

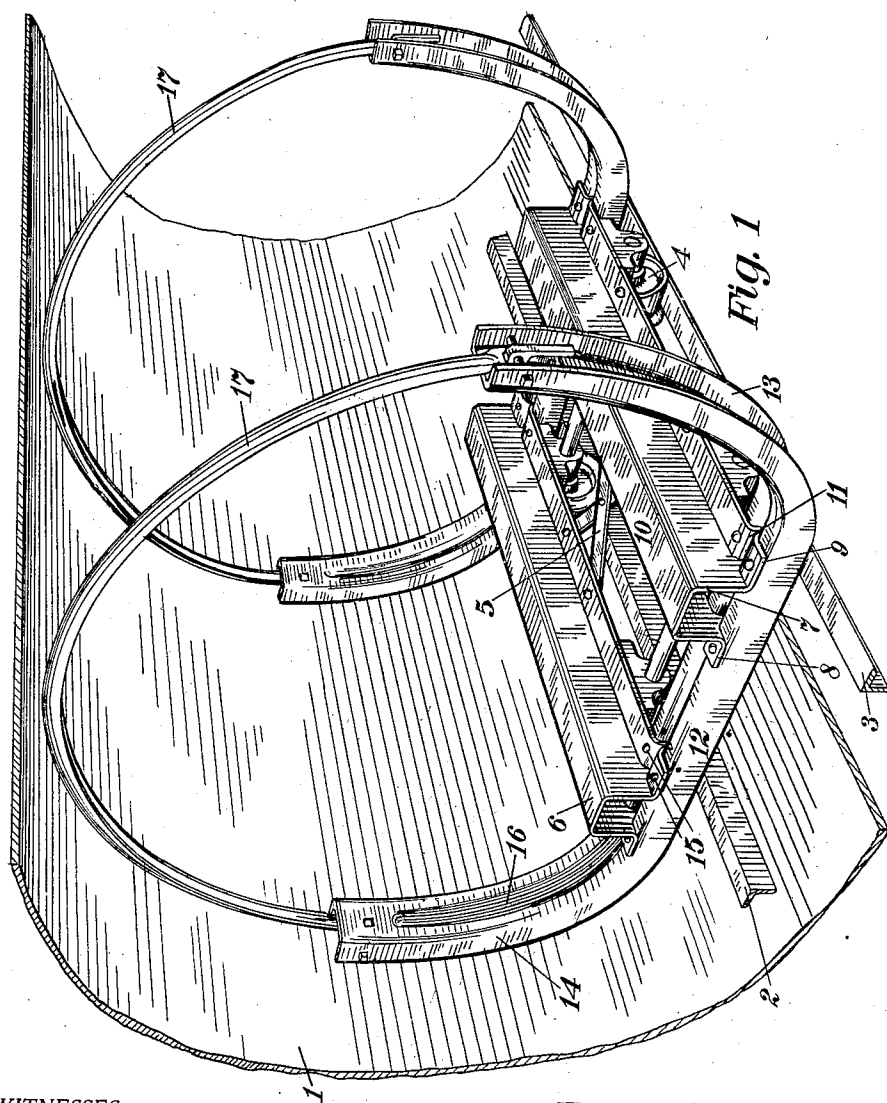
No. 869,028.

PATENTED OCT. 22, 1907.

T. H. STAGG.
TIE BAR FOR IMPREGNATING TANKS.

APPLICATION FILED MAY 22, 1907.

2 SHEETS—SHEET 1.



WITNESSES:

R. Rogers.
R. Mackay

Thomas H. Stagg, INVENTOR.

BY

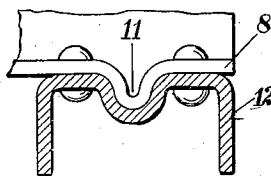
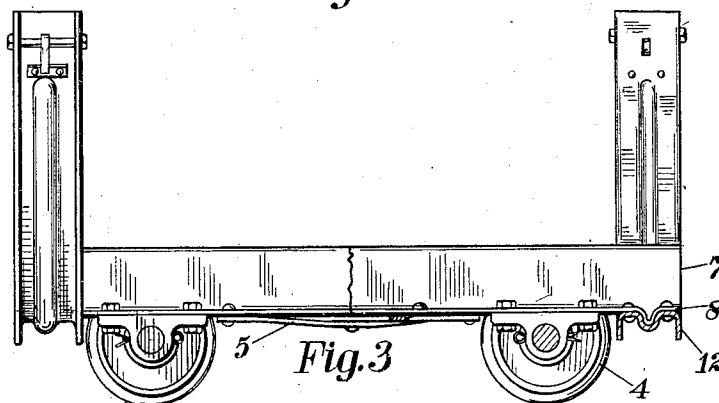
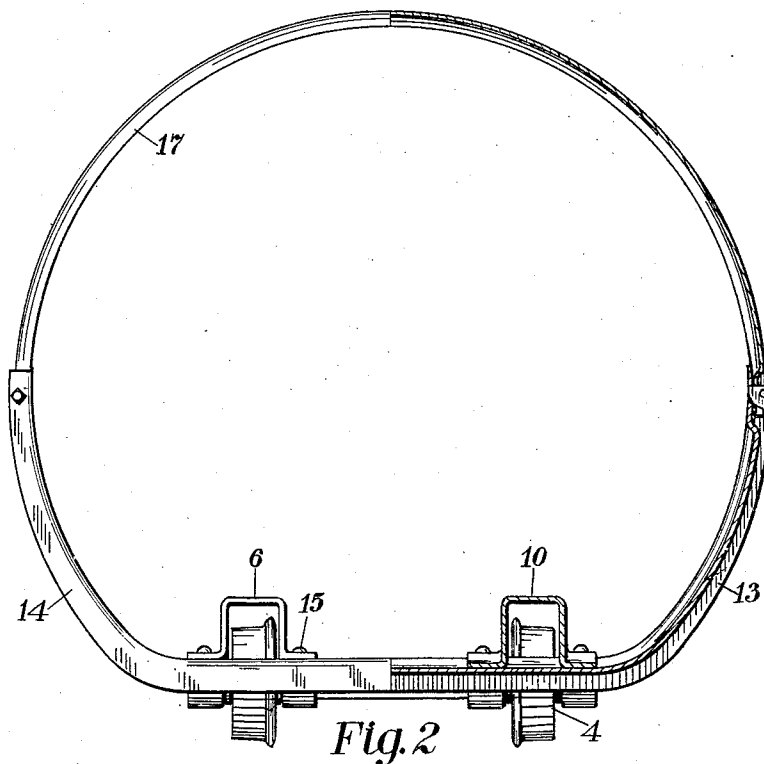
Geo. W. Rightmire
ATTORNEY.

No. 869,028.

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TIE CAR FOR IMPREGNATING TANKS.
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2 SHEETS—SHEET 2.



WITNESSES:

A. Rogers
R. Minkley

Thomas H. Stagg,
INVENTOR.

BY

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UNITED STATES PATENT OFFICE.

THOMAS H. STAGG, OF COLUMBUS, OHIO, ASSIGNOR TO THE KILBOURNE AND JACOBS MANUFACTURING COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

TIE-CAR FOR IMPREGNATING-TANKS.

No. 869,028.

Specification of Letters Patent.

Patented Oct. 22, 1907.

Application filed May 22, 1907. Serial No. 375,170.

To all whom it may concern:

Be it known that THOMAS H. STAGG, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, has invented certain new and useful Improvements in Tie-Cars for Impregnating-Tanks, of which the following is a specification.

My invention relates to improvements in tie cars for impregnating tanks, and relates especially to an improved form of side sill therefor, and to provide a bracing construction of said side sill in conjunction with the end sill of said car.

In cars of this nature hitherto, it has been usual to connect the end sills and side sills and to strengthen the junction of the same with gusset plates riveted at the angle of the union of the two sills; this involves a great deal of material and much labor in the construction, and adds materially to the weight of the car, as well as to its cost.

My improvement which will be hereinafter described obviates the use of gusset plates, and hence reduces the time and labor of construction and the cost thereof and produces a car which is of any desired strength.

In the drawings, Figure 1 is a perspective view of the car in place in a tank, the latter being broken away; Fig. 2, is an end view of the car partly in section; Fig. 3 is a side view of the car with a part broken away; Fig. 4 is a transverse section through the end sill showing the side sill in place thereon.

Referring to the drawings, 1 indicates a tank, in which are positioned the rails 2 and 3, upon which the car is adapted to move; 4 represents the trucks of the car, with the cross bracing construction 5, the side sills being shown at 6 and 7. These side sills are pressed into shape, and extend from one end of the car to the other, and rest upon the trucks. They act as a cover for the wheels, and as seen are composed of the flange portions 8 and 9 and the upwardly extending cover portion 10, thereby forming an inverted U. This pressed shape has great power of resistance as well as comparative lightness; near the ends of the flange portions 8 and 9 are buckled or crimped portions as shown at 11 for the purpose now to be described.

The end sill 12 extends across the car in a horizontal plane and at each side thereof curves upwardly and outwardly as shown at 13 and 14. The end sill is secured to the side sills by rivets or bolts 15, and has a channel 16 formed therein beginning near one end thereof and terminating adjacent the other end thereof. This construction of the end sill provides a channel which has a groove formed on the outer face thereof, as appears in Fig. 4. Into this groove the fold or crimped portion 11 of the flanges of the side sill enter, and when the sills are secured together, a firm bracing construction is provided. Any tendency of the end sill to be twisted from position will be checked by the bracing

construction formed by the engagement of the fold 11 with the groove 16, and it is apparent that the side sill is strengthened and maintained in proper position by the same engagement. Therefore a mutually bracing construction is provided by the formation of the folds on the flanges of the side sills and their positioning in the groove formed in the upper face of the end sills or channels. The end sill or bolster, as it is sometimes called, is shown in elevation and also in transverse section in Fig. 3, and it may be seen in longitudinal section in Fig. 2. When the ties are placed on the car, they are maintained in position thereon by the bail 17, which is preferably secured adjacent the upper ends of the bolster.

The car thus formed is very simple in its construction and very strong; pressed shapes are utilized for forming both the side sills and the end sills, and the formation of the groove in the end sill and the depending loop or buckle in the side sill to engage said groove on both sides of said sill and at both ends thereof, renders the car capable of sustaining a heavy load and also maintains the same against any tendency to twisting or loosening of parts. Further, the weight and cost of the car are materially reduced, and the wheels are completely covered; loading of the car may be carried on without wasting time to arrange the ties with reference to the wheels, for the side sill completely prevents any contact of the ties with the wheels. Therefore the free movement of the car is never hindered by the ties rubbing against the wheels and locking the same.

I claim:

1. In a car for wood impregnating tanks, a side sill formed of a pressed shape and adapted to cover the wheels of the car, an end sill, and folds formed on said side sill adapted to engage said end sill for bracing the same.

2. In a car for wood impregnating tanks, a side sill formed of a pressed shape and adapted to form a cover for the wheels on one side of the car, an end sill formed of a pressed shape and secured to said side sills, flanges on said side sills having folds therein, and a groove formed on said end sill with which said folds are adapted to engage, thereby forming a bracing construction.

3. In a car for wood impregnating tanks, an integral side sill pressed into shape having side flanges, folds formed in said side flanges adjacent the ends thereof, an end sill pressed into channel shape and having a longitudinal groove on its upper face which said folds are adapted to enter, means securing said end sill and side sill together, said side sill being formed to cover the wheels on said car.

4. In a car for wood impregnating tanks, a side sill formed of a pressed shape, an end sill, a corrugation formed on said side sill adapted to engage said end sill, thereby forming a bracing construction.

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

THOMAS H. STAGG.

Witnesses:

A. RAGER.

GEO. W. RIGHTMIRE.