

No. 815,286.

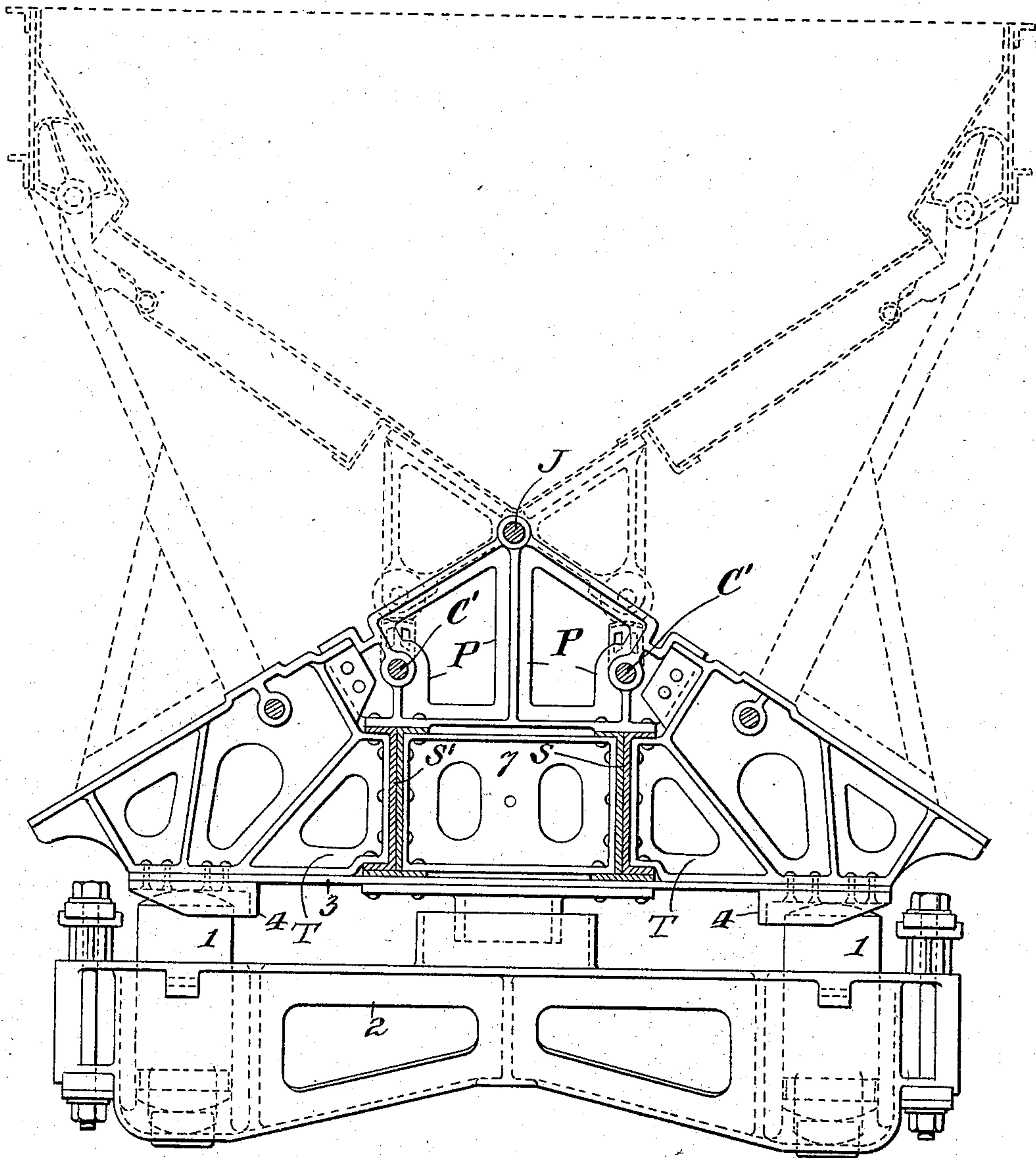
PATENTED MAR. 13, 1906.

J. M. GOODWIN.
BODY BOLSTER FOR VEHICLES.

APPLICATION FILED JUNE 7, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



Attest:

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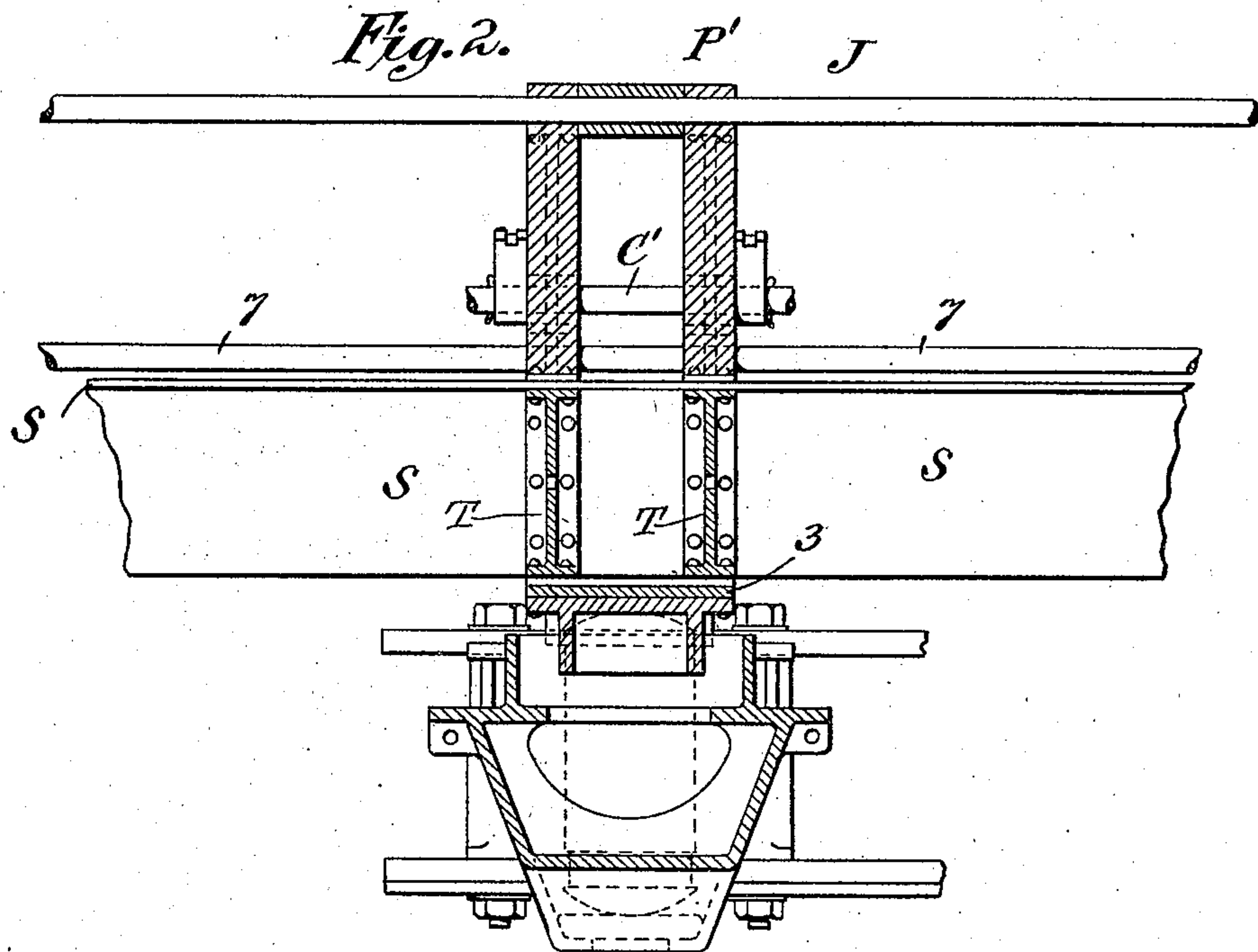
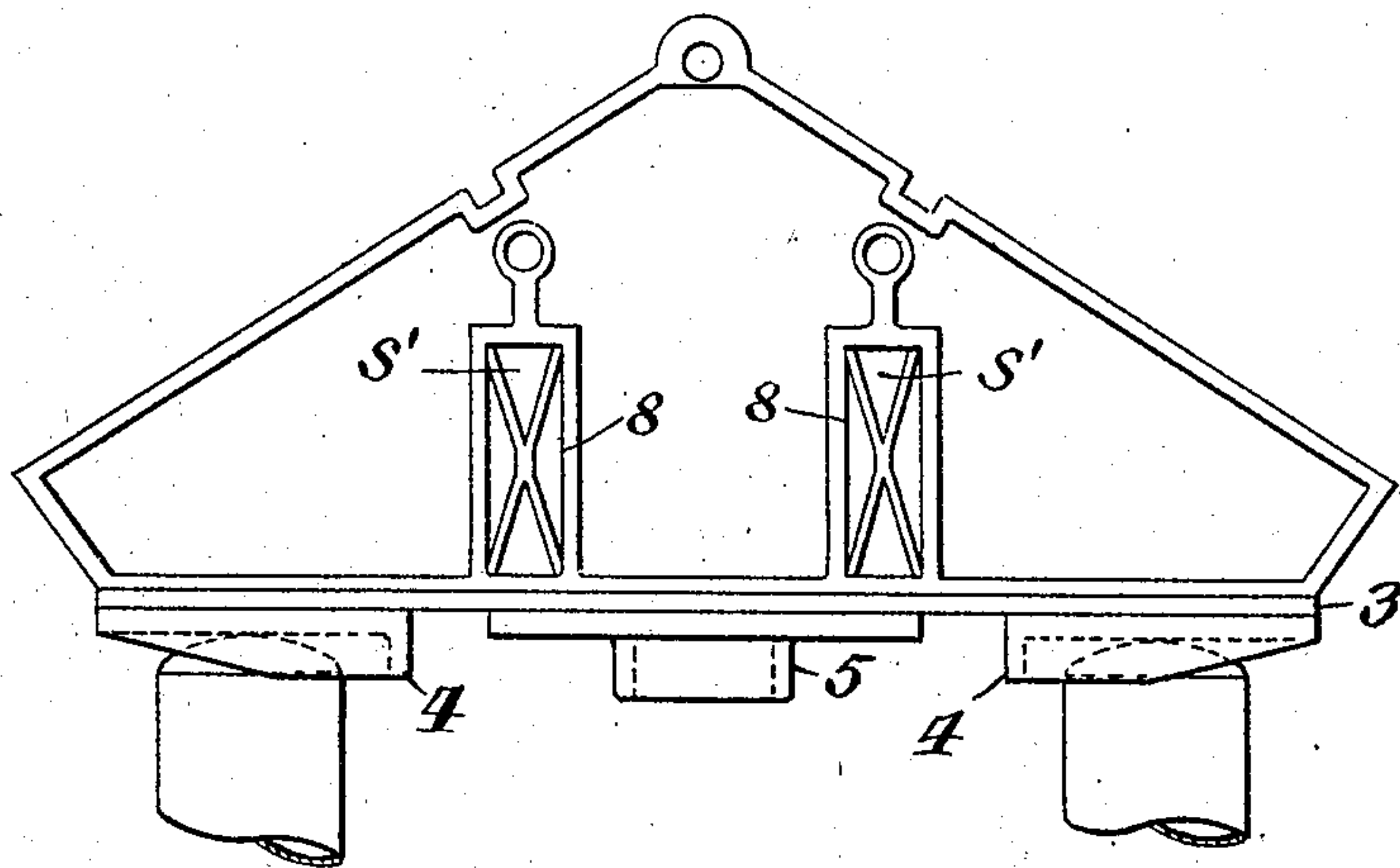


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN M. GOODWIN, OF MOUNT VERNON, NEW YORK.

BODY-BOLSTER FOR VEHICLES.

No. 815,286.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed June 7, 1905. Serial No. 264,091.

To all whom it may concern:

Be it known that I, JOHN M. GOODWIN, a citizen of the United States, residing in the city of Mount Vernon, county of Westchester, and State of New York, have invented certain new and useful Improvements in Vehicle Body-Bolsters, of which the following is a full, true, and concise specification.

My invention relates to new and useful constructions of vehicle body-bolsters, especially adapted for employment in connection with railway-trucks which have the bearings that carry the superimposed load located upon each side or close to the plane of the wheels; and the invention relates more particularly to a body-bolster suitable for use in the said relation for supporting the center sills of dumping-vehicles.

Referring to the accompanying two sheets of drawings, forming a part hereof, Figure 1 is a side elevation of a body-bolster constructed according to my invention applied to the so-called "Goodwin" dumping-car and showing a truck-bolster with its side bearings. Fig. 2 is a transverse central section on line 2 2 of Fig. 1, and Fig. 3 is a modification.

The center sill of the vehicle is composed of two or more longitudinal beams S S, extending from end to end of the vehicle and sustaining the bulk of the pressure from the superimposed load. At each end the center sill is supported, through the agency of the body-bolsters of this invention, upon two side bearings 1 1 of a truck-bolster 2. The construction of the truck of which the bolster 2 is a member is not a part of the present invention and will therefore not require more than passing mention to illustrate its relation thereto.

The new body-bolster is composed of two parallel bolster members or bolster-plates, each formed, essentially, of three main sections, which are properly united to and around the sill, and a tension-plate, which binds the sections on opposite sides of the sill together and also joins the two parallel bolster members, so as to form a unitary structural body-bolster. The saddle-sections P are superposed upon the center sill, being securely fastened to the top flanges of the beams S S, and are provided with the usual journal-seats for the center valve-shaft J and detent shafts C' C' on opposite sides thereof. Between the adjacent saddle-sections the center valve-shaft J may be incased in a spacing-

sleeve P', Fig. 2, which preserves the said sections at a fixed distance apart and aids in bracing and supporting them, and the shafts C' C' may also be thus incased, if desired, for the same purpose. The two other main sections T of each bolster member are of the same shape and formation and are hung one from each of the ends of the saddle-sections P, being securely fastened to the sides of the beams S S, as indicated in Fig. 1 of the drawings, so that they constitute, in effect, inverted brackets on the center sill, the contour of the several sections being such that when built around the sill, as described, they form bolster members which are substantially triangular and have their two lower apices about flush with the bottom of the sill. The tie-plate 3, located underneath the sill, is secured to the bottoms of the four inverted-bracket sections T, as shown in Fig. 2, and thereby binds both bolster members, as well as the component sections thereof, securely together. It will be understood, of course, that the several sections are made with flanges or other suitable means whereby they may be joined, as above described, and also that when in position on the sill the shaft-journals are in alinement.

The bearing-plates 4, which form the seats that rest on the truck-bearings 1 1, are located at opposite ends of the tie-plate 3, these being preferably securely riveted thereto, as shown, and formed of any suitable shape that will properly receive and retain the said truck-bearings. A swivel member 5, which takes the place of the ordinary king-pin, is secured centrally to the tie-plate and is adapted to protrude within a complementary recess or tubular boss 6 on the truck-bolster 2; but the two swivel members 5 and 6 are not subject to the strains of the load, these being transmitted entirely or mainly through the body-bolster sections to the side bearings of the truck, as above described. When the center sill is composed of more than a single beam, straining-pieces 7 are desirably interposed between and rigidly secured to them, preferably by means of the same rivets that bind the bracket-sections T thereto.

The modification shown in Fig. 3 is a bolster member made of a single piece of triangular shape having two open slots 8 in its bottom edge to receive the two beams S' of the center sill, and the tie-plate 3 serves to reinforce the bottom of the member, as well as to unite both the members of the bolster, as be-

fore, being supplied with bearing-plates 4 and central swivel member 5, as described with reference to Figs. 1 and 2.

Having described my invention, what I claim, and desire to secure by United States Letters Patent, is—

1. In a vehicle having a center sill, a body-bolster formed of sections surrounding and secured to said center sill, in combination with bearing-seats at the opposite ends of said bolster adapted to transmit the entire weight transmitted therethrough to the side bearings of a truck.

2. In a vehicle having a center sill, a body-bolster comprised of parallel bolster members surrounding said sill and provided with a tension-plate uniting the same, in combination with bearing-seats at the opposite ends of said members adapted to transmit the entire weight transmitted therethrough to the side bearings of a truck.

3. In a vehicle having a center sill, a body-bolster comprising parallel bolster members respectively formed of sections built around the sill, a tie-plate uniting said members and serving as a tension-piece respectively for each of them, bearing-seats at the opposite ends of said body-bolster adapted to transmit the entire weight transmitted therethrough to the side bearings of a truck, and a swivel member located between the bearing-seats.

4. In a dumping-vehicle having a center sill, a body-bolster comprising bolster members surrounding and secured to said sill, a tie-plate extending underneath the sill and fastened to the lower margins of said members, bearing-seats at the opposite ends of the tie-plate adapted to transmit the entire weight transmitted through said body-bolster to the side bearings of a truck and a swivel member mounted centrally thereon.

5. In a dumping-vehicle having a center sill, a body-bolster of substantially triangular shape surrounding and secured to the same, and provided with bearing-seats at its opposite lower apices in or below the horizontal level of said sill, adapted to transmit to

the side bearings of a truck the entire weight transmitted through said bolster.

6. In a dumping-vehicle having a center sill, a body-bolster comprised of parallel bolster members of substantially triangular shape, respectively formed of sections surrounding said sill, a tension-plate for the sections uniting said members beneath the sill and bearing-seats adapted to transmit to side bearings of a truck the entire strain transmitted through said members.

7. In a dumping-vehicle having a center sill, a plurality of bolster members formed respectively of saddle-sections mounted on top of the sill and inverted-bracket sections secured to the saddle-sections and the sill, in combination with tension members uniting opposite brackets and bearing-seats on opposite sides of the sill adapted to rest on the side bearings of a truck.

8. A dumping-vehicle having a center sill formed of parallel beams, a plurality of bolster members straddling said center sill and provided with bearing-seats on opposite sides thereof adapted to transmit the entire weight transmitted through said bolster members to the opposite side bearing of a truck, in combination with a straining-piece between said parallel beams and a tension-plate joining the opposite ends of said members.

9. A dumping-vehicle having a center sill, a plurality of bolster members therefor formed respectively of saddle-sections superposed on said sill and provided with aligned shaft-journals, spacing means between said saddle-sections and inverted-bracket sections hung from said saddle-sections on opposite sides of the sill and secured thereto, in combination with tension-plates joining said bracket-sections and provided with end bearings and an intermediate swivel member.

In testimony whereof I have signed my name to the specification in the presence of two subscribing witnesses.

JOHN M. GOODWIN.

Witnesses:

E. W. GOODWIN,
PHILIP H. LANTZ.