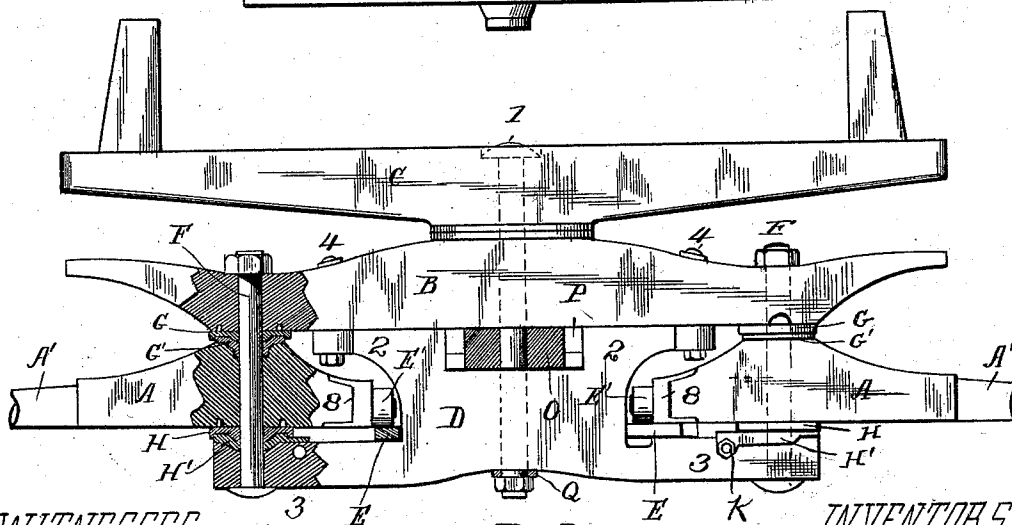
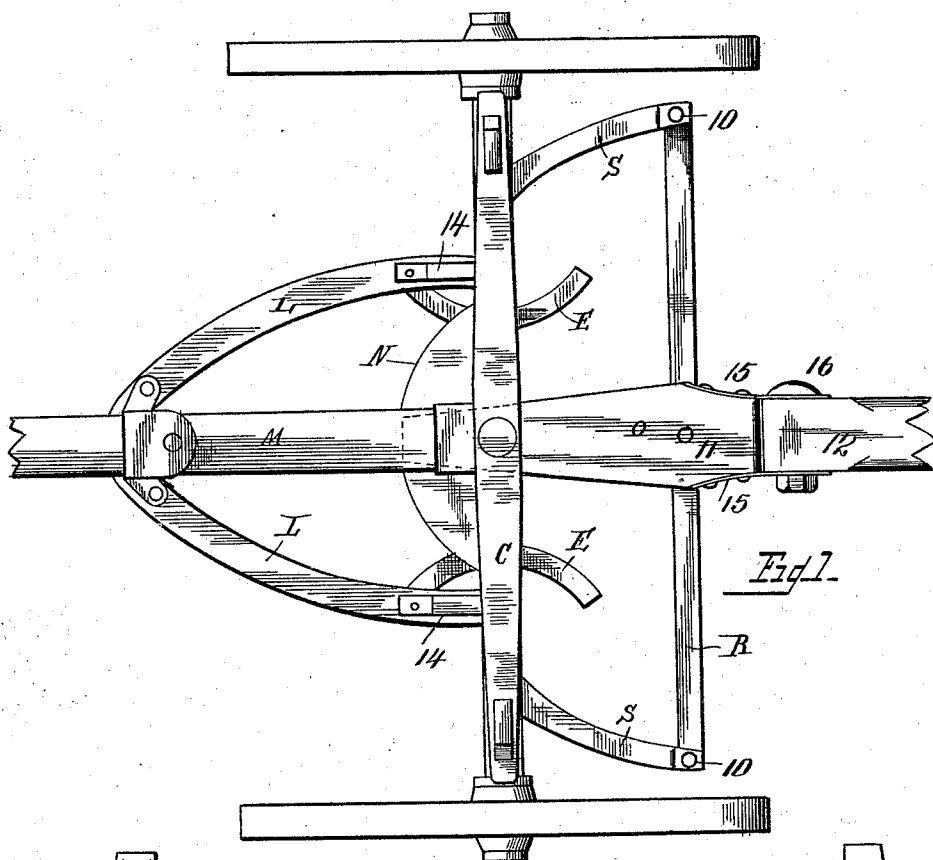


3 Sheets—Sheet 1.

No. 550,694.

Patented Dec. 3, 1895.



WITNESSES

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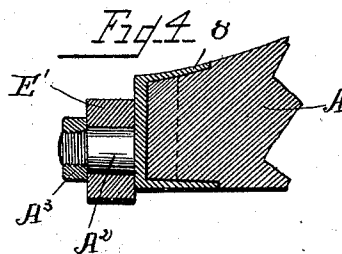
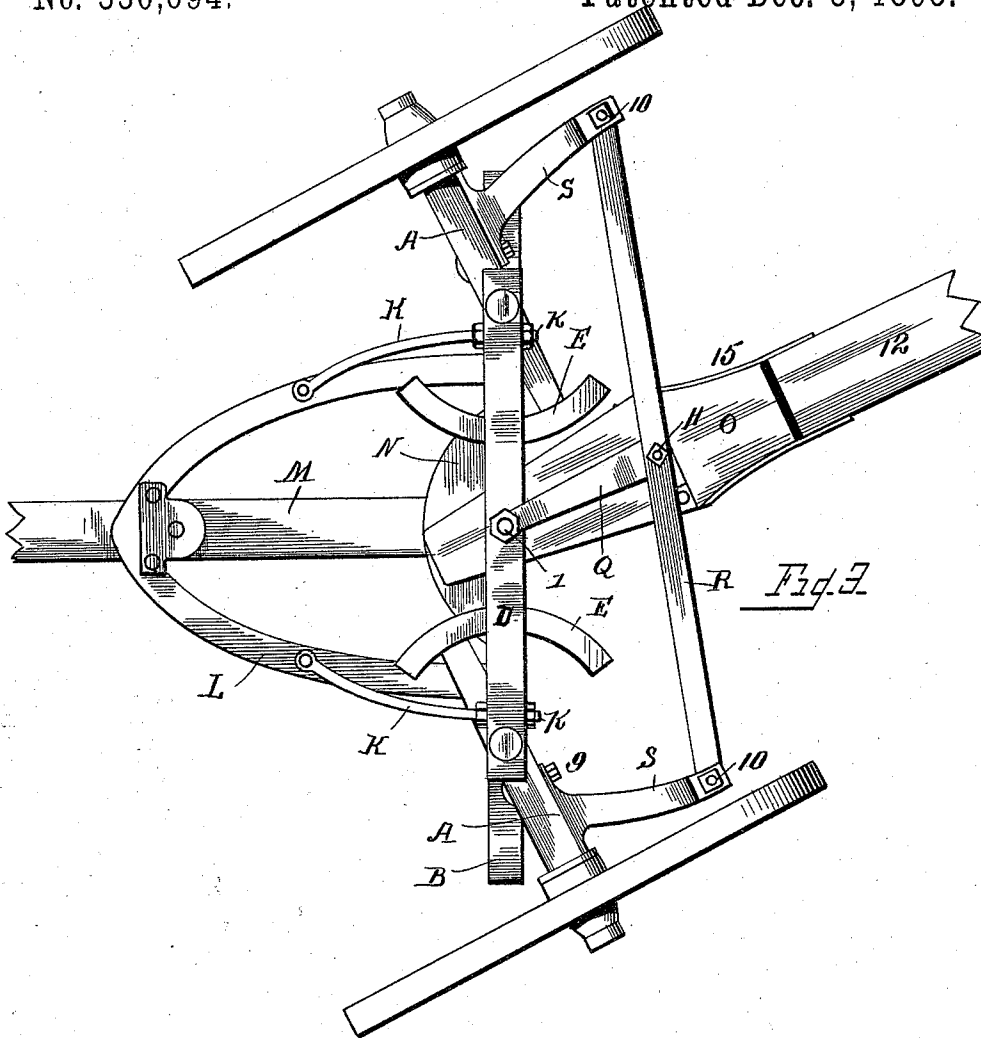
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W. SCHEMENOUR.
WAGON.

No. 550,694.

Patented Dec. 3, 1895.



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(No Model.)

3 Sheets—Sheet 3.

W. SCHEMENOUR.
WAGON.

No. 550,694.

Patented Dec. 3, 1895.

Fig. 5.

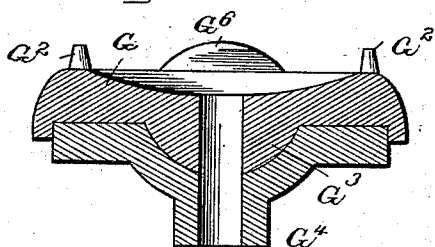


Fig. 6.

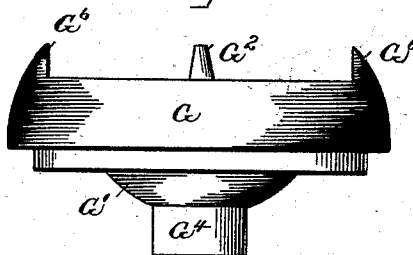


Fig. 7.

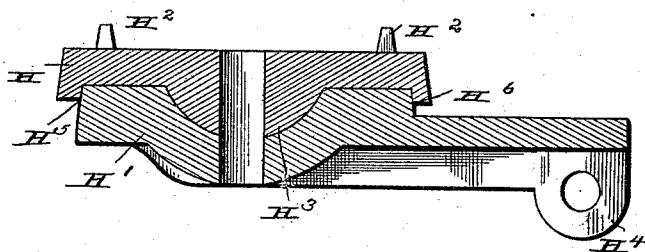


Fig. 8.

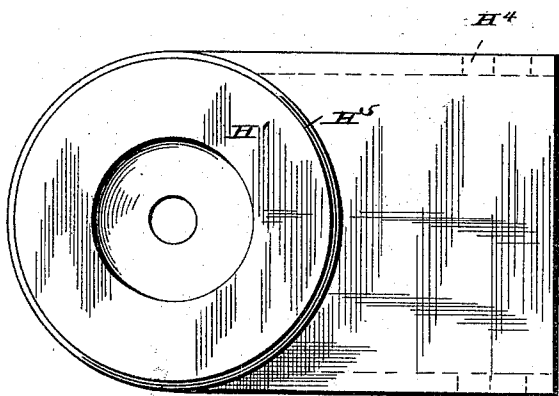
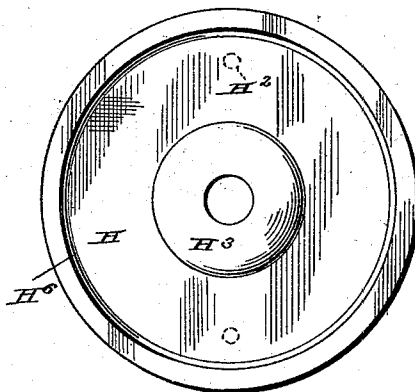


Fig. 9.



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WAGON.

SPECIFICATION forming part of Letters Patent No. 550,694, dated December 3, 1895.

Application filed May 7, 1895. Serial No. 548,378. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SCHEMENOUR, residing at Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Wagons, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to the running-gear of wagons, and especially such wagons as are intended to turn short curves.

The object of the invention is to improve the construction of this class of wagons, so that much of the gear may be of wood, for lightness, yet the wearing parts may be of metal and of such form as to be quickly and firmly connected; also, to produce a running-gear of this character which may be cramped with but little friction; also, to connect the parts in a strong and durable manner at a moderate cost.

Figure 1 is a top plan of the front axle of a wagon and immediate connections, according to my invention. Fig. 2 is a rear elevation, partly in section, of the front axle and connections, the wheels being omitted. Fig. 3 is a bottom plan view of the axle and connections in cramped position. Fig. 4 is a detail section of antifriction-wheel and connections to one of the short axles. Fig. 5 is a section, and Fig. 6 a side elevation, of cupped wear-plates and bearing hereinafter described. Fig. 7 is a section of another cupped wear-plate and bearing. Figs. 8 and 9 are plan views of the wear-pieces, Fig. 7.

The pivoted short axles A A are of wood, provided with usual metallic spindles or skeins A' for the reception of the wheels. These short axles A are pivoted by strong bolts F between the wooden truss-block D and the wooden bolster-bar B. The bolster C is secured to the bolster-bar and truss-block by king-bolt 1, which passes through these parts, as well as through the tongue-carrier O. The truss-block D has the integral central bridge 2 rising above the extensions 3 3. The bridge ends are secured to the bolster-bar by bolts 4 4.

The extensions 3 3 of the truss-block are each provided with a metallic wear-plate H', which is held to the wooden part of the truss-block by braces K passing through side lugs H⁴ of

the wear-plates and through the block and extending to hounds L, where the braces are attached. These wear-plates have cups in their upper surfaces and a circular face H⁵ projecting above the general level of the plate, the cup being in the center thereof. The truss-block also has rigid metallic arc-plates E firmly secured thereto in about the position shown.

The short axles A A have metallic wear-pieces H on their lower surfaces, which wear-pieces have ring-flanges H⁶ surrounding the disk-faces H⁵ of the wear-plates, and having also bosses H³ to enter the cup in the wear-plate. These wear-pieces H are connected to the short axles A by the pins H². The wear-pieces H H' are thus interposed between the extensions of the truss-block and the short axles A when the parts are assembled and serve as bearings and pivotal supports for the short axles and much strengthen the parts around the true pivots F.

The upper part of the short axle A is crowned, and on the crown is fixed a circular wear-plate G', having a central cup in its upper surface and a central boss G⁴, which extends into a countersink in the crown of the axle.

The wear-piece G is held to the underside of the bolster-bar by pins G² and lugs G⁶. The position of the assembled parts is clearly shown in Fig. 2, and, as will be readily understood, the short axles A when so supported will be strongly connected both to the extensions of the truss-block and to the bolster-bar and at the same time will be pivoted so as to turn easily, and the bearing will be on metallic surfaces, which take the wear.

At the inner end of each of the short axles there is a metallic socket or casting 8, having a pintle A², on which the antifriction wheel or roll E' is held by nut A³. This wheel or roll E' runs on the arc-plate E, thus supporting the inner end of the short axle when in straight or cramped position and permitting an easy movement of the short axle on its pivot.

The short axles A each have an arm S firmly secured thereto, as by bolts 9, passing through the axle and a flange on the arm, so that arms S are rigid with the short axles and project

forward therefrom. One end of the flange may project into the axle-skein. The arms preferably curve outward, as shown, so as to give a considerable sweep to the coupling-bar.

5 Coupling-bar R is connected by strong pivots 10 with the outer ends of each of the arms S and by bolt 11 to the tongue-carrier O. The tongue-carrier O extends through an opening P in the truss and rides under a brace-plate
10 N behind the bolster-bar, the tongue-carrier being pivoted to the king-bolt 1. The tongue 12 is connected to the tongue-carrier in any suitable and usual manner, as by straps 15 and bolt 16. A brace Q extends from the
15 king-bolt below the truss-block to the bolt 11. The fit of the parts is such as to allow the tongue-support and connections to cramp the short axles, as shown in Fig. 3.

The reach M is connected to hounds L in suitable manner, and the hounds are connected to the truss-bar by bolts and braces, as indicated at 14, or in any other suitable manner.

From the description the operation of the device will be readily understood by those
25 familiar with this art. The side movement of the tongue and support will cramp the short axles, the ends of the axles being supported by the anti-friction-wheels running on the arc-plates. The wear-plates not only take
30 the wear, but act as braces and supports to the axles, both in straight and cramped position, and the tongue-support is braced and supported in all positions.

What I claim is—

1. In a wagon, the truss block having side 35 extensions and a central bridge and the bolster bar having side extensions and rigidly connected to said bridge, the short axle pivoted between the extensions of the bolster
40 bar and bridge, arc plates rigid with the truss block and extending across the extensions thereof, and the short axle having bearings on said plates, all combined substantially as described.

2. In a wagon, the wooden truss block hav- 45 ing a central truss and the bolster bar secured thereon, the metallic arc plates secured to the truss block, the short axles pivoted between the extensions of the truss block and the bolster bar, said axles having anti-friction
50 wheels at their inner ends resting on the arc plates, all combined substantially as described.

3. In a wagon, the wooden truss block and bolster bar, the metallic arc plates secured to 55 the truss block, the short wooden axle having a metallic socket at its inner end, and having a pintle on said socket bearing an anti-friction roll which travels on the arc plate, and means for cramping said axles, all com-
60 bined substantially as described.

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

WILLIAM SCHEMENOUR.

Witnesses:

JOHN HABLITZEL,
ERNST CONRAD.