

J. D. SPRATT.

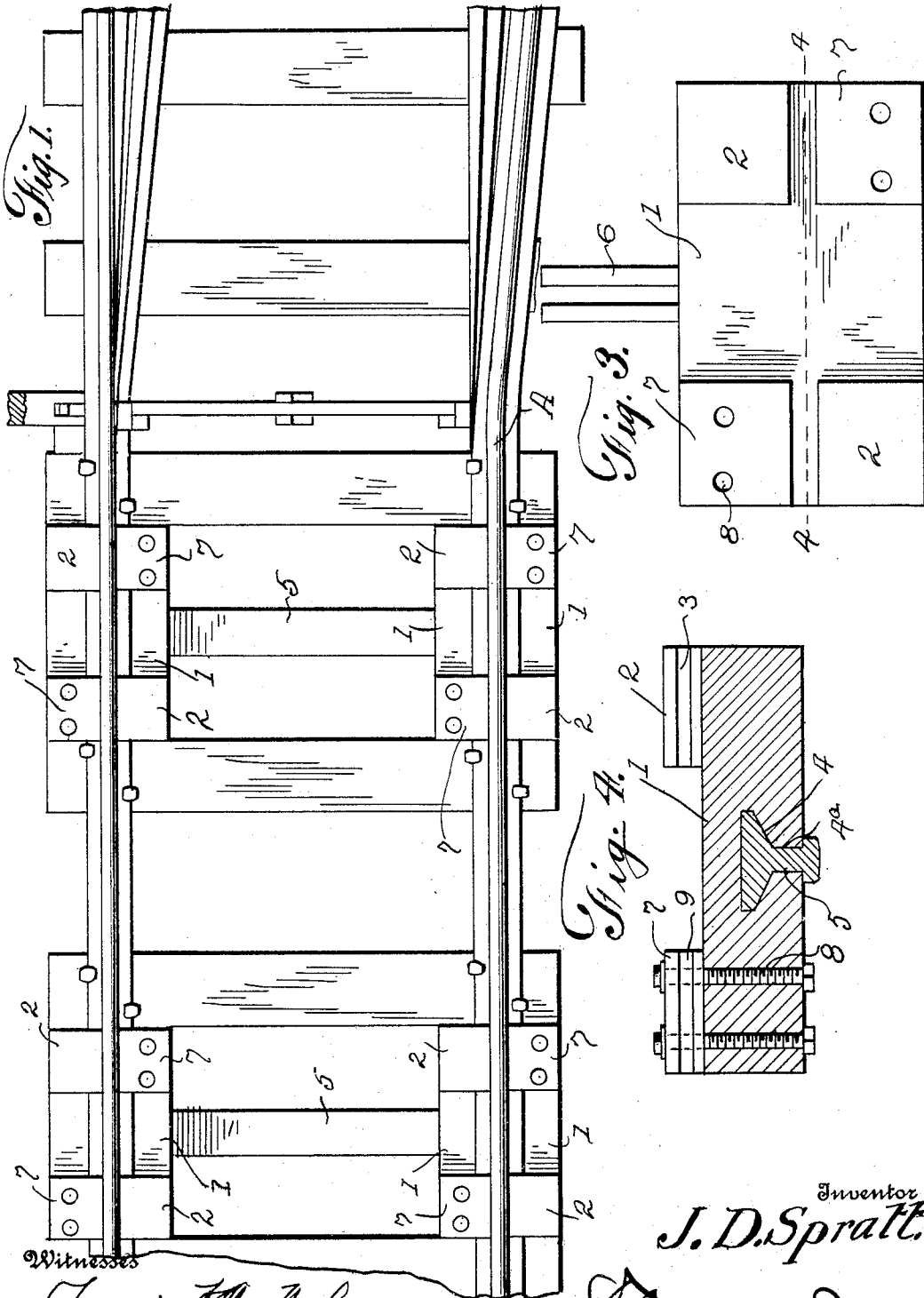
RAIL BRACE.

APPLICATION FILED JULY 16, 1912.

Patented Sept. 24, 1912.

2 SHEETS—SHEET 1.

1,039,609.



Witnesses

Francis MacFarlane,
W. M. Cullinan.

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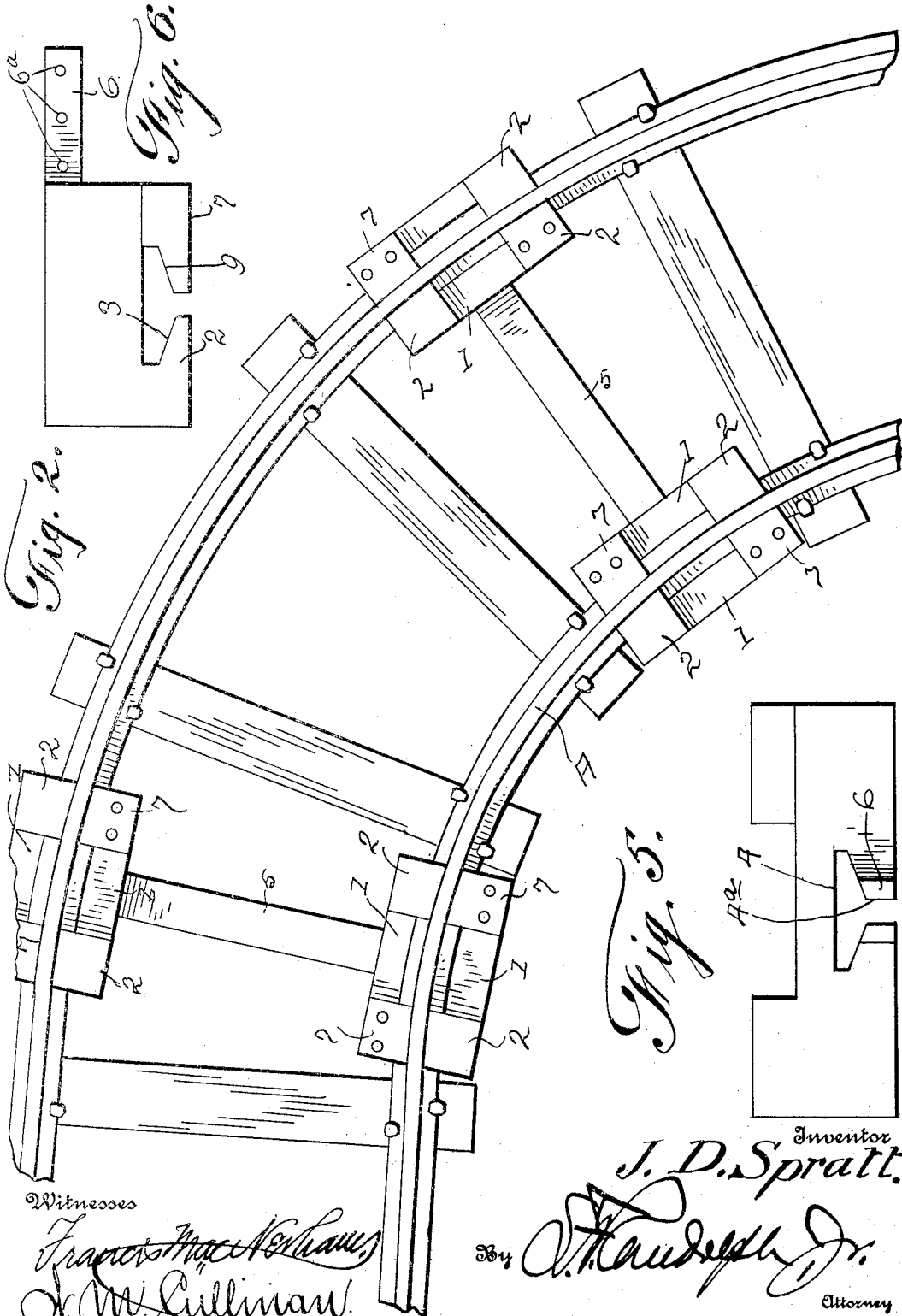
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UNITED STATES PATENT OFFICE.

JOSEPH D. SPRATT, OF WOLF CREEK, TENNESSEE.

RAIL-BRACE.

1,039,609.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH D. SPRATT, a citizen of the United States, residing at Wolf Creek, in the county of Cocke and State of Tennessee, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification.

The invention relates to devices to be secured to the rails of railway tracks adjacent to switches and on curves to hold the rails in their proper relative position to prevent them from spreading because of the jarring exerted thereon by trains passing thereover, and has for its object the provision of blocks having cleats formed integral therewith and adapted to engage the base flanges of the rail and other cleats removably secured to said blocks adapted to cooperate with the integral cleats aforesaid to securely clamp the rails, said blocks being connected by means of a cross bar formed preferably of discarded rails.

My invention will be described in detail hereinafter and illustrated in the accompanying drawings, in which,

Figure 1 is a plan view of a fragment of a railway track showing the application of my invention to the track adjacent to a switch; Fig. 2, a similar view of a curved track showing the braces in position thereon; Fig. 3, a top plan view of one of the blocks showing the removable cleats in position thereon; Fig. 4, a longitudinal sectional view of the block on the plane indicated by the line 4—4 of Fig. 3; Fig. 5, an end view of the block; and Fig. 6, a side elevation thereof in an inverted position.

In the drawings similar reference characters will be used to designate corresponding parts throughout the several views.

As heretofore stated, my improved rail brace is adapted to be secured to the rails to prevent them from spreading and is particularly applicable to the road bed adjacent to a switch and in curves as clearly shown in Figs. 1 and 2.

In Figs. 1 and 2, the rails are indicated at A, and my improved brace is shown to consist of blocks 1 formed preferably of cast steel or the like, said blocks being substantially rectangular in plan and having integral cleats formed on opposite corners thereof designated 2, said cleats having their inner surfaces provided with portions designated 3 that are adapted to engage one side

of the base flange of the rail A. Each of the blocks 1 is also formed with a T-shaped groove 4 intersecting its under side and adapted to receive a bar of steel indicated at 5, said bar being preferably a discarded rail with which railroads are abundantly supplied and which are ordinarily waste material. The inner edges of the blocks 1 are formed with parallel bars 6 extended from the block opposite the parallel sides 4^a of the groove 4 that engage the web of the rail 5 and are adapted to be secured thereto by means of bolts or other suitable fastenings secured through holes 6^a formed therein and in the web of the rail 5.

7 indicates cleats adapted to be secured to the upper side of a block in the corners not occupied by the integral cleats 2 and to be secured thereto by means of bolts 8 or other suitable fastenings, said cleats being also formed with undercut portions 9 that are adapted to engage the base flanges of the rail A.

In applying my improved rail brace to the rails, the blocks 1 are mounted on the rail base when the cleats 7 are unattached, and the cleats 7 are then secured in position as shown in Figs. 1 and 2. The bar of metal 5 is then inserted through the grooves 4 of the two blocks and said bar secured to the blocks by means of bolts or suitable fastenings inserted through the hole 6^a in the bars 6 and alined holes formed in said bar 5.

When my improved brace is in position, it will be apparent that all tendency of the rails to spread caused by the pressure of the train thereon is avoided and the track will be kept in a safe condition at all times.

Having thus described the invention what I claim is:—

1. In a rail brace, blocks having integral cleats mounted thereon on opposite corners thereof and provided with undercut portions adapted to engage the base flanges of a rail, other cleats removably secured to said blocks, and means to connect said blocks.

2. In a rail brace, blocks having integral cleats formed on opposite corners thereof and provided with undercut portions adapted to engage the base flanges of the rail, other cleats removably secured to said block and also provided with undercut portions adapted to engage the base flanges of the rail, and a bar of rigid material connecting said blocks and secured thereto.

3. A rail brace comprising blocks having

integral cleats mounted on opposite corners thereof and provided with undercut portions adapted to engage the base flanges of a rail, other cleats removably secured to the
5 other corners of said blocks, said blocks being provided with T-shaped grooves intersecting their under surfaces, bars extending from said blocks and opposite the parallel sides of said grooves, and a T-shaped bar

engaging the T-shaped grooves in the blocks 10 and secured to the bars on the blocks.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH D. SPRATT.

Witnesses:

WERNIE EVANS,
O. R. TREADWAY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
