

No. 817,365.

PATENTED APR. 10, 1906.

W. E. DAVIS & W. W. NORMAN.

SWITCH POINT CONNECTOR.

APPLICATION FILED JAN. 2, 1906.

Fig. 1.

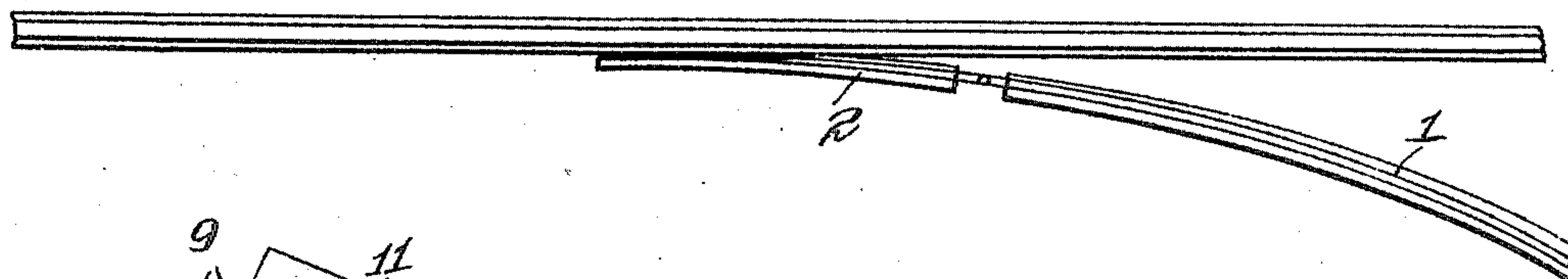


Fig. 2.

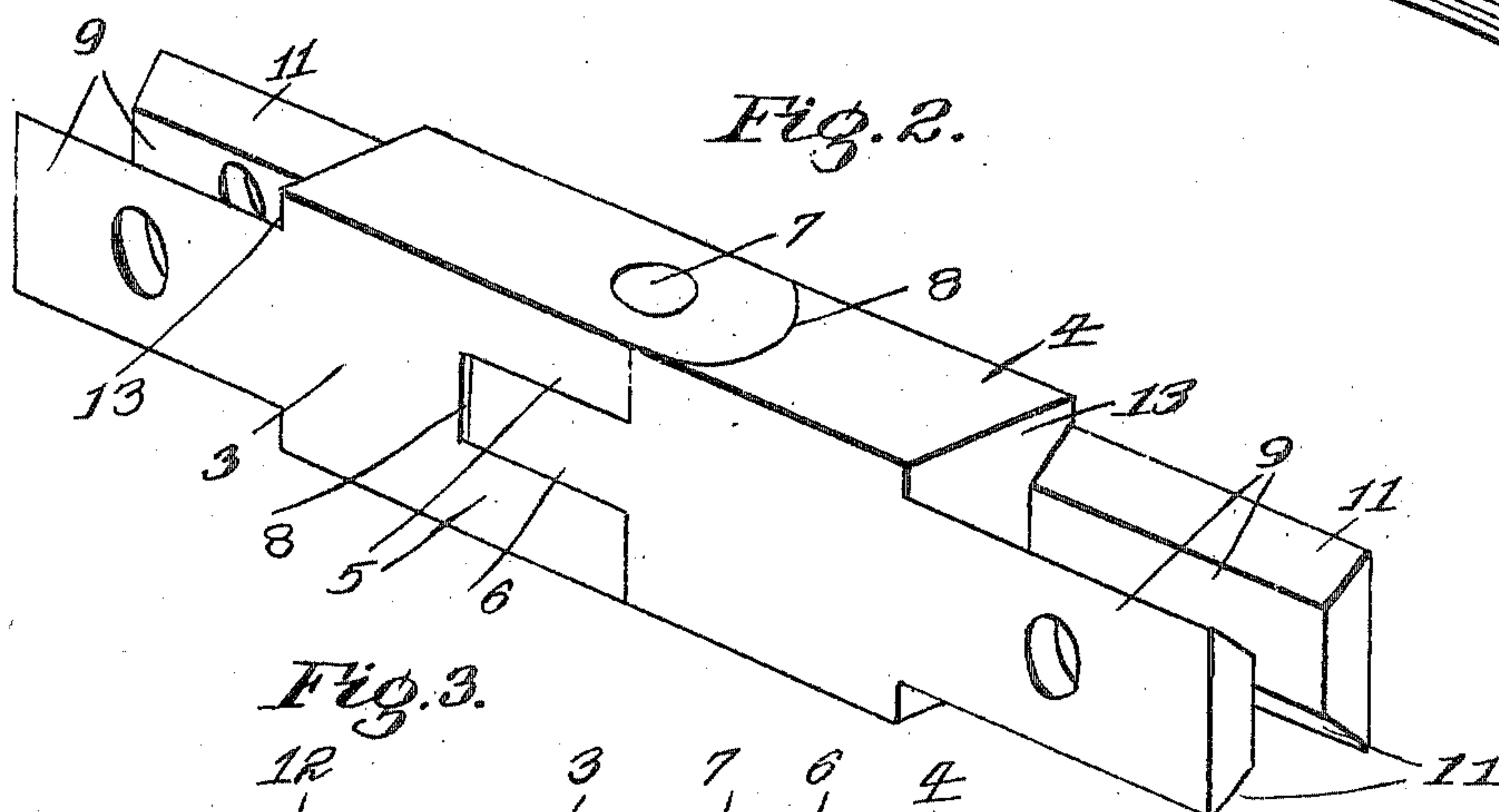


Fig. 3.

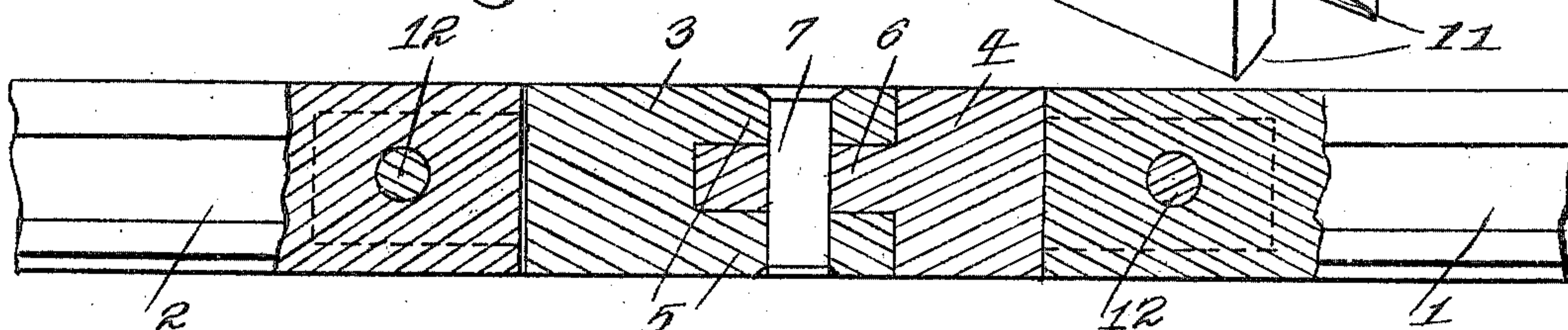
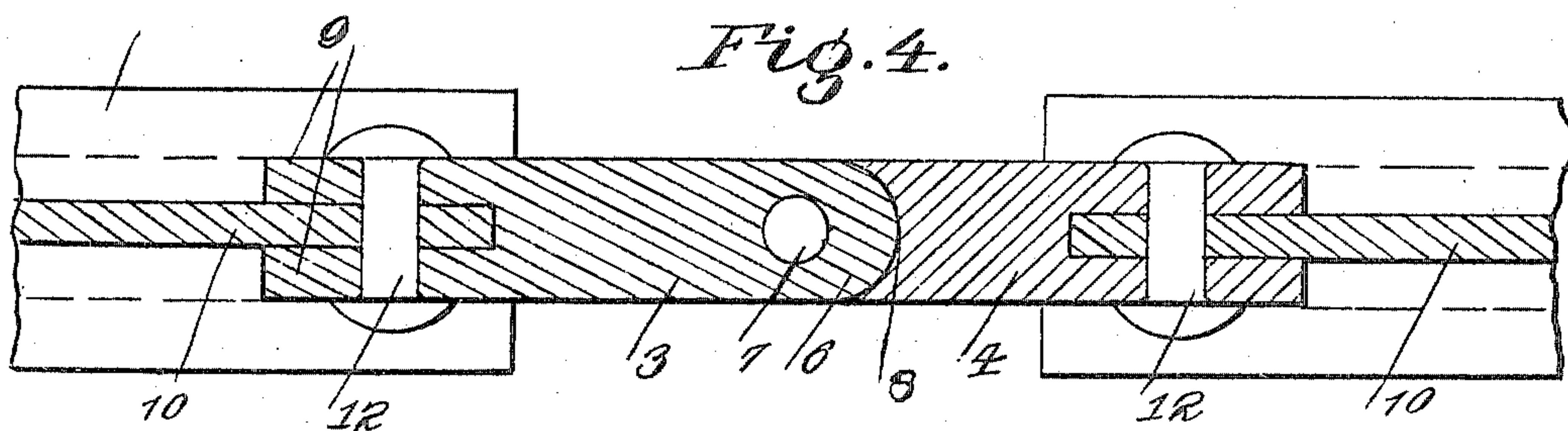


Fig. 4.



W.E. Davis. Inventors
W.W. Norman

Witnesses

W. A. Hoodson

By

W. A. Hoodson, Attorney

UNITED STATES PATENT OFFICE.

WILLIE E. DAVIS AND WILLIAM W. NORMAN, OF WYNDAL, WEST VIRGINIA.

SWITCH-POINT CONNECTOR.

No. 817,365.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed January 2, 1906. Serial No. 294,195.

To all whom it may concern:

Be it known that we, WILLIE E. DAVIS and WILLIAM W. NORMAN, citizens of the United States, residing at Wyndal, in the county of Fayette and State of West Virginia, have invented certain new and useful Improvements in Switch-Point Connectors, of which the following is a specification.

Our invention relates to improvements in that class of railway-switches in which a shifting switch point or tongue is used for changing the course of a line or track into a siding thereof, or vice versa, the switch-point being hinged to the lead-rail at one end of the former. By "lead-rail" we mean the rail to which the switch-point is ordinarily connected, whether it be one of the siding-rails or one of the main rails.

The object of our invention is to provide in switch mechanism of the character above set forth an improved connection between the shifting switch-point and the rail to which it is attached, the invention being attached to either ordinary railway service or mining service or the like.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 illustrates a plan view of a portion of a main track and siding provided with our improved construction of shifting switch-points. Fig. 2 is a detail perspective view, on an enlarged scale, showing a portion only of a switch-point, the rail to which it is attached, and our improved construction of connection between the switch-point and the rail. Fig. 3 is a vertical longitudinal section through the switch-point, rail, and connection. Fig. 4 is a horizontal longitudinal section of the same.

Referring to the drawings, the numeral 1 designates the lead-rail, which may be either a main-line rail or siding-rail, and 2 designates the switch-point connected thereto by means of our invention.

Our improved means for connecting the switch-point 2 to the lead-rail 1 comprises two hinged members 3 and 4, which are substantially similar in construction, except that the member 3 is bifurcated horizontally to provide two spaced-apart cheeks 5 and the

member 4 is provided with a lip 6, inserted between the said cheeks 5, both the latter and the lip being provided with vertical openings, through which a pintle 7 extends, so as to hinge the two members together to swing in a horizontal plane. The hinge, as will be seen, is in the nature of a knuckle-joint, and the meeting end edges of the cheeks 5 and lips 6 are curved in a horizontal plane, as are the adjacent edges of the adjoining parts, as indicated at 8. Each of the members 3 and 4 is provided on its outer end with two longitudinally-extending side straps 9, spaced from each other, so as to receive between them the web 10 of the switch-point and rail, and each of the said straps is beveled, as shown at 11, on the inner side of its upper and lower edges to fit snugly underneath and upon the head and base flanges, respectively, of the switch-point and rail. The straps 9 are securely fastened to their respective parts by one or more bolts extending laterally therethrough and through the webs of the switch-point and rail, as indicated at 12. The side straps 9 are of less height than the remaining solid portions of the members 3 and 4, so as to form shoulders 13 on the said members, which abut securely against the ends of the switch-point and rail to which they are securely attached, and preferably have their upper surfaces approximately flush with the surface of the head of the rails and the lower surfaces of the base portions thereof.

From the foregoing description, in connection with the accompanying drawings, it will be seen that we have provided a connection between the switch-point and the lead-rail which, while it permits the shifting switch-point to turn about the pintle 7 as a pivot, yet supports the switch-point firmly against torsional strain and provides two solid portions, forming a tread for the car-wheels as they pass through the switch. It is to be understood that the pintle 7 is preferably riveted at both ends, so as to secure it firmly in place.

Having thus described the invention, what is claimed as new is—

1. Means for connecting a switch-point to its lead-rail, comprising two hinged members each of which is provided with a solid portion and at its outer end with two longitudinally-extending spaced-apart side straps beveled

at its upper and lower edges and designed to embrace the web of the rail and switch-point and snugly fitting under and upon the head and base flanges respectively of the same, and means for securing said straps to the said switch-point and rail.

2. Means for connecting a switch-point to its lead-rail; comprising two hinged members each of which is provided with longitudinally-extending straps designed to embrace the web of the rail and switch-point and means for securing said straps to the same.

3. Means for connecting a switch to its lead-rail, comprising two members provided with solid portions hinged together by a knuckle-joint to swing in a longitudinal plane and each provided at its ends with spaced-apart side straps designed to embrace the rail-webs, and bolts extending through said straps and webs, as and for the purpose set forth.

4. Means for connecting a switch-point to its lead-rail, comprising two members pro-

vided with solid portions hinged together by a knuckle-joint and provided with correspondingly-curved meeting edges and provided at their ends with spaced-apart longitudinally-extending side straps beveled at their upper and lower edges and designed to embrace the webs of the switch-point and rail and fit snugly underneath and above the head and base flanges respectively of the same, and bolts passing through said straps and webs to secure the same together, the solid portions of said members having their upper surfaces flush with the treads of the switch-point and rail, as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIE E. DAVIS. [L. s.]
WILLIAM W. NORMAN. [L. s.]

Witnesses:

W. H. HILL,
ROBERT H. MILLER.]