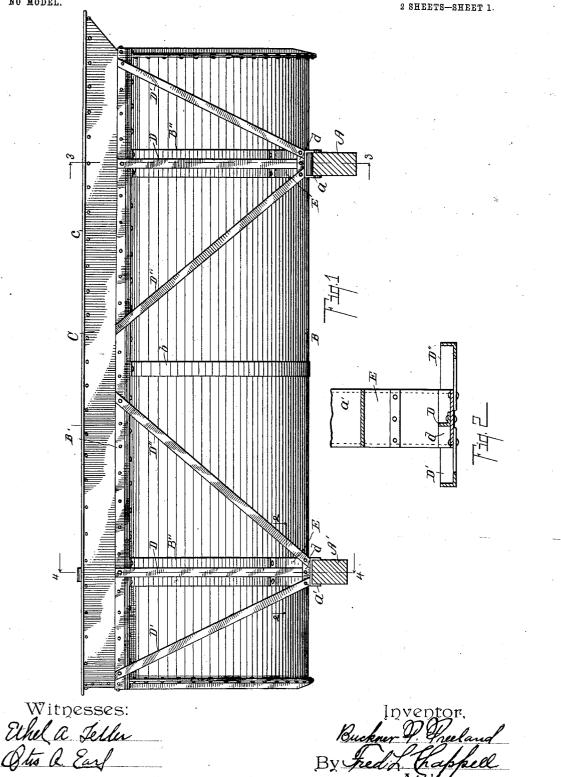
No. 759,364.

B. F. FREELAND. WAGON BODY. APPLICATION FILED MAR. 4, 1904.

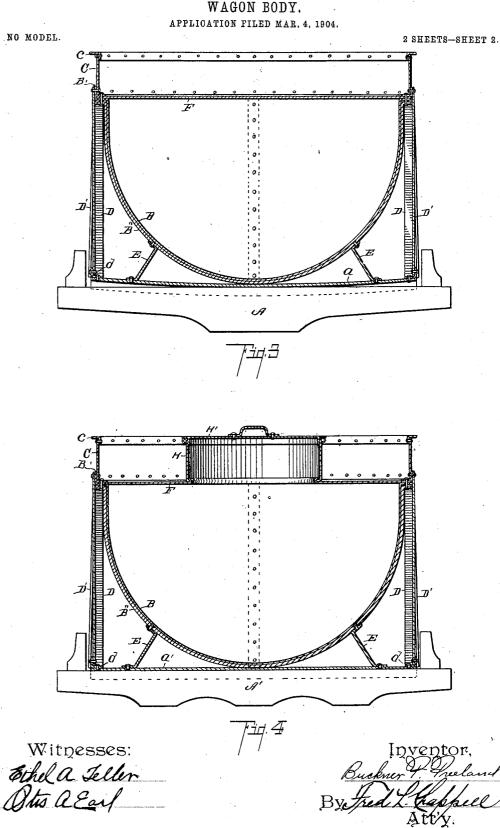




RIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 759,364.

B. F. FREELAND. WAGON BODY.



THE NORIUS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 759,364.

Patented May 10, 1904.

## UNITED STATES PATENT OFFICE.

## BUCKNER F. FREELAND, OF MIDDLEBURY, INDIANA.

## WAGON-BODY.

SPECIFICATION forming part of Letters Patent No. 759,364, dated May 10, 1904.

Application filed March 4, 1904. Serial No. 196,556. (No model.)

## To all whom it may concern:

Be it known that I, BUCKNER F. FREELAND, a citizen of the United States, residing at Middlebury, in the county of Elkhart and State

5 of Indiana, have invented certain new and useful Improvements in Wagon-Bodies, of which the following is a specification.

This invention relates to improvements in wagon-bodies.

10 It relates particularly to improvements in wagon-bodies for transporting water, grain, and the like.

The main object of this invention is to provide an improved wagon-body for transport-

15 ing water, grain, and the like which, although made of comparatively light material, is very strong and durable and capable of carrying a very heavy load without injury thereto.

Further objects and objects relating to struc-20 tural details will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

25 The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawings, forming a part of this 3° specification, in which—

Figure 1 is a side elevation view of my improved wagon-body, the wagon-bolsters being shown in connection therewith and in section. Fig. 2 is a detail cross-sectional view taken on

- 35 a line corresponding to line 2 2 of Fig. 1. Fig. 3 is a detail transverse sectional view taken on a line corresponding to line 3 3 of Fig. 1, the front bolster A of a wagon being shown in full lines. Fig. 4 is a detail transverse sec-
- 4° tional view taken on a line corresponding to line 44 of Fig. 1, the rear bolster A' of a wagon being shown in full lines.

In the drawings the sectional views are taken looking in the direction of the little arrows at 45 the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the drawings, A represents the front, and A' the rear, bolsters of a wagon,

which I illustrate to show the relation of my 50 improved wagon-body thereto. These may be of the usual or any desired construction.

A tank-body B, formed of sheet metal, preferably galvanized or otherwise treated to pre-vent corrosion, is provided. The tank-body 55 B is provided with an outturned flange at the top. Side rails B', of angle-iron, are secured to these flanges. This tank-body B is preferably semicircular in form. The body B is reinforced and supported by heavy band-iron 60 strips B", arranged over each bolster. These bands B" rest upon the front and rear bolsterpieces a a', respectively. These bolster-pieces are formed of downwardly - facing channeliron, with the arms of the channel-iron em- 65 bracing the bolster. The forward bolsterpiece a is curved slightly upward from the center, so that it is free to rock slightly in relation to the bolster. The supporting-bands B'' are braced to the bolster-pieces by braces 70 (See Figs. 2 and 4.) At the end of each  $\mathbf{E}_{-}$ bolster-piece is an angle-iron cross-piece d, securely riveted thereto. Secured to these cross - pieces are uprights or standards D, which are also secured to the side rails B' 75 A pair of upwardly-diverging braces D' D''are secured to each cross-piece and to the side rails B'. A centrally-arranged supporting-band b is provided, which is securely riveted to the longitudinal side rails B'. 80

The top F of the tank is clamped securely in place between the flanges on the tank-body.

An upwardly-projecting manhole H is provided for the top F. (See Fig. 4.) This manhole is provided with a suitable cover H'.

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To provide a carrying-deck for fuel and the like when the wagon is designed for the use of threshers, for example, I add an extension C, which is secured to the upwardly-projecting arm of the angle-iron side rails. The ex- 90 tension C is provided with an angle-iron rim c, which makes the same very strong and at the same time does not add materially to the weight of the structure. With the parts thus arranged I secure a very rigid structure and 95 one which may be used on very rough roads without danger of opening the seams, as by this arrangement of parts the tank-body is not only evenly supported throughout, but is retained from sudden strain and jars due to roads and the like. The strain upon the tank is greatly relieved by the curved front bolster-

5 piece a, which allows the wagon to pass over obstructions or through holes or the like without the liability of twisting the tankbody, which is very detrimental to structures made of metal.

<sup>10</sup> The tank-body proper is so braced and supported that it may be made of comparatively light material and still be very durable.

I have illustrated and described my improved wagon-body in the form preferred by 15 me on account of the economy with which it may be produced and its durability. I am aware, however, that it is capable of very great structural variation without departing from my invention.

20 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

 In a wagon - body, the combination of front and rear bolster-pieces a a' respectively,
formed of downwardly-facing channel-iron, the said front bolster a having a slight upward curve from the center; a tank-body B of sheet metal semicircular in form and having outturned flanges at the top; longitudinal side
rails B' of angle-iron secured to said flanges; supporting-bands B'' arranged over said bolster-pieces secured to said side rails; a centrally-arranged supporting-band b secured to said side rails; braces E secured to said bolster-pieces and to said bands B''; angle-iron cross-pieces; uprights D secured to said cross-

pieces d and to said side rails; upwardly-diverging braces D' D' secured to said crosspieces d and to said side rails; a top F for said tank clamped between said side rails and the outturned flanges of said tank-body B; an extension C for said tank-body secured to the upwardly-projecting angle of said side rails; and

45 an angle-iron rim c for said extension C, all coacting for the purpose specified.

2. In a wagon-body, the combination of front and rear bolster-pieces a d' respectively, formed of downwardly-facing channel-iron. 5° the said front bolster a having a slight upward curve from the center; a tank-body B of sheet metal semicircular in form and having outturned flanges at the top; longitudinal side rails B' of angle-iron secured to said flanges; 55 supporting-bands B" arranged over said bolster-piecessecured to said side rails; a centrallyarranged supporting-band b secured to said side rails; braces E secured to said bolsterpieces and to said bands B"; angle-iron cross-60 pieces d secured at the end of said bolsterpieces; uprights D secured to said crosspieces d and to said side rails; upwardly-diverging braces D' D" secured to said cross-

said tank clamped between said side rails and 65 the outturned flanges of said tank-body B, all coacting for the purpose specified.

3. In a wagon-body, the combination of front and rear bolster-pieces a a' respectively, formed of downwardly-facing channel-iron, 70 the said front bolster a having a slight upward curve from the center; a tank-body B of sheet metal semicircular in form and having outturned flanges at the top; longitudinal side rails B' of angle-iron secured to said flanges; 75 supporting-bands B" arranged over said bolster-pieces secured to said side rails; a centrally-arranged supporting-band b secured to said side rails: braces E secured to said bolsterpieces and to said bands B''; angle-iron cross- 80pieces d secured at the end of said bolsterpieces; uprights D secured to said cross-pieces d and to said side rails; and upwardly-diverg-ing braces D' D' secured to said cross-pieces dand to said side rails; all coacting for the pur- 85 pose specified.

4. In a wagon-body, the combination of front and rear bolster-pieces a a' respectively, formed of downwardly-facing channel-iron, the said front bolster having a slight upward 90 curve from the center; a tank-body B of sheet metal semicircular in form and having outturned flanges at the top; longitudinal side rails B' of angle-iron secured to said flanges; supporting-bands for said tank-body secured 95 to said side rails; angle-iron cross-pieces dsecured at the end of said bolster-pieces; uprights D secured to said cross-pieces d and to said side rails; upwardly-diverging braces D' D' secured to said cross-pieces d and to 100 said side rails; a top F for said tank clamped between said side rails and the outturned flanges of said tank-body B; and an extension for said tank-body secured to the upwardlyprojecting angle of said side rails, all coacting 105 for the purpose specified.

5. In a wagon-body, the combination of front and rear bolster - pieces a a' respectively, formed of downwardly-facing channel-iron, the said front bolster a having a slight up- 110 ward curve from the center; a tank-body B of sheet metal semicircular in form and having outturned flanges at the top; longitudinal side rails B' of angle-iron secured to said flanges; supporting-bands for said tank-body secured 115 to said side rails; angle-iron cross-pieces d secured at the end of said bolster-pieces; uprights D secured to said cross-pieces d and to said side rails; upwardly-diverging braces D' D" secured to said cross-pieces d and to said 120 side rails; a top F for said tank clamped between said side rails and the outturned flanges of said tank-body B, all coacting for the purpose specified.

pieces; uprights D secured to said crosspieces d and to said side rails; upwardly-diverging braces D' D' secured to said crosspieces d and to said side rails; and a top F for

curve from the center; a tank-body B of sheet metal semicircular in form and having outturned flanges at the top; longitudinal side rails B' of angle-iron secured to said flanges; 5 supporting-bands for said tank-body secured to said side rails; angle-iron cross-pieces d secured at the end of said bolster-pieces; uprights D secured to said cross-pieces d and to said side rails; upwardly-diverging braces D' 10 D" secured to said cross-pieces d and to said side rails, all coacting for the purpose specified. 7. In a wagon-body, the combination of front and rear bolster-pieces respectively, formed of downwardly-facing channel-iron, the said front bolster having a slight upward curve 15

from the center; a tank-body of sheet metal; longitudinal side rails for said tank-body; supporting-bands for said tank-body secured to said side rails; uprights secured to said bolster-

pieces and to said side rails; and upwardly- 20 diverging braces secured to said bolster-pieces and to said side rails, for the purpose specified.

8. In a wagon-body, the combination of front and rear bolster-pieces respectively, formed of downwardly-facing channel-iron, the said 25 front bolster having a slight upward curve from the center; a tank-body of sheet metal; longitudinal side rails for said tank-body; supporting-bands for said tank-body secured to said side rails; and upwardly-diverging braces 30 secured to said bolsters and to said side rails, for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses. BUCKNER F. FREELAND. [L. s.]

Witnesses: E. VARUS,

FRANK JONES.