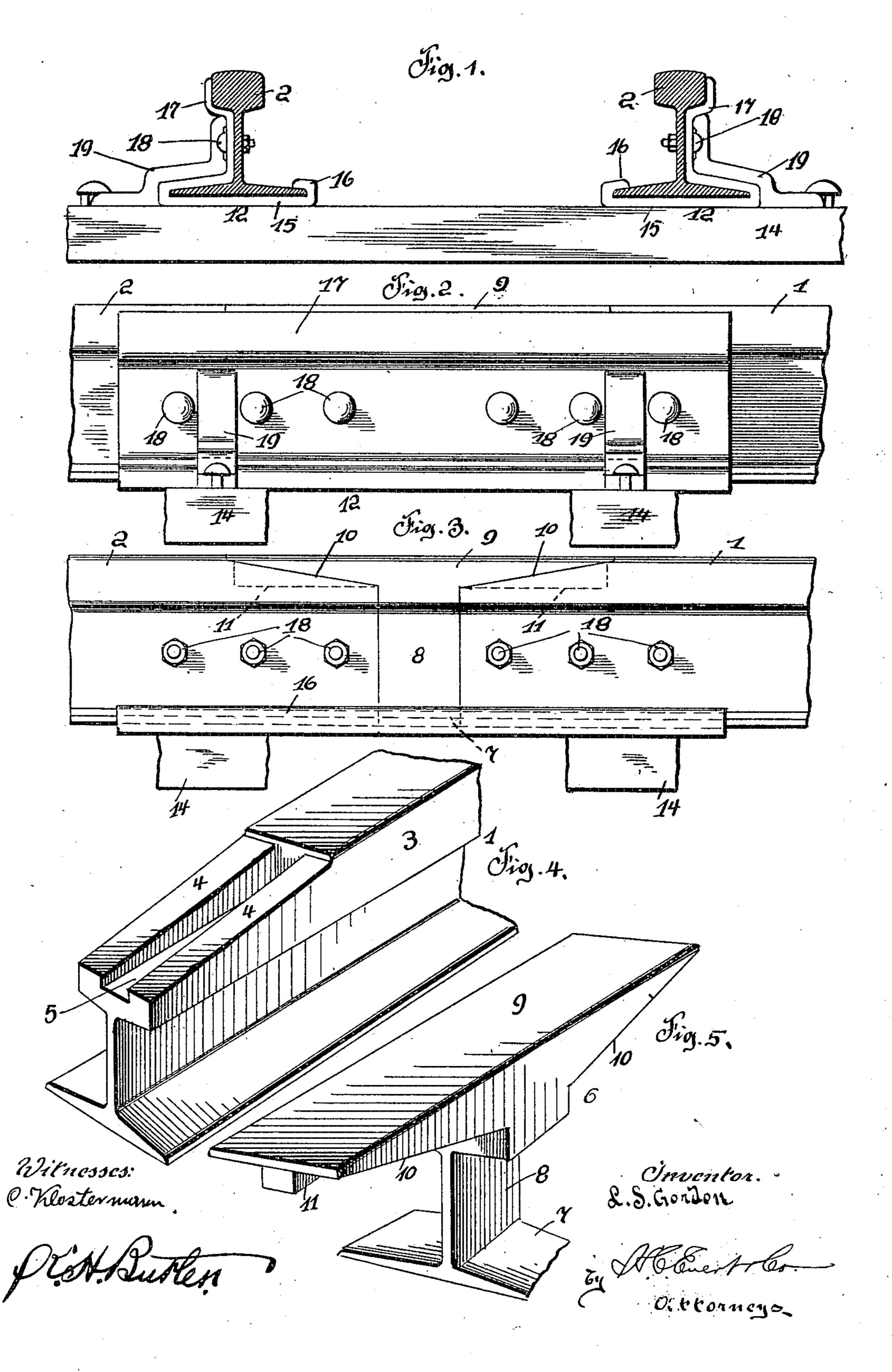
L. S. GORDON.

RAIL JOINT.

APPLICATION FILED JUNE 23, 1908.



UNITED STATES PATENT OFFICE.

LEWIS S. GORDON, OF OIL CITY, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD TO JAMES B. McMULLEN, OF OIL CITY, PENNSYLVANIA.

RAIL-JOINT.

No. 837,268.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed June 23, 1906. Serial No. 323,146.

To all whom it may concern:

citizen of the United States of America, residing at Oil City, in the county of Venango 5 and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to rail-joints particularly designed for steam-railroads wherein heavy rails are employed to form a track

for rolling-stock.

The invention has for its object the pro-15 vision of positive and reliable means for effectually joining together the confronting ends of two sections of rails, whereby lateral or vertical displacement of one rail with relation to its adjoining rail is entirely elimi-20 nated.

Another object of this invention is to provide a simple and inexpensive rail-joint requiring little, if any, skill in assembling and disconnecting the parts thereof.

A further object of the invention is to pro-

vide novel means for preventing the rails of a track from spreading.

A still further object of this invention is to provide a rail-joint having practically a con-

30 tinuous tread for the rolling-stock.

With these and other objects in view, which will more readily appear as the invention is better understood, the invention consists in the novel construction, combination, 35 and arrangement of parts to be presently described, illustrated, and specifically pointed

out in the appended claims.

Referring to the drawings forming part of this specification, Figure 1 is a cross-sectional 40 view of a track, illustrating an end view of two of my improved rail-joints. Fig. 2 is a side elevation of a rail-joint, illustrating the outer side of the joint. Fig. 3 is a similar view of the inner side of the joint. Fig. 4 is 45 a perspective view of the end of one of the rail-sections, and Fig. 5 is a similar view of an intermediate tread-block.

The rails 1 and 2 which are to be joined have their heads 3 milled to form an inclined 50 tread-seat 4, having a longitudinally-dis-

posed groove 5 formed therein.

In connection with the milled ends of the rails I use an intermediate tread-block 6, said block consisting of a base 7, a web 8, and 1

Be it known that I, Lewis S. Gordon, a underneath end faces beveled, as at 10, to engage the seats 4 of the rails 1 and 2. Each beveled face of tread-block 6 is provided with a depending longitudinally - disposed web or flange 11, adapted to fit into the 60 grooves 5 of the rails 1 and 2. The webs or flanges 11 assist in maintaining the rails 1 and 2 in longitudinal alinement and prevent the tread-block from being laterally displaced when rolling-stock is passing over the same. 65

To retain the rails together and in engagement with the tread-block, I use a chair 12 of sufficient length to rest upon the ties or sleepers 14. The chair comprises a base 15, the edge of which is bent to embrace the base- 70 flanges of rails, as at 16, while the opposite edge of the base carries a fish-bar 17, which embraces the rails and extends upwardly alongside of the heads of said rails and tread portion 9 of the block 6. The fish-bar 17 is 75 secured to the rails 1 and 2 by a plurality of

nuts and bolts 18.

By referring to Fig. 1 of the drawings it will be observed that when my improved joints are used in connection with a track the 80 fish-bars 17 are arranged upon the outer sides of the track to brace and strengthen the rails and the intermediate tread-blocks. To further assist in this respect, I employ railbraces 19, which are spiked to the ties 14 and 85 are adapted to brace the fish-bar 17 and prevent the rails of the track from spreading.

In using an intermediate tread-block and bracing said block at its base, side, and top I eliminate the jar and noise of rolling-stock 90 when passing over the same and reduce the

expense of track maintenance.

I do not care to confine myself to the size, shape, or minor details of construction, as such changes as are permissible by the ap- 95 pended claims may be resorted to without departing from the spirit and scope of the invention.

What I claim, and desire to secure by Letters Patent, is—

1. In a rail-joint, the combination with rails having their heads cut away and grooved to form inclined tread-seats, of an intermediate tread-block mounted between the ends of said rails, and having a tread portion adapted 105 to bear upon said seats, a chair embracing the ends of said rails, and said block, and having a fish-bar extending upward alongside of the heads of said rails, and tread portion of said block, means to secure said rails in said chair, and means in combination with ties for bracing said chair, substantially as described.

2. In a rail-joint, the combination with adjoining rails having their ends milled to form inclined seats having grooves formed therein, of a tread-block interposed between the ends of said rails, a tread portion carried by said block and bearing upon said seats,

depending webs carried by said portion and engaging in the grooves of said seats, a chair embracing said rails and said block, means to secure said rail and said block in said chair, 15 substantially as described.

In testimony whereof I affix my signature

in the presence of two witnesses.

LEWIS S. GORDON.

Witnesses:

JAMES B. McMullen, Wm. H. Weigle.