

UNITED STATES PATENT OFFICE.

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ELEVATED-TRACK SWITCH.

SPECIFICATION forming part of Letters Patent No. 731,440, dated June 23, 1903.

Application filed April 9, 1903. Serial No. 151,711. (No model.)

To all whom it may concern:

Be it known that I, HERBERT H. DREW, a citizen of the United States, and a resident of Waterloo, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Elevated-Track Switches; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide simple economical drop-switches for the tracks of elevated carriers; and it consists in certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a plan view of a drop-switch in accordance with my invention connecting intersecting overhead tracks for an elevated carrier; Fig. 2, a side elevation of the same, partly in section, this view being indicated by lines 2 2 in the first figure; Figs. 3 and 4, perspective views of fragments of the switch, and Fig. 5 a sectional view indicated by line 5 5 in said first figure.

Referring by letter to the drawings, A indicates one and B another of intersecting wire tracks for the traveler of an elevated carrier such as the one set forth in my Patent No. 608,656, of August 9, 1898. The track-wires extend at right angles to each other and at their intersection the track-wire A is at a sufficient elevation above the one B to obtain clearance for traveler-wheels C when the hereinafter-described switch is swung up.

The switch comprises two angle-iron plates D E, one straight and the other curved. The horizontal flanges of the plates are lapped and bolted together, the curved plate being uppermost. One end of the straight plate D is secured by a staple *b* in pivotal connection with the track-wire A, and the other end of this plate is provided with prongs *c*, arranged to straddle the track-wire B when the switch is swung down to rest on both of said wires. The horizontal flange of the curved plate E is shorter than the vertical flange of same, and adjacent to one of its ends said horizontal flange is partly cut away on transverse and longitudinal lines to obtain clearance for an inclined stretch of the track-wire

A, with which it has notch fit, the metal not cut away being recurved under the plate toward the center to form a guard *d* parallel to the adjacent lower horizontal stretch of said wire. The inclined stretch of the track-wire A fits notches in upturned extremities of an end piece *e* of the horizontal flange of the plate E next the gap that results from the aforesaid cutting away and recurving of some of the metal, and said plate turns freely on said wire when the switch is swung up. The other end of the horizontal flange of plate E is partly cut away, and the remaining metal is bent down at a right angle to form a guard *f*, that comes outside the track-wire B when the switch is swung down. At this end of the plate E the vertical flange is partly inclined and provided with an upper lateral hook *g*, that catches on the track-wire B when the switch is down. Lateral blocks *h i* are fast to the outside of the vertical flange of the plate E, adjacent to the ends of same, these blocks being flush with the upper edge of said flange and beveled at their extremities.

The switch being swung down, the wheels of a traveler will pass from either track-wire onto the edge of the vertical flange of the plate E and pass from the same onto the other track-wire. In leaving the switch the traveler-wheels are guided by one or the other of the blocks *h i*, so as to insure of said wheels catching properly on the track-wire to which they have been switched. Any suitable means may be employed to hold the switch when the same is swung up out of use.

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

1. The combination with elevated-carrier tracks at a right angle to each other, of a drop-switch comprising united straight and curved angle-iron plates pivotally connected to one of the tracks and provided with means for catching the other of said tracks when swung down into working position.

2. The combination with elevated-carrier tracks at a right angle to each other of a drop-switch comprising united straight and curved plates pivotally connected to one of the tracks and provided with means for catching the other of said tracks when swung down into

working position, together with beveled lateral guide-blocks in connection with the vertical flange of the curved plate.

3. The combination with elevated-track
5 wires at a right angle to each other, of a drop-switch comprising a straight angle-iron plate having one end thereof pivotally connected by a staple to one of the wires and its other
10 end provided with prongs that straddle the other of said wires when the switch is in working position, a curved angle-iron plate having its horizontal flange bolted on the corresponding flange of the straight plate, said
15 flange of the curved plate being cut, bent and notched at one end to fit and turn upon an inclined portion of the wire to which said

straight plate is pivotally connected, its other end being cut and bent to straddle the other wire, an upper wire-engaging hook extending laterally from the outer side of the vertical
20 flange of said curved plate at that end of same farthest from the pivot-wire, and beveled lateral guide-blocks on said vertical flange of the curved plate.

In testimony that I claim the foregoing I
25 have hereunto set my hand, at Waterloo, in the county of Jefferson and State of Wisconsin, in the presence of two witnesses.

HERBERT H. DREW.

Witnesses:

L. H. GINGLES,

T. A. WILLIAMS.