(No Model.)

# W. H. MILLER.

## FIFTH WHEEL.

No. 275,688. Patented Apr. 10, 1883.

Fig. 1.

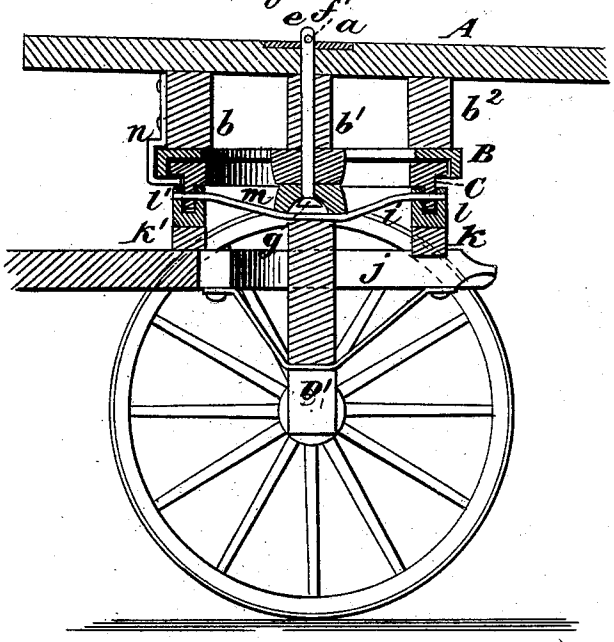



Fig. 3

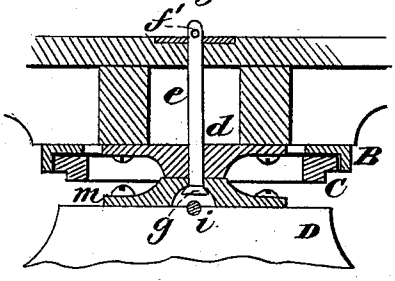



Fig. 4.

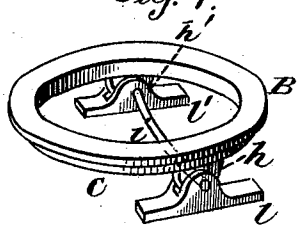
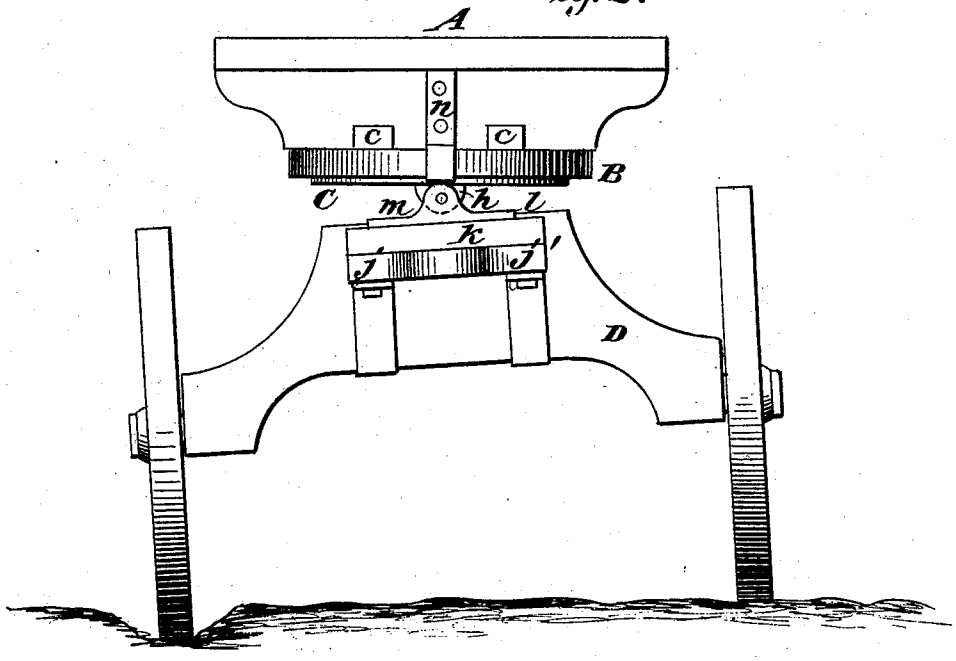



Fig. 2.




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# UNITED STATES PATENT OFFICE.

WILLIAM H. MILLER, OF SOUTH BEND, INDIANA.

## FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 275,688, dated April 10, 1883.

Application filed January 2, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. MILLER, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Fifth-Wheels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in fifth-wheels for vehicles; and it consists in the peculiar arrangement of the upper and lower circles of the same, the connection of the circles to the head-block or axle of a vehicle, and to the body or bottom of a water-wagon or other vehicle; and it further consists in the peculiar arrangement and attachment of the king-bolt to said device.

The object of my invention is to provide against the strain usually brought to bear on fifth-wheels of ordinary construction when in use on uneven surfaces. I attain this object by means of the arrangement of different parts of the device in a manner that will be more fully pointed out and described in the specification and claims.

Similar letters refer to similar parts throughout the drawings.

Figure 1 is a longitudinal sectional view of my improved fifth-wheel. Fig. 2 is a front elevation of the same. Fig. 3 is a cross-sectional view; and Fig. 4 is a detail view, showing the lower circle with hinges and supports.

In the drawings, A represents the bed or bottom of a vehicle-body, or the bottom of a box, mounted on wheels and used as a tank for holding water to sprinkle streets and for other purposes. At a point equidistant from the sides and near the front end a metal plate, *a*, is let into said bed or bottom to the extent that the upper surface of said plate is flush with the upper surface of said bed or bottom. Three cross-bars, *b* $b'$ $b^2$, are secured crosswise to the under side of the bed or bottom A. The center cross-bar, $b'$, is secured directly under and in line with plate *a*. Cross-bar *b* is secured in like manner a short distance in front of cross-bar $b'$, and cross-bar $b^2$ is secured in like manner a short distance in the rear of said cross-bar $b'$. Two stiffening ribs or plates, *c*, are secured longitudinally across said cross-bars, to which are secured the upper circle of the fifth-wheel and the bolster-plate *d*. A perforation is formed through plate *a*, cross-bar $b'$, and bolster-plate *d*, to receive king-bolt *e*, which is formed of sufficient length and size to loosely fit inside said perforation, and has formed through its outer end an aperture, through which passes a pin, $f'$, or screw-threaded bolt to receive a nut. The lower end of said king-bolt has an outwardly-tapering or spherical head, *g*, by means of which and the pin $f'$ the parts are held together.

The upper circle, B, is formed with a flanged rim on its under side, adapted to fit loosely around the outer edge of circle C. Circle C is formed with a flat upper surface in the usual manner. On the under surface, at opposite points, are secured projecting ears *h* and $h'$, both of which are perforated to receive a pivot pin or rod, *i*. This rod *i* is formed of sufficient length to pass through from the outside of ear *h* in a concave form to the outer edge of ear $h'$.

Hounds $j$ $j'$ pass through and are secured to axle D. In the rear of axle D, and on the upper face of hounds $j$ $j'$, is secured a cross-bar, *k*, on the upper face of which and about its center is secured a metal plate, *l*, having upwardly-projecting ears with perforations through the same to receive one end of pivot-rod *i*, said ears being formed of sufficient space between them to admit the ear $h'$ on circle C. In front of axle D is secured, on the upper face of hounds $j$ $j'$, a cross-bar, $k'$, having secured on its upper surface a metal plate, $l'$, formed like plate *l*, and for a similar purpose.

In line with axle D, and on the upper face of the same, is secured a fish-plate or under bolster-plate, *m*, formed with an upper flat bearing-surface, and having its under face concaved to receive the beveled head of king-bolt *e*. The under edges are also notched to receive the pivot-rod *i*, that is formed to pass through under said fish-plate and under the head of king-bolt *e*.

Near the center and to the front face of cross-

bar *b* is secured a metal strap, *n*, extending downward, and formed with an inwardly-turned lip on its lower extremity to lap over the edge of circle B and aid in holding circle C in place when within the rim of circle B.

Plate *m* is formed with a perforation through its center in line with the perforations in bolster-plate *d*, cross-bar *b'*, and plate *a*, and its purpose is to receive and loosely hold king-bolt *e*.

Having thus described my invention, what I desire to secure by Letters Patent is—

The combination of the circles B and C, cross-bars *b b' b²*, lugs *h* and *h'*, ears *l* and *l'*, cross-bars *k* and *k'*, and plate *m*, with king-bolt *e* and pivot-rod *i*, substantially as shown and specified.

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

WILLIAM H. MILLER.

Witnesses:

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