

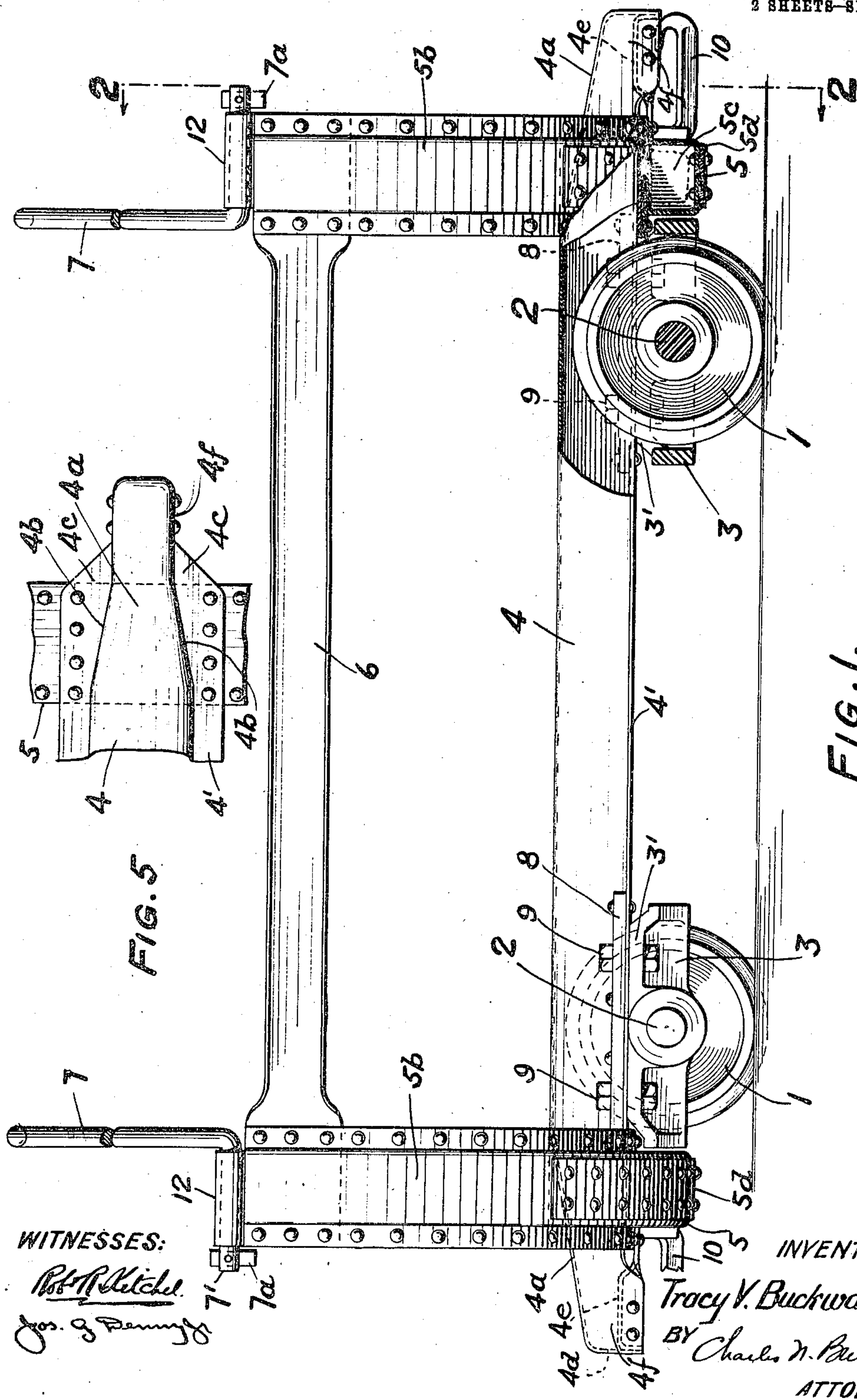
## TIE TRUCK.

APPLICATION FILED SEPT. 3, 1910.

981,975.

Patented Jan. 17, 1911.

2 SHEETS—SHEET 1.



**WITNESSES:**

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***INVENTOR***

*Tracy V. Buckwalter*

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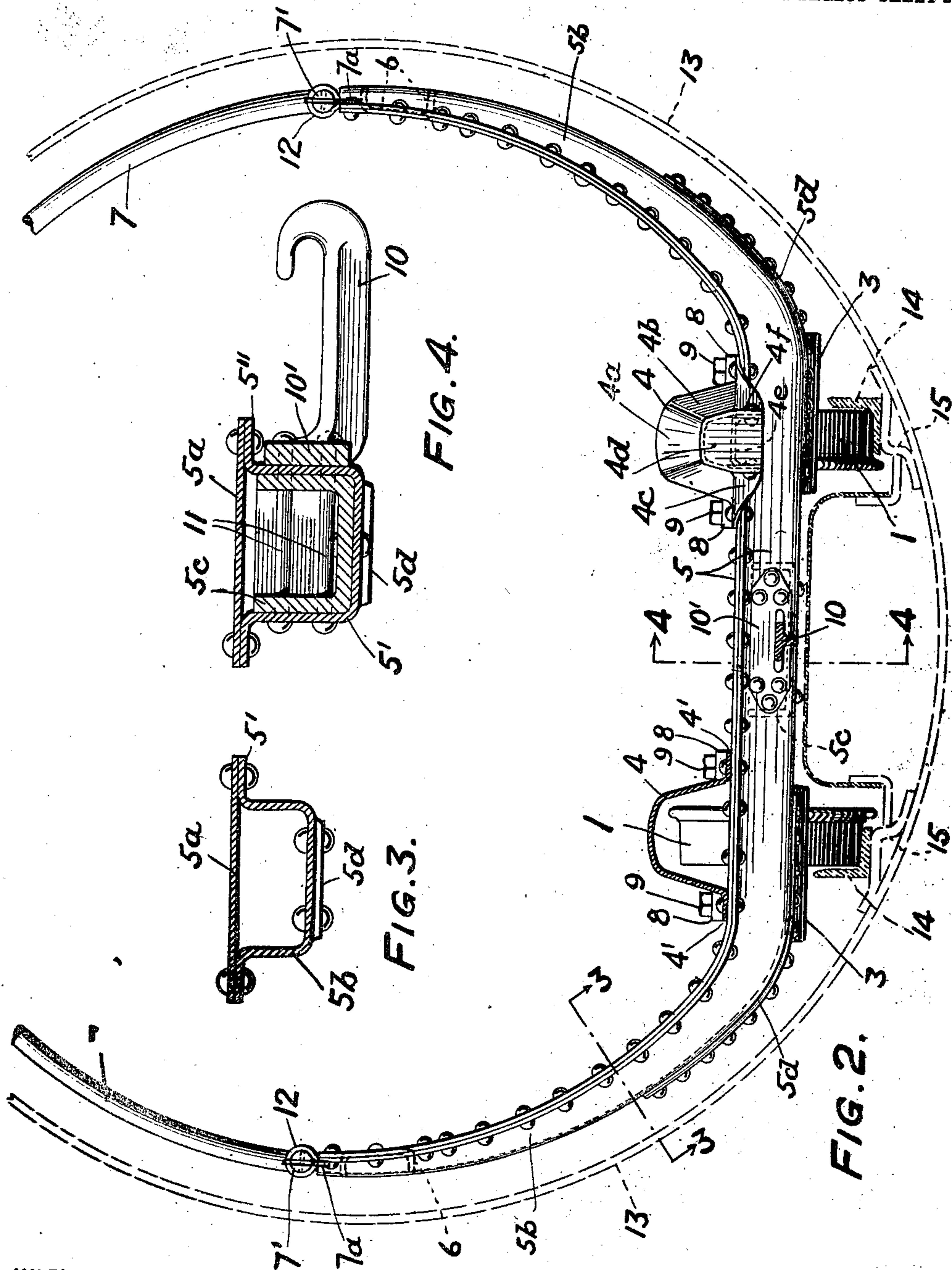
**ATTORNEY.**

T. V. BUCKWALTER.  
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2 SHEETS—SHEET 2.



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# UNITED STATES PATENT OFFICE.

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## TIE-TRUCK.

981,975.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed September 3, 1910. Serial No. 580,375.

*To all whom it may concern:*

Be it known that I, TRACY V. BUCKWALTER, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain Improvements in Tie-Trucks, of which the following is a specification.

My improvements relate to trucks for carrying ties which are to be impregnated with a preservative, and their leading object is to provide a frame having superior strength, durability and economy of construction combined with convenience in operation.

In the accompanying drawings, Figure 1 is a side elevation, partially in section, representing a truck embodying my improvements; Fig. 2 is an end elevation of the same, part being shown in section taken on the line 2—2 of Fig. 1; Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2; Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2; and Fig. 5 is a plan view representing the end of a longitudinal sill and its connection with the bolster.

The truck, as represented in the drawings, comprises the wheels 1, the axles 2 upon which the wheels are journaled, the housing 3 in which the axles are journaled, the longitudinal sills 4 supported by the housings, the bolsters 5 fixed to the sills, the longitudinal braces 6 connecting the bolsters' standards, and the bails 7 connected with the standards.

The housings 3 are characterized by a yoke-like formation which provides the bearings 3' on each side of the respective wheels.

The respective sills 4 have a channel or trough-like construction and are placed bottom upward over the wheels, being provided with the laterally extending flanges 4' which rest upon the bearings 3'. Plates 8 are placed on the flanges 4' above the housings and bolts 9 are passed through the parts 3', 4' and 8 to fix the sills in place. The respective ends of the sills have the inclined upper surface 4<sup>a</sup>, inclined side sections 4<sup>b</sup>, and the widened flange sections 4<sup>c</sup>; the contracted and depressed points of the sills being closed by the end webs 4<sup>d</sup>. Fillers 4<sup>e</sup> are inserted between the vertical flanges 4<sup>f</sup> at the ends of the sills to brace the parts 4<sup>a</sup> and 4<sup>f</sup>, the fillers being riveted to the flanges and to the adjacent bolster.

The bolsters 5 comprise the channels 5' 55 having the flanges 5'' to which are riveted cover plates 5<sup>a</sup> forming a box construction, the horizontal body portion of the bolsters being made of greater depth than the standards or arms 5<sup>b</sup>, which gradually decrease 60 in depth as they extend upwardly in the form of circular arcs. The straight bodies of the bolsters extend beyond the sills 4, beneath which they are fixed by riveting the flange sections 4<sup>c</sup> to the plates 5<sup>a</sup> and the 65 flanges 5''. The bolsters are further strengthened by straps or plates 5<sup>a</sup> placed so as to give the necessary strength to the lower parts of the arms where they are subjected to the greatest bending stress. Stiff- 70 ening boxes 5<sup>c</sup> are nested in the channels 5' in the central sections of the bolsters and drawbars or hooks 10 are fixed to these sections by bolts 11 passed therethrough and through the bearing flanges 10' of the hooks. 75

The braces 6 are suitably channel bars having their flanges bent outwardly into the planes of the webs at the ends thereof, the ends of the bars being riveted to the inner flanges of the bolster arms near the tops 80 thereof.

The bolster arms have the cylindrical bearings 12, fixed to the tops thereof, in which are engaged the laterally extending studs 7' on the semi-circular bails 7, the 85 studs being held in the bearings 12 by keys 7<sup>a</sup> and being removable to remove the bails in loading and unloading.

This truck is adapted to move into cylindrical chamber 13 upon a track 14 supported therein by brackets 15. 90

In operation, when the truck is loaded with ties, it is pushed along the track by a motor acting against the buffers provided by the ends of the sills, the movement in the 95 opposite direction being effected by engaging the motor to the hook. To remove the load the bails are detached and the ends of the ties have a hoist chain thrown around them, by which they are lifted in bulk from the 100 bolsters, the depressed and contracted ends of the sills permitting the chain to be readily slipped thereover.

Having described my invention, I claim:

1. In a truck, traction wheels, means comprising yoke-like housings supported by and providing bearings on opposite sides of said wheels, inverted channel-like sills having 105



flanges fixed to said housings on opposite sides of said wheels, and bolsters fixed to said sills beneath the ends thereof.

2. In a truck, longitudinal sills comprising inverted channels with flanges thereon, in combination with bolsters comprising channels with flanges thereon and cover plates fixed to said flanges last named, said bolsters being fixed beneath said sills to the flanges thereof.

3. In a truck, longitudinal sills comprising inverted channels with flanges thereon, said sills having contracted end sections with widened flanges thereon, in combination with bolsters with flanges thereon and cover plates fixed to said last named flanges, said first named flanges being fixed to said cover plate.

4. In a truck, longitudinal sills having contracted and depressed ends, in combination with a bolster having curved arms gradually decreasing in depth, said bolster having a body portion fixed to said sills.

5. In a truck, a sill resembling an inverted trough with flanges thereon, said sill having an end section with sides inclined inwardly and a top inclined downwardly.

6. In a truck, a bolster comprising a chan-

nel with flanges thereon, a reinforcing box nested within said channel, and an exterior reinforcing plate riveted to said channel.

7. In a truck, a bolster having a body portion with upwardly extending curved arms decreasing in depth from said body portion, said bolster having a box like construction.

8. In a truck, bolsters having body portions with upwardly extending curved arms, longitudinal sills to which the bodies of said bolsters are fixed and longitudinal braces to which the arms of said bolsters are fixed.

9. In a truck, a bolster comprising a channel, a stiffening box nested in said channel, and a draw bar fixed thereto.

10. In a truck, the combination of an inverted channel, with a bolster, and a filler disposed in said channel and fixed to said bolster for bracing said channel.

In witness whereof I have hereunto set my name this 18th day of August, 1910, in the presence of the subscribing witnesses.

TRACY V. BUCKWALTER.

Witnesses:

J. L. MINICK,

J. C. SNYDER.