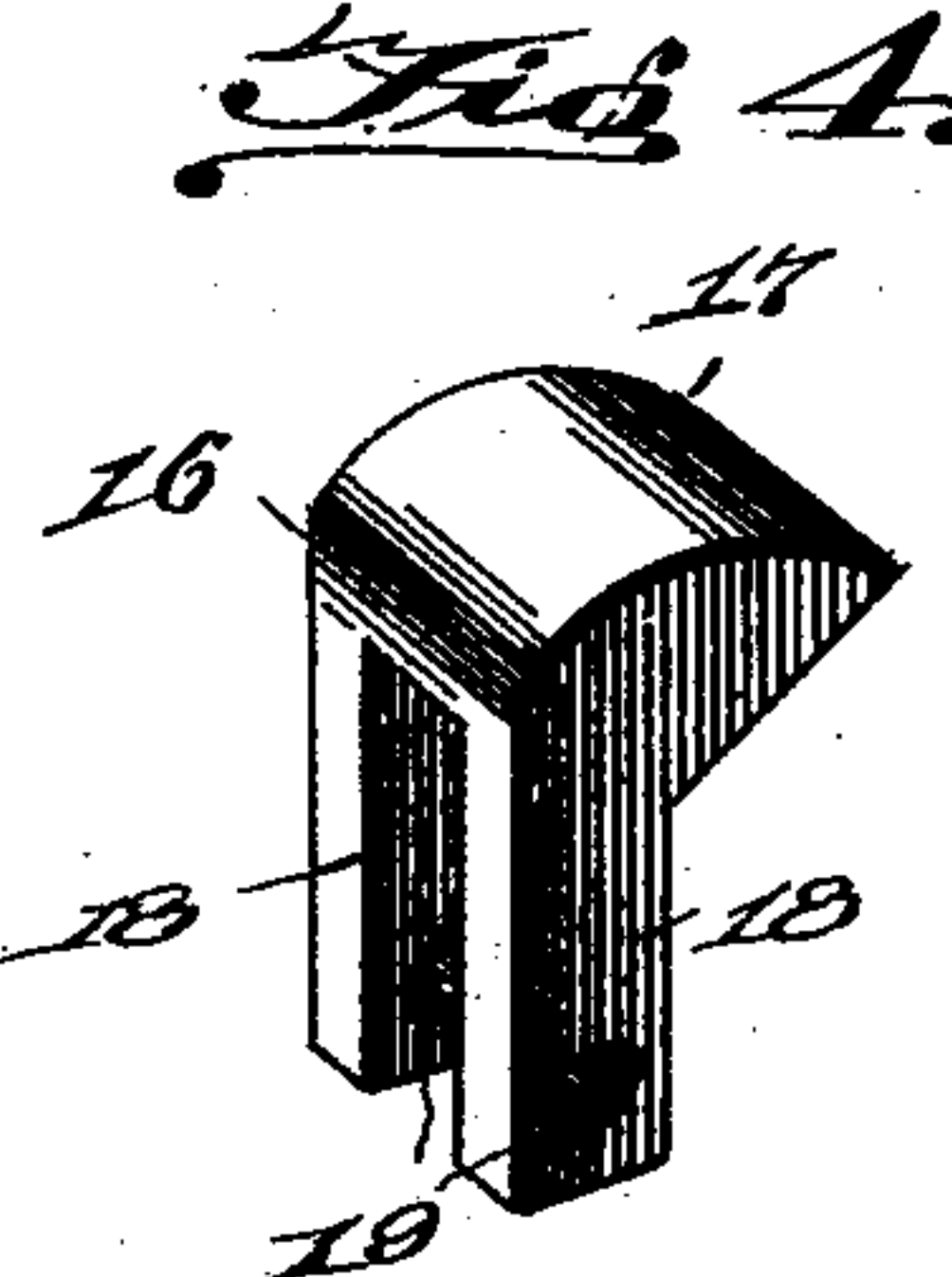
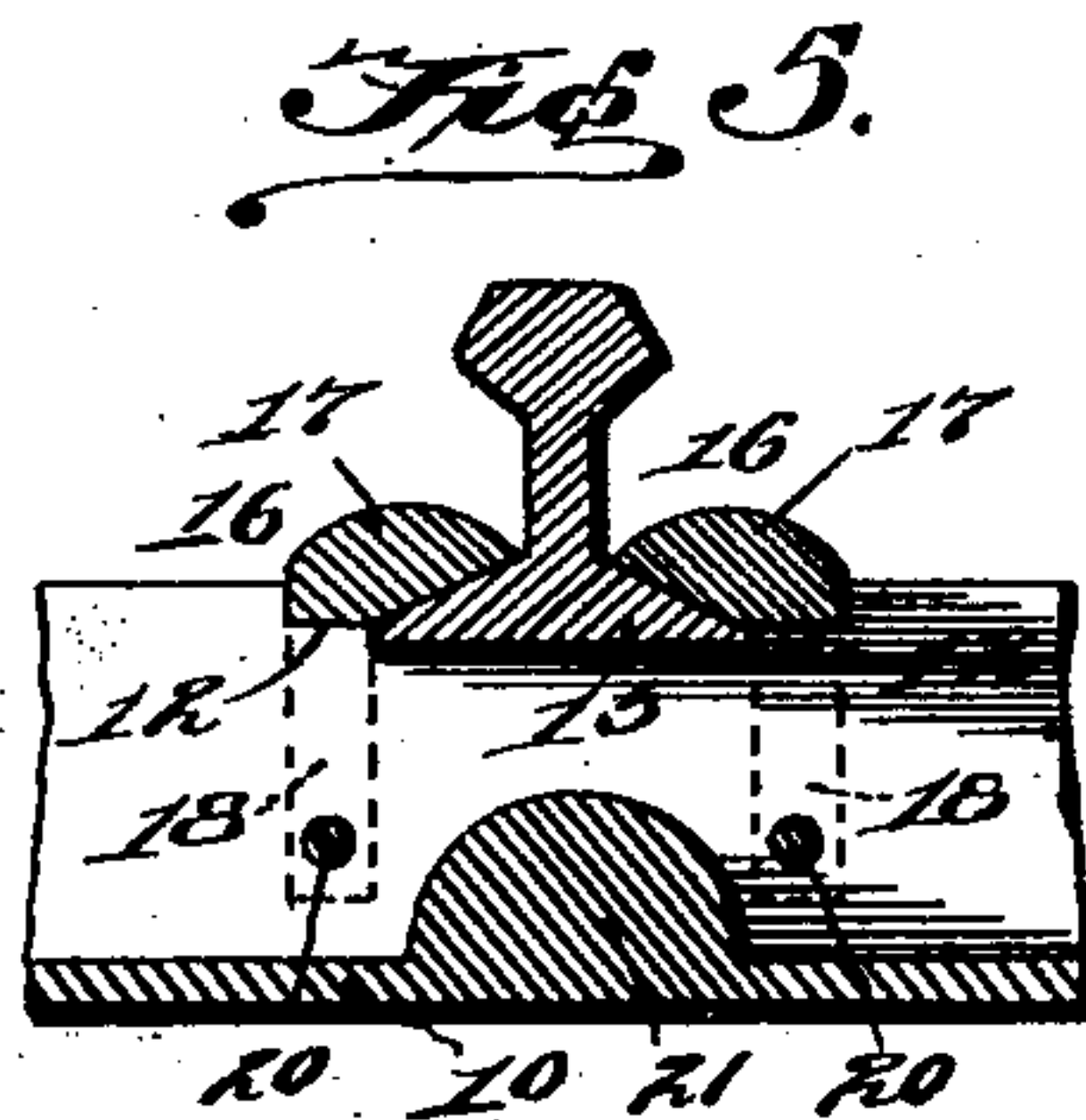
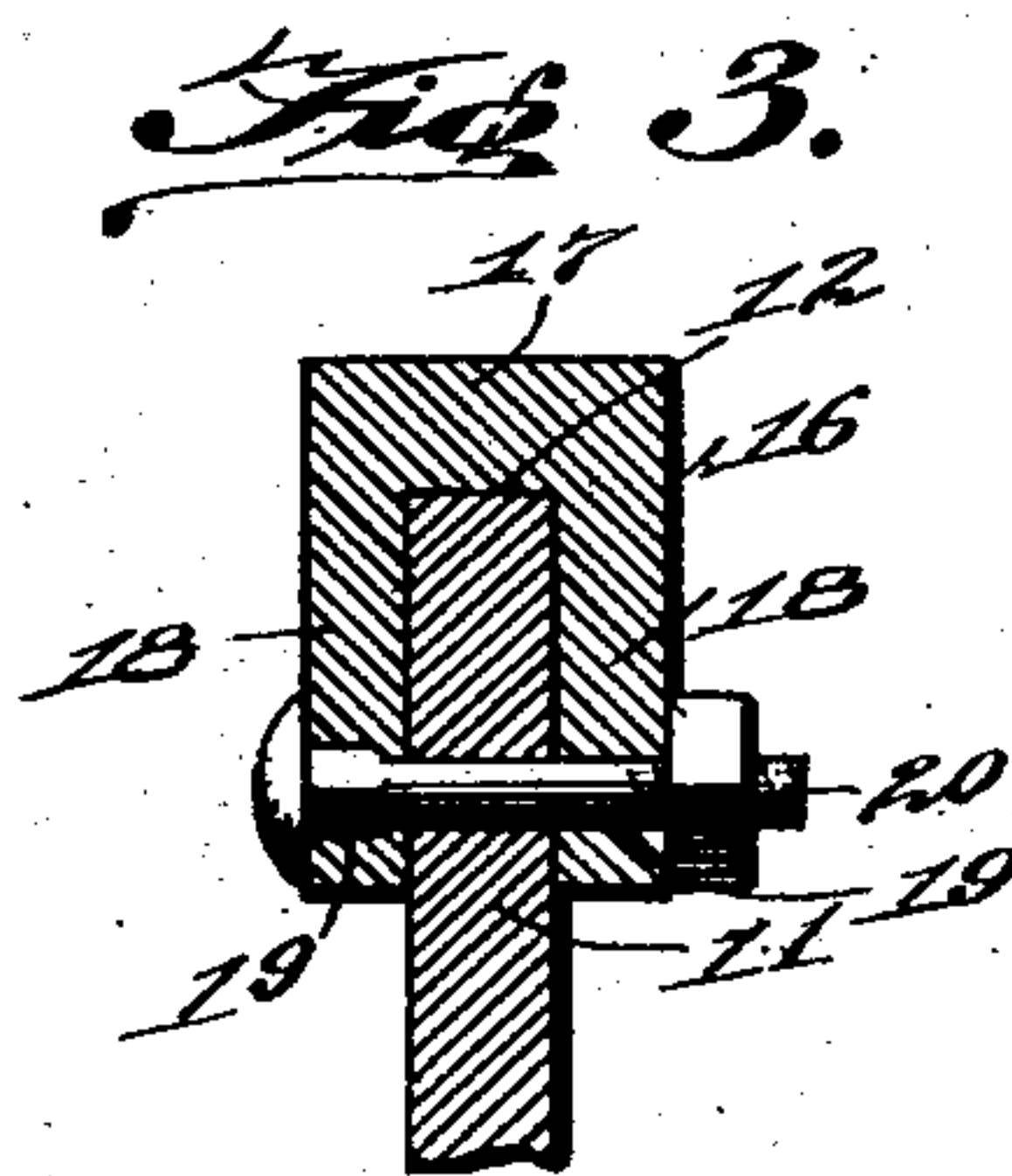
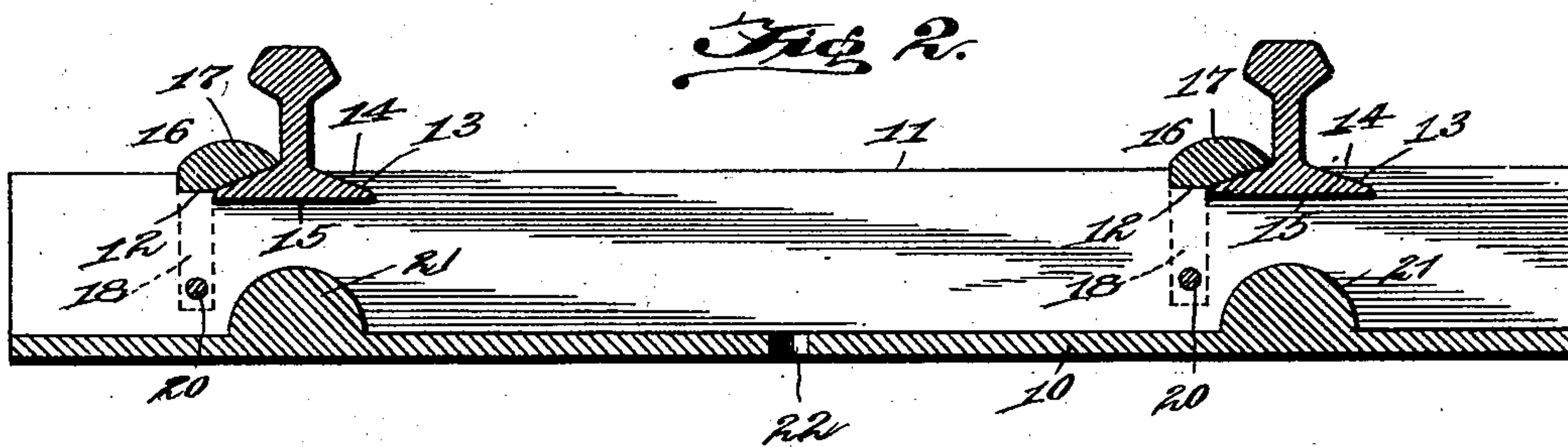
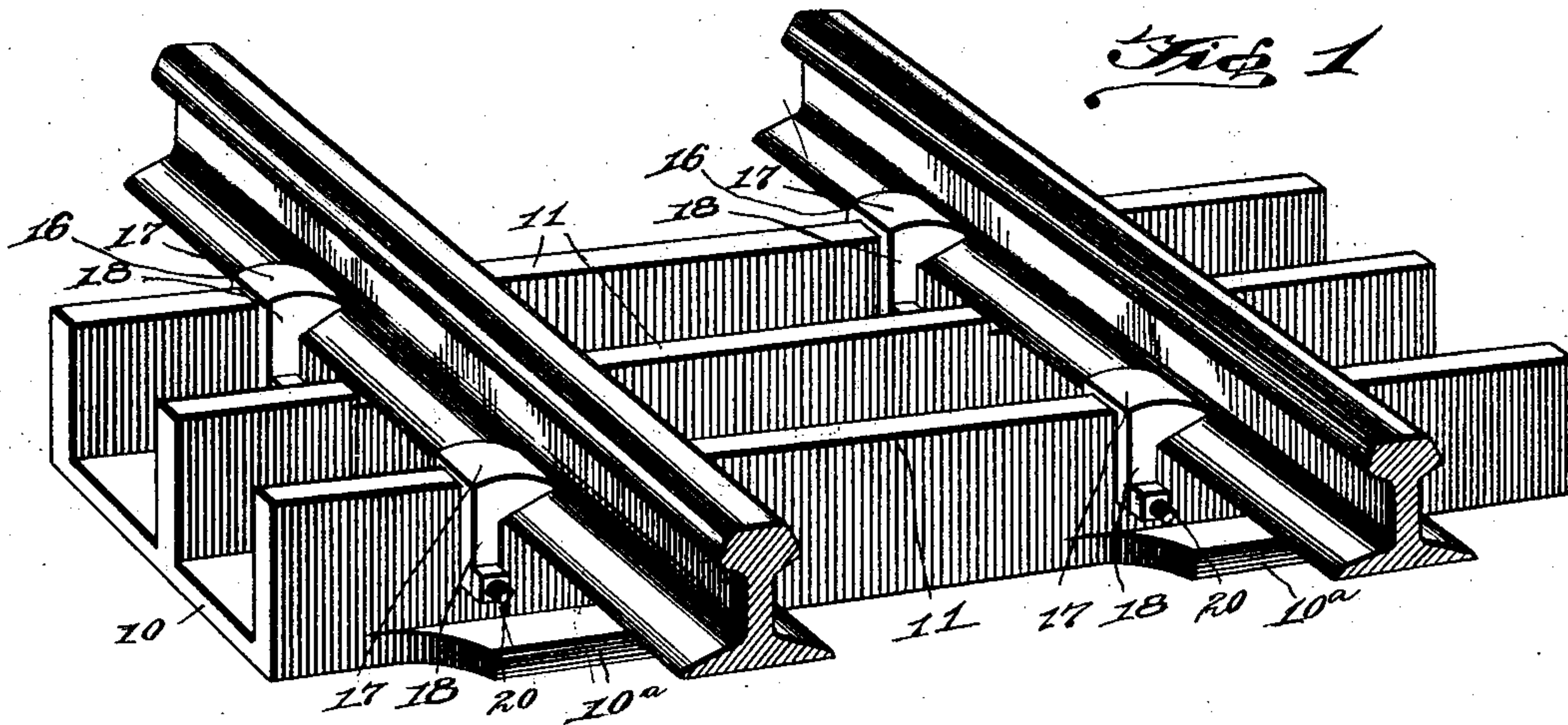


No. 721,919.

PATENTED MAR. 3, 1903.

F. J. SIBLEY.
RAILROAD TIE.
APPLICATION FILED MAY 7, 1902.

NO MODEL.



Frank J. Sibley Inventor

By

E. J. Sizer

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Witnesses
John Maupin
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UNITED STATES PATENT OFFICE.

FRANK J. SIBLEY, OF FOSTORIA, OHIO, ASSIGNOR OF ONE-HALF TO RAWSON CROCKER, OF FOSTORIA, OHIO.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 721,919, dated March 3, 1903.

Application filed May 7, 1902. Serial No. 106,332. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. SIBLEY, a citizen of the United States, residing at Fostoria, in the county of Seneca and State of Ohio, have invented a new and useful Railroad-Tie, of which the following is a specification.

This invention relates to railroad-ties; and the object thereof is to provide a rigid structure which will constitute a firm and broad foundation for the rails or track, while at the same time employing a comparatively small amount of material, and, furthermore, to provide in connection therewith simple means for securely fastening the rails to the tie, so that the chance of said rails spreading is reduced to a minimum.

The preferred form of construction is clearly illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the improved tie, showing the rails secured thereto. Fig. 2 is a longitudinal section view through the same. Fig. 3 is a detail sectional view through one of the flanges and locking devices for the rail. Fig. 4 is a perspective view of one of the locking devices. Fig. 5 is a detail sectional view showing a slightly-modified form of construction.

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

In the embodiment of the invention as shown the tie, which is preferably constructed of metal, comprises a base-piece 10, from which project upstanding longitudinally-disposed spaced supporting-flanges 11. The base may be of any form or size, as desired, though, as shown, it preferably comprises a substantially rectangular plate having outstanding portions 10^a, which increase the bearing-surface. The flanges 11 are provided in their upper edges with recesses 12, each of which has one end undercut, as shown at 13, to provide the overhanging lug 14. Each recess, furthermore, has a depressed seat 15, the length of which is equal to the width of the rail and shorter than the length of the recess. The rails are arranged in these recesses and fitted in the seats 15, with the edges of their base-flanges engaged in the undercut portions, as shown. Holding devices 16 secure these rails in place, said de-

vices comprising heads 17, which fit in the recesses, as shown, and fill the remaining spaces thereof, said heads engaging over the opposite edges of the rails. The heads carry depending fingers 18, which embrace the flanges and are provided in their lower ends with openings 19. Through these openings are passed fastening-bolts 20, which also pass through the flanges, thereby securing the holding devices in place. These fastening devices may be employed on both sides of the rails, if desired, thus dispensing with the undercut portions 13 and the lugs 14, as will be seen in Fig. 5. In order to strengthen the flanges and base, transverse ribs 21 may be arranged across said base between the flanges and beneath the rails, and in order to avoid the collection of moisture between the flanges and ribs drain-openings 22 are formed in the base. By this means it will be seen that a tie is provided having a broad bearing-surface and yet employing a comparatively small amount of material.

The means for fastening the rails in place is extremely simple, and because of the heads of the holding devices fitting in the seats and abutting against the ends of said seats the bolts are relieved of a great deal of lateral strain, which is taken by the ends or shoulders formed by the recesses.

From the foregoing it is thought that the 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, proportion, 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 I claim as new, and desire to secure by Letters Patent, is—

1. A railroad-tie having a recess in its upper edge that is longer than the width of the rail-flange, and a depressed seat in the bottom of the recess that is substantially equal in length to the width of the rail-flange and is adapted to receive the same, in combination with holding means fitted in the recess and engaging the rail to hold it in said seat.

2. A railroad-tie comprising a base having an upstanding supporting-flange that is provided in its upper edge with a recess, said recess being longer than the width of the rail-flange and having a depressed seat in the bottom thereof, said depressed seat being equal in length to the width of the rail-flange and adapted to receive the same, in combination with a holding device fitted in the recess and filling the space between the rail and the end of said recess.

3. The combination with a tie comprising a base having an upstanding supporting-flange provided in its upper edge with a recess, one end of said recess being undercut to receive one of the edges of the base-flange of a rail the other end forming an angular shoulder, of a holding device fitted in the recess and engaging over the opposite edge of said rail-flange, said holding device abutting against the end shoulder of the recess and having depending fingers that embrace the flange,

and a substantially horizontal bolt passed through the flange and finger.

4. A tie comprising a base, a plurality of longitudinally-disposed spaced supporting-flanges projecting above the base and having rail-receiving recesses in their upper edges, said recesses being longer than the width of the rail-flanges, and transverse strengthening-ribs extending across the base and engaging the flanges beneath the recesses, said base being provided with drain-openings, in combination with holding devices for the rails fitted in the recesses and abutting against the ends thereof.

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

FRANK J. SIBLEY.

Witnesses:

W. L. JEFFORDS,
A. W. AYLSWORTH.