2 Sheets—Sheet 1.

J. SKEEN.

FIFTH WHEEL.

No. 115,245. Patented May 23, 1871.

Fig. 1.

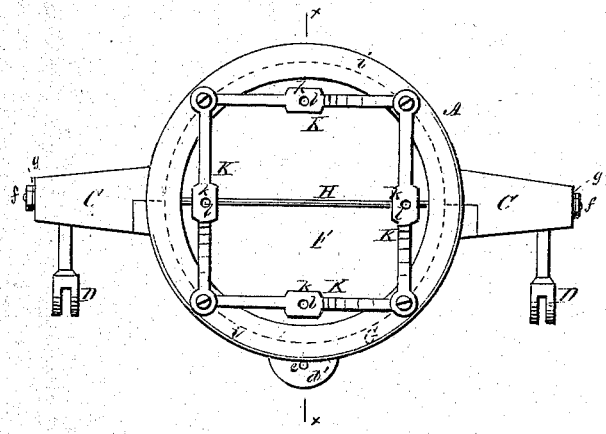
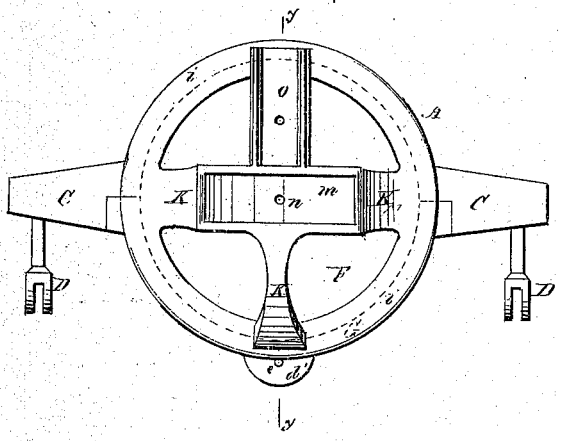


Fig. 2.



Witnesses.

Addie Mere
John R. Young

Inventor.

Jacob S. Keen,
by Brindle & Dyer.
Attys.

2 Sheets—Sheet 2.

J. SKEEN.

FIFTH WHEEL.

No. 115,245. Patented May 23, 1871.

Fig. 3.

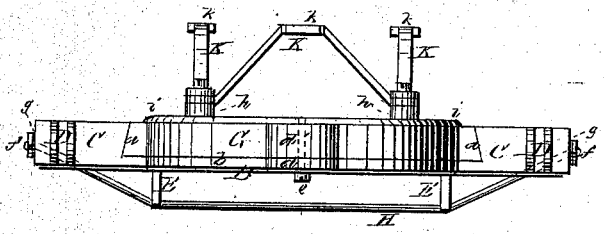


Fig. 4.

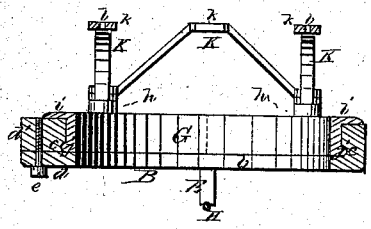


Fig. 5.

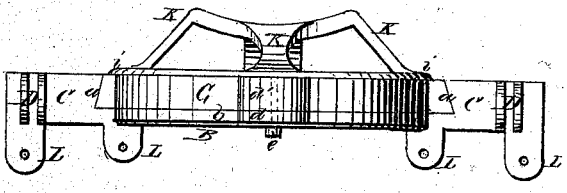
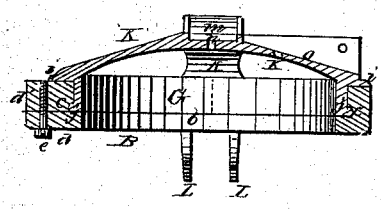


Fig. 6.



Witnesses.

John R. Young

Inventor.

Jacob S. Skeen,
by Prindle & Dyer.
Attys.

United States Patent Office.

JACOB SKEEN, OF MOUND CITY, ILLINOIS.

Letters Patent No. 115,245, dated May 23, 1871.

IMPROVEMENT IN FIFTH-WHEELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB SKEEN, of Mound City, in the county of Pulaski and in the State of Illinois, have invented certain new and useful Improvements in Fifth-Wheels; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a top plan view of my device adapted for use with side springs and without a perch;

Figure 2, a top plan view of a modification of the same, adapted for use with a single spring and with a perch;

Figure 3, a front elevation of fig. 1;

Figure 4, a vertical cross-section on the line *x x* of fig. 1;

Figure 5, a front elevation of fig. 2; and

Figure 6, a vertical cross-section on line *y y* of fig. 2.

Like letters denote like parts in each figure.

The object of my invention is the construction of a fifth-wheel for carriages, which shall be cheap, strong, and serviceable, which shall dispense with the king-bolt, and shall be so arranged as to be capable of adaptation to a great variety of carriages; and

My invention consists in an annular lower ring, provided with arms and shackle-bars cast in one piece; in an annular upper ring, provided with certain yokes; and in combining with the ring first described a truss for the purpose of giving it greater strength, all constructed of cast metal, as and for the purposes hereinafter more fully set forth and explained.

In the annexed drawing—

A represents the fifth-wheel as a whole, shown in figs. 1, 3, and 4, which is of an annular form, with the upper and lower sides in parallel planes with two extended opposite arms, upon the same upper and lower planes as the annular portion before named.

Of this fifth-wheel the principal and lower ring B, the arms C, the shackle-bars D, and the truss-studs E are constructed in one piece.

The central circular opening is represented by the letter F.

Half of the ring B is cut away upon the top and in front, into which a segment, G, is fitted, having its ends made with a downward bevel at *a*, to fit into corresponding bevels in the ring B.

A flange, *b*, extends from the lower part of said ring, encircling the opening F.

Directly above this flange a groove, *c*, is cut into the ring entirely around it, and around segment G, so that when the last-named portion is fitted upon said ring the groove forms a continuous uniform circle.

Upon the central part of the ring B is a lip, *d*, and upon the segment G a corresponding lip, *d'*; through a proper opening in each a screw, *e*, passes, which secures the segment in place upon the ring.

From points near the ends of the arms C, the shackle-bars D extend forward, provided with suitable eyes, to which the hounds are attached.

Upon the under sides of the ring B are truss-studs E, over which passes the truss-rod H, the ends of which rod pass up into the arms C and out through their ends, where they are threaded and secured by proper nuts *f*, under one or both of which are elastic washers *g*, to allow for expansion and contraction.

An upper ring, I, provided with yoke-studs *h*, is made in one piece, having a flange, *i*, upon its upper part, covering the top of the ring B, and a flange, *j*, upon its lower portion, corresponding with and fitting into the groove *c*, before spoken of.

Upon the tops of the studs *h* are the yokes K, arranged as shown in fig. 1, secured in place by means of suitable screws, passing in each instance down through one end of two contiguous yokes.

The tops of the yokes are flattened at *k*, and there provided with suitable openings *l*, by means of which the under part of the carriage is secured to the tops of said yokes.

Ordinary elliptic side springs are secured upon the under sides of the ends of the arms C, so that said springs shall be in line with the carriage lengthwise.

In the construction of this fifth-wheel it will be seen that a king-bolt is dispensed with; that only one screw, viz., the screw *e*, secures the whole in place, that the separate parts are light and yet strong, strength being imparted by the yokes K, as well as by the truss-rod H.

In the modification of my device, shown particularly in figs. 2, 5, and 6, no truss-rod is used, and the yokes K are made in one piece with the upper ring.

On the under side of the arms are clips L, by means of which the fifth-wheel is secured to the axle of the carriage.

Upon the top of the yokes is a recess, *m*, provided with an opening, *n*, for the purpose of receiving and securing a single elliptic spring crosswise of the carriage.

The yoke to the rear has a groove, *o*, provided with suitable openings, into which the forward end at the reach is secured.

The operation of the device first described, and or its modification does not seem to require any explana-

tion in addition to that already given in the description.

All parts of each are intended to be of cast-steel or malleable iron, except the truss-rod and bolts or screws, and the upper parts of each are interchangeable.

Having thus explained my invention,

What I claim as new therein is—

1. The ring B, provided with arms C and shackle-bars D cast in one piece, constructed and arranged substantially as described and shown.

2. The ring I, provided with yokes K, constructed and arranged substantially as described and shown.

3. In combination with the ring B, the truss-rod H, constructed and arranged substantially as described and shown.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of April, 1871.

JACOB SKEEN.

Witnesses:

GEO. S. PRINDLE,

EDM. F. BROWN.