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Date: Feb. 3, 1903
Description: Patent for the S.W. Taber Wagon Gear.

Silas W. Taber of Houlton, Maine

Wagon-gear

Specification forming part of Letters Patent No. 719,531, dated February 3, 1903.
Application filed January 17, 1903, serial No. 90,192. (No model.)

UNITED STATES PATENT OFFICE.

SILAS W. TABER, OF HOULTON, MAINE.

WAGON-GEAR.

SPECIFICATION forming part of Letters Patent No. 719,531, dated February 3, 1903.

Application filed January 17, 1902. Serial No. 90,192. (No model.)

To all whom it may concern:

Be it known that I, SILAS W. TABER, a citizen of the United States, residing at Houlton, in the county of Aroostook and State of Maine, have invented a new and useful Wagon-Gear, of which the following is a specification.

My invention relates to improvements in wagon-gears of that class in which drop or crank axles are employed; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

One object of my invention is to effect improvements in the construction of the drop-axle, whereby the same is provided with a strengthening-truss.

A further object of my invention is to combine with the drop-axle a link-brace which connects the same to the front end of the reach or wagon bed or platform to prevent the drop-axle from canting.

In the accompanying drawings, Figure 1 is a perspective view of the front truck of a wagon-gear embodying my improvements. Fig. 2 is a vertical transverse sectional view of the same. Fig. 3 is a detail top plan view showing the pole-circle and the pole connected thereto.

In the construction of the drop-axle 1 the straight intermediate portion 2 thereof, which connects the crank portions 3, is provided on its upper side with a truss-bar 4, which is bent substantially, as shown in Fig. 1, so that the central portion of the truss-bar is separated from and disposed at some distance above the center of the straight portion 2 of the axle, so that an opening 5 is formed between the said truss-bar and the straight intermediate portion of the axle. In the construction of the axle the truss-bar 4 is first bent in the required form and the ends thereof are then secured to the ends of the intermediate portion 2 of the axle by welding the same thereto. The crank portions 3 of the axle are then welded to the ends of the intermediate portion 2 and the truss-bar 4. Blocks 6 of suitable size are inserted between the intermediate portion 2 of the axle and the truss-bar 4 at suitable distances on opposite sides of the center of the axle. A clamp-plate 7 is disposed longitudinally on the central portion of the truss-bar 4. The width of the said clamp-

plate exceeds that of the truss-bar, and the sides of the clamp-plate project beyond the front and rear sides of the truss-bar. Yokes 8 are disposed transversely under the axle at suitable distances from the center thereof, and the ends of said yokes are connected to the projecting sides of the clamp-plate by bolts 9. By this construction of the axle the same is prevented from springing either upwardly or downwardly.

At the center of the truss-bar 4 is a rearwardly-extending lug 10, which in practice is forged to the truss-bar. The king-bolt 11, which connects the reach or the front portion of the wagon bed or platform to the front axle, is disposed in an opening in the said lug 10. I also provide a link-brace 12, which is preferably of the form shown in Fig. 2. The said link-brace is disposed in and transversely of the opening 5 between the intermediate portion 2 of the axle and the truss-bar and has its rear end pivotally connected to the lower end of the king-bolt 11. The front end 75 of the link-brace is connected, as by a bolt 13, with the front end of the reach, bed, or body of the wagon. For the purposes of this specification the reach has been indicated at *a* by dotted lines in Fig. 2 of the drawings. The function of the link-brace, as will be understood, is to prevent the drop or crank axle from canting.

The pole-circle 14 has its ends connected to the crank portions of the axle by the usual couplings 15. At the central portion of the pole-circle is formed a yoke 16, having forwardly-extending arms 17 and which forms a seat for the rear end of the pole or tongue 18, the same being secured to the yoke 16 of the pole-circle by bolts 19, which pass transversely through the arms 17 and the rear portion of the pole or tongue.

Brace-rods 20 have their front ends bolted to opposite sides of the pole or tongue, as at 21, and their rear ends connected to the pole-circle by clips 22.

Having thus described my invention, I claim—

1. An axle having a truss-bar in the vertical plane thereof and with its intermediate portion spaced from that of the axle and provided with a laterally-extending lug, whereby an opening is formed between the axle and

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Be it known that I, Silas W. Taber, a citizen of the United States, residing at Houlton, in the county of Aroostook and State of Maine, have invented a new and useful Wagon-Gear, of which the following is a specification.

My invention relates to improvements in wagon-gears of that class in which drop or crank axles are employed; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

One object of my invention is to effect improvements in the construction of the drop-axle, whereby the same is provided with a strengthening-truss.

A further object of my invention is to combine with the drop-axle a link-brace which connects the same to the front end of the reach or wagon bed or platform to prevent the drop-axle from canting.

In the accompanying drawings, Figure 1 is a perspective view of the front truck of a wagon-gear embodying my improvements. Fig. 2 is a vertical transverse sectional view of the same. Fig. 3 is a detail top plan view showing the pole-circle and the pole connected thereto.

In construction of the drop-axle 1 the straight intermediate portion 2 thereof, which connects the crank portion 3, is provided on its upper side with a truss-bar 4 which is bent substantially, as shown in Fig. 1, so that the central portion of the truss-bar is separated from and disposed at some distance above the center of the straight portion 2 of the axle, so that an opening 5 is formed between the said truss-bar and the straight intermediate portion of the axle. In construction of the axle the truss-bar 4 is bent in the required form and the ends thereof are then secured to the ends of the intermediate portion 2 of the axle by welding the same thereto.

The crank portions 3 of the axle are then welded to the ends of the intermediate portion 2 and the truss-bar 4. Blocks 6 of suitable size are inserted between the intermediate portion 2 of the axle and the truss-bar 4 at suitable distances on opposite sides of the center of the axle. A clamp-plate 7 is disposed longitudinally on the central portion of the truss-bar 4. The width of the said clamp-

plate exceeds that of the truss-bar, and the sides of the clamp-plate project beyond the front and rear sides of the truss-bar. Yokes 8 are disposed transversely under the axle at suitable distances from the center thereof, and the ends of said yokes are connected to the projecting sides of the clamp-plate by bolts 9. By this construction of the axle the same is prevented from springing upwardly or downwardly.

At the center of the truss-bar 4 is a rearwardly-extending lug 10, which in practice is forged to the truss-bar. The king-bolt 11, which connects the reach or the front portion of the wagon bed or platform to the front axle, is disposed in an opening in the said lug 10. I also provide a link-brace 12, which is preferably of the form shown in Fig. 2.

The said link-brace is disposed in and transversely of the opening 5 between the intermediate portion 2 of the axle and the truss-bar and has its rear end pivotally connected to the lower end of the king-bolt 11. The front end of the link-brace is connected, as by a bolt 13, with the front end of the reach, bed, or body of the wagon. For the purposes of this specification the reach has been indicated at *a* by dotted lines in Fig. 2 of the drawings. The function of the link-brace, as will be understood, is to prevent the drop or crank axle from canting.

The pole-circle 14 has its ends connected to the crank portions of the axle by the usual couplings 15. At the central portion of the pole-circle is formed a yoke 16, having forwardly-extending arms 17 and which forms a seat for the rear end of the pole or tongue 18, the same being secured to the yoke 16 of the pole-circle by bolts 19, which pass transversely through the arms 17 and the rear of the pole or tongue.

Brace-rods 20 have their front ends bolted to opposite sides of the pole or tongue, as at 21, and their rear ends connected to the pole-circle by clips.

Having thus described my invention, I claim—An axle having a truss-bar in the vertical plane thereof and with its intermediate portion spaced from that of the axle and provided with a laterally-extending lug, whereby an opening is formed between the axle and

the truss-bar, in combination with a king-bolt engaged by the lug, and a link-brace disposed and extended through the said opening and connected to the king-bolt, substantially as described.

2. An axle having a truss-bar provided with a laterally-extended lug at the center of the axle, blocks between the truss-bar and the axle, whereby an opening is formed between the truss-bar and the axle, a link-brace disposed in and extended through said opening and means to secure the link-brace to said lug, to prevent the axle from canting, substantially as described.

3. In combination with a reach extending forwardly above the axle, a brace-link secured at its front end to the reach and having its rear portion extended between the axle and truss-bar and under the lug of the latter, and a king-bolt in alined openings in said reach, lug, and the rear end of the brace-link, substantially as described.

4. In combination with a drop-axle having a truss-bar on the upper side of the intermediate portion thereof and spaced therefrom, said truss-bar having a rearwardly-extending

lug at its center, a reach extending forwardly above the axle, a brace-link secured at its front end to the reach and having its rear portion extended between the axle and truss-bar, and under the lug of the latter, and a king-bolt in alined openings in said reach, lug, and the rear end of the brace-link, substantially as described.

5. An axle having a truss-bar in the vertical plane thereof and with its intermediate portion spaced from that of the axle, and provided with a rearwardly-extended lug, blocks in the space between the axle and truss-bar, clamp-plates above and below the truss-bar and axle respectively and projecting beyond the front and rear sides thereof, and bolts connecting said plates together and disposed on the front and rear sides of the truss-bar and axle, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SILAS W. TABER.

Witnesses:

R. N. BROWN,
JOHN C. MCINTYRE.

the truss-bar, in combination with a king-bolt engaged by the lug, and a link-brace disposed and extended through said opening and connection to the king-bolt, substantially as described.

2. An axle having a truss-bar provided with a laterally-extended lug at the center of the axle, blocks between the truss-bar and the axle, whereby an opening is formed between the truss-bar and the axle, a link-brace disposed in and extended through said opening and means to secure the link brace to said lug, to prevent axle from canting, substantially as described.

3. In combination with a reach extending forwardly above the axle, a brace-link secured at its front end to the reach and having its rear portion extended between the axle and truss-bar and under the lug of the latter, and a king-bolt in alined openings in said reach, lug, and the rear end of the brace-link, substantially as described.

4. In combination with a drop-axle having a truss-bar on the upper side of the intermediate portion whereof and spaced therefrom, said truss-bar having a rearwardly-extending

lug at its center, a reach extending forwardly above the axle, a brace-link secured at its front end to the reach and having its rear portion extended between the axle and truss-bar, and under the lug of the latter, and a king-bolt in alined openings in said reach, lug, and the rear end of the brace-link, substantially as described.

5. An axle having a truss-bar in the vertical plane thereof and with its intermediate portion spaced from that of the axle, and provided with a rearwardly-extended lug, blocks in the space between the axle and truss-bar, clamp plates above and below the truss-bar and axle respectively and projecting beyond the front and rear sides thereof, and bolts connecting said plates together and disposed on the front and rear sides of the truss-bar and axle, substantially as described.

In Testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of witnesses.

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