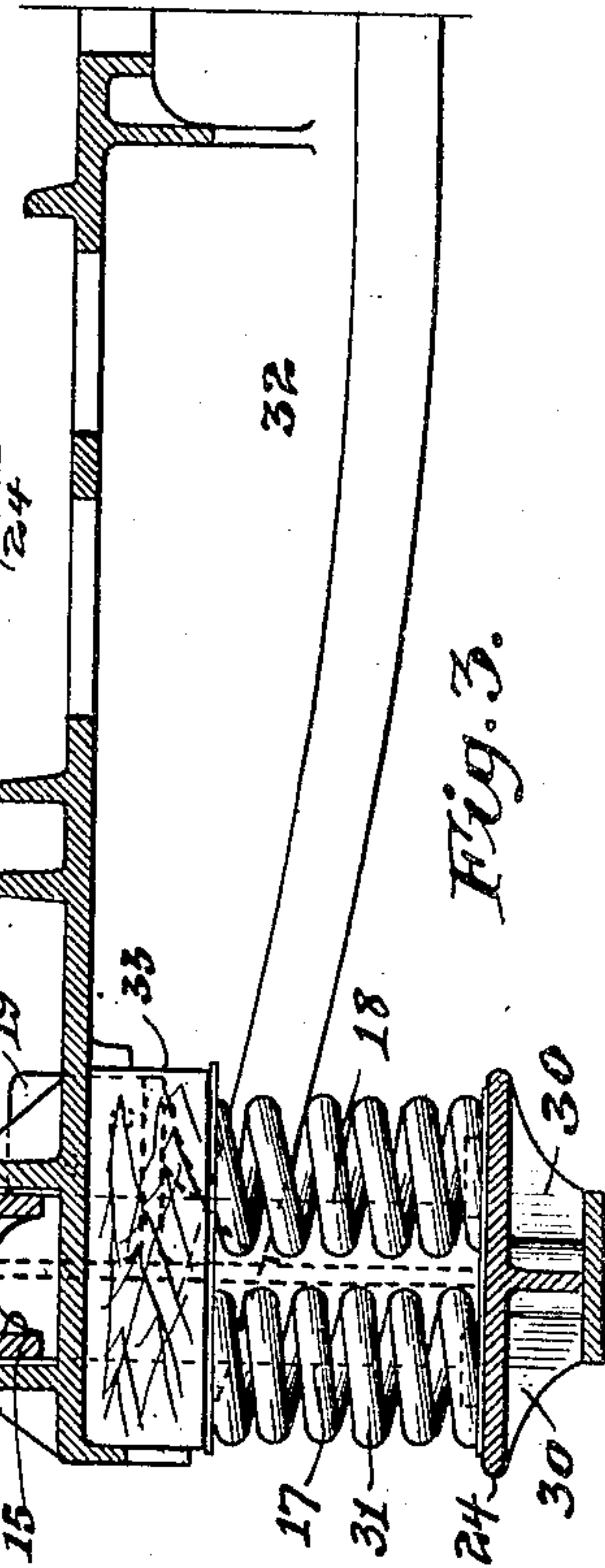
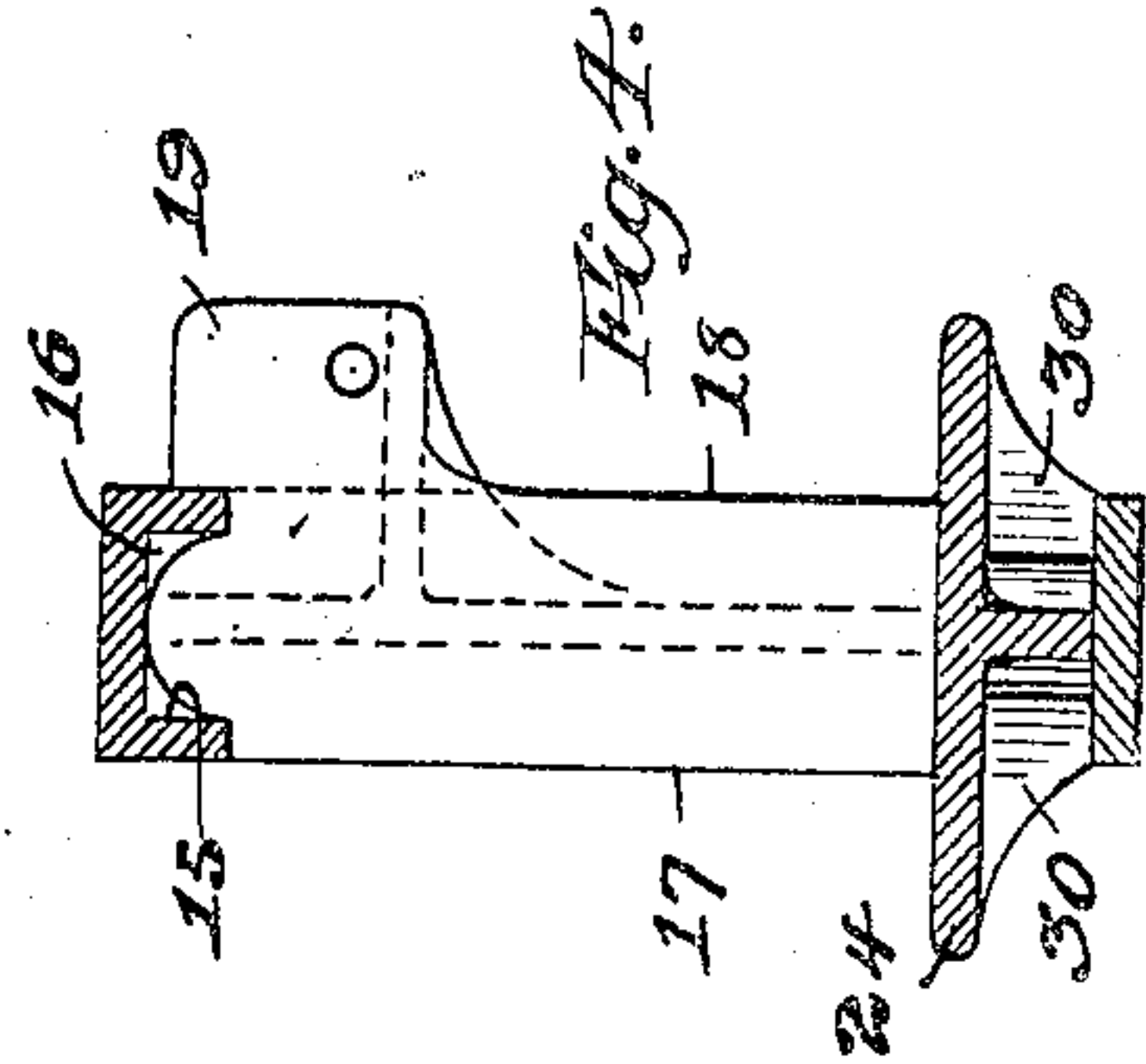
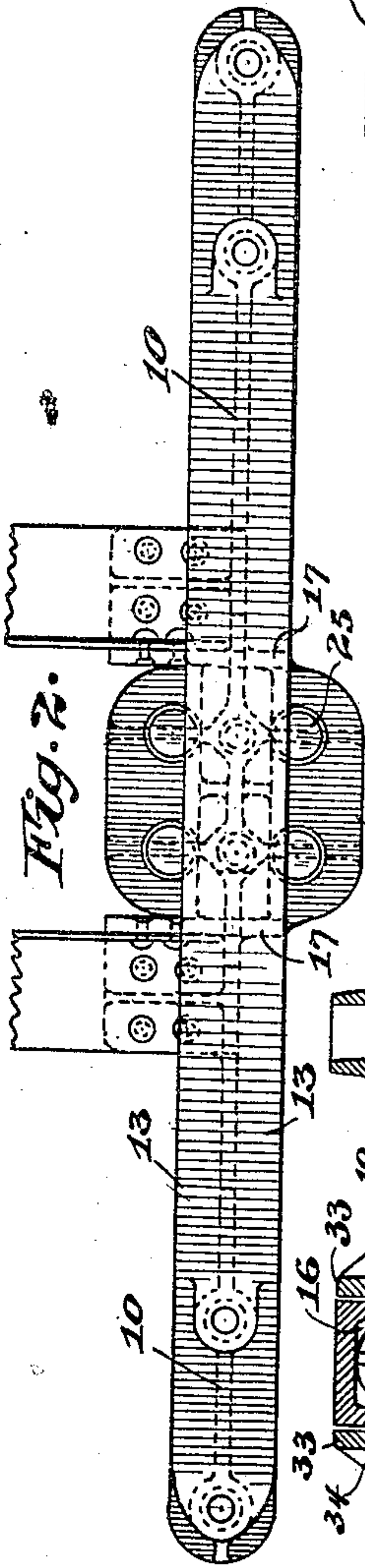
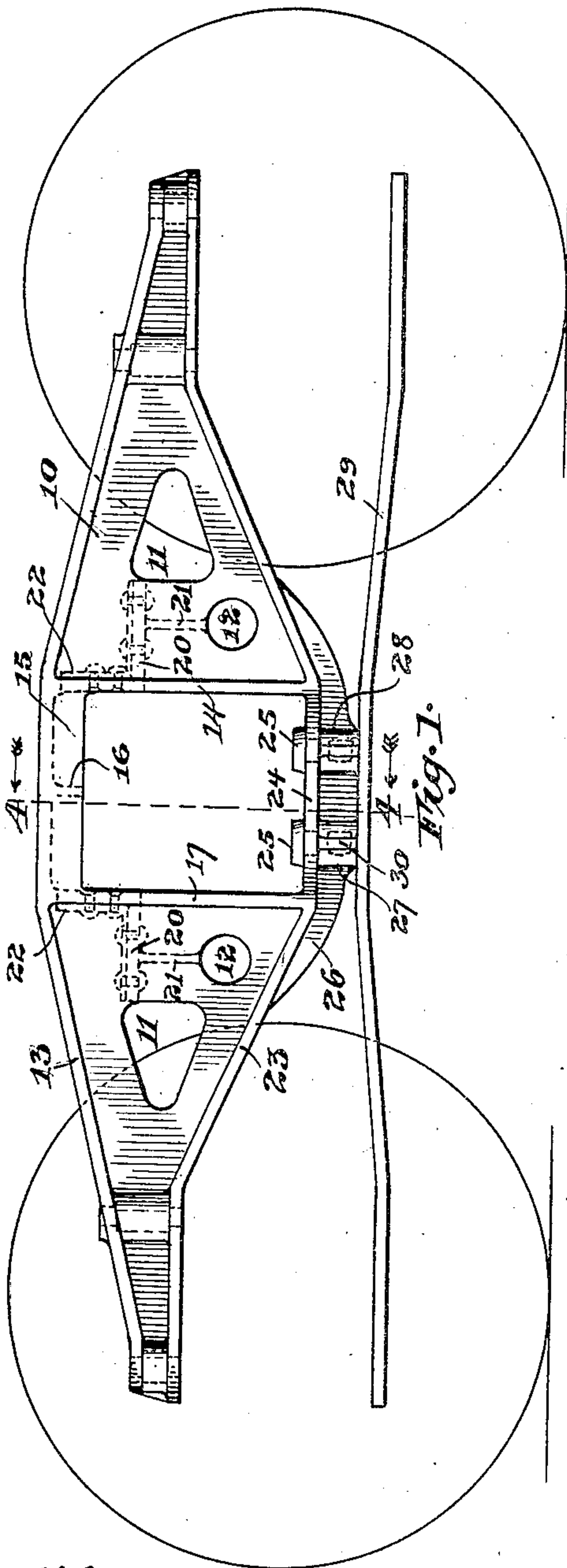


G. G. FLOYD.
RAILWAY CAR TRUCK.
APPLICATION FILED SEPT. 24, 1906.

924,976.

Patented June 15, 1909.



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UNITED STATES PATENT OFFICE.

GEORGE G. FLOYD, OF GRANITE, ILLINOIS, ASSIGNOR TO AMERICAN STEEL FOUNDRIES, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

RAILWAY-CAR TRUCK.

No. 924,976.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed September 24, 1906. Serial No. 335,924.

To all whom it may concern:

Be it known that I, GEORGE G. FLOYD, a citizen of the United States, residing at Granite, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Railway-Car Trucks, of which the following is a specification.

My invention relates to railway car trucks and its main object is to provide means whereby the bolster may be readily removed from the truck and disconnected from the side frames.

In my preferred construction each side frame is cast in one piece and is provided with a central aperture or opening through which an end of the bolster projects. At the bottom of this opening the side is broadened so as to provide a wide spring seat, springs being interposed between this seat and the under side of the end of the bolster. To prevent lengthwise movement of the bolster I supply it on its upper side or surface near each end with guiding lugs adapted to fit on opposite sides of that portion of the side frame over the aperture. Under normal working conditions these lugs prevent the bolster from shifting longitudinally, but in case it is desired to withdraw the bolster the springs are removed, allowing the bolster to drop sufficiently to enable it to be withdrawn from the side frame, the lugs on its upper face escaping that part of the frame over the aperture.

Another object of my invention is the provision of means for the attachment of the transoms or transverse beams to the side frames. For this purpose I preferably use, in connection with inwardly projecting walls, shelves with brackets integral with the side frame and extending inwardly from the plate or vertical web portion of the frame.

I have illustrated the preferred embodiment of my invention in the accompanying drawings, wherein,

Figure 1 is a side elevation of my improved and novel side frame; Fig. 2 is a plan view of the structure shown in Fig. 1; Fig. 3 is a section longitudinally of the bolster and transversely of the side frame on an enlarged scale; and Fig. 4 is a transverse section of the side frame on line 4-4 of Fig. 1.

The side frame of the car truck includes a main plate or vertical web 10 triangularly

and circularly apertured at 11 and 12 for the purpose of producing a structure of minimum weight consistent with sufficient strength. The top edge of plate 10 is bowed upwardly and has flanges 13 extended therefrom its opposite directions. At its central part this plate or web has a rectangular opening 14 adapted to receive the end of the bolster and the bolster springs. Above this opening or aperture flange 13, which at this portion becomes a web, is provided on both edges with a downwardly extended flange 15, the two depending flanges being tied together at their centers by an arched web 16, shown most clearly in Fig. 3. The sides of aperture 14 have outwardly extended flanges 17 and inwardly projecting flanges 18 which at their upper ends are considerably broadened at 19. Adjacent to the lower ends of the broad parts of these flanges or walls are horizontal shelves 20 integral with the frame and sustained in position by integral brackets 21. The walls 19 and shelves 20 form convenient means to which to rivet angle transoms 22. Along its bottom edge plate 10 has a marginal flange 23 which at the bottom of recess 14 is considerably widened to provide the spring seat 24 extending inwardly and outwardly from the plate 10. The top surface or face of this spring seat may desirably be supplied with round bosses 25 over which the lower ends of the bolster springs are adapted to fit. Beneath a portion of flange 23 and spring seat 24 the frame has a downwardly extended rib 26 with apertured enlargements 27 adapted to accommodate bolts or the like for maintaining in position the pedestal tie-bar 29. This rib 26 and the enlargements also have bracket ribs 30 to aid in supporting the spring seat 24.

The bolster springs 31 when in position rest on the spring seat and encircle the bosses 25, while the bolster 32 has its end projecting through aperture 14 and in connection with the filler block 33 rests upon the top ends of the springs 31. On its top surface bolster 32 has two transverse lugs or ribs 33 adapted to overlap flanges 15, as shown in Fig. 3, this construction preventing lengthwise movement of the bolster as long as the springs remain in place. These ribs or lugs 33 are desirably integral with the bolster and may be supplied with integral bracket supports or braces 34 to maintain them in proper position. In order to re-

move the bolster it is merely necessary to take out the springs which permits the bolster to descend sufficiently so that lugs 33 escape flanges 15, thereby permitting the
5 bolster to be withdrawn through aperture 14.

I claim:

1. In a railway car-truck, the combination of a side-frame having an aperture of substantially uniform width and adapted to
10 accommodate the end of a bolster, and a bolster whose end projects through said aperture and is of substantially the same width as said aperture, said bolster having integral therewith a pair of transverse up-
15 standing guiding ribs or lugs adapted to lie on opposite sides of that portion of the side-frame above said aperture and co-act therewith permitting vertical movement of the bolster but preventing longitudinal shifting
20 thereof, said ribs or lugs and portion of said frame constituting the sole means for preventing lengthwise movement of the bolster, substantially as described.

2. In a railway car-truck, the combination of a side-frame having an aperture of substantially uniform width and adapted to
25 accommodate the end of a bolster, and a bolster whose end projects through said aperture and is of substantially the same width as said aperture, said bolster having integral therewith a pair of transverse up-
30 standing guiding ribs or lugs adapted to lie on opposite sides of that portion of the side-frame above said aperture and co-act therewith permitting vertical movement of the bolster but preventing longitudinal shifting
35 thereof, said ribs or lugs and portion of the side-frame constituting the sole means for preventing lengthwise movement of the bolster, said bolster also having integral there-
40 with one or more braces to strengthen said ribs or lugs, substantially as described.

3. In a railway car-truck, the combination of a side-frame having an aperture of
45 substantially uniform width and adapted to accommodate the end of a bolster, the portion of said frame over said aperture having practically parallel flanges, and one or more transverse webs integral with and connect-

ing said flanges, and a bolster whose end is of 50 substantially the same width as said aperture and projects through the same, said bolster having integral therewith a pair of transverse upstanding guiding ribs or lugs adapted to lie on opposite sides of said flanges to 55 co-act therewith, permitting vertical movement of the bolster and preventing longitudinal shifting thereof, said ribs or lugs and flanges constituting the sole means for preventing lengthwise movement of the bol- 60 ster, said bolster also having integral therewith one or more braces to aid in maintaining said ribs or lugs in proper position and preventing their being broken off, substantially as described. 65

4. In a railway car-truck, the combination of a side-frame having a bolster aperture of substantially uniform width adapted to accommodate the end of a bolster, the portion of said frame over said aperture having 70 substantially parallel depending flanges connected together by one or more transverse webs, and a bolster whose end projects through said aperture and is of substantially the same width, said bolster having on its 75 top surface upstanding transverse guiding ribs or lugs integral therewith and co-acting with said flanges permitting vertical movement of the bolster and preventing longitudinal shifting thereof, said lugs or ribs 80 and flanges constituting the sole means for preventing lengthwise movement of the bolster, substantially as described.

5. A side-frame for a railway car-truck having an inwardly-projecting wall integral 85 with said frame and at one vertical edge of its spring pocket, and an inwardly-projecting shelf near the top of the side-frame supported by a bracket beneath it both integral with said frame, legs of an angle bar trans- 90 som being adapted to lie against and be fastened to said wall and shelf, substantially as described.

GEORGE G. FLOYD.

Witnesses:

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