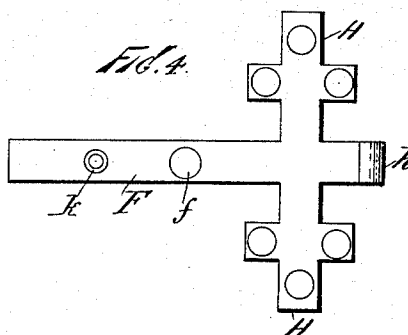
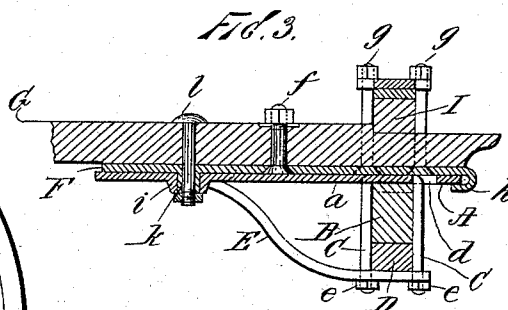
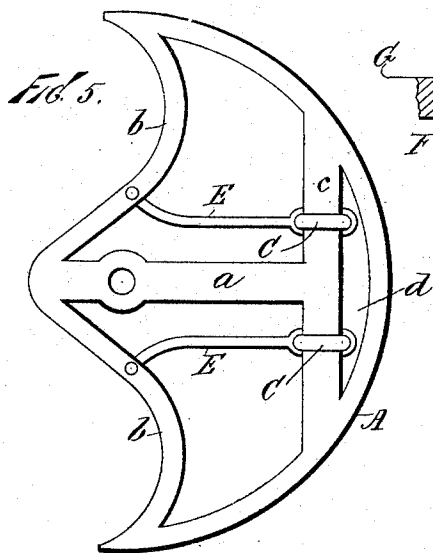
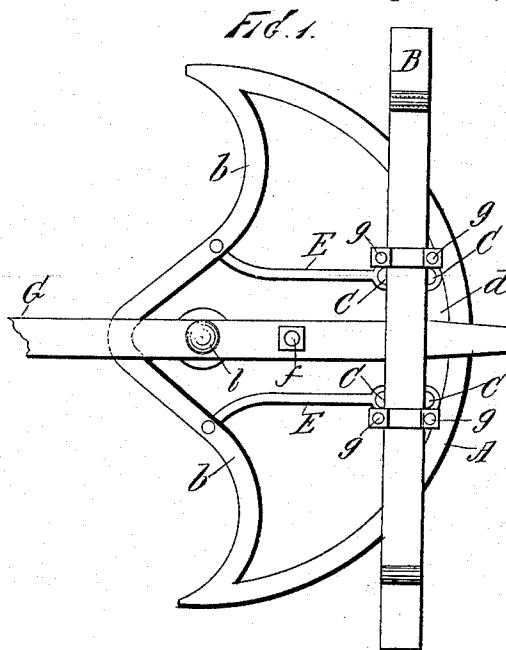
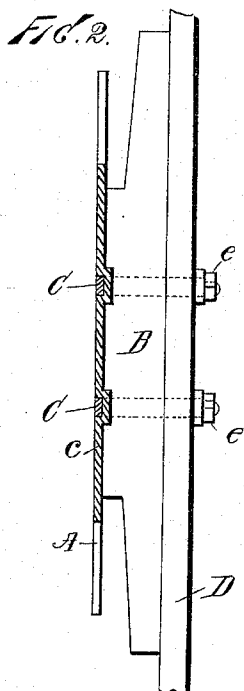


(No Model.)

R. CARR.
FIFTH WHEEL FOR VEHICLES.

No. 518,688.

Patented Apr. 24, 1894.



Witnesses:
John Buckler,
L. O. Osgood,

Inventor
Robert Carr,
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UNITED STATES PATENT OFFICE.

ROBERT CARR, OF NEWBURG, NEW YORK.

FIFTH-WHEEL FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 518,688, dated April 24, 1894.

Application filed July 20, 1893. Serial No. 481,006. (No model.)

To all whom it may concern:

Be it known that I, ROBERT CARR, of Newburg, county of Orange, and State of New York, have invented certain new and useful Improvements in Fifth-Wheels for Vehicles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to that class of appliances known as fifth wheels and used in connection with vehicles to facilitate turning and other movements thereof.

The object of my invention is to produce a simple, cheap, durable and efficient fifth wheel whereof all the parts may be easily made by hand work, which is secure, noiseless in working and which permits the axle to turn or travel a half circle or more while the fifth wheel projects only a slight distance in front of the bolster. To accomplish all of this and to secure other advantages in the matters of construction, operation and use my invention involves certain new and useful arrangements or combinations of parts and peculiarities of construction as will be herein first fully described and then pointed out in the claim.

In the drawings Figure 1 is a plan view showing my improved device in position for use. Fig. 2 is a sectional elevation on a plane through the axle showing the curve plate mounted in place. Fig. 3 is a sectional elevation of the whole device on a plane through the reach. Fig. 4 is a plan view of the under side of the reach plate detached, and Fig. 5 a similar view of the curve plate.

In all the figures, like letters of reference, wherever they occur, indicate corresponding parts.

A is the curved or principal plate of my improved fifth wheel, of which *a* is the central bar, *b b* branches or braces extending from the rear end of said bar to the extremities of the curve, and *c* the piece which is to be applied on the axle stock leaving an opening *d* for purposes to be hereinafter explained. The axle or curve A with the braces and bars referred to are made in one piece so as to be solid and secure, and this piece is rigidly fixed upon the axle stock B. and moves therewith.

C C are clamps in the form of clevises reaching over piece *c*, through the opening between it and the curve, down inside and outside the axle stock B. and axle D, and are clamped on the under side by nuts as *e*. The piece *c* is recessed to receive the clamps, as indicated, so that they will not project above the curve, leaving the entire upper surface thereof plain and smooth. The opening *d* not only admits of the application of clevis clamps C, but it serves to lighten the circle without detracting from its necessary strength.

E. E. are braces for the curve, the same being applied, by riveting or otherwise, at their junction with the branches *b*, and by fitting over the clamps C under the axle where they are locked by the nuts *e*.

The reach-plate is made somewhat in the form of a cross, the bar F being applied beneath the reach G and secured thereto as by a bolt *f* having its head countersunk, and the arms H H being secured to the under side of the bolster or spring bar I by similar bolts, as *g*. The bar F is extended forward to form a hook *h* which reaches under the curve, and when in place, prevents the reach plate from leaving the curve. A circular curve of any desired size may be used. Its center is located (when the parts are applied as explained) well back of the end of the reach or the normal position of the axle, permitting the axle to make a shorter or quicker turn than would otherwise be required, as will be readily understood. The central bar *a* is provided with a socket piece *i*, and the reach-plate with a corresponding or fitting hollow piece *k*, which enters the socket piece *i* and thus maintains the two plates always in working position when they are suitably locked together. The pieces *i* and *k* are easily forged or "jumped" upon the plates and they afford an enlarged bearing sufficient to obviate undue wear and to avoid the rattling or jarring liable to occur in case a simple bolt is provided as the axis around which the turning is to take place.

To secure the two plates, a simple bolt as *l* passes down through the reach and through the hollow projection *k*, and is provided with a nut on the under side. This bolt can be easily removed when desired and the plates

then separated for any inspection or repairs which may be necessary. None of the wear in turning comes upon the bolt 7.

5 The device constructed substantially in accordance with the foregoing explanations is found to admirably answer all the purposes or objects of the invention previously set forth.

10 Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

15 The herein described fifth wheel for vehicles, the same comprising the curve plate recessed as explained and secured upon the axle body by the clevis clamps located in the re-

cesses and reaching over the curve plate, said plate being provided with braces extending from the axle and with a socket, and the reach plate secured upon the reach and upon the spring bar and provided with a hollow 20 projection entering the socket, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

ROBERT CARR.

Witnesses:

JESSE F. SHAFER,
WILLIAM MULLENNEAUX.