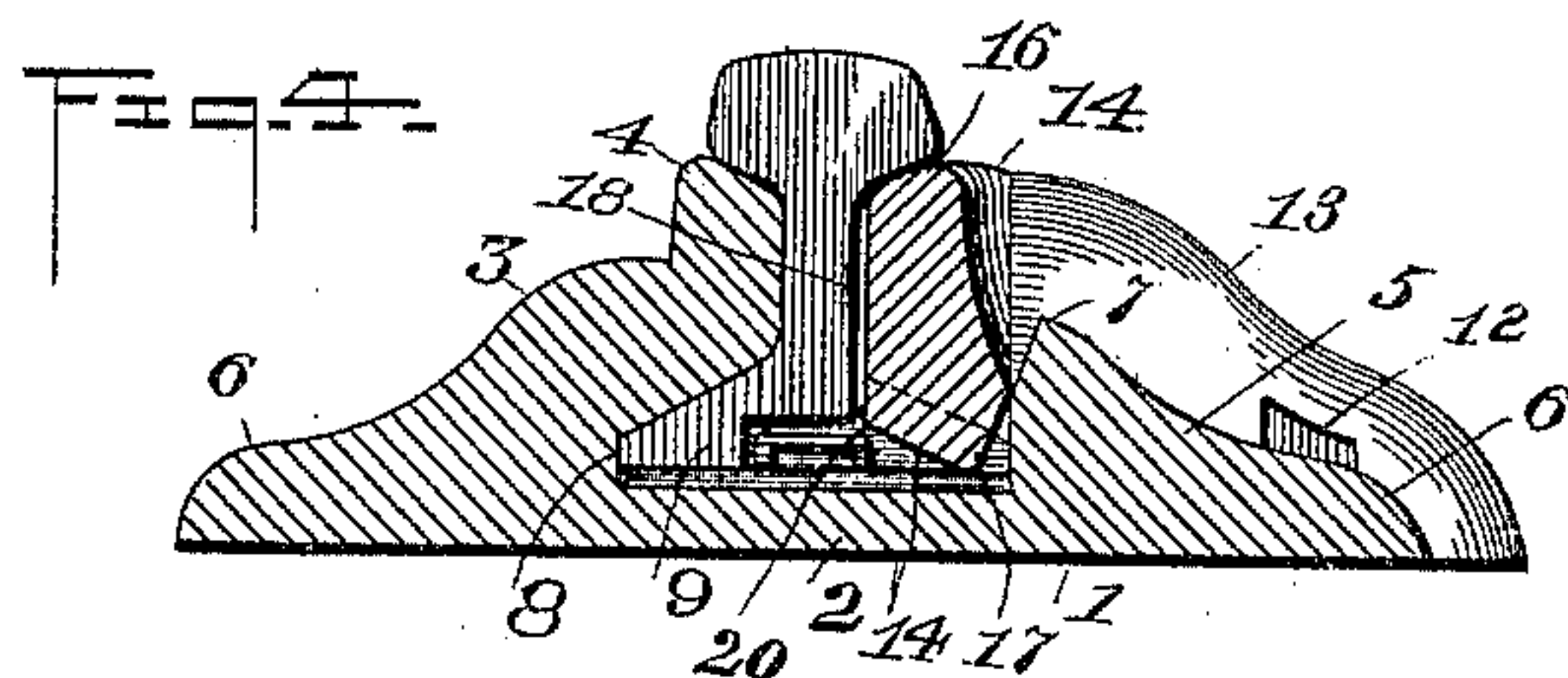
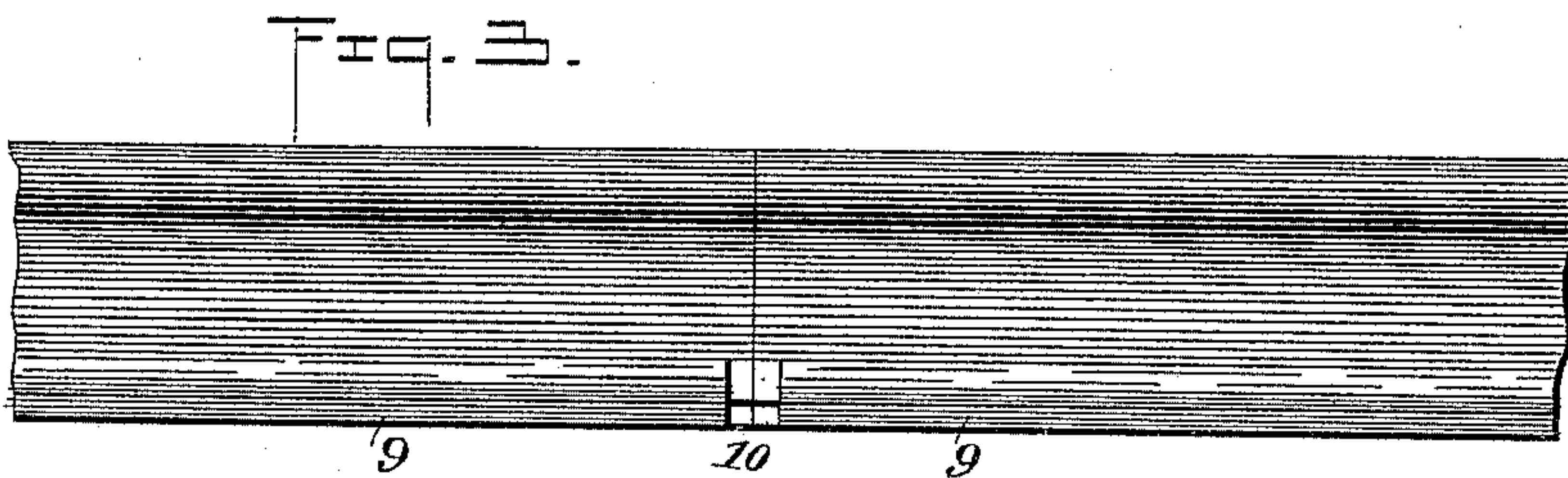
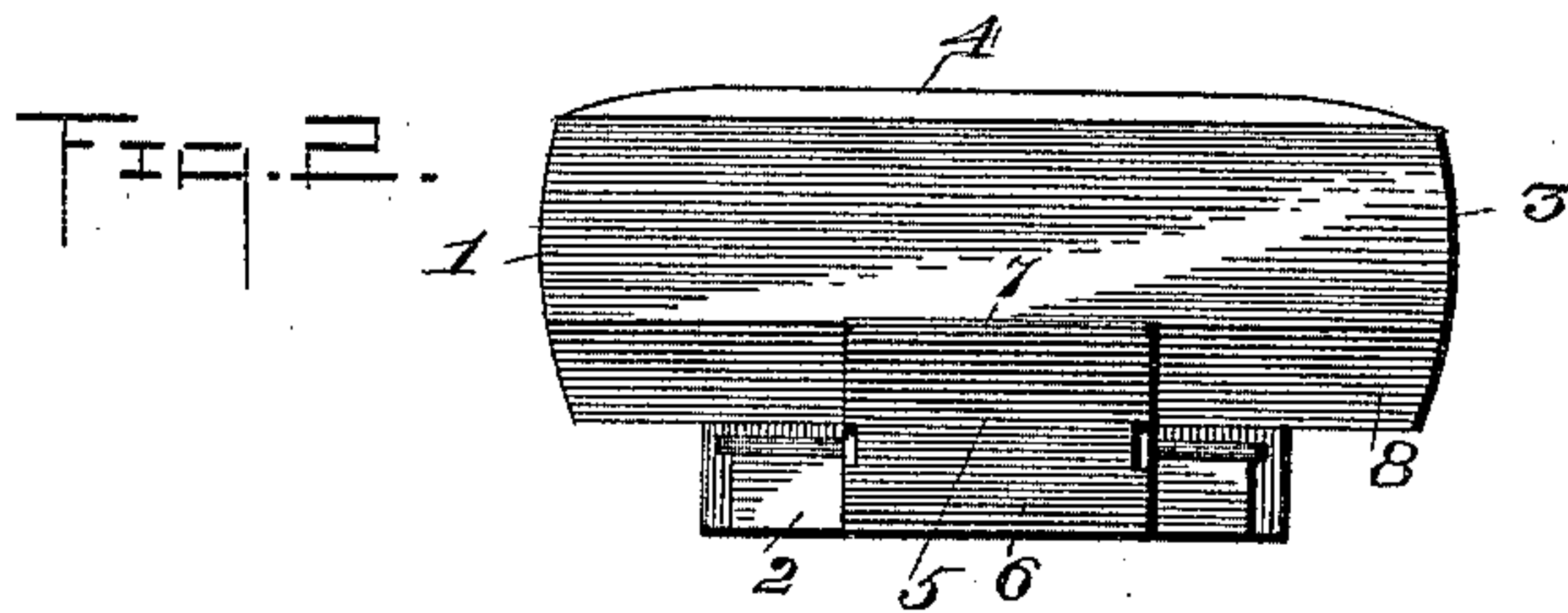
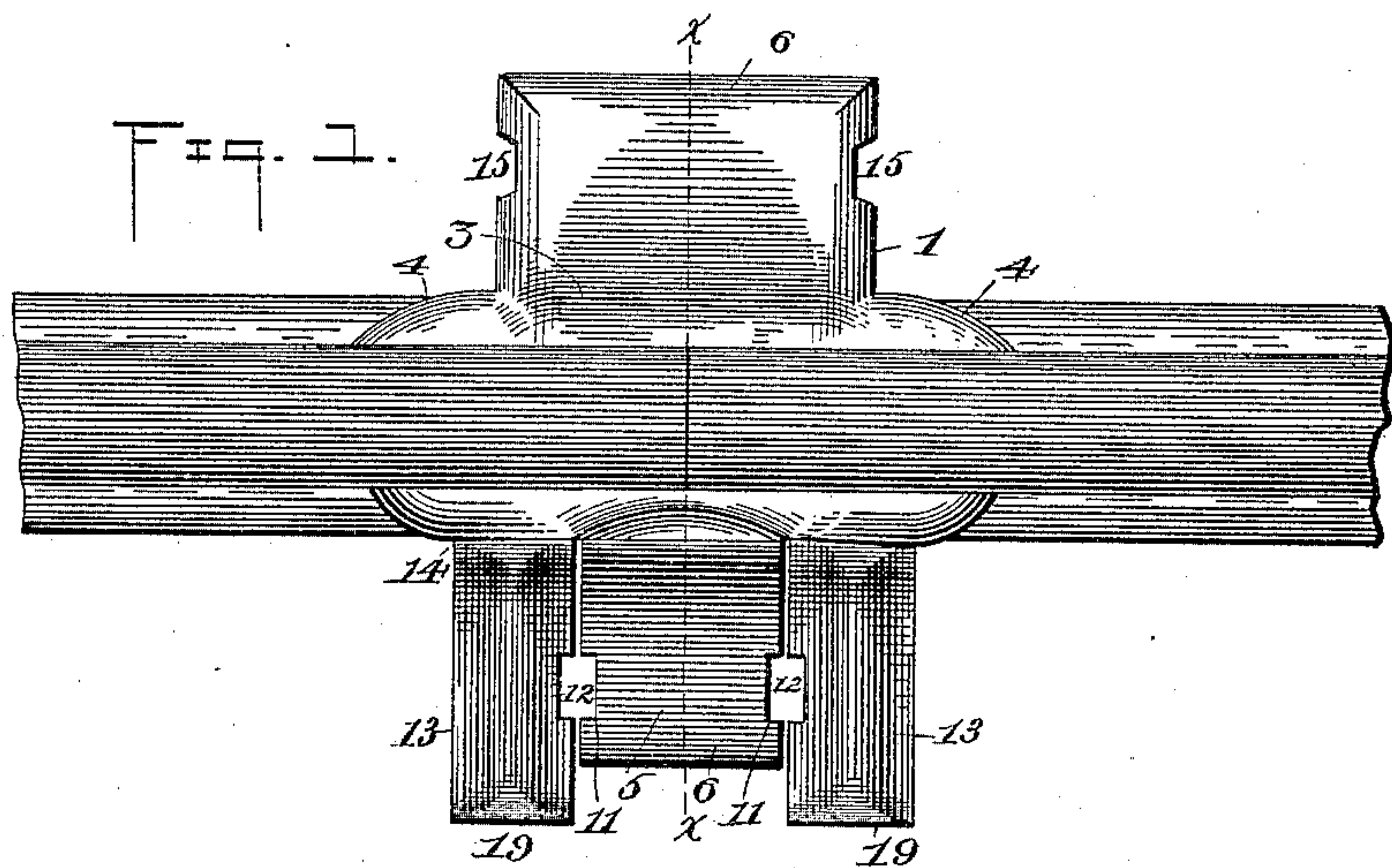


(No Model.)

N. T. FRAME.
RAILROAD CHAIR.

No. 446,633.

Patented Feb. 17, 1891.



Witnesses:
W. E. A. A. A. A. A.
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UNITED STATES PATENT OFFICE.

NATHAN T. FRAME, OF JAMESTOWN, OHIO.

RAILROAD-CHAIR.

SPECIFICATION forming part of Letters Patent No. 446,633, dated February 17, 1891.

Application filed November 6, 1890. Serial No. 370,567. (No model.)

To all whom it may concern:

Be it known that I, NATHAN T. FRAME, a citizen of the United States, residing at Jamestown, in the county of Greene and State of Ohio, have invented certain new and useful Improvements in Railroad-Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in chairs for railroad-tracks; and it consists in the construction, arrangement, and combination of the parts of which it is composed, as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, in which the corresponding parts are designated by similar letters, Figure 1 is a plan view of my invention. Fig. 2 is an end view of the chair proper. Fig. 3 is an elevation of the ends of two contiguous rails for use with my invention. Fig. 4 is a cross-section on the line *xx* of Fig. 1.

The chair proper 1 is of the shape shown in Fig. 2, it having on one side of its base-plate 2 the brace 3, which is of such a contour as to fit between the lower flange of the rails and the lower surface of the head thereof, the latter of which it supports, as is well known, the said brace 3 projecting over each side of the base-plate 2, as shown in Fig. 1 at 4, thus giving a greater bearing-surface on which to carry the heads of the rails. The opposite end 5 of the base-plate is reduced in width, forming offsets 6 on each of its sides, the said end 5 having a shoulder 7 upon its upper surface, between which shoulder and the inner face of the base of the brace 3 is the groove 8, the said groove being of sufficient width to receive the lower flanges of the opposite rails 9. A portion of the contiguous ends of each of the flanges upon one and the same side of the said rails is cut away, as at 10 in Fig. 3. The sides of the reduced end 5 have recesses 11 therein, which recesses, together with the corresponding and registering recesses 12 in the inner faces of the forks 13 of the pressure-block 14, receive nails

or spikes to retain them in position, the sides of the opposite end of the base-plate 2 having recesses 15 therein, which are also adapted to receive nails or spikes, as already known.

The pressure-lock hinge consists of block 14, the under and upper faces 16 and 17, respectively, of which are at a slightly greater distance apart than the lower surface of the head and the upper surface of the flange of the rail at their junction with the web, thus preventing the inner surface 18 of the block from bearing upon the web of the rail, but keeping it normally in the position shown in Fig. 4. As is shown in this figure, the block lies between the flange and the head of the rails on the opposite side to the brace 3 (the upper face 17 of the block being under and in contact with the lower surface of the head of a rail) and between the shoulder 7 upon the end 5 of the base-plate 2 of the chair (which serves as a fulcrum for the block) and the web of the rail. The forks 13 project from the outer surface of the block 14 at a distance apart equal to the width of the reduced end of the base-plate 2, on each side of which they lie, the outer lower surfaces 19 of the said legs being upon a tie of the track when in use. A lug 20 projects from the lower face 16 of the block 14 and rests in the recesses 10 of the flanges of the rails, thus retaining the junction of the rails in the center of the chair.

It will be evident from the above description that upon the passage of a train over the rails resting in the above-described chair the pressure of the lower surface of the head of the rail against the upper surface 17 of the locking-block 14 (the surfaces 19 of the legs thereof bearing upon the tie) will force the said upper surface 17 farther under the head of the rail, thus causing the support given the head of the rail to be directly proportional to the weight thereon. It will also be obvious that the chair, as above described, may be readily put together by raising the ends of the rails and putting the base-plate in place, after which the locking-hinge may be inserted by slipping its lower edge between the shoulder 7 and the web of

the rails, the weight of the rails causing the block to assume its proper position upon lowering the chair upon the tie.

Having thus described my invention, what I claim is—

1. The combination, with a railroad-chair, of a base-plate having a brace on one end thereof and a shoulder upon its opposite end, a block of a greater height than the distance between the flange and the head of the rail contained between the said brace and shoulder, a fork upon the outer surface of the said block extending outward and downward therefrom to below the lower surface of the said plate, and a rail between the said shoulder and block, as described.

2. The combination, in a railroad-chair, of a base-plate having a brace on one end thereof and a shoulder upon its opposite end, a block of a greater height than the distance between the flange and the head of the rail contained between the said shoulder and the web of the rail and having forks extending from the outer surface thereof and a lug upon its lower surface, and rails having their contiguous ends contained between the said brace

and shoulder, the ends of the flanges upon one side of the rail being cut away to receive the said lug, as described.

3. The combination, in a railroad-chair, of a base-plate having a brace on one end thereof and having a reduced opposite end and a shoulder thereon, a block of a greater height than the distance between the flange and the head of the rails contained between the said shoulder and the web of the rails and having forks extending from the outer surface thereof, the said forks being upon the opposite sides of the reduced end of the said base-plate and extending to the lower surface of the base-plate, a lug upon the lower surface of the block, and rails having their contiguous ends contained between the said brace and shoulder, the ends of the flanges upon one side of the rails being cut away to receive the said lug, as described.

In testimony whereof I affix my signature in presence of two witnesses.

NATHAN T. FRAME.

Witnesses:

M. TODHUNTER,
JOSHUA SMITH.