(No Model.)

W. A. DUSE.

RUNNING GEAR FOR WAGONS.

No. 490,803. Patented Jan. 31, 1893.

Fig. 1.

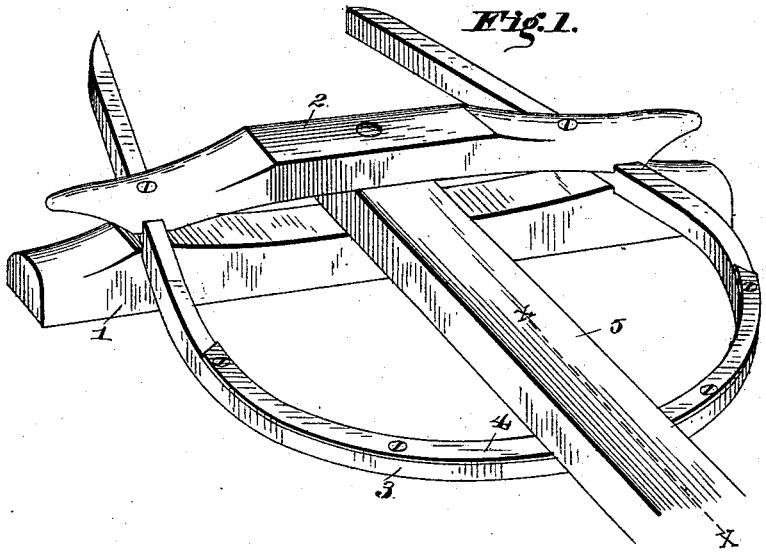


Fig. 2.

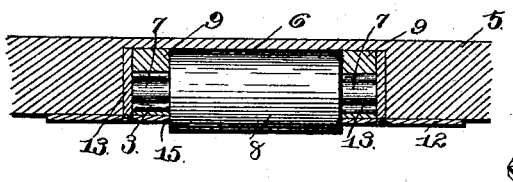


Fig. 3.

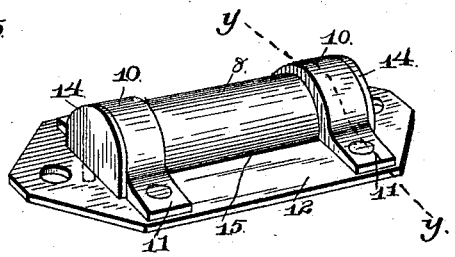
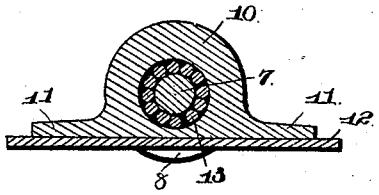


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM A. DUSE, OF STEWARTSVILLE, MISSOURI.

RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 490,803, dated January 31, 1893.

Application filed March 26, 1892. Serial No. 426,541. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. DUSE, a citizen of the United States, residing at Stewartsville, in the county of De Kalb and State of Missouri, have invented a new and useful Running-Gear for Wagons, of which the following is a specification.

This invention relates to that class of wagons in which the tongue is supported by a cross-bar connecting the hounds behind the front axle and passing beneath the coupling-pole. The part of the pole against which the cross-bar rests, as well as the bar itself, are subjected to constant wear, as the cross-bar is continually moving back and forth through a greater or less distance.

With this in view, the present invention consists of the construction and arrangement of the parts as will be more fully hereinafter described and claimed.

The object of the present invention is to provide a construction which will lessen and materially obviate wear upon the several parts and avoid the use of a lubricant.

In the drawings—Figure 1 is a perspective view of a portion of a running-gear, showing my improved construction applied thereto. Fig. 2 is a longitudinal vertical section on the line *x—x*, Fig. 1. Fig. 3 is a detail perspective view of the improved construction removed. Fig. 4 is a transverse section of the device shown by Fig. 3 on an enlarged scale, taken on line *y—y*, of said figure.

Similar numerals of reference indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1 designates the bolster, 2 a hound, 3 a circle connected to said bolster and hound and having thereon a metallic wear-strip 4, and 5 a coupling-pole. The parts are well known in the art and need not be further explained herein.

The under side of the coupling-pole is mortised, as at 6, to receive the support or bearings 7, 7, of an anti-frictional roller 8. The boxes 9 consist of centrally located collars 10, provided with ears 11, secured to a supporting-plate 12, which is attached to the coupling-pole 5, as shown. Each of the said collars 10 is provided with an opening extending therethrough of greater diameter than the said bearing 7 of the anti-frictional roller to permit the insertion of short steel rods 13 around the said bearings 7, to reduce the friction as will be understood and at the same time avoid the use of lubricants.

To assemble the parts thus far explained, the boxes 9 are first secured in position on the plate 12, the bearings 7 of the roller 8 being first inserted in the openings of the collars 10. The steel rods 13 are then inserted in place, as shown, and vertically-disposed against the outer ends of the said collars 10. To cover the same and hold the rods 13 within the said collars, are cap-plates 14, which are formed with lugs projected through openings in the plate 12 and upset to produce a secure fastening. After the parts are thus assembled they are inserted within the mortised portion of the coupling-pole and secured in position by attaching the said plate 12 to the said pole. A portion of the roller 8 projects through an opening 15 in said plate 12 and bears on the wear-strip 4 of the circle 3 to travel thereover according to the movement of the several parts of the running-gear.

By the construction set forth, the employment of a lubricant is wholly unnecessary; and the wear on the journals of the roller is materially reduced through the medium of the rods 13, which are loosely mounted and move from one position to another, thereby avoiding a rigid or stationary wearing surface.

Having thus described the invention, what is claimed as new is—

1. The combination with the coupling-pole, of a plate secured thereto having an opening through which a portion of an anti-frictional roller projects, boxes secured to said plate to receive the journals of said anti-frictional roller and having openings therein of considerably greater diameter than the said journals, steel rods surrounding the journals in said boxes, and cap-plates removably fitted over the ends of said boxes and secured to said plates supporting the anti-frictional roller, substantially as described.

2. The combination with a coupling pole having a mortise therein, of a plate with an opening therethrough, boxes secured to said plate, an anti-frictional roller between and

having its journals bearing in said boxes, steel rods surrounding the journals of said anti-frictional roller, and cap-plates removably fitted against the ends of said boxes and having lugs extending through openings in the first-named plate and upset thereon, 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.

WILLIAM A. DUSE.

Witnesses:
D. T. SHEWEY,
CHAS. MCMULLEN.