

No. 713,805.

Patented Nov. 18, 1902.

S. P. RUSH.
RAILWAY CHAIR.

(Application filed Aug. 2, 1902.)

(No Model.)

Fig. 1.

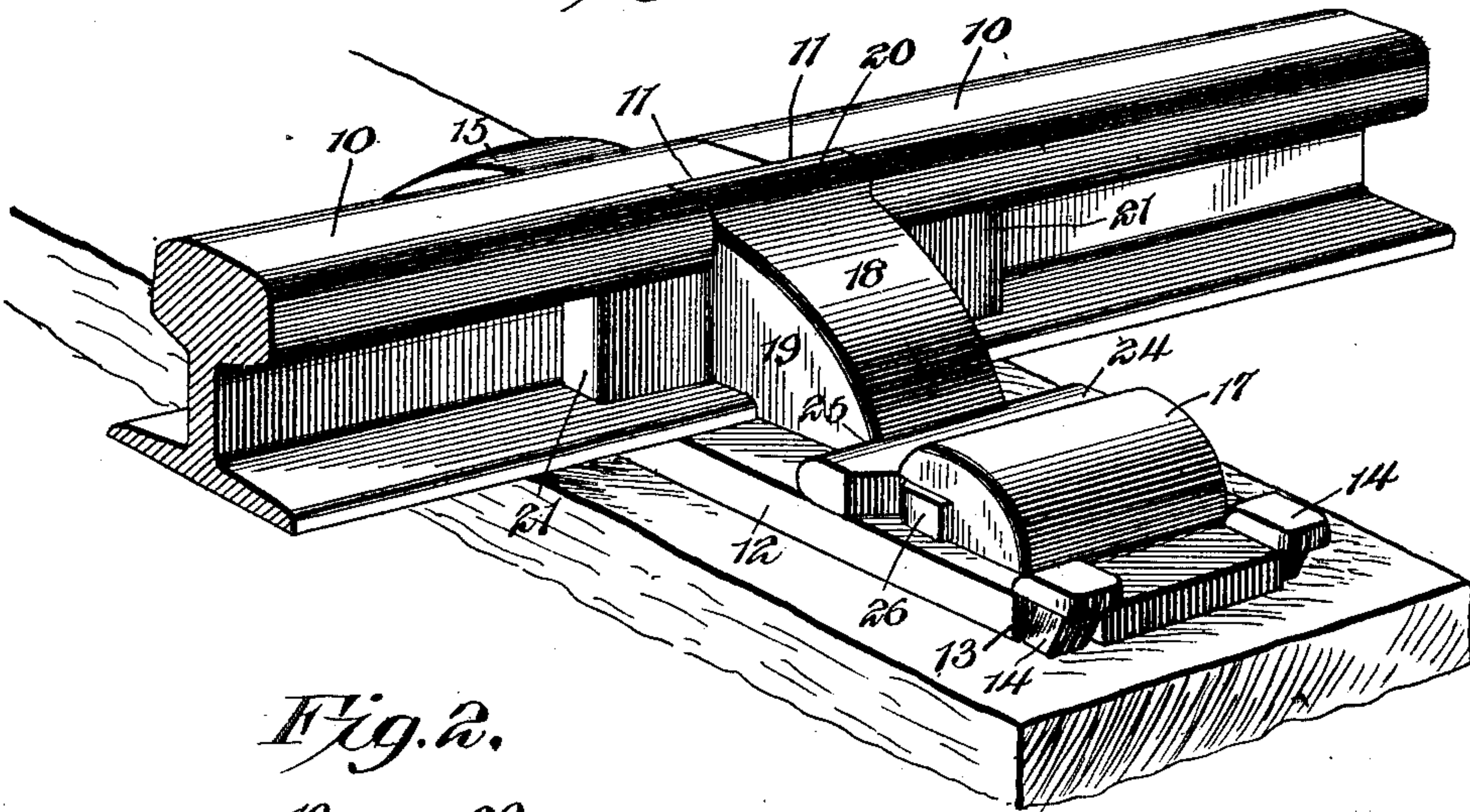


Fig. 2.

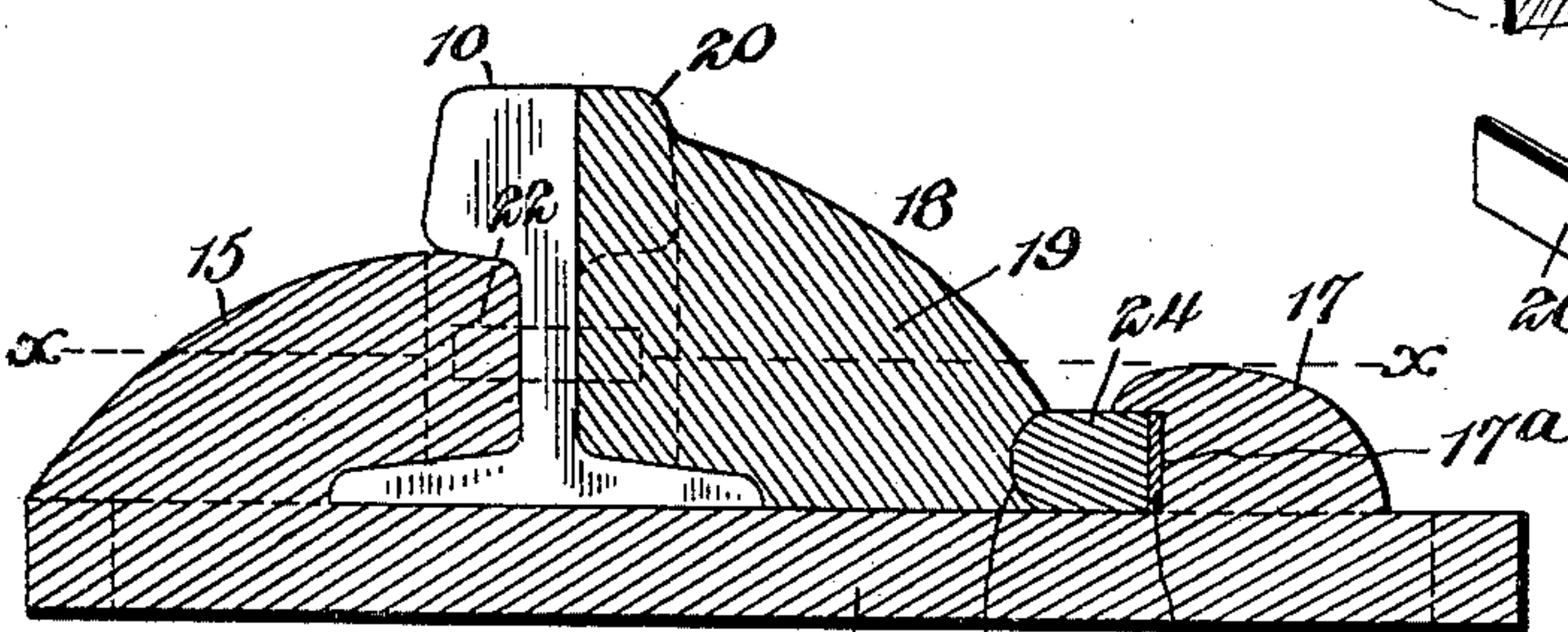


Fig. 5.

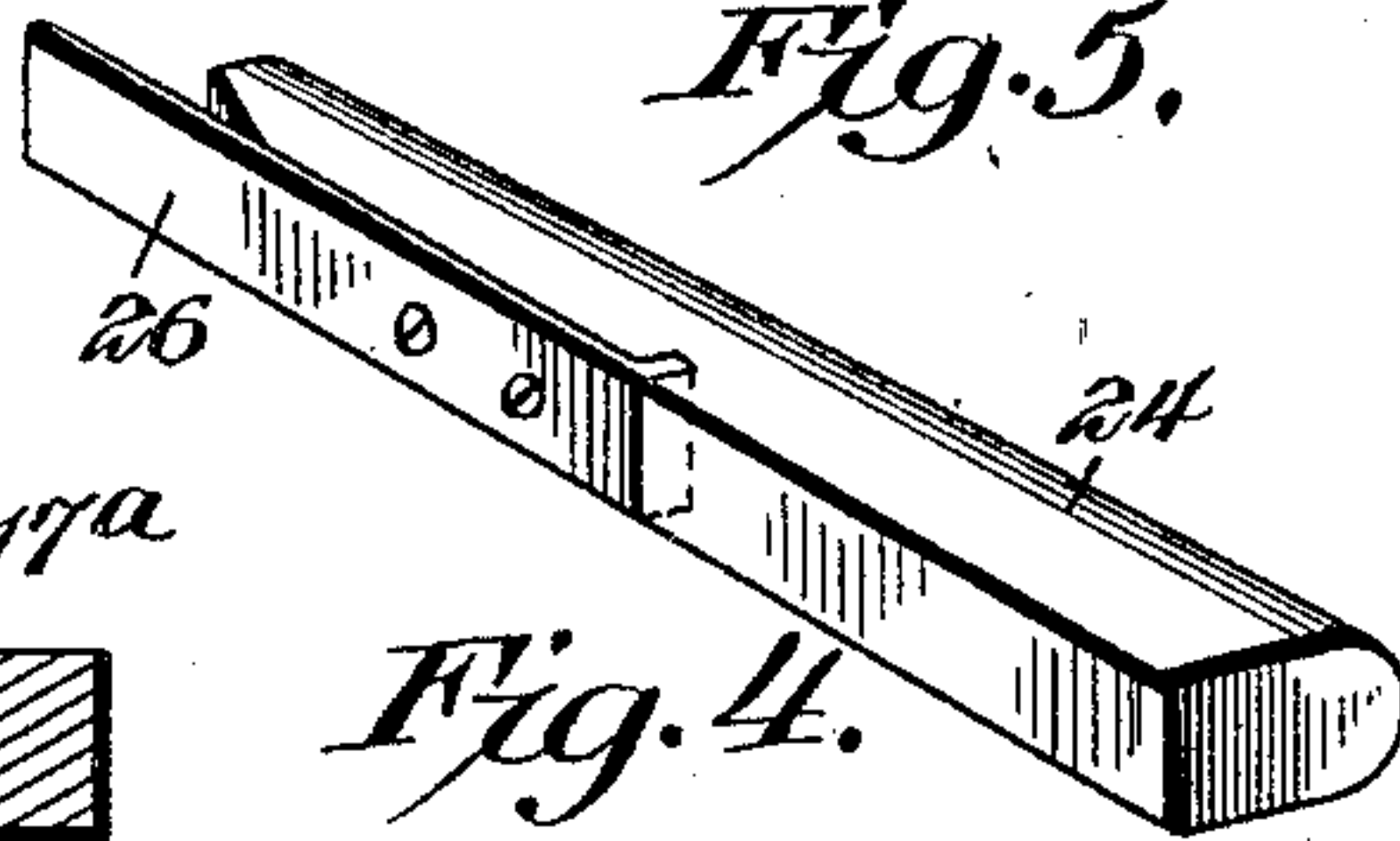


Fig. 4.

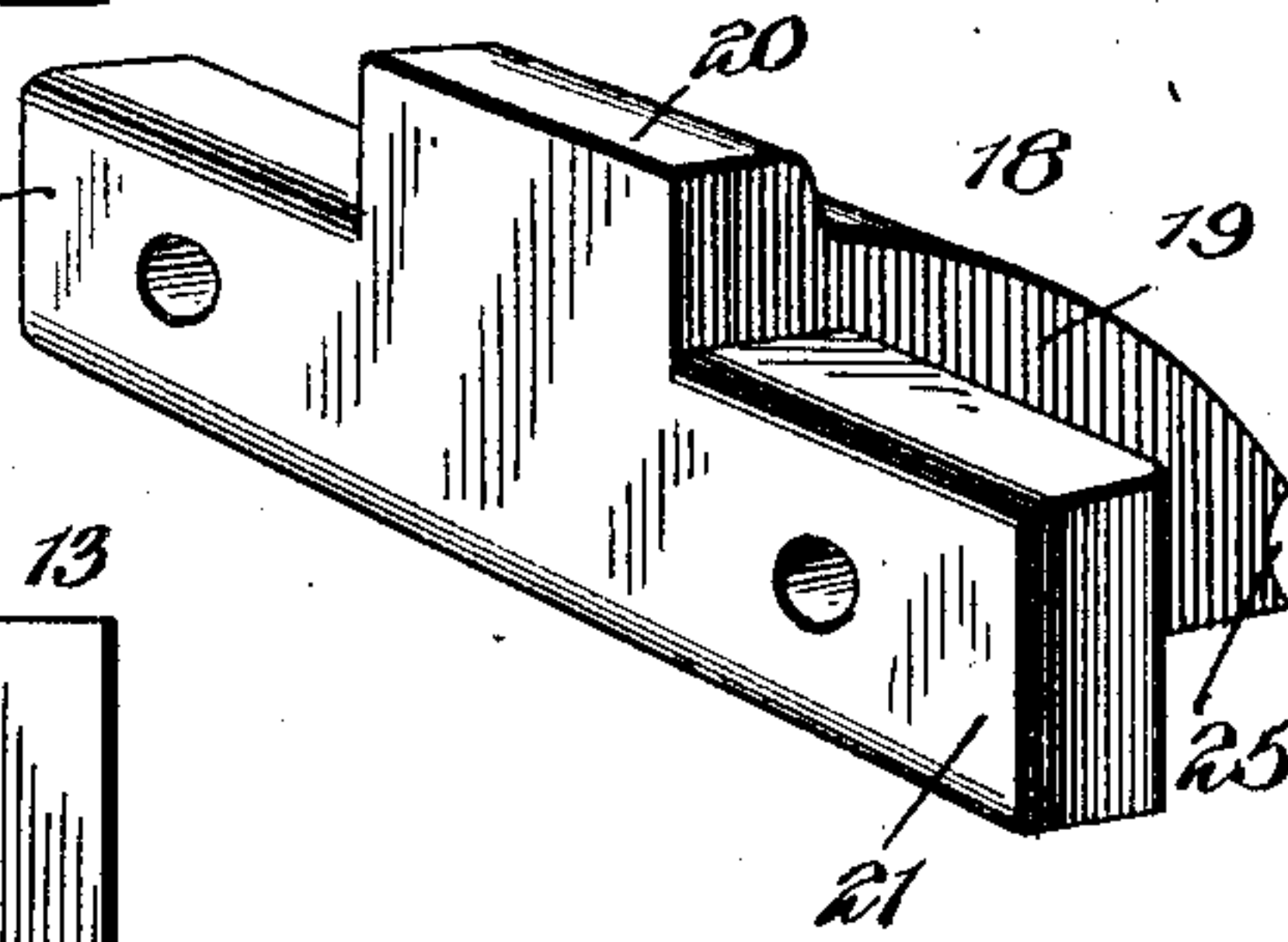
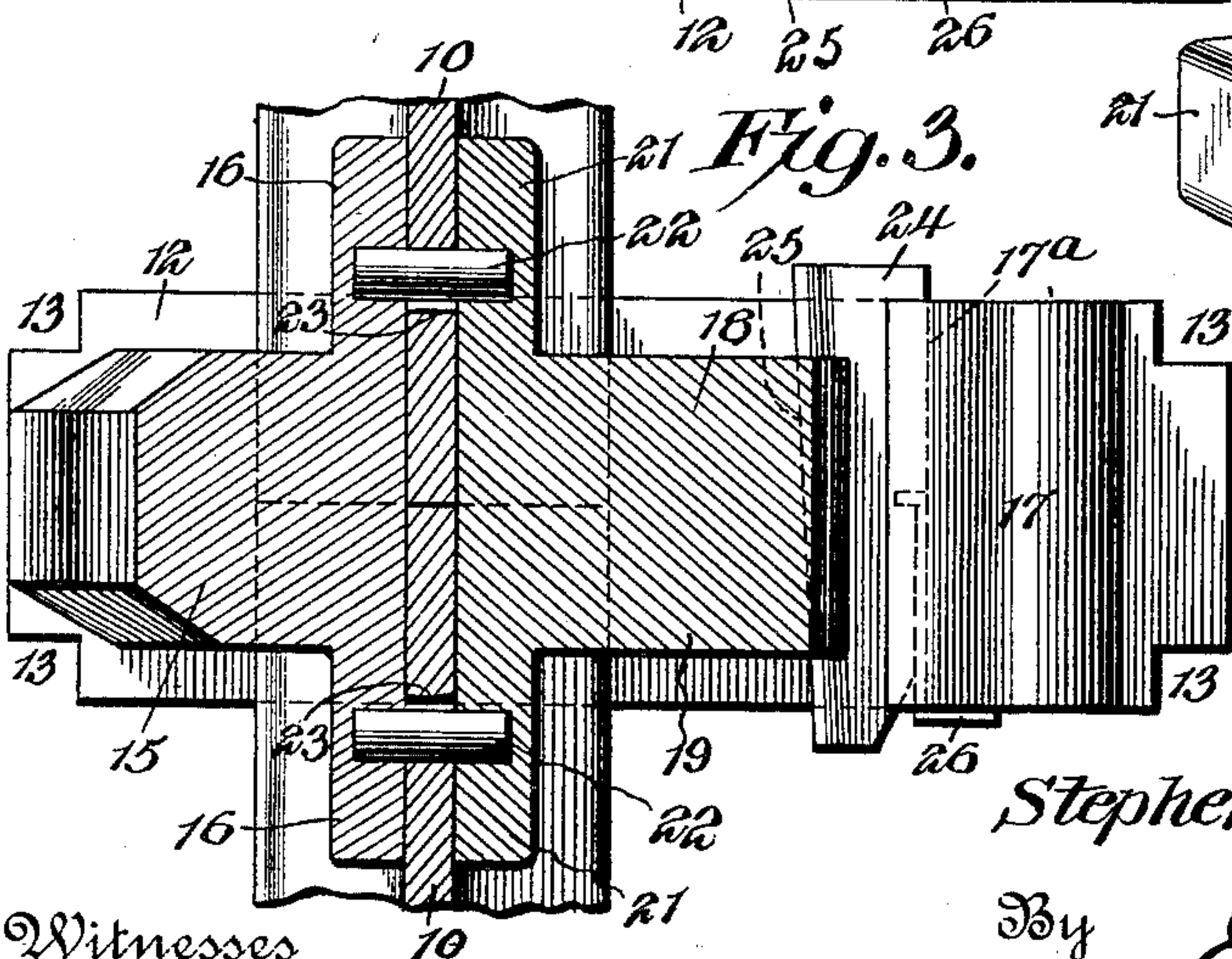


Fig. 3.



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UNITED STATES PATENT OFFICE.

STEPHEN P. RUSH, OF TYRONE, PENNSYLVANIA, ASSIGNOR TO JOHN LEONARD TROUTWINE AND HARRY E. SEEDS, OF TYRONE, PENNSYLVANIA.

RAILWAY-CHAIR.

SPECIFICATION forming part of Letters Patent No. 713,805, dated November 18, 1902.

Application filed August 2, 1902. Serial No. 118,164. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN P. RUSH, a citizen of the United States, residing at Tyrone, in the county of Blair and State of Pennsylvania, have invented a new and useful Railway-Chair, of which the following is a specification.

This invention relates to railway-chairs employed at the joints of rails; and one object thereof is to provide a structure which will not only secure the abutting ends of the rails together, but will form a bridge across the joint thereof, thus obviating the wearing of said ends and the shocks imparted by the passage of the wheels thereover.

Another object is to provide a structure made up of a few simple elements that are associated so they will not readily become deranged, the necessity of bolts and nuts which are liable to become loosened being eliminated. Thus a structure is obtained which is well qualified for the hard service to which it is necessarily exposed.

The preferred form of construction is illustrated in the accompanying drawings and is described in the following specification.

In said drawings, Figure 1 is a perspective view of the abutting ends of two rails, showing the chair in position thereon. Fig. 2 is a vertical transverse sectional view through the same. Fig. 3 is a horizontal sectional view taken on the line xx of Fig. 2. Fig. 4 is a perspective view of the clamping-block, and Fig. 5 is a perspective view of the wedge-key.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

The rails shown in the illustrated embodiment of the invention are designated by the reference-numerals 10, the head-flanges being provided in the outer edges of their abutting ends with aligned seats or recesses 11. A base-plate 12 is arranged transversely beneath the abutting ends of the rails and is preferably provided at its corners with notches 13, designed to receive the usual spikes 14, by means of which the base may be attached to a tie, if desired. This base is provided at its inner end with an upstanding abutment 15, arranged to fit against the inner sides of the rails and

preferably terminating at the lower edges of the head-flanges, as shown in Fig. 2, so as to permit the free passage of the flanges of the car-wheels. This abutment is provided with oppositely-extending wings 16, which fit in the inner channels of the rails. The opposite end of the base is provided with an upstanding projection 17 in the form of an inturned hook having a guideway 17^a in its inner face.

Slidably mounted upon the base, between the rails and the projection 16, is a clamping-block, (designated as a whole by the reference-numeral 18.) This block comprises a neck 19, having at its upper end an upstanding head 20, which head is adapted to fit snugly in the recesses 11 of the rails, thus bridging the joint between them, as is fully illustrated in Fig. 1. The neck, furthermore, is provided with oppositely-extending wings 21, disposed below the head 20 and engaging in the outer channels of the rails, said wings abutting against the webs thereof. Dowelpins 22 extend through the webs of the rails and have their opposite ends engaging in sockets formed in the corresponding wings 16 and 21 of the abutment and clamping-block, the openings in the web being preferably in the form of slots 23, which will permit the necessary expansion and contraction of the rails.

In order to fasten the clamping-block in its operative position, a locking-key 24 is employed, which is in the form of a wedge and is slidably mounted between the clamping-block and the upstanding projection 17, a guideway 25 being formed in the rear end of said clamping-block for that purpose. The key in turn is held against accidental displacement by a locking-tongue 26, secured at one end to an intermediate portion of the key and extending longitudinally toward the contracted end thereof. The free end of this tongue is adapted to be bent about the end of the projection, as indicated in Figs. 1 and 3. This structure has a number of advantages over the ordinary rail-joint. In the first place, the joint is bridged by the head, which also prevents displacement of the clamping-block. The wings 21 also prevent any upward movement of the clamping-block

and greatly strengthen the joint. By means of the key the locking-block may be securely and tightly wedged in place, and this key is held against displacement by simple though
 5 efficient means. The various parts shown are simply and easily constructed and when assembled coact to make a strong chair which will withstand rough usage and heavy traffic.

From the foregoing it is thought that the
 10 construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description and it will be understood that various changes in the size, shape, pro-
 15 portion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what
 20 I claim as new, and desire to secure by Letters Patent, is—

1. The combination with rails having recesses in their abutting ends, of a holding-block comprising a neck having an upstand-
 25 ing head fitted in the recesses and bridging the joint between the rails, wings extending in opposite directions from the neck and fitting in the channels of the rails, said wings having sockets in their inner faces which ex-
 30 tend only partially through the wings, and pins seated in the sockets of the wings and engaging the webs of the rails.

2. The combination with rails having recesses in their abutting ends, of a base ar-
 35 ranged transversely beneath the rails, said base having a rail-engaging abutment at one end and an upstanding hook at the other end,

a holding-block slidably mounted on the base and comprising a neck having an upstanding head fitted in the recesses and bridging the
 40 joint between the rails, wings extending in opposite directions from the head and fitting in the channels of the rails, a key interposed between and engaging the upstanding hook of the base and the holding-block, and a bend-
 45 able locking-tongue carried by the key and engaging the upstanding hook of the base to hold said key against displacement.

3. The combination with rails having recesses in their abutting ends, of a base ar-
 50 ranged transversely beneath the rails, a rail-engaging abutment located at one end of the base and having oppositely-projecting wings that engage in the channels of the rails, an upstanding hook located at the other end of
 55 the base, a holding-block slidably mounted on the base and comprising a neck having an upstanding head fitted in the recesses of the rails and bridging the joint between the same, wings extending in opposite directions from
 60 the head and fitting in the channels of the rails, said holding-block having a seat in its rear face, and a key interposed between and engaging the upstanding hook of the base and the holding-block, being arranged in the
 65 seat of the latter.

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

STEPHEN P. RUSH.

Witnesses:

C. O. TEMPLETON,
 W. L. HICKS.