

C. W. REINOEHL & B. L. WEAVER.
RAILROAD STRUCTURE.

APPLICATION FILED JAN. 14, 1910.

955,284.

Patented Apr. 19, 1910.

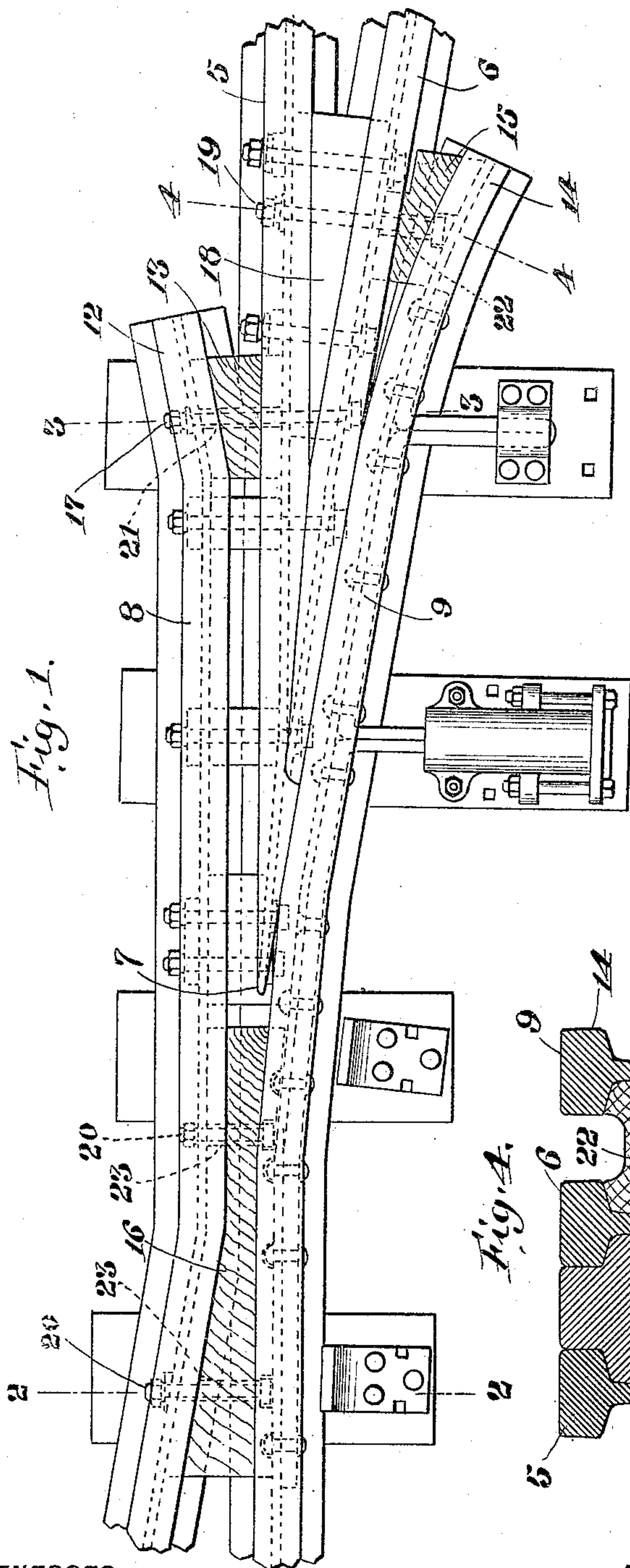


Fig. 1.

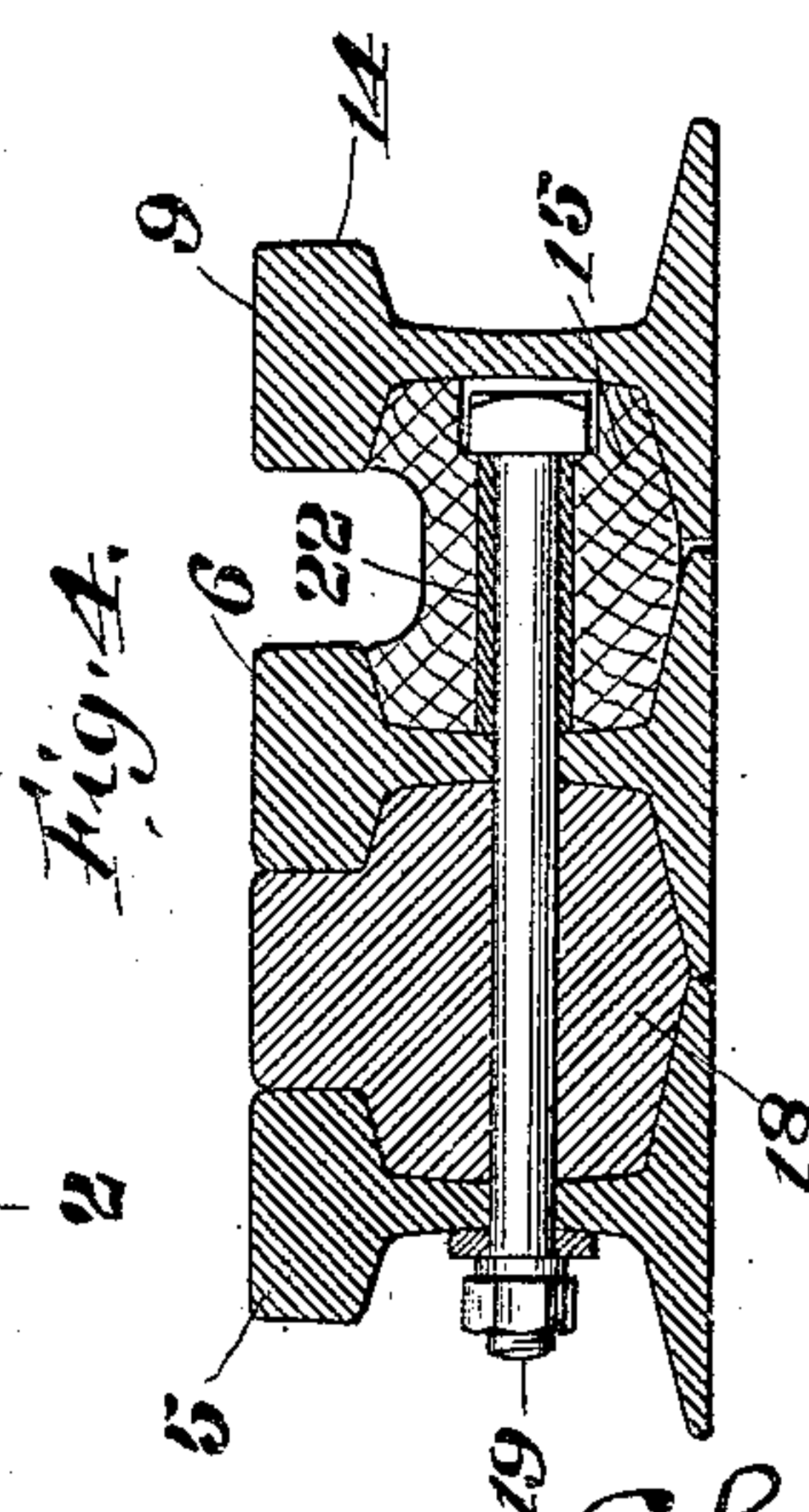


Fig. 4.

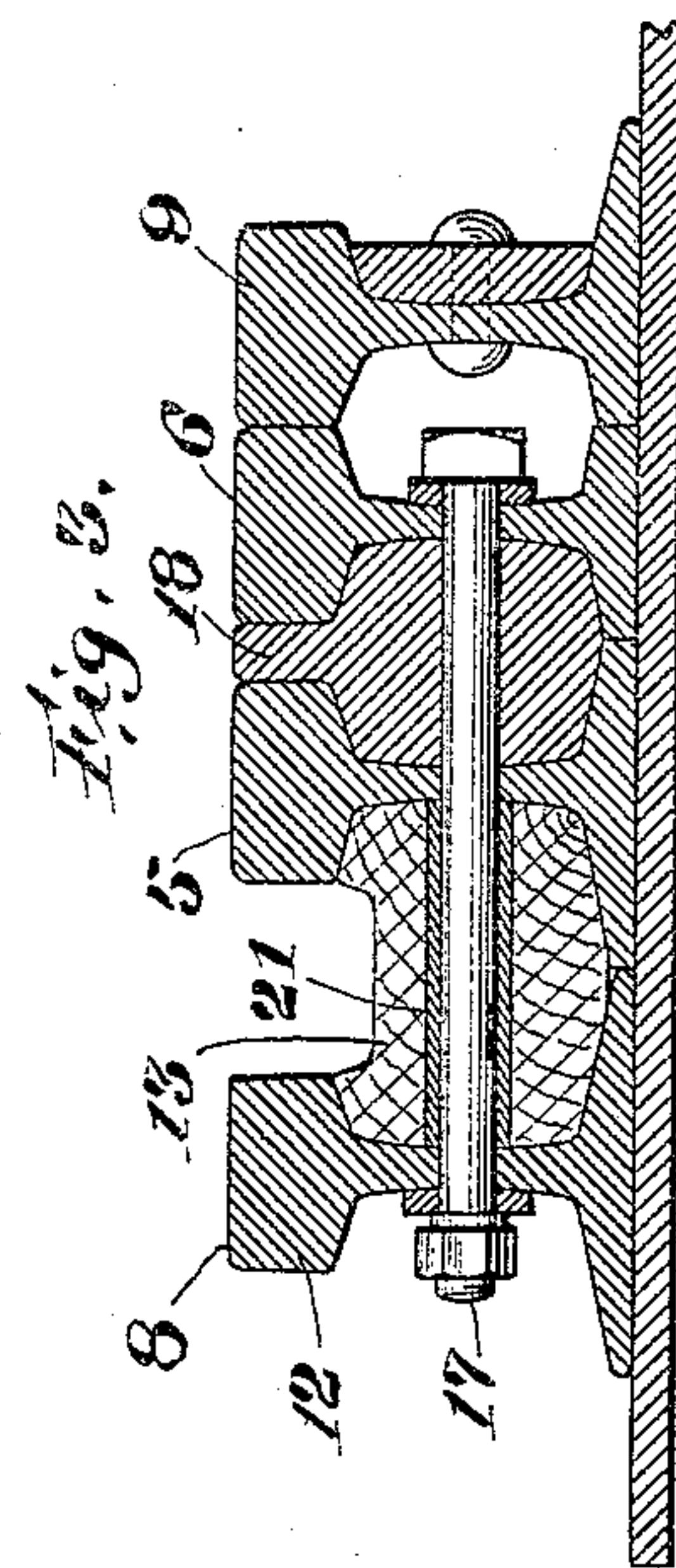


Fig. 3.

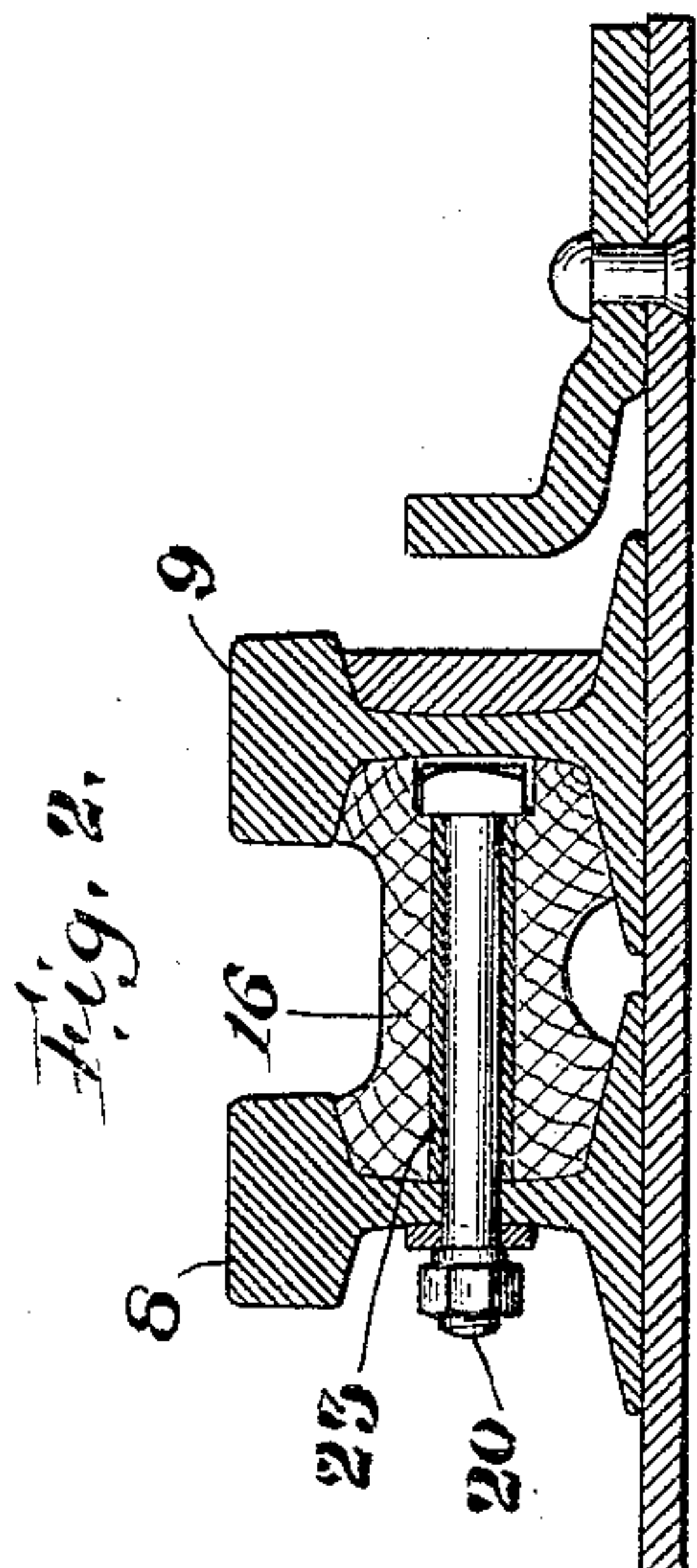


Fig. 2.

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CHARLES W. REINOEHL AND BENT L. WEAVER, OF STEELTON, PENNSYLVANIA.

RAILROAD STRUCTURE.

955,284.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed January 14, 1910. Serial No. 537,989.

To all whom it may concern:

Be it known that we, CHARLES W. REINOEHL and BENT L. WEAVER, citizens of the United States, residing at Steelton, Dauphin county, State of Pennsylvania, have invented certain new and useful Improvements in Railroad Structures, of which the following is a specification.

In railroad frogs, and in various other places in railroad structures two railroad rails are located laterally adjacent each other on a suitable supporting base, the rails being maintained in proper relative positions by suitable devices. In such places one of the two adjacent rails is frequently receiving a part of the weight of a railroad car passing over the same, while the adjacent rail is receiving either no weight or less weight. Consequently, as is well known, there is a slight vertical movement of one rail with respect to the other rail due to the weight of the car and the slight yielding of the supporting base for the rails.

Heretofore metal spacing blocks have been secured in place between the two adjacent rails to maintain them in proper relative positions; and consequently it frequently happens that a racking and loosening of the parts takes place due to the slight movement of one rail with relation to the adjacent rail, as previously mentioned, and due to the absence of any resilient characteristics in the metal blocks.

The object of our invention is to overcome the foregoing objection; and we attain our object by the employment of a wooden block or spacing member engaged with the two adjacent rails and suitably secured in place therebetween, the natural resilient characteristics of the wooden block permitting slight relative movement between the two rails and preventing in a great measure the racking and loosening of the parts of the structure. The wooden block also serves as a foot guard to prevent the foot of a person from being caught between the two adjacent rails.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the drawings:—Figure 1 is a plan view of a railroad frog embodying our invention. Fig. 2 is a transverse section, on line 2—2 of Fig. 1. Fig. 3 is a transverse section, on line 3—3 of Fig. 1. Fig. 4 is a transverse section, on line 4—4 of Fig. 1.

5 and 6 designate the point rails, the meeting ends of which are tapered and fitted together to form the frog point 7 in the usual manner. 8 and 9 designate the laterally disposed wing rails, the rail 8 being held in fixed position in proper relation to the frog point in the usual manner, and the rail 9 being adapted to be moved toward and from the frog point and being also adapted to be held yieldingly in engagement with the frog point 7 in the usual well known manner. The rails 5, 6, 8 and 9 are of usual railroad rail construction and they rest upon tie plates which in turn are supported by underlying cross ties. This general type of railroad frog is of common and well known construction.

Interposed between the outwardly flaring end 12 of the wing rail 8 and the adjacent point rail 5 is a wooden spacing or flare block 13; interposed between the outwardly flaring end 14 of the wing rail 9 and the adjacent point rail 6 is a wooden spacing or flare block 15; and interposed between the adjacent wing rails 8 and 9 in advance of the frog point 7 is a wooden spacing or throat block 16.

The wooden blocks 13, 15 and 16 are shaped and fitted between their adjacent rails between the heads and bases thereof as shown in the drawings, and these blocks not only serve as spacing members for the rails, but they also serve as foot guards to prevent the foot of a person from being caught between adjacent rails.

The block 13 is engaged with the rails 5 and 8 between the heads and bases thereof and it is secured in place by a transverse bolt 17 extending through the block 13 and the rails 5, 6 and 8 and securing them together. The bolt 17 also extends through a heel block 18 arranged between the point rails 5 and 6.

The block 15 is engaged with the rails 6 and 9 between the heads and bases thereof and it is secured to the rail 6 by a transverse bolt 19 extending through the block 15 and the rails 5 and 6, and also through the heel block 18, thus permitting the movable wing rail 9 to move into and from engagement with the block 15 and frog point 7.

The block 16 is engaged with the rails 8 and 9 between the heads and bases thereof and it is secured to the fixed wing rail 8 by transverse bolts 20 extending through the

block 16 and rail 8, thus permitting the rail 9 to move into and from engagement with the block 16 and frog point 7.

5 The wooden blocks 13, 15 and 16 are reinforced by metal bushings 21, 22 and 23 through which the bolts 17, 19 and 20 extend, respectively. These metal bushings serve to prevent the bolts extending there-
10 through from wearing the blocks, and they also serve as reinforcements to prevent the wooden blocks from being crushed or split by any undue tightening of the bolts extend-
ing through the blocks.

15 Where it is desired to properly hold two adjacent rails in spaced relation to each other the wooden blocks hereinbefore described may be employed at different points or metal spacing blocks may be employed at
20 some points, while wooden blocks are employed at other points to suit different requirements for strength and resiliency.

The wooden blocks hereinbefore de-

scribed are not only light and durable, but, due to the natural resiliency of the wood, they give to the entire frog structure a flexi- 25
bility not obtainable where the entire frog is constructed of metal.

We claim:—

In a railroad structure, the combination of two adjacent railroad rails, a supporting 30
base therefor, a wooden block interposed between said rails between the heads and bases thereof, said block having a hole extending therethrough, a metal bushing within said
35 hole, and a bolt extending through said rails and said bushing and securing said rails and said block together.

In testimony whereof we affix our signatures in the presence of two witnesses.

CHARLES W. REINOEHL.
BENT L. WEAVER.

Witnesses:

E. M. WARE,
S. I. HARPER.