

No. 637,786.

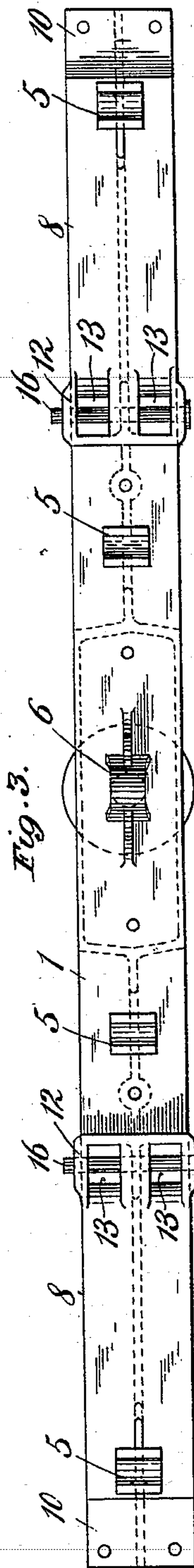
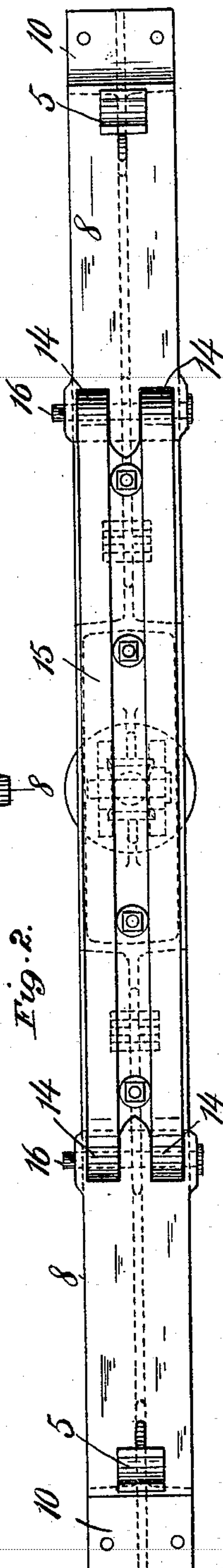
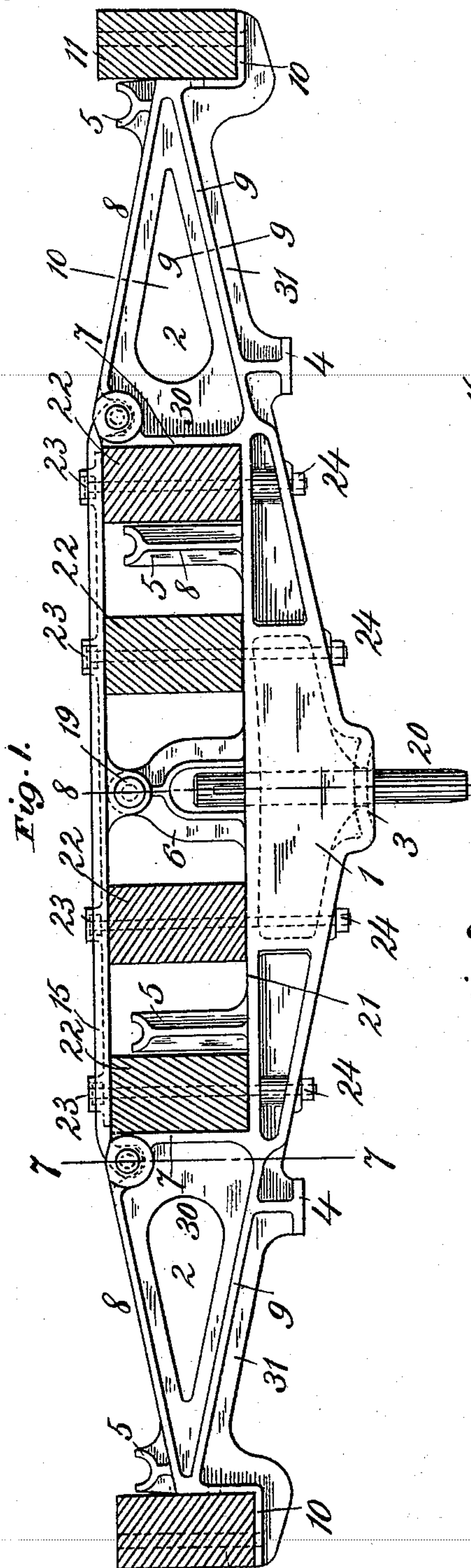
Patented Nov. 28, 1899.

J. HICKEY.  
CAR TRANSOM.

(Application filed Mar. 15, 1897.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES  
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2 Sheets—Sheet 2.

Fig. 4.

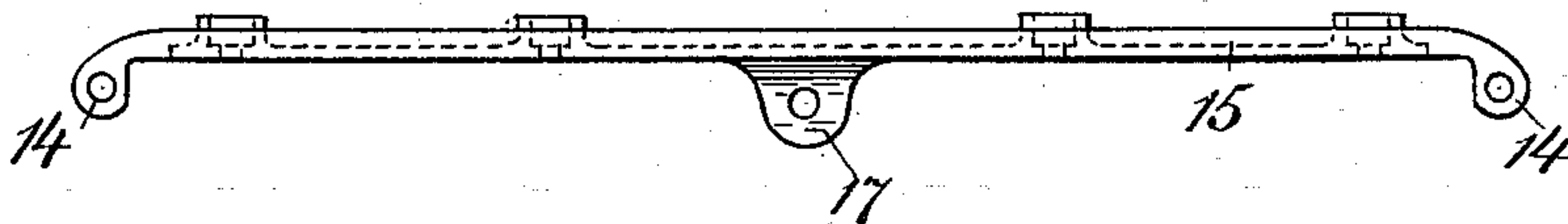


Fig. 5.

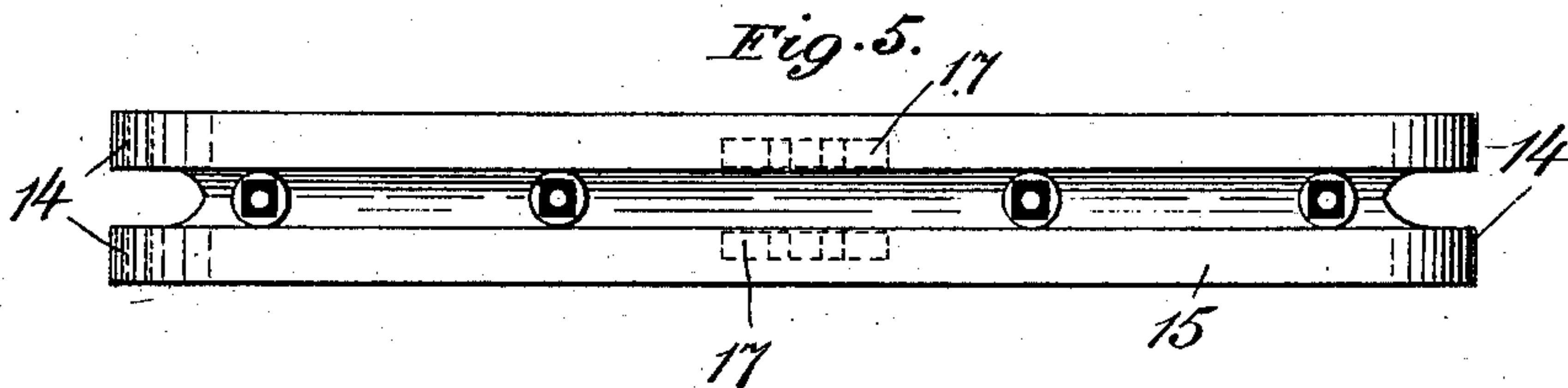


Fig. 6.

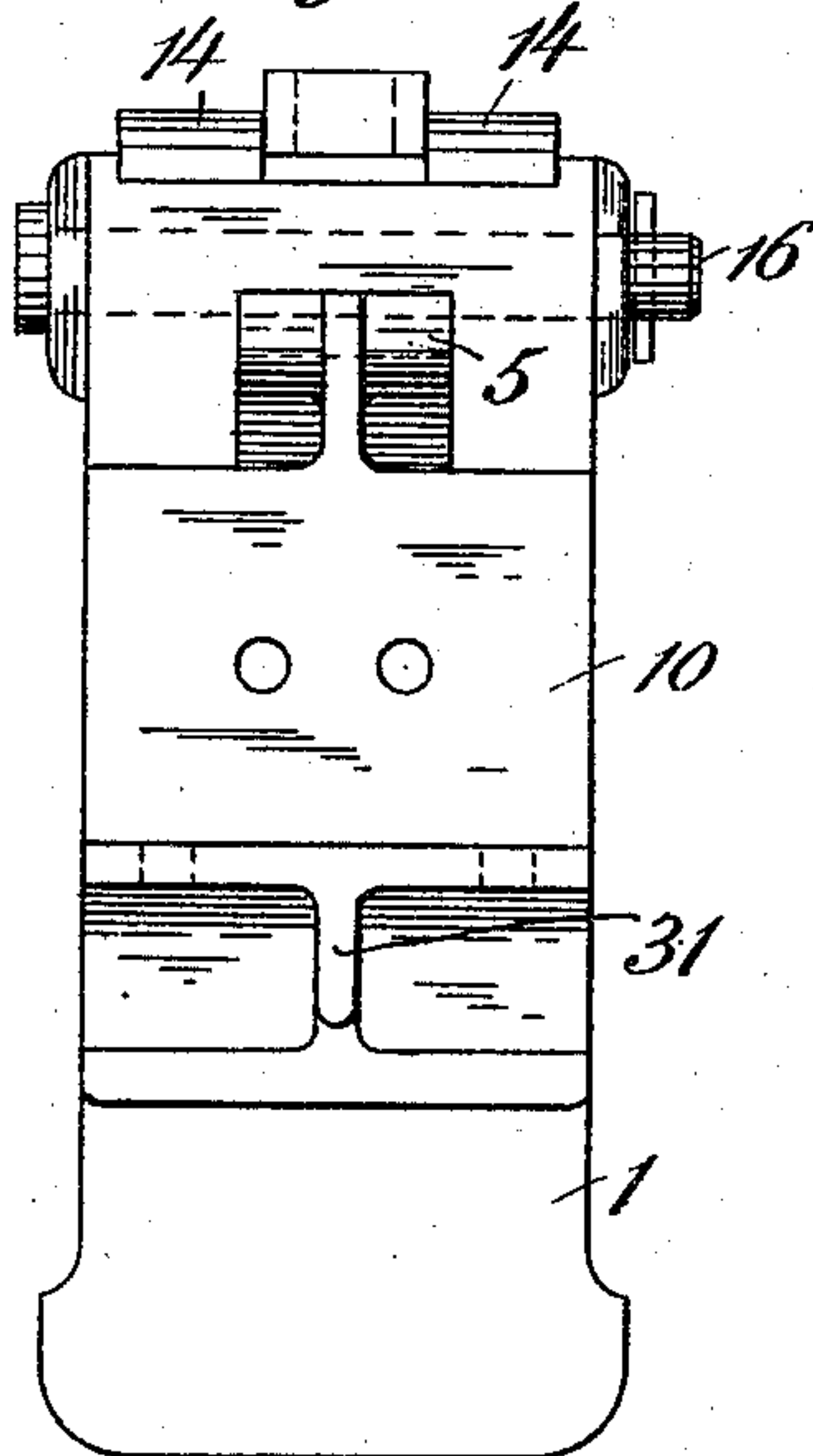


Fig. 7.

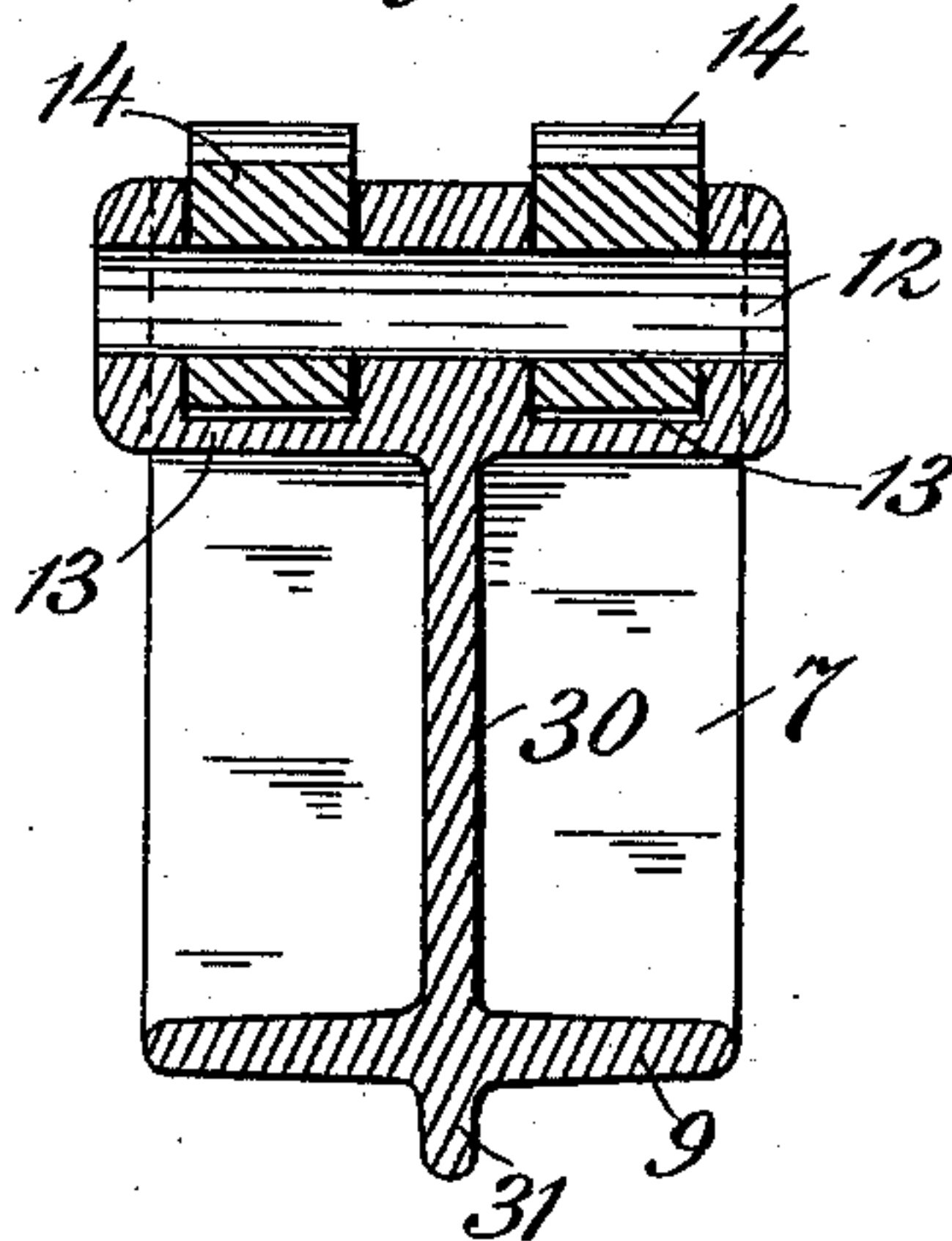


Fig. 8.

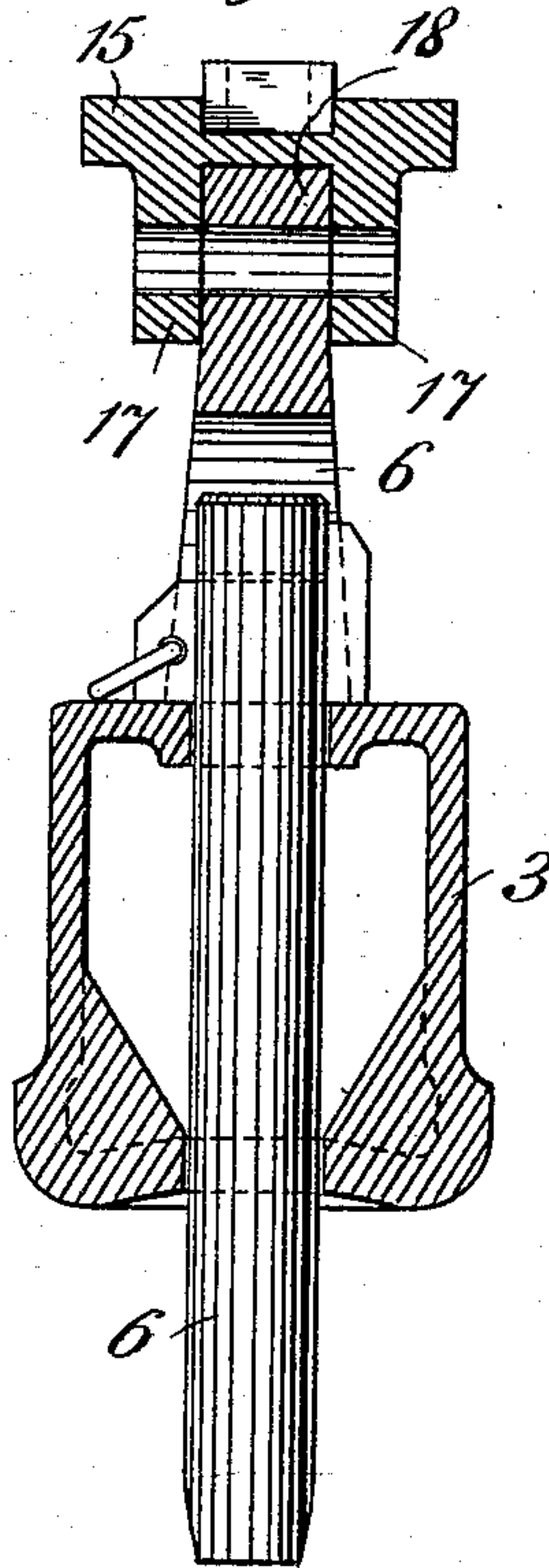


Fig. 9.

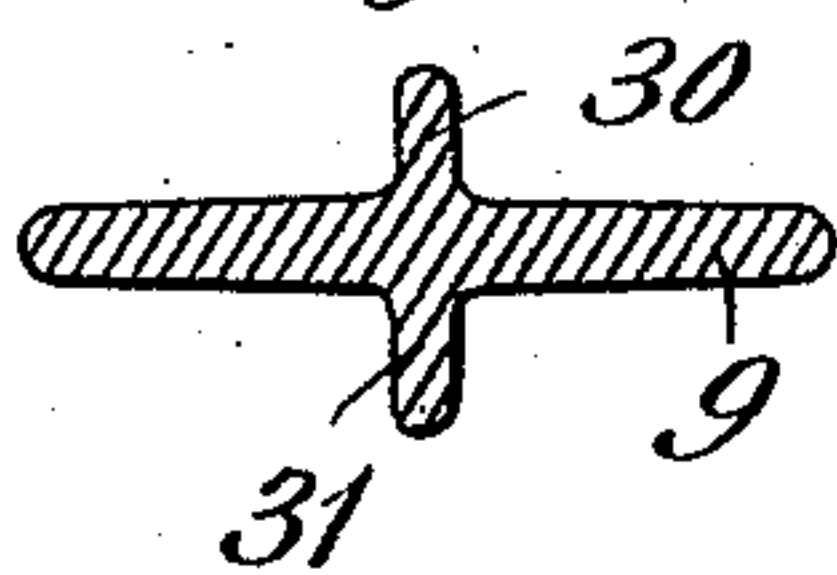
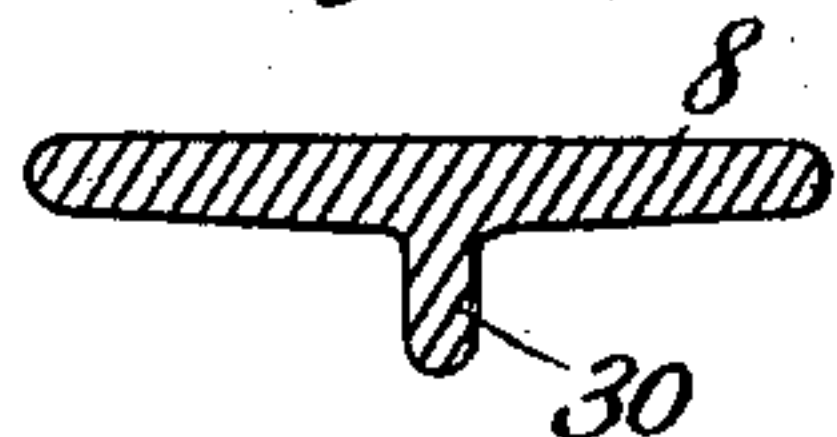


Fig. 10.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JOHN HICKEY, OF ST. PAUL, MINNESOTA, ASSIGNOR TO THE AMERICAN  
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## CAR-TRANSOM.

SPECIFICATION forming part of Letters Patent No. 637,786, dated November 28, 1899.

Application filed March 15, 1897. Serial No. 627,647. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HICKEY, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Car-Transoms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same.

My invention relates to transoms or body-bolsters for railway-cars; and its object is to provide a transom of great strength and rigidity adapted to be firmly secured to the car-sills, thereby insuring an even distribution of the load throughout the transom.

The characteristic features of the invention will be fully described hereinafter and are embodied in the transom illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the transom or body-bolster, the car-sills being shown in vertical section. Fig. 2 is a top plan view of the same. Fig. 3 is a plan view with the top bar removed. Figs. 4 and 5 are respectively an edge view or side elevation and a plan view of the top bar removed. Fig. 6 is an end elevation of the transom; and Figs. 7, 8, 9, and 10 are enlarged sectional views taken, respectively, on the lines 7 7, 8 8, 9 9, and 10 10 of Fig. 1.

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

The body of the transom comprises a base or register 1, provided with vertically and laterally projecting end extensions 2, a center bearing 3, side bearings 4, and upwardly-projecting bearings or saddles 5 to receive truss-rods. Rising from the center of the upper side of the base 1 is an arch-shaped yoke 6, the purpose of which will be explained hereinafter.

All of the parts thus far named are preferably made integral, of cast-steel or other suitable metal.

Each of the end portions 2 of the transom is provided with a vertical wall or face 7 and converging upper and lower bars 8 and 9, the strengthening-webs 30 31, and a depending

bracket 10, adapted to serve as a seat for the appropriate outer sill 11 of the car.

Each of the triangular end portions 2 of the transom is provided with a horizontal bolt-hole 12 and with pockets 13 to receive the perforated forked ends 14 of the removable top bar 15, which are secured by bolts 16.

Depending from the center of the under side of the bar 15 are parallel ears 17, between which is secured a perforated lug 18, projecting from the yoke 6, by means of a bolt 19. The yoke thus serves as a central point of attachment for the bar 15, and said yoke straddles and protects the king-bolt 20 of the transom, as shown in Fig. 1. The horizontal upper side 21 of the girder 1 constitutes a support for the inner longitudinal sills 22 of the car, and the vertical walls 7 of the triangular end portions constitute vertical supports for the sills adjacent to them. The height of the walls 7 is equal to that of the sills, and the latter are secured by the top bar 15 and by vertical bolts 23, which extend through the top bar, the sills, and the base 1, and are provided on their ends below the base 1 with nuts 24.

While the cross-sectional contour of the transom may be varied, I have shown the base 1 of box-like form in cross-section at its center, (see Fig. 8,) and thence of general I shape to its junction with the projecting end portions 2. The lower side of the base or girder is preferably inclined to correspond to the inclination of the bars 9 of the end portions.

By the construction of the girder 1, bearing against the under sides of the inner sills 22 and having upwardly-projecting end portions 2, with their vertical parts 7 bearing against the outer sides of the sills 22 and connected together at the top by the bar 15, bearing upon the sills 22, combined with the end brackets 10, bearing against and underlapping the outer sills 11, the transom and sills are intimately combined and braced together in every direction, and the load thereby distributed uniformly through the transom. Furthermore, by connecting the projecting end portions 2 of the girder 1 together at the top by the bar 15 the height of the transom



from the center bearing, as compared with a transom having the ordinary top and bottom bars, is increased to the extent of the depth of the inner sills 22, whereby a stronger and more rigid transom is obtained.

Having thus described my invention, what I claim is—

1. A car-transom, comprising a base or main body portion having a depression in its top for the reception of the central floor-sills, and a top bar spanning said depression.

2. A car-transom, comprising a base or main body portion having a depression in its top for the reception of the central floor-sills, and a top bar spanning said depression, said top bar being removable.

3. A car-transom, comprising a base or main body portion having a depression in its top for the reception of the central car-sills, the ends of the depression being vertical to afford lateral supporting-walls for the adjacent sills, and a top bar spanning said recess.

4. In a car-transom the combination of a beam adapted to furnish a bearing for the floor-beams, and having buttresses rising therefrom near its outer ends, with a truss rod or plate fastened to said buttresses and extending over the top of the intermediate floor-beams.

5. In a car-transom the combination of a beam adapted to furnish a bearing-surface for the floor-beams and having buttresses rising therefrom near its outer ends, said buttresses having vertical downwardly-facing top edges, and a tension-plate having downwardly-turned or hooked ends adapted to hook over the top edges of the buttresses and extending over the intermediate floor-beams.

6. A car-transom, comprising a base or main body portion having a depression in its top for the reception of the car-sills and having a king-bolt opening, a guard above the king-bolt opening, and a top bar spanning the recess.

7. A car-transom, comprising a base or main body portion having a depression in its top for the reception of the car-sills and having a king-bolt opening, a guard above the king-bolt opening, and a top bar spanning the recess,

and removably secured at its ends to the main body portion and at its center to the king-bolt guard.

8. A car-transom, comprising a base or main body portion having a depression in its top for the reception of the car-sills and having a king-bolt opening, a guard above the king-bolt opening, and a top bar spanning the recess, said top bar being provided at its ends and center with perforated lugs, and being secured to the main body portion and king-bolt guard by pins passing through corresponding perforations therein.

9. A car-transom, comprising a main body portion having a central depression, and truss-saddles located within said depression.

10. A car-transom, comprising a main body portion having a central depression, truss-saddles located within the depression, and truss-saddles located at the outer ends of the transom.

11. An integrally-formed car-transom having a main body portion, whose central part comprises a box-girder carrying the central bearing, and whose outer or side wings constitute flanged girders carrying the side bearings and having a central web.

12. A car-transom, having a main body portion whose central part comprises a box-girder, and whose outer or side wings constitute flanged girders, said side wings extending above the central part so as to leave a depression for the reception of the central floor-sills.

13. A car-transom, having a main body portion, whose central part comprises a box-girder carrying the center bearing and whose outer or side wings constitute centrally-webbed flanged girders carrying the side bearings, said side wings having brackets at their outer ends to receive the outer car-sills.

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

JOHN HICKEY.

Witnesses:

H. C. FROST,  
N. S. WILBUR.