A. MUNCHAUSEN.

RAIL JOINT.

APPLICATION FILED MAR. 13, 1911.

997,932. Patented July 11, 1911.

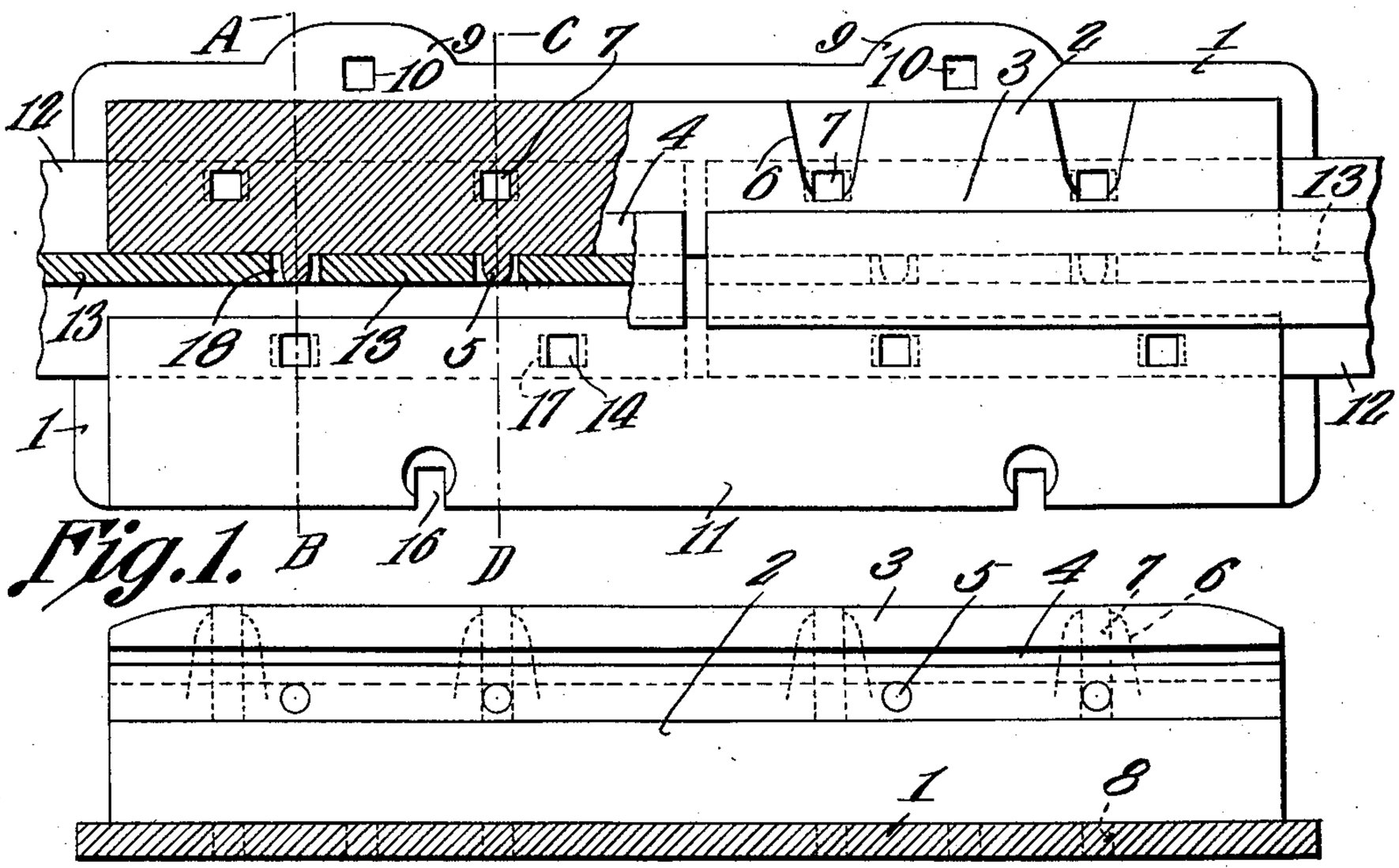

Fig. 1.

Fig. 2.

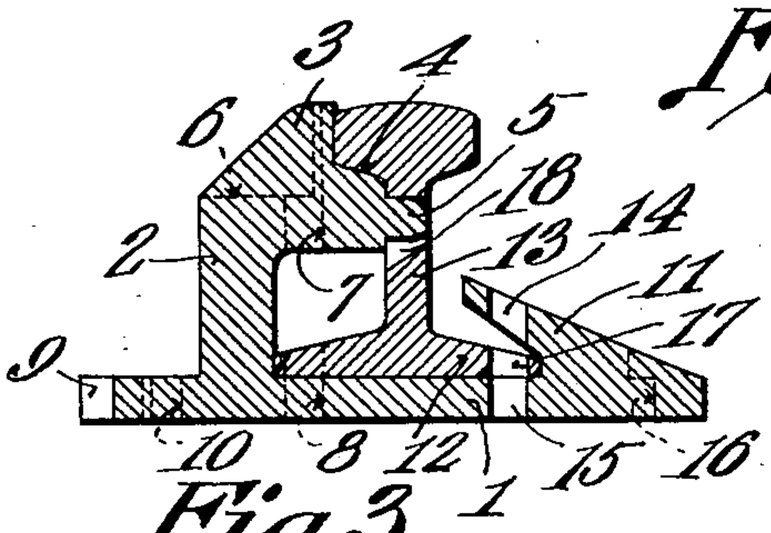

Fig. 3.

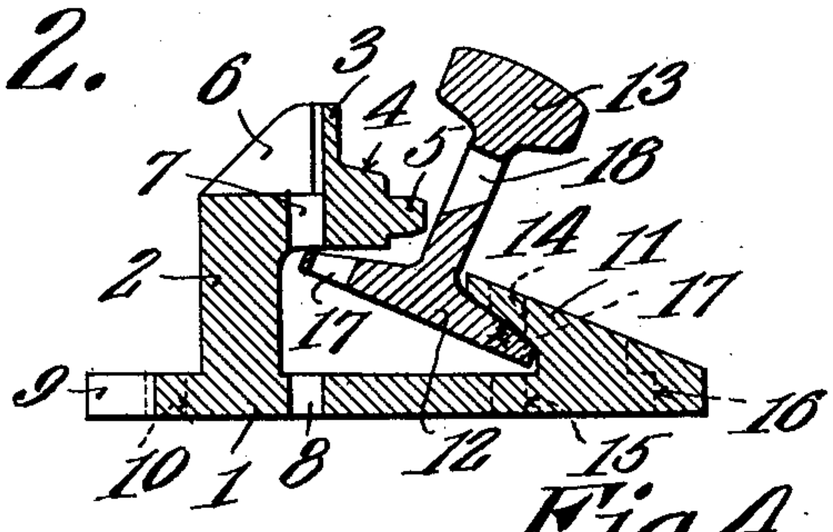

Fig. 4.

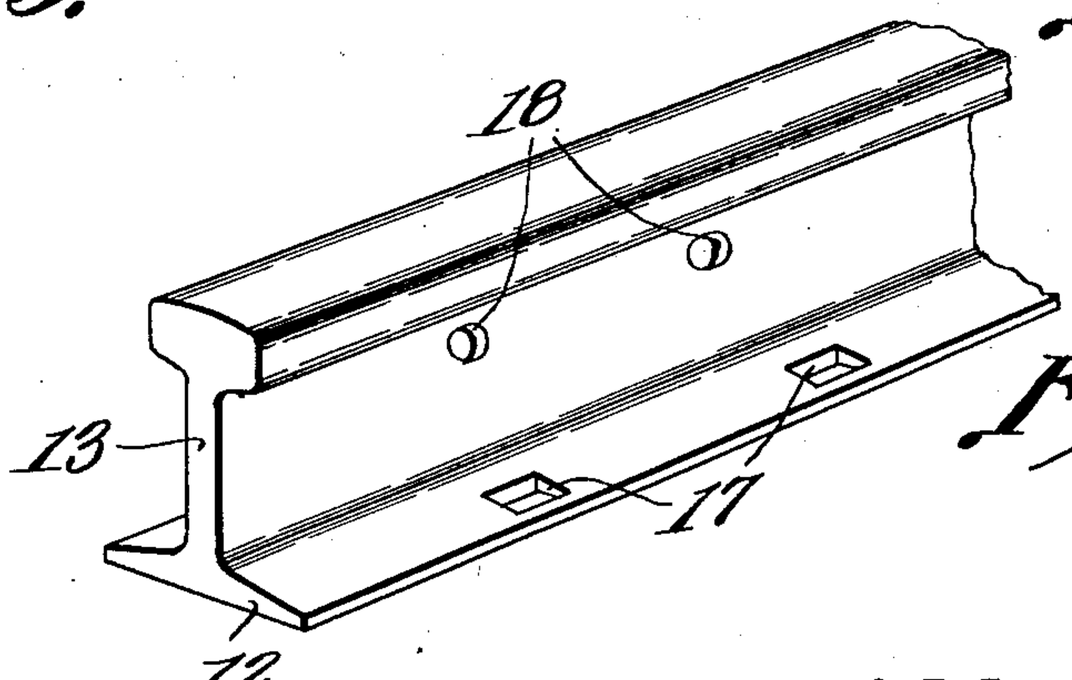

Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR MUNCHAUSEN, OF INDEPENDENCE, LOUISIANA.

RAIL-JOINT.

997,932. Specification of Letters Patent. Patented July 11, 1911.

Application filed March 13, 1911. Serial No. 614,017.

To all whom it may concern:

Be it known that I, ARTHUR MUNCHAUSEN, a citizen of the United States, residing at Independence, in the parish of Tangipahoa and State of Louisiana, have invented a new and useful Rail-Joint, of which the following in a specification.

This invention relates to rail joints and its object is to provide a device of this character which does not require the use of bolts for connecting the rails together and which also serves as an efficient support for the rail ends so as to prevent them from sagging and thus causing the wheels to pound while passing over them.

Another object is to provide a rail joint so constructed as to enable the rails to be readily assembled and taken apart, it being impossible, however, for the rails to spread apart while in use.

Another object is to provide a joint of this character which will not interfere with the expansion and contraction of the rails.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings, the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a view partly in plan and partly in section of a rail joint constructed in accordance with the present invention, rails being shown in position. Fig. 2 is a central vertical longitudinal section through the joint. Fig. 3 is a section on line A—B Fig. 1. Fig. 4 is a section on line C—D Fig. 1. Fig. 5 is a perspective view of one portion of a rail.

Referring to the figures by characters of reference 1 designates a base plate having an upstanding flange 2 extending longitudinally thereof and provided, at the top thereof, with an enlargement 3 extending longitudinally thereof, this enlargement overhanging the plate 1 and provided, in the top thereof, with a longitudinal recess 4 designed to receive one side portion of the head of a rail. Rail engaging studs 5 project laterally from the enlargement 3 and a series of preferably four recesses is formed in the upper portion of the enlargement, as indicated at 6, each of these recesses having a spike receiving opening 7 extending downwardly therefrom and alining with a corresponding opening 8 in the plate 1. Ears 9 extend laterally from the base plate 1 and have openings 10 for the reception of fastening means.

Formed upon the base plate 1 at that side thereof farthest removed from the flange 2, is a longitudinally extending flange 11 inclined relative to the plate 1 and overhanging said plate, that portion of the base plate exposed between the two flanges 2 and 11 being of the same width as the base 12 of a rail 13. Openings 14 are formed in the flange 11 and register with corresponding openings 15 formed in the base plate 1, and recesses 16 are formed in that edge of the base plate along which the flange 11 is located. Each rail 13 has openings 17 in the base flanges thereof and which are adapted to register with the openings 8 and 15 heretofore referred to. Additional openings 18 are formed in the webs of the rails, these openings being flared toward one side of the rail and being adapted to receive the studs 5 hereinbefore referred to.

The distance between the enlargement 3 and the base plate 1 is such as to permit the rail 13 to be tilted upon the base plate as indicated in Fig. 4, thus shifting the web of the rail out of engagement with the studs 5 and permitting the said rail to be moved longitudinally relative to the base plate. The said base plate is adapted to be fastened to the ties by driving spikes through the openings 10 and recesses 16. The rail to be secured is then placed on edge, as indicated in Fig. 4, and slipped between the flanges 2 and 11 until the openings 18 are brought opposite the studs 5. Said rail is then permitted to swing back to normal position on the base plate, whereupon the studs 5 will be seated within the openings 18, as indicated in Fig. 3 and the openings 17 in the base flanges of the rail will lie between the openings 7 and 8 and 14 and 15 respectively. The outer portion of the head of the rail will rest within the longitudinal recess 4 and thus be reinforced by the enlargement 3. By driving spikes downwardly through the openings 17 and 8 and through the openings 14, 17 and 15, the rail will not only be securely fastened to the base plate 1, but said base plate will also be additionally se-

cured to the tie. By placing the joint within the enlargement 3 in contact with the outer face of the rail head, it will be apparent that said rail will be prevented from tilting outwardly when subjected to operative pressure as at turns.

By utilizing a rail joint such as has been described, it will be seen that it becomes unnecessary to employ bolts for the purpose of fastening the rails together and there is no danger of the rails working loose and becoming displaced relative to each other. The openings in the rails are somewhat longer than the openings 7, 8, 14 and 15 and the studs 5 are somewhat smaller than the openings 18, thus permitting the rails to expand or contract.

What is claimed is:—

1. In a device of the class described, a base plate, parallel flanges thereon and having portions overhanging the base plate, said flanges forming a rail receiving space therebetween, projections upon one of said overhanging portions, a rail insertible while tilted, into said space and having apertures for the reception of the projections when the rail assumes its normal position upon the plate, there being fastener receiving openings within said overhanging portions and the base plate and adapted to register with corresponding openings in the base flanges of the rails.

2. The combination with a base plate, of flanges extending upwardly therefrom and overhanging the plate, there being projections upon one of said overhanging flanges, a rail insertible while tilted, in the space between the flanges and movable into upright position to engage the projections and rest flat upon the plate, there being fastener receiving openings within said overhanging flanges and the base plate and corresponding openings within the base flanges of the rail adapted to register with the first mentioned openings.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ARTHUR MUNCHAUSEN.

Witnesses:

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P. E. DOEHONAL.