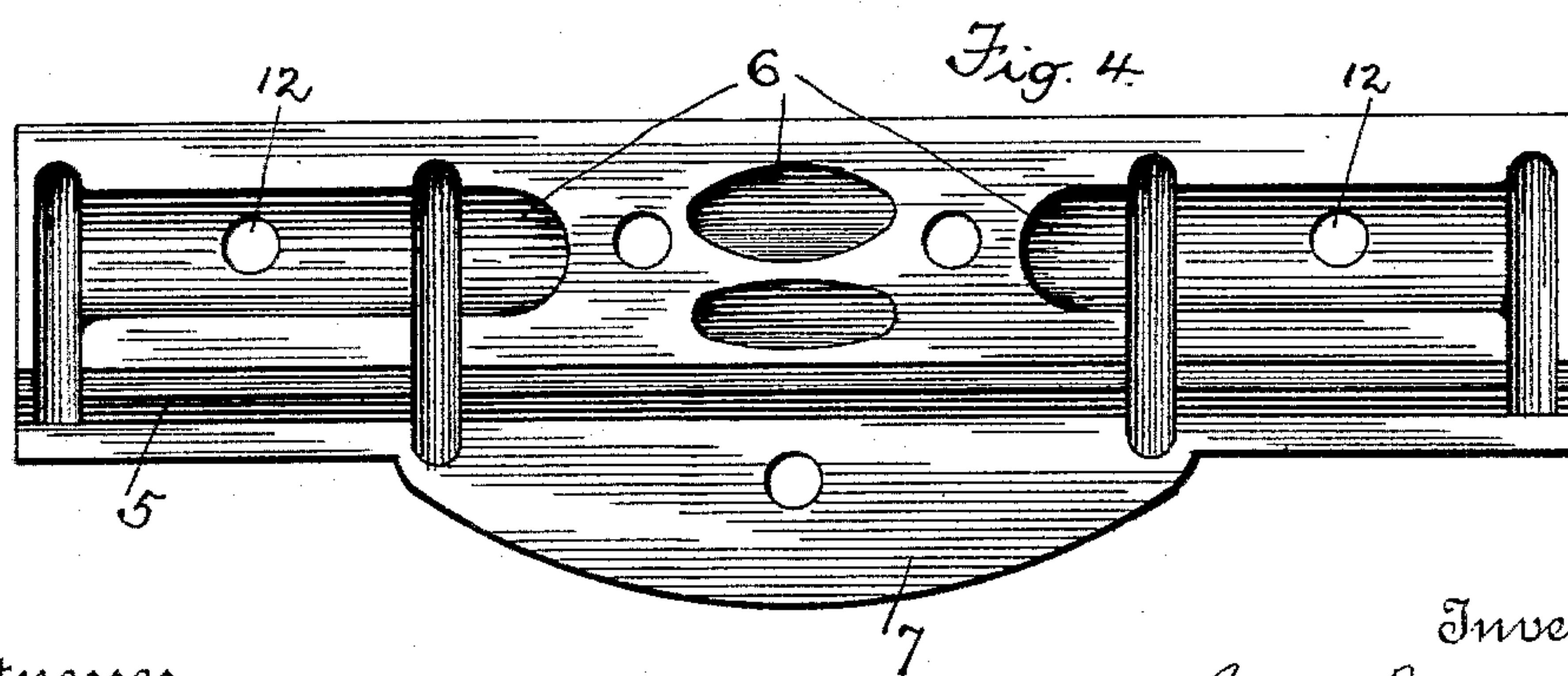
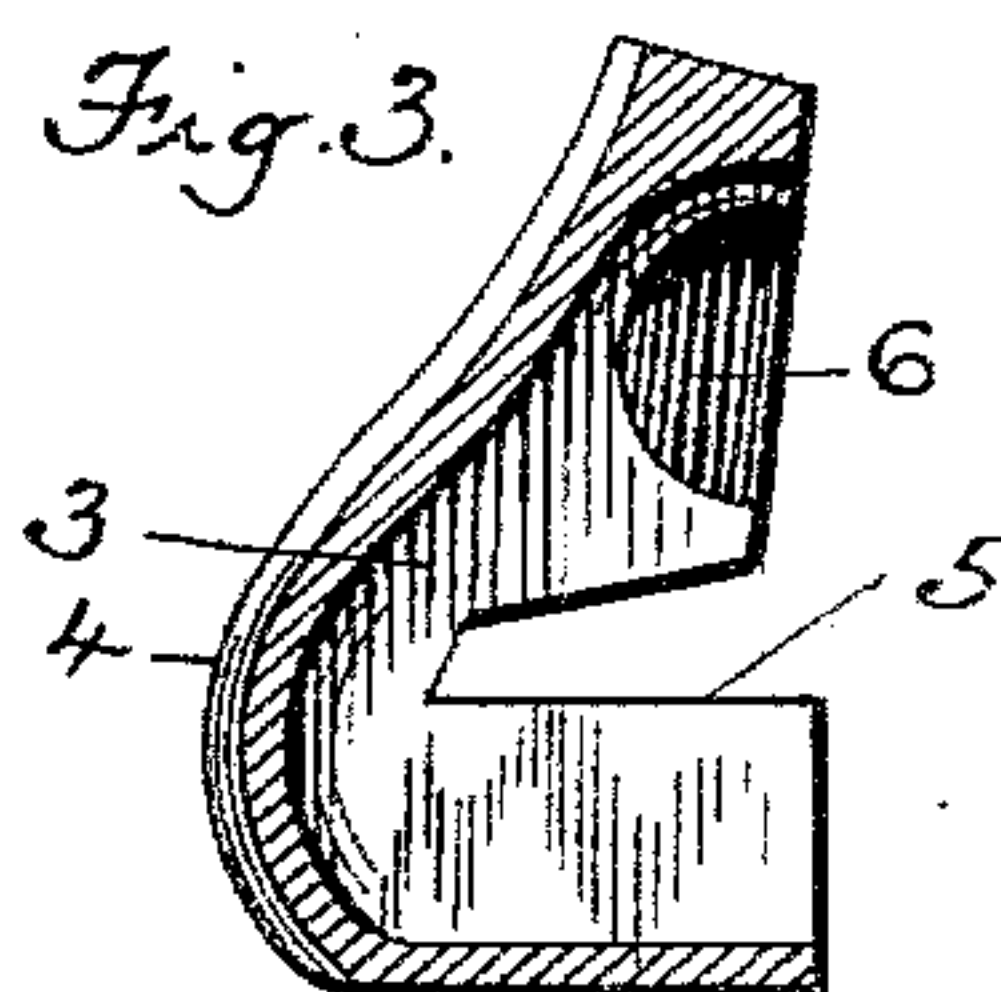
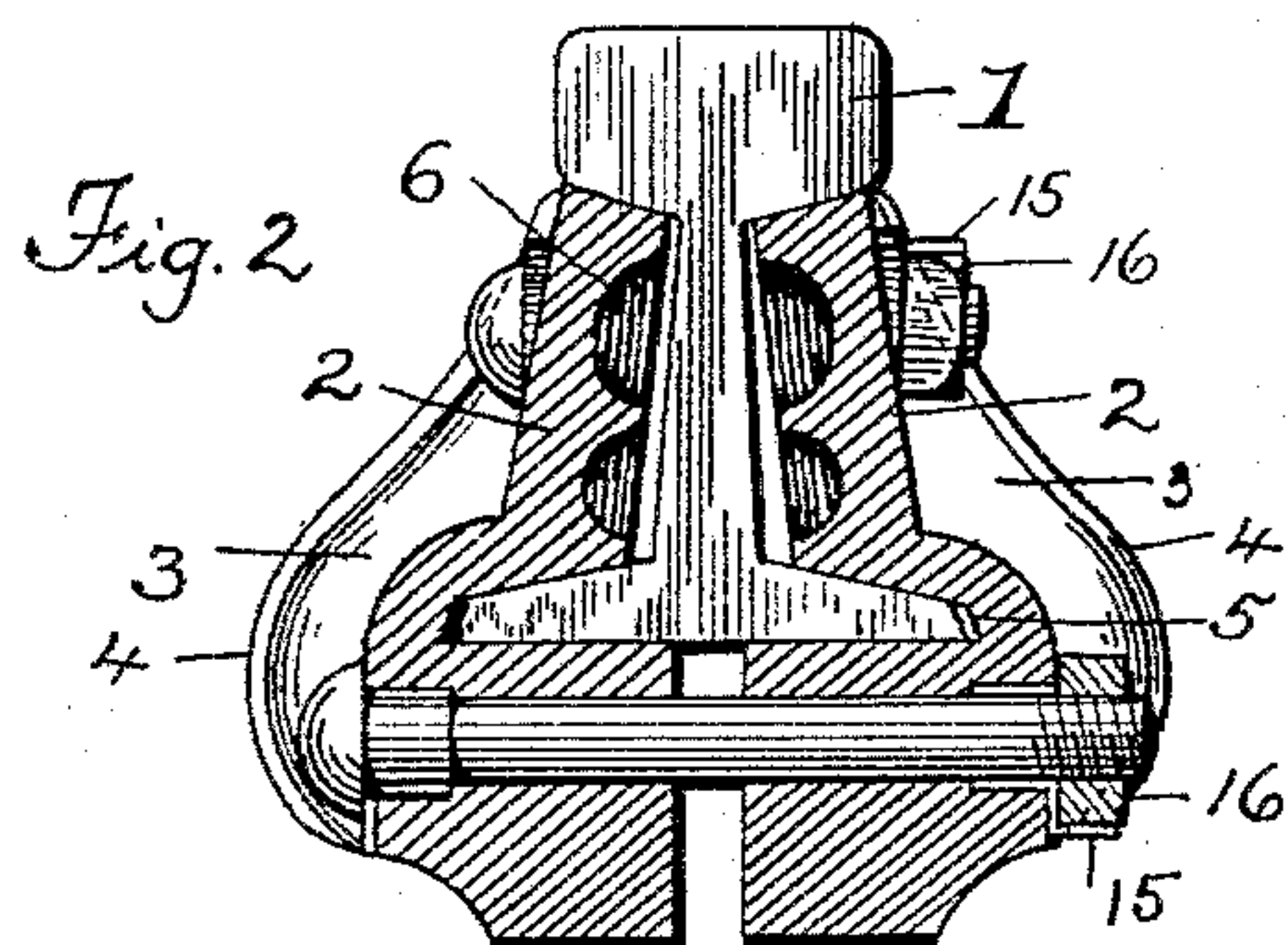
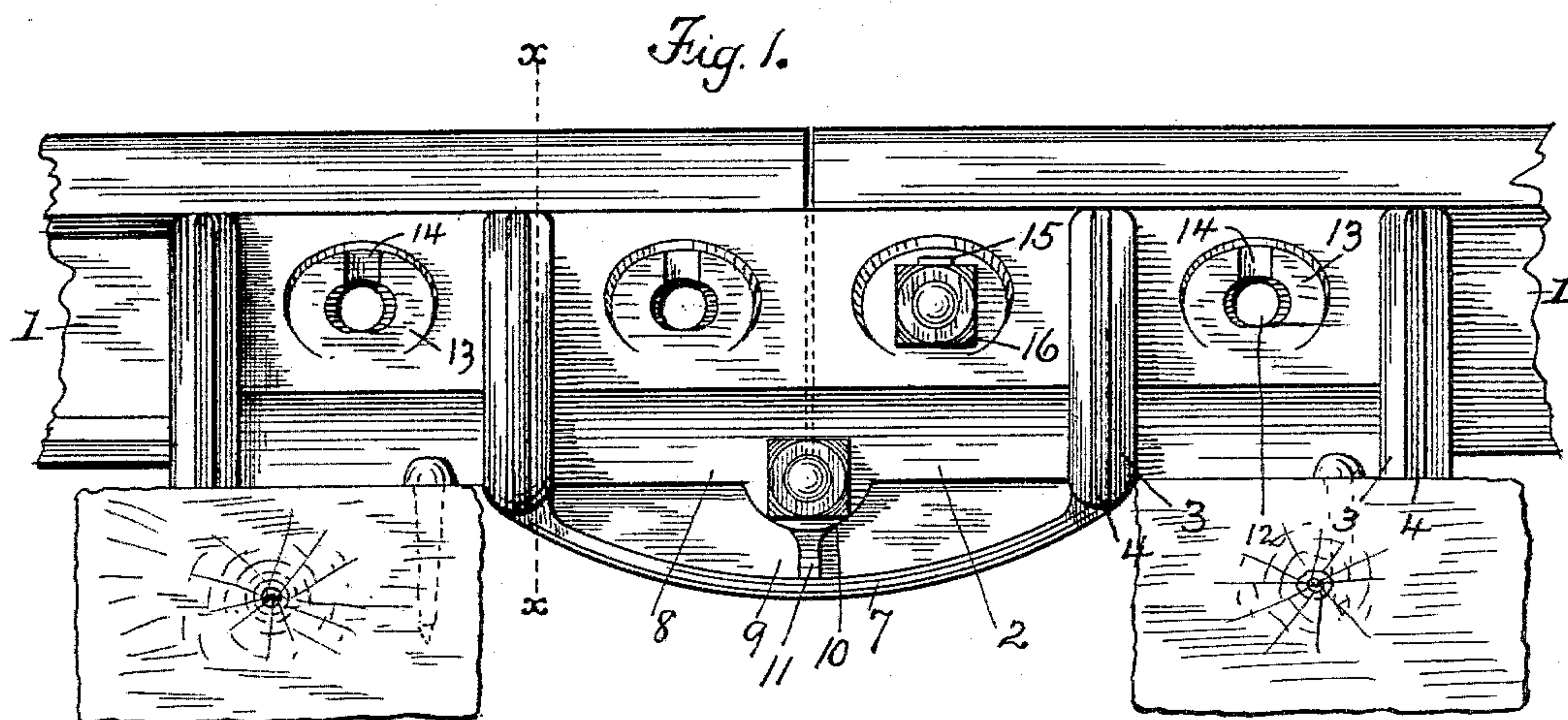


(No Model.)

P. BROWN.
RAIL JOINT CHAIR.

No. 598,134.

Patented Feb. 1, 1898.



Witnesses
Thos E. Robertson.
W. E. Clendaniel.

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UNITED STATES PATENT OFFICE.

PERRY BROWN, OF WILMINGTON, DELAWARE.

RAIL-JOINT CHAIR.

SPECIFICATION forming part of Letters Patent No. 598,134, dated February 1, 1898.

Application filed May 6, 1897. Serial No. 635,342. (No model.)

To all whom it may concern:

Be it known that I, PERRY BROWN, a citizen of the United States, residing at Wilmington, in the county of New Castle and State of Delaware, have invented a certain new and useful Improvement in Rail-Joint Chairs, of which the following is a specification, reference being had to the accompanying drawings.

This improvement relates to that class of rail-joint chairs in which the rail is clamped between two similar castings held together by bolts passing through the web of the rail and also by a bolt passing beneath the foot of the rail; and its object is to provide a joint of this character which shall combine the maximum of strength with the minimum of weight compatible with the service it has to perform.

To these ends the invention consists in the peculiar construction hereinafter described and then definitely claimed.

In the accompanying drawings, Figure 1 is a side view of a chair constructed according to my improvement with parts of two rails set therein. Fig. 2 is a transverse central vertical section of the same. Fig. 3 is a vertical transverse section through one of the parts of the chair on the line $x x$, Fig. 1. Fig. 4 is a side view of the inside of one of the parts of a chair.

Referring now to the details of the drawings by figures, 1 represents the rail, and 2 2 the sections of the chair, both of which are alike and are provided with hollow ribs 3, outside of which extend smaller solid ribs 4. On the inside of each part of the sections of the chair is a groove 5, running the whole length of the same, to receive the foot of the rail, and shorter grooves 6, the main object of which is to save metal and yet at the same time strengthen the casting by providing additional "skin" to the casting, for I find that in the skin most of the strength of malleable

castings resides. Depending from the bottom of each chair-section is a kind of truss 7, connected all its length to the base 8 of the chair by a web 9, in the longitudinal center of which is cast a thimble 10, through which the bolt to connect the parts together is passed. A short rib 11 connects the thimble to the truss 7. Through the upper part of each section is a series of holes 12, around each of which is a slight projection 13, designed to make a good seat for the heads and nuts of the bolts. In each of these projections is a recess 14, intended to receive a piece of sheet-iron 15, which when turned up against the side of the nut 16 forms a nut-lock, as shown at Figs. 1 and 2. When in use, the two parts are bolted together and the ends of the base of the chair rest upon the ties, the truss dropping between the ties.

What I claim as new is—

1. A rail-joint chair comprising two sections adapted to be clamped to the ends of the rails, and each provided with the hollow ribs 3, the truss 7 beneath the junction of the rails, the web 9 between the base and the truss, and the thimble 10, substantially as described.

2. As an improved article of manufacture, a rail-joint chair comprising two similar sections, each having a groove 5 to receive one-half of the feet of the adjoining rails, hollow ribs 3, a truss 7, web 9, thimble 10, rib 11 connecting the truss to the thimble, and provided with recesses for the reception of a nut-lock, all substantially as described and shown.

In testimony whereof I affix my signature, in the presence of two witnesses, this 4th day of May, 1897.

PERRY BROWN.

Witnesses:

THOS. E. ROBERTSON,
WALTER E. CLENDANIEL.