

No. 763,075.

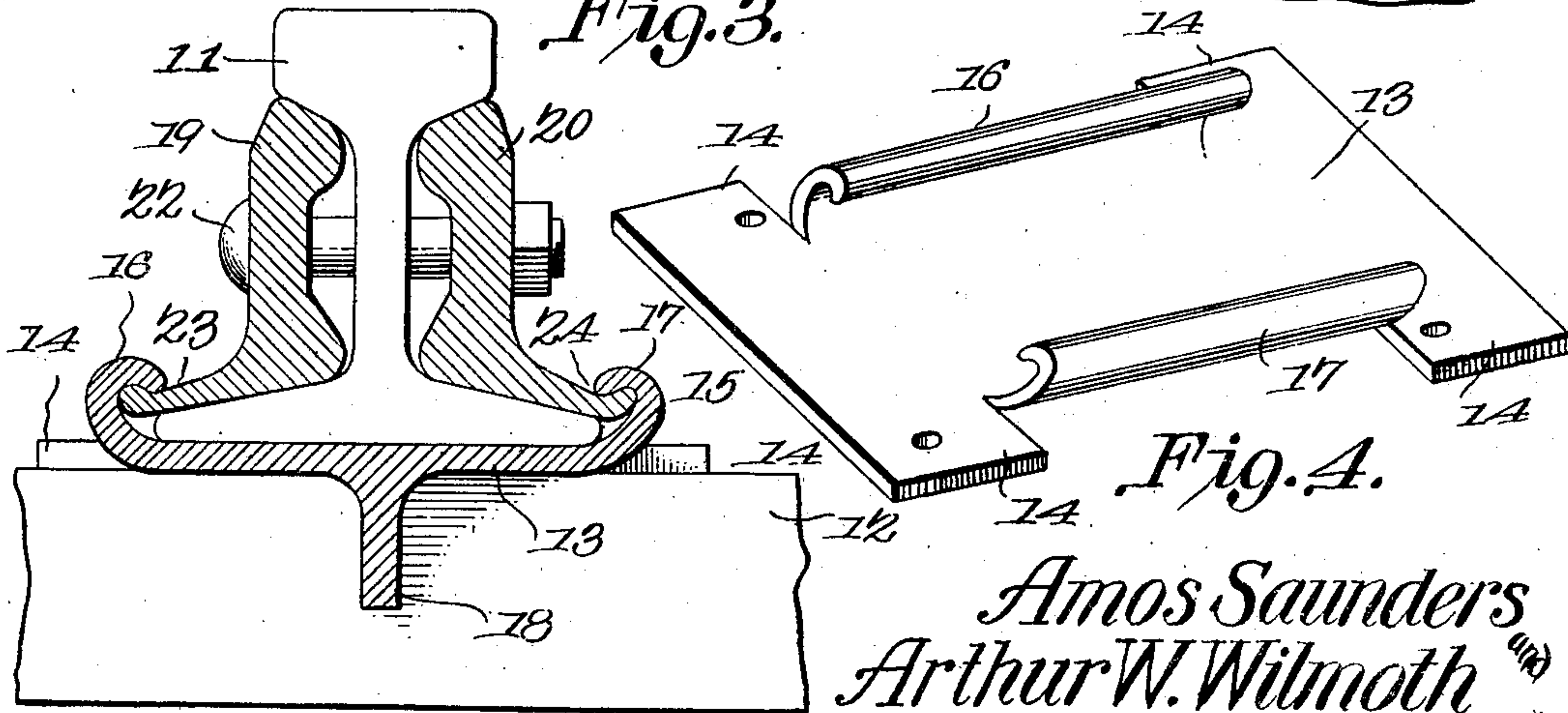
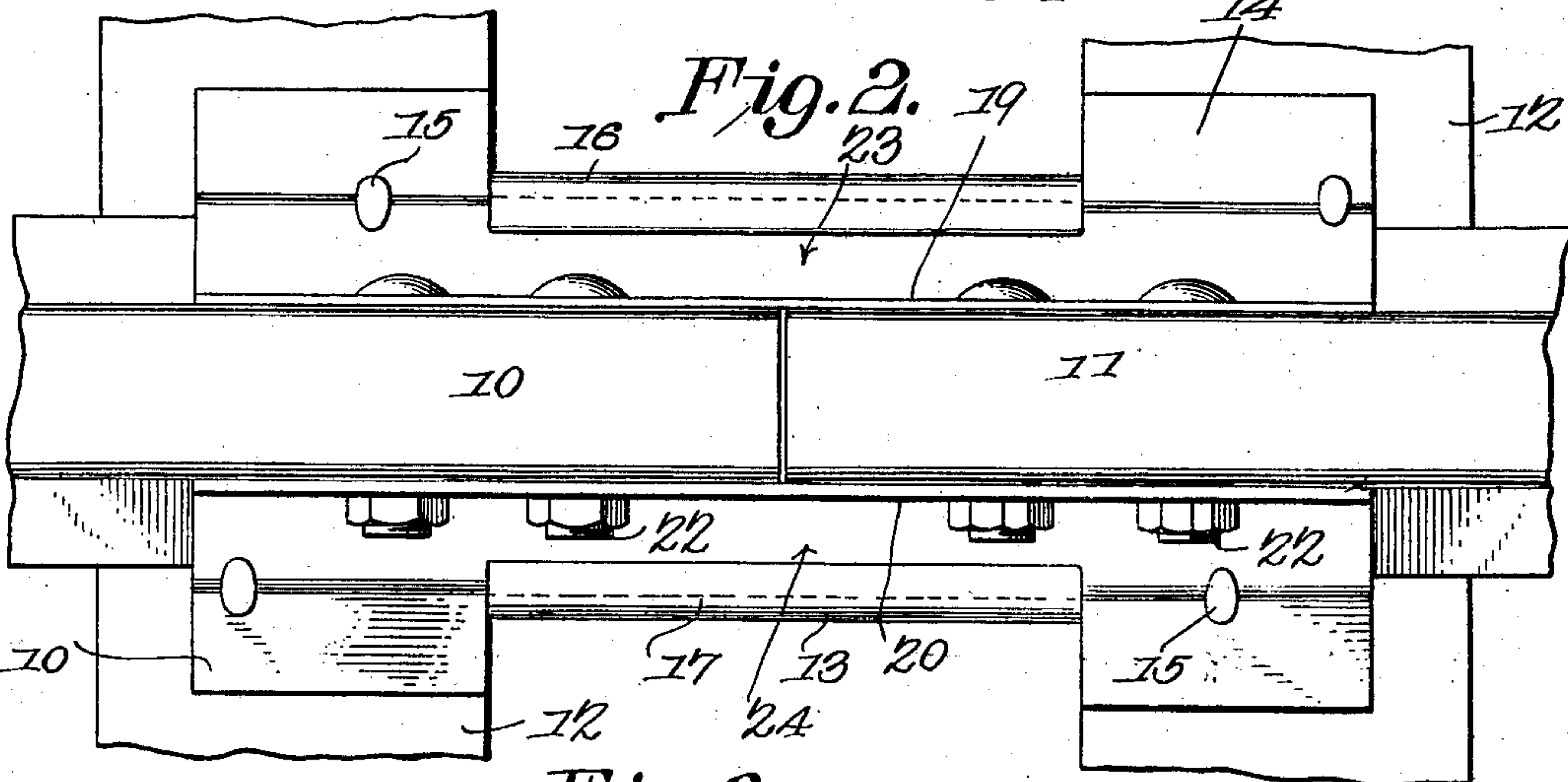
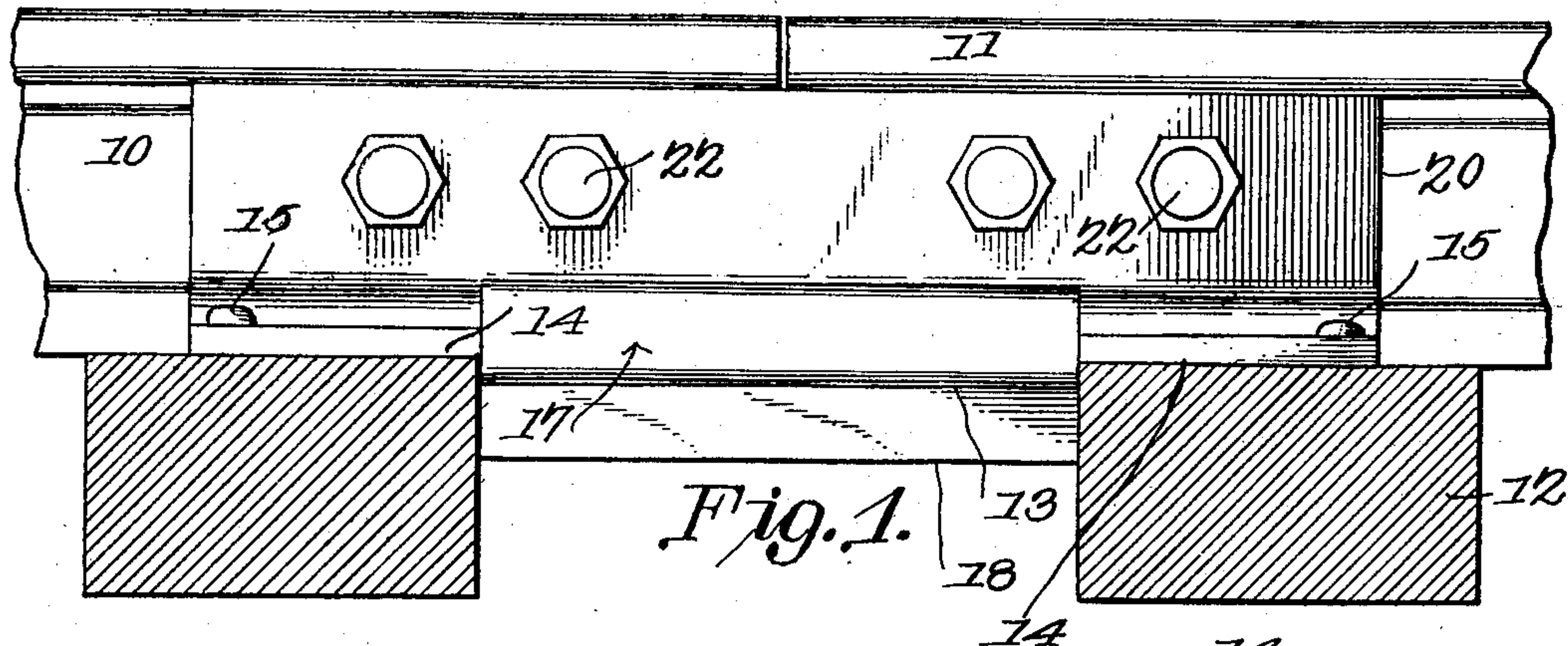
PATENTED JUNE 21, 1904.

A. SAUNDERS & A. W. WILMOTH.

RAILWAY RAIL JOINT CHAIR.

APPLICATION FILED MAR. 10, 1904.

NO MODEL.



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UNITED STATES PATENT OFFICE.

AMOS SAUNDERS AND ARTHUR W. WILMOTH, OF RICHARDSON, TEXAS.

RAILWAY-RAIL-JOINT CHAIR.

SPECIFICATION forming part of Letters Patent No. 763,075, dated June 21, 1904.

Application filed March 10, 1904. Serial No. 197,438. (No model.)

To all whom it may concern:

Be it known that we, AMOS SAUNDERS and ARTHUR W. WILMOTH, citizens of the United States, residing at Richardson, in the county of Dallas and State of Texas, have invented a new and useful Railway-Rail-Joint Chair, of which the following is a specification.

This invention relates to the railway-chairs connecting the adjacent ends of railway-rails, and has for its object to improve the construction and produce a device of this character of increased strength and durability and which will effectually prevent deflection of the rails at the joints, and thereby preserve the uniformity of the line of the rails.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages, and the right is therefore reserved of making all the changes and modifications which fairly fall within the scope of the invention and the claims made therefor.

In the drawings thus employed, Figure 1 is a side elevation, Fig. 2 is a plan view, and Fig. 3 is a transverse section, of the improved joint applied. Fig. 4 is a perspective view of the base-plate detached.

The rails 10 11 and ties 12 are of the usual form.

The improved device consists of a base-plate 13, extending beneath the rail ends and over two or more of the ties adjacent to the rail ends and with lateral extensions 14 at the ends projecting over the ties, the plate being secured to the ties by the usual spikes 15.

Between the lateral extensions the edges of the plate 13 are bent outwardly and upwardly and thence inwardly and downwardly, as at 16 17, and the plate is also provided with a depending fin 18, bearing by its ends against the adjacent ties 12. Disposed upon opposite sides of the rail ends are clamp-plates 19 20, secured in position by the usual transverse clamp-bolts 22 and extending over the tie-flanges of the rails and with their outer edges 23 24 bent upwardly and outwardly for engagement with the turned-over edges 16 17 of the plate 13, as clearly shown in Fig. 3. The clamp-plates 19 20 will preferably extend the full length of the plate 13 and with spike-recesses of the usual form to receive the shanks of the spikes 15, and thus assist in supporting the clamp-plates. By this simple means it will be obvious that a very compact, strong, and durable joint is produced which not only firmly connects the rail ends and prevents all longitudinal movement, but also serves as a "chair" to prevent deflection or sagging at the joints, thus effectually supporting the rails and maintaining a uniformity in the line of the rails.

By distributing the strains over two or more of the ties the tendency to deflection is obviated and the stiffness or rigidity of the joint materially increased.

The lateral extensions 14 at the ends of the plate 13 also materially increase the bearing-surface of the plate and correspondingly decrease the tendency to deflection.

The plate 13, together with the lateral extensions 14 and bent-over edges 16 17, will preferably be in one piece pressed into required shape.

By making the plate in one piece, with the edges slitted so that the central portions may be curled upward, inward, and downward to engage the clamp-plates of the rail and the end portions flattened down to rest upon the ties and form attaching members, the expense of manufacturing the device is greatly reduced without sacrificing its strength. This is a consideration of vital importance in such a thing as a railroad-chair, where cheapness must be combined with strength.

Having thus described the invention, what is claimed is—

1. A railway-chair comprising a plate having portions of its side edges curled upward,
5 inward and downward, and portions of said edges flattened down to provide attaching members.

2. A railway-chair comprising a plate having its side edges flattened down at the ends
10 to provide attaching members, and curled upward, inward and downward at the central

portion to engage rail-clamp members, and an integral fin on the lower portion of the plate.

In testimony that we claim the foregoing as
our own we have hereto affixed our signatures
in the presence of two witnesses.

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ARTHUR W. WILMOTH.

Witnesses:

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