improvement in Split Switches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has relation to split switches of that type in which the point rails are provided with renew-10 able point portions of more durable material.

The object of my invention is to provide a switch of this type in which the point portions are rigidly and securely fastened to the point rails in such a manner that they can be readily removed and replaced.

With this object in view, my invention consists in the novel construction, arrangement and combination of parts, all substantially as hereinafter described and pointed out in the appended claims, reference being had to the accompanying drawing, in which

Figure 1 is a plan view of a switch embodying my invention; Fig. 2 a detail plan view of a portion of one of the point rails; Figs. 3 and 4, sections on the lines 3—3, and 4—4 respectively of Fig. 1; and Fig. 5, a view similar to Fig. 4, but showing a slight modification.

The letters A. A. designate the stock rails, B, B, the point rails having the removable points C, C, D, the tie rods which connect the point rails, and E, the usual slide plates on which the point rails seat and move.

The removable points C preferably extend back to a point slightly beyond where their heads come to the full rail width, and are then bifurcated to form seats for the ends of the rails B, B, the arms c of those bifurcations embracing the webs of the said rails B in the manner shown in the drawing, and secured by the rivets d, or by bolts. The points C are preferably castings of a very hard and durable steel, such as manganese steel,

and are made of a section (see Fig. 3) such that they fit under the heads of the adjacent stock rails A. This gives them a rigid reinforced section which prevents the points from breaking down, and one which is, independent of the character of steel used, much stiffer than the usual point rail which is formed by planing a **T**-rail. To still further stiffen the joint between the points C, and the rails B, one of the arms c may be formed with a base portion c' which extends under the **45** base of the rail B, as shown in Fig. 5.

In Fig. 2 I have shown the joint at h, between the head portions of the point C and rail B as formed obliquely, in order that the car wheels may pass more gradually from one surface to the other.

The points C may be removed by removing the bolts or rivets d, and a new point can be quickly applied.

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

1. In a split-switch, a point rail proper which terminates back of the point of the switch, and a separate point of harder material removably secured to the said point rail, said point being of the full depth of the rail and having a head which is of the full width of the rail head for a portion of its length and is of decreasing width during 60 the remainder of its length, said point also having bifurcated arms which embrace the point rail and fit its head and base; substantially as described.

2. In a split-switch, a removable switch point having a bifurcated portion to embrace and seat the end portion of 65 the point-rail, one arm of the bifurcation having a base portion arranged to extend underneath the base of the point rail.

In testimony whereof, I have affixed my signature in presence of two witnesses.

GEORGE M. ERVIN.

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Witnesses:

LORETTO M. O'CONNELL, H. W. SMITH.