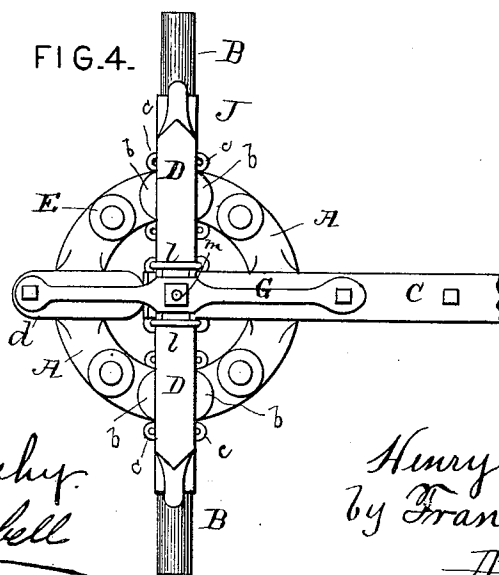
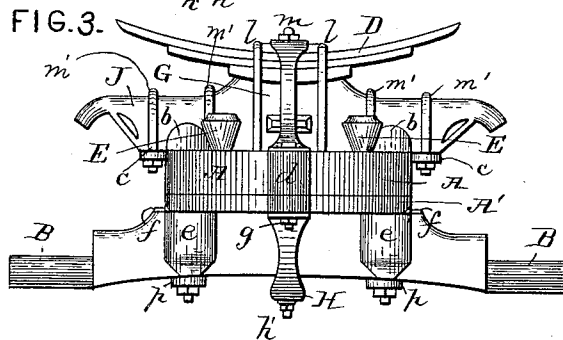
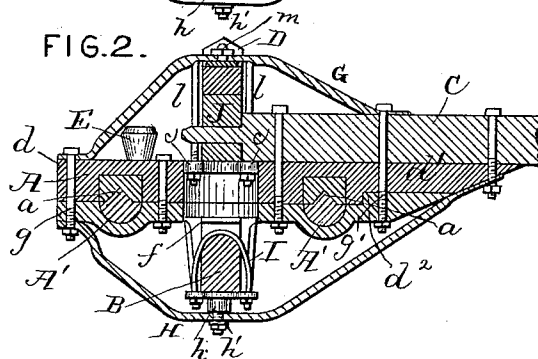
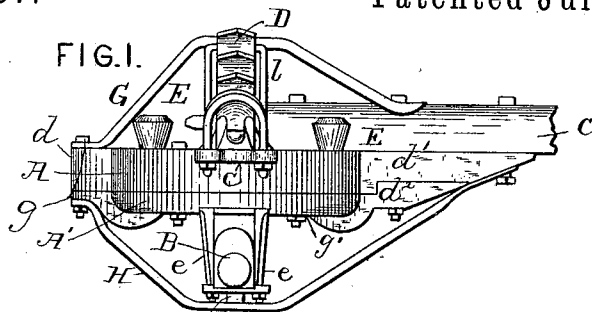


(No Model.)

H. C. SHRINER.
FIFTH WHEEL.

No. 366,637.

Patented July 12, 1887.



ATTEST-
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UNITED STATES PATENT OFFICE.

HENRY C. SHRINER, OF RANDOLPH, KANSAS, ASSIGNOR OF ONE-HALF TO
JOHN ELFSTROM, OF SAME PLACE.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 366,637, dated July 12, 1887.

Application filed November 10, 1886. Serial No. 218,456. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. SHRINER, a citizen of the United States, residing at Randolph, in the county of Riley and State of Kansas, 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.

This invention relates to certain novel improvements in what are denominated "fifth-wheels" for vehicles, and in means for securing and bracing the same to the axle, the head-block, and the reach, which improvements will be fully understood from the following description, when taken in connection with the annexed drawings, in which—

Figure 1 is an elevation of one side of my improved device. Fig. 2 is a vertical longitudinal section centrally through the device. Fig. 3 is a front view, and Fig. 4 is a top view.

Referring to the annexed drawings by letters, A designates the upper part of a fifth-wheel; A', the lower part thereof. B is the axle, C the perch or reach, and D the leaf-spring.

The upper half of my improved circular fifth-wheel is constructed as follows: The bottom side has an annular groove, *a*, of any suitable form. Diametrically opposite each other I form raised lugs *b b*, on top of section A, laterally projecting from the base of which are perforated ears *c c*. Equidistant from the lugs *b b*, and diametrically opposite each other, I also form lugs *d d'*, projecting inwardly and outwardly and vertically perforated. At suitable points through this half or section A, I make screw-tapped holes, into which I screw oil-cups E, for lubricating the surfaces between the two annular sections A A' of the fifth-wheel. It will be seen that the external rear lug, *d'*, is considerably extended, and notched at *d''*, for a purpose hereinafter explained.

The bottom half, A', of my fifth-wheel is constructed with an annular rib in its upper side, of a form adapted to fit the groove *a* on the

bottom of the upper half, A, and thereby prevent the possibility of lateral displacement of one section upon the other, at the same time excluding dust from the impinging surfaces. Depending from and formed on the lower side of this half A' are lugs *e e e e*, arranged in pairs diametrically opposite each other, and having screw-threaded portions on their lower ends. I also form on the periphery of the half A' lips or extensions *f f*, springing from the roots of the lugs *e e*.

When the two circular halves A A' are brought together, they are held by means of a front clip, *g*, and a rear bracket-clip, *g'*. The front clip is rigidly secured to the lugs *d* by bolts, the front one of which also secures the front ends of two braces, G H, in their places. The rear bracket-clip, *g'*, is rigidly secured to the lug *d'* by means of bolts, which also secure the rear parts of the fifth-wheel to the perch C and the rear end of the upper brace, G, to the lug *d'* and perch C. The rear end of the brace H is rigidly secured to the rear extension of the lug *d'* and to the perch C. As shown in Figs. 1 and 2, I dispense with a king-bolt and use a clip, I, rigidly secured to the axle B centrally between the inner edges of the lower half, A', of the fifth-wheel. The strap of the clip I has a boss, *h*, and screw *h'*, formed on it, the axis of the screw coinciding with the vertical axis of the fifth-wheel. The screw *h'* passes through the brace H, and receives a washer and a nut on it, thus forming a pivotal connection of this brace with the axle.

The front end of the perch is rigidly secured to the head-block J in the usual manner, and the spring D is secured upon this block by the clips *l l* and a bolt, *m*, that also confines the arch of the upper brace, G. This head-block is seated upon the upper half of the fifth-wheel between the pairs of lugs *b b* and upon the webs between the ears *c c*, and by means of four clips, *m'*, that pass through these ears and receive nuts on their lower ends. The head-block D is strongly secured upon the upper half of the fifth-wheel.

The axle B is received between the lugs *e e* on the lower half, A', of the fifth-wheel, and by means of straps *p* and nuts screwed on the lower ends of said lugs *e e* the half A' is rigidly and strongly secured to the axle. The lips or

extensions *f* aid in affording a broad bearing of the fifth-wheel upon the axle, and the rear clip, *g'*, being shouldered and adapted to the notch *d'* of the rear lug, *d'*, resists considerably of the strain on the lower half of the fifth-wheel incident to the draft on the axle.

Having described my invention, what I claim is—

The combination of a fifth-wheel having formed on its upper part the lugs *b*, the perforated ears *c*, and lugs *d d'*, and on its lower part the lugs *e* and lips or extensions *f*, the

head-block secured between said lugs *b* by clips, the clips *g g'*, longitudinal braces *G H*, secured as described, and the pivotal connection of the lower brace to the axle, all substantially as specified. 15

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

HENRY C. SHRINER.

Witnesses:

SAM KIMBLE,
W. FRYHOFFER.