

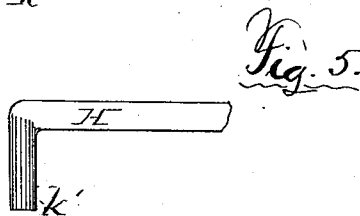
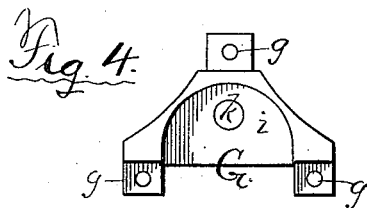
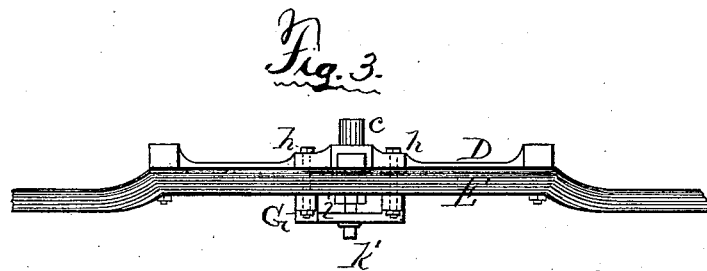
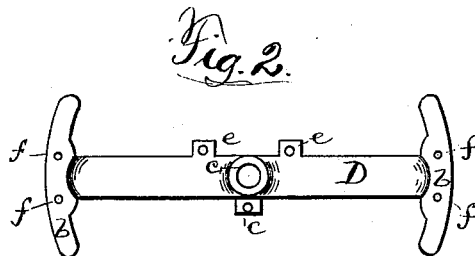
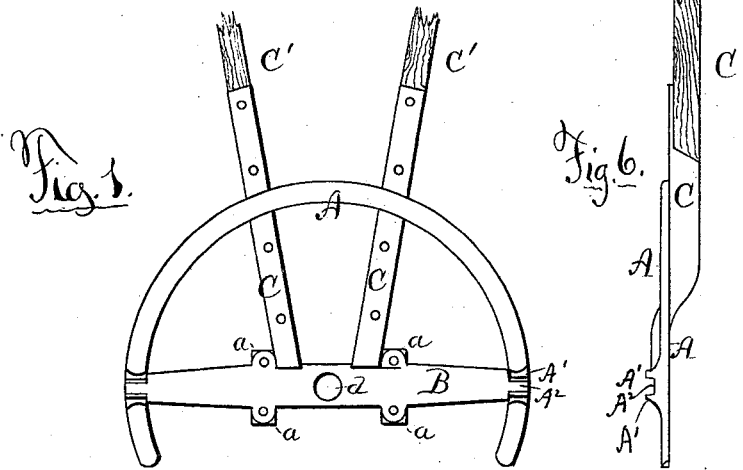
(No Model.)

E. P. CARTER.

FIFTH WHEEL.

No. 265,578.

Patented Oct. 10, 1882.



Witnesses:
C. H. Killogg.
J. R. Drake.

E. P. Carter,
Inventor, by
J. R. Drake,
Atty.

UNITED STATES PATENT OFFICE.

EGBERT P. CARTER, OF ARCADE, NEW YORK.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 265,578, dated October 10, 1882.

Application filed April 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, EGBERT P. CARTER, a citizen of the United States, residing at Arcade, in the county of Wyoming and State of New York, have made certain Improvements in Fifth-Wheels and their Connecting Parts for Buggies and other Wagons, of which the following is a specification.

The invention relates more particularly to simplifying the construction of said fifth-wheel and connecting parts, the object being to save in labor, time, and expense by uniting heretofore separate pieces into one or more castings, all as hereinafter fully explained.

In the drawings, Figure 1 is a plan of the fifth-wheel and reach-frames, &c.; Fig. 2, a plan of the axle-plate and the segments on which the fifth-wheel moves; Fig. 3, a side elevation of the lower plate attached to an axle, and showing the clip tie-plate beneath; Fig. 4, a top plan of the clip tie-plate; Fig. 5, a side view of the pin end of safety-brace; Fig. 6, a side elevation of fifth-wheel and drop-reach.

A represents the fifth-wheel; B, the uniting-plate, and C C the frames of the drop-reaches which receive the wooden reaches. These parts are all of metal, and are cast in one piece instead of being in several separate pieces, as is usual. The drop-reach frames C C are cast on with the fifth-wheel and plate B, and "drop" or curve under the fifth-wheel, as clearly shown in Fig. 6, and receive the wooden reaches C' C', which are fastened to the frames C C by bolts or otherwise. This construction allows these wooden reaches to be made straight, thereby saving bending, the iron frames C forming the necessary bend, as shown. The ears and holes *a a* are to attach the whole to the parts above.

D is an axle-plate, fastened to the axle E, forming, by means of the circle-segments *b b* at the ends, the seat for the fifth-wheel above to move on, and having a central hollow upward projection, *c*, and which goes through the central hole, *d*, in the upper plate, B, and in which the usual king-bolt sets. There are ears or lugs *e e* to attach it to the axle, and bolts also go through the holes *f f* in the circle-segments *b* to attach to axle E. This axle-plate D, segments *b b*, and central projection, *c*, are all cast in one piece, thereby making it strong-

er, simpler, and cheaper in construction, and very much less work in attaching it to the axle.

All the foregoing-described parts are usually separate and expensive pieces, and require skilled labor to put together and in place. My improved construction does away with all that.

Below the center of the axle E, and exactly underneath the king-bolt, is a clip tie-plate, G, for aiding in holding the plate D and its segments *b b* to the axle (see Fig. 4) by bolts *h h* (see Fig. 3) going through the lugs *e e* and plate D, and also clip tie-plate G *g g*. The center is partly hollowed out into a semicircular seat, *i*, and with a central vertical hole, *k*, therein, into which the end *k'* of the safety-brace goes, as shown in Fig. 3. This is to give a little but necessary play.

The end of the safety-brace H is bent down into a downwardly-projecting pin, *k'*, as shown in Fig. 5, and after setting in the hole *k* is secured by a nut on the under side, to prevent rattle. This making the safety-brace end into a pin by merely bending it down greatly simplifies its construction, besides making it stronger, by allowing it to be larger where it passes through the tie-plate. A great advantage of my construction of the fifth-wheel and the drop-reaches is that it allows the front end of the buggy body or box to drop lower before striking the reaches than is now the case with other constructions.

The whole device of the fifth-wheel and the two plates is in only two pieces, and can be put on a buggy by any one, while ordinarily they are composed of some eight or ten pieces, besides having to bend the reaches. My plates go onto the axle-stock flat, and the usual head-block sets on flat, saving thereby labor in rounding it up and rounding the castings instead.

The construction of the fifth-wheel is such that the rests *b*, when the wheel is turned, will come around under the part A until they come against the depressed attaching-pieces C. For this purpose the parts *b* are made as short as is consistent with efficacy. The attaching-pieces C run out at right angles from the piece B for a short distance, and then drop down with a sudden depression to accommodate the circle A. They are run out into cheeks *m* on either side, which embrace the reaches C' and

hold them securely from twisting or breaking off the nails or screws. In the wheel A, where it rests over the plate D, risers A' are provided, which have depressions A² formed in them, in 5 which the springs rest. The risers A' may be made high enough to guard the several leaves of the spring and prevent strain.

I claim—

1. The fifth-wheel described, consisting of the 10 circle A and cross-stay B, provided at the point of junction with risers A' and depressions A² for receiving the springs, the deflected reach-holding attachments C C, provided with the cheeks m, to give lateral stiffness to 15 the braces C' C', run out under the circle A, the whole being cast or formed in a single piece, combined with the plate D, having the rests b, substantially as set forth.

2. The clip tie-plate G, with the central semi-circular hollow, i, and hole k for the reception 20 of the safety-brace end k', and with the lugs g g, in combination with an axle and axle-plate D, and to be bolted thereto, all substantially as and for the purpose specified.

3. In combination with the clip tie-plate G 25 i k, the safety-brace H, having its end bent down into a pin, k', and held by a nut underneath plate G, all substantially as and for the purpose specified.

In witness whereof I have hereunto signed 30 my name in the presence of two subscribing witnesses.

EGBERT P. CARTER.

Witnesses:

J. R. DRAKE,

C. H. KELLOGG.