

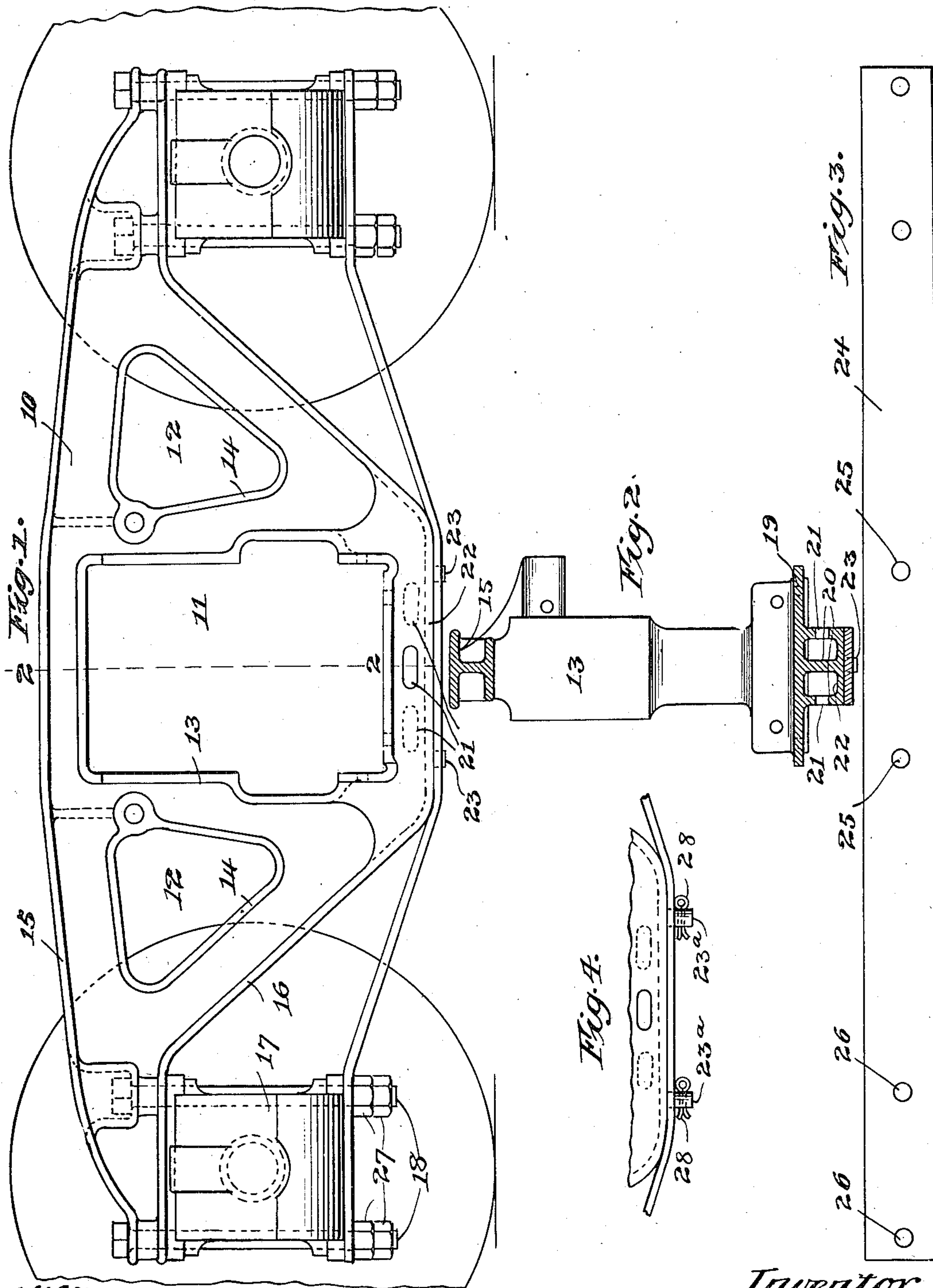
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G. G. FLOYD.

SIDE FRAME FOR RAILWAY CAR TRUCKS.

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UNITED STATES PATENT OFFICE.

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SIDE FRAME FOR RAILWAY-CAR TRUCKS.

No. 837,047.

Specification of Letters Patent.

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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 Side Frames for Railway-Car Trucks, of which the following is a specification.

My invention pertains to railway-car-truck side frames; and its principal object is the production of such a frame of comparatively great depth at its center and having a large central aperture or recess to receive the ends of the spring-plank and bolster, at the same time maintaining the strength of the frame up to the standard. To accomplish this object, I provide below the flat plate portion supporting the spring-plank a plurality of spaced longitudinal webs which act to support the plate portion and to tie together the two ends of the frame on each side of the central aperture.

My invention also comprehends an improved means of attaching the tie-bar to the frame, which includes dowel-pins, preferably integral with the frame, adapted to fit in holes in the bar.

The preferred embodiments of my invention are illustrated on accompanying drawings, wherein—

Figure 1 is a side elevation of the truck side frame. Fig. 2 is a vertical cross-section on line 2 2 of Fig. 1. Fig. 3 is a plan view of the tie-bar, and Fig. 4 is a fragmentary elevation of a modified means for attaching the tie-bar to the side frame.

Referring to the drawings, it will be seen that the web 10 of the side frame has a central aperture 11 to accommodate the bolster and spring-plank and two triangular apertures 12 to economize on metal without sacrificing strength in the structure. These apertures 11 and 12 have the marginal flanges 13 and 14, respectively, while the web 10 has the top and bottom peripheral flanges 15 and 16, the function of which, as is well understood, is to stiffen the frame. At its ends the frame is equipped with any convenient means to accommodate and cooperate with the journal-boxes 17. Those shown in the present instance comprise the usual pairs of journal-box bolts 18.

The flange on the lower margin of recess 11

is desirably made broad to form a plate 19, as shown in Fig. 2, to offer a strong support for the spring-plank, and beneath plate or flange 19 are three spaced longitudinal webs 20, suitably apertured at 21 to provide for sustaining the cores when the frame is cast. These webs are united along their lower edges by the horizontal portion 22, which forms a continuation of flange 16, and the webs in addition to supporting plate 19 tie together the two legs or end parts of the frame.

Projecting downwardly from part 22 are a plurality of dowel-pins 23, preferably cast integral with the frame, adapted to hold tie-bar 24 in place by fitting in holes 25, while the ends of the tie-bar are securely attached to the bolts 18, the latter passing through holes 26, nuts 27, threaded on the ends of the bolts, retaining the bar in position. By using this construction I have an advantage in regard to economy, since the pins can be easily cast on the frame without additional expense, and the bar can be readily and quickly removed when desired.

In Fig. 4 I have shown a slight modification, wherein the dowel-pins 23^a are somewhat longer than pins 23 and have cotters 28 passing through transverse holes therein to keep the tie-bar from falling in case its ends become broken off or become detached from the bolts 18.

It is apparent that my novel side frame is designed to successfully meet the requirements regarding depth and strength and that my improved means for positioning the tie-bar has the advantage of economy and ease with which the bar may be removed and replaced.

Various modifications in the described structure will be apparent to those skilled in the art to which my invention pertains, and it should be borne in mind that such changes fall within the scope of my invention as defined by the claims.

I claim—

1. A railway-car-truck side frame having a tie-bar and a dowel-pin fitting in an aperture in said tie-bar, substantially as described.

2. A railway-car-truck side frame having downwardly-projecting dowel-pins on its lower edge integral with said side frame, in

combination with an apertured tie-bar, said pins holding said tie-bar in position by fitting in said apertures, substantially as described.

3. A railway-car-truck side frame having
5 a central aperture for the reception of the ends of a spring-plank and a truck-bolster, and a plurality of webs beneath said aperture to sustain said spring-plank and to tie together the two parts of the frame on opposite
10 sides of said aperture, substantially as described.

4. A railway-car-truck side frame having a central aperture for the reception of the ends of a spring-plank and a truck-bolster, a
15 flat horizontal plate portion integral with said frame forming the lower margin of said aperture, and a plurality of longitudinal vertical webs integral with said plate portion and side frame supporting said plate portion and
20 tying together the two parts of said frame on opposite sides of said aperture, substantially as described.

5. A railway-car-truck side frame having

a central aperture for the reception of the ends of a spring-plank and a truck-bolster, a
25 flat horizontal plate portion integral with said frame forming the lower margin of said aperture, a plurality of longitudinal vertical webs integral with said plate portion and side
30 frame supporting said plate portion and tying together the two parts of said frame on opposite sides of said aperture, a substantially horizontal portion integral with and
uniting the lower edges of said webs, and one
35 or more dowel-pins integral with and projecting downwardly from the lower surface of said last-mentioned horizontal portion, in combination with a tie-bar having one or
more apertures, said bar being retained in
40 position by said pin or pins engaging said aperture or apertures, substantially as described.

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