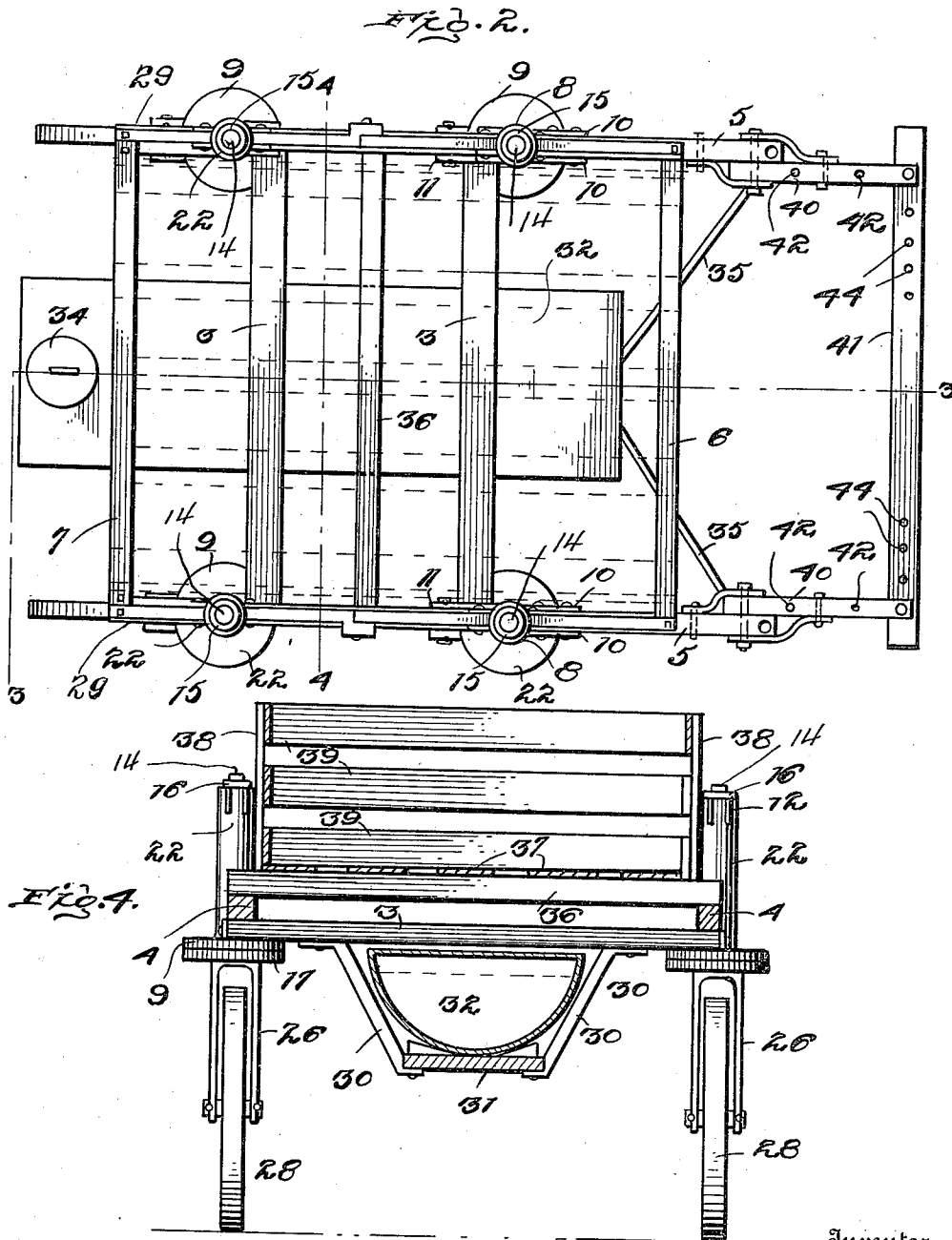


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TENDER FOR TRACTION ENGINES.
APPLICATION FILED JUNE 20, 1910.

1,006,764.

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3 SHEETS—SHEET 2.



Inventor

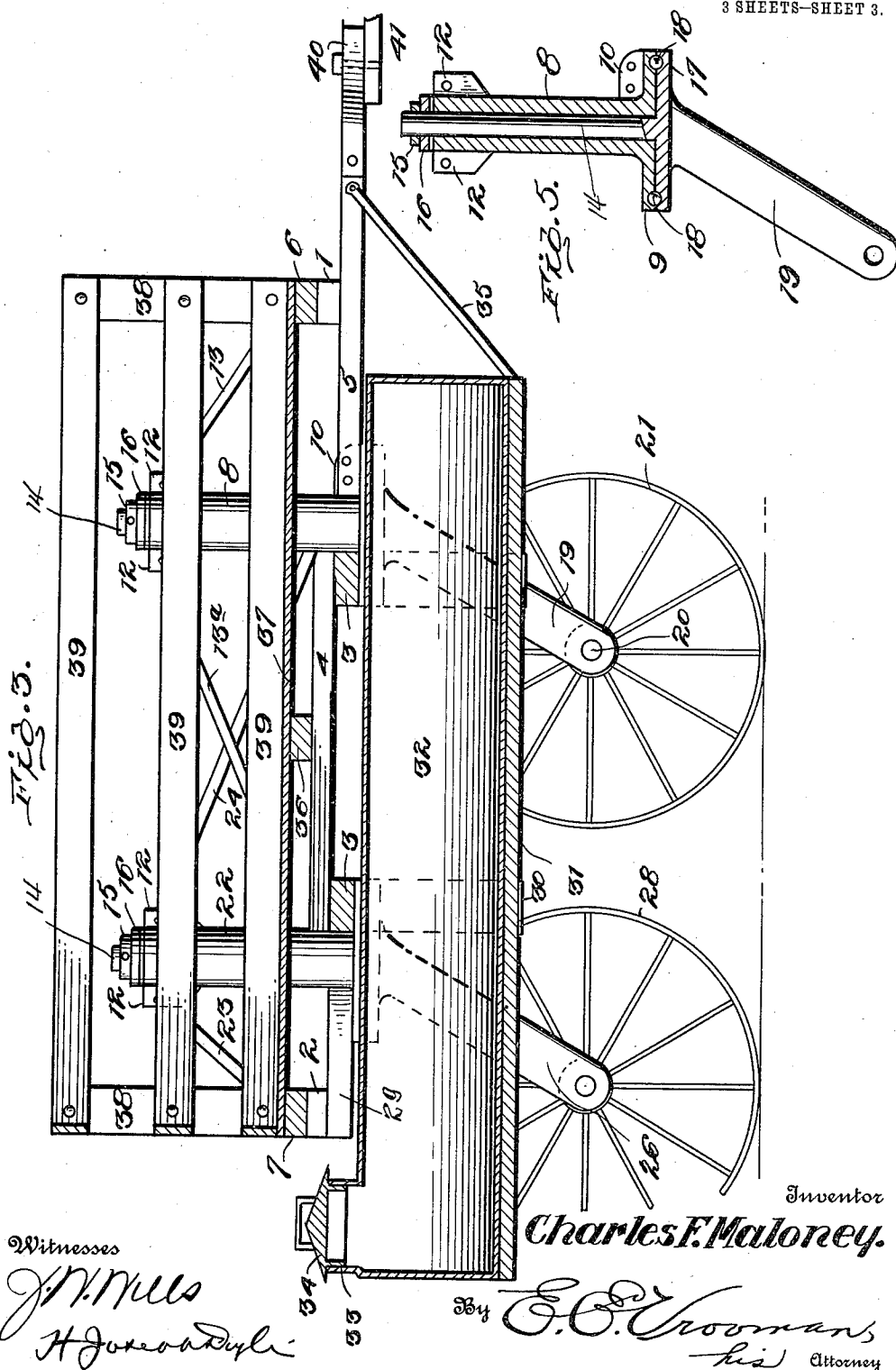
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UNITED STATES PATENT OFFICE.

CHARLES F. MALONEY, OF WHEELLOCK, NORTH DAKOTA.

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Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed June 20, 1910. Serial No. 567,942.

To all whom it may concern:

Be it known that I, CHARLES F. MALONEY, a citizen of the United States of America, residing at Wheelock, in the county of Williams and State of North Dakota, have invented certain new and useful Improvements in Tenders for Traction-Engines, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to tenders for traction engines and the principal object of the same is to provide the tender with novel water and fuel-carrying means and also to provide novel means for connecting the supporting wheels to the body, so that the tender will closely follow the traction engine.

In carrying out the objects of the invention generally stated above it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawings, wherein:—

Figure 1 is a view in side elevation of the improved tender. Fig. 2 is a top plan view thereof. Fig. 3 is a longitudinal sectional view taken on the line 3—3, Fig. 2. Fig. 4 is a transverse sectional view taken on the line 4—4, Fig. 2. Fig. 5 is a detail vertical sectional view of one of the bearings that connect the supporting wheels to the tender. Fig. 6 is a detail fragmentary plan view of an auxiliary coupling attachment for the tender.

Referring to the accompanying drawings by numerals, it will be seen that the improved tender comprises a body or platform that is formed of the front and rear transverse beams 1, 2, the intermediate transverse beams 3, the intermediate longitudinal side beams 4 the ends of which rest upon the ends of the intermediate transverse beams 3, and the forward longitudinal side beams 5, the front ends of which connect with the front ends of the transversely arranged front beam 1. Said front beam 1 carries a bolster 6 and the rear beam 2 also carries a bolster 7, the bolsters 6 and 7 being in a higher plane than the transversely arranged intermediate beams 3.

At the front portion of the body, each side is provided with a vertically arranged bearing sleeve 8 having a flat and preferably circular base plate 9 one portion of the up-

per surface of which is provided with spaced parallel flanges 10 between which the rear ends of side beams 5 extend and which are bolted or otherwise rigidly but detachably fastened in the socket formed by said flanges. At an opposite portion, the plates 9 are provided with an abutment flange 11 to which the ends of the forward member of the intermediate beams 3 are bolted or otherwise rigidly fastened. Each sleeve has the upper portion provided with laterally projecting oppositely disposed flanges 12 one of which has a brace connection 13 with the front bolster 6, the other having a brace connection 13^a with the rear end of the intermediate beams 4.

Shafts 14 extend through the sleeves 8 and 22, the upper end thereof being provided with a collar 15 that holds a flange 16 over the open upper end of sleeve 8. The collar 15 is rigidly fastened to the shafts 14 and obviously prevents longitudinal movement thereof without interfering with the rotary movements of the shaft. The lower end of shafts 14 carries a flat, and preferably circular, bearing plate 17 that is placed in antifriction engagement with sleeve plate 9 by means of the roller bearings 18. Each plate 17 is provided with a downwardly projecting, rearwardly inclined hanger arm 19, said arms 19 carrying the shaft 20 for the front wheels 21.

Sleeves 22 are provided for the rear of the body, said sleeves being similar to the sleeves 8 and have brace connections 23 with the rear bolster 7, and another brace connection 24 with the forward ends of intermediate beams 4. Said braces 24 cross braces 13^a and are provided with an arch 25 at their centers which loops over said braces 13^a. A hanger arm 26 is connected to each sleeve 22 in the same manner as that described in connection with hanger arms 19, said arm 26 having the rear wheels 28 journaled thereto. The base plates of sleeves 22 are equipped with an abutment flange for the end of the rear member of the intermediate beams 3, and said plates carry the longitudinally arranged rearwardly projecting bars 29 which support the rear transverse beams 2. The intermediate beams 3 are provided with hangers 30 which support a base board 31 upon which a water tank 32 is mounted. Said tank projects beyond the rear of the body and is provided with a filling tube 33 that is sealed by a cover 34.

Said base board 31 is supported at the front end by the hangers 35 which are carried by the forward side beams 5.

A fuel rack is supported by the front and rear bolsters 6 and 7 and an intermediate supporting beam 36 that is carried by the side beams 4. Said rack is composed of the spaced parallel floor boards 37 and the upwardly extending side standards 38 which are connected by the spaced parallel boards 39. Said rack is removably seated on the bolsters and the supporting beams and the sides thereof are supported by the bearing sleeves 8 and 22. The fuel carried by the rack is usually hay and straw, and it will be seen that the rack being open the fuel is kept ventilated, and that the bolsters 6 and 7 and supporting beam 36 retain the rack spaced from the water tank so that the fuel will not be affected by the dampness from said tank. Beams 5 carry forward extensions 40 the free ends of which are connected by a draft bar 41 adapted to be coupled to a traction engine (not shown).

It will be clear from the foregoing that the manner of pivotally connecting the wheels to the body provides means whereby the tender will be caused to closely follow every movement of the traction engine, so that straining of the same due to independent side movements is prevented. It will also be understood that the fuel rack being removable, the same can be readily taken from the body when necessary or desirable.

As is shown in Figs. 2 and 6, the extensions 40 are provided with openings 42 to which one end of the link bars 43 are fastened. Said bars are also selectively bolted to the openings 44 of the draft bar 41, and project beyond the same. Bars 43 are arranged in convergent relation, and provide means whereby the tender can be coupled to a narrow "hitch" of a motor.

What I claim as my invention is:—

1. A tender for traction engines comprising a body, supporting wheels independently pivotally connected thereto, a tank suspended beneath and projecting beyond the rear end of said body and provided with filling means, and a fuel rack removably seated on said body.

2. A tender for traction engines comprising a body, forward and rear vertically arranged bearing sleeves carried thereby, a base plate carried by each sleeve, a shaft rotatably held in each sleeve, each shaft pro-

vided with a bearing plate, anti-friction rollers interposed between said plates, a rearwardly inclined hanger arm depending from each bearing plate, a supporting wheel journaled in each arm, and a tank suspended beneath said body.

3. A tender for traction engines comprising a body, a water tank carried thereby, vertically arranged bearing sleeves carried by said body, a wheel pivotally connected to each sleeve, and a fuel rack seated on said body between said sleeves and held thereon by said sleeves.

4. A tender for traction engines comprising a body formed of longitudinally arranged forward side members, intermediate transverse members, longitudinally arranged rear side members supported by the transverse members, a forward transverse member connecting the forward side members, forward bearing sleeves provided with means for supporting the forward side members and one of the transverse intermediate members, rear bearing sleeves for supporting another intermediate transverse member, an end transverse member for the body, extensions carried by the rear sleeves and engaging said end transverse member, and supporting wheels pivotally connected to said sleeves.

5. A traction engine tender comprising a body formed of parallel longitudinally arranged side members, intermediate and end transverse members connecting the side members, bearing sleeves carried by the forward portion of said body and provided with sockets for engaging the forward side members and an abutment flange for one of the transverse members, rear bearing sleeves carried by the body and provided with an abutment flange for another transverse member and with extensions for engagement with the end transverse member, and supporting wheels carried by the said sleeves.

6. A tender for traction engines comprising a body, vertically arranged bearings carried thereby, supporting wheels journaled in said bearings and a fuel rack removably held on said body by said bearings.

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

CHARLES F. MALONEY.

Witnesses:

WILLIAM MALONEY,
ANNA L. MALONEY.