C. B. WOOD.

Fifth Wheel.

No. 164,067. Patented June 1, 1875.

Fig 1

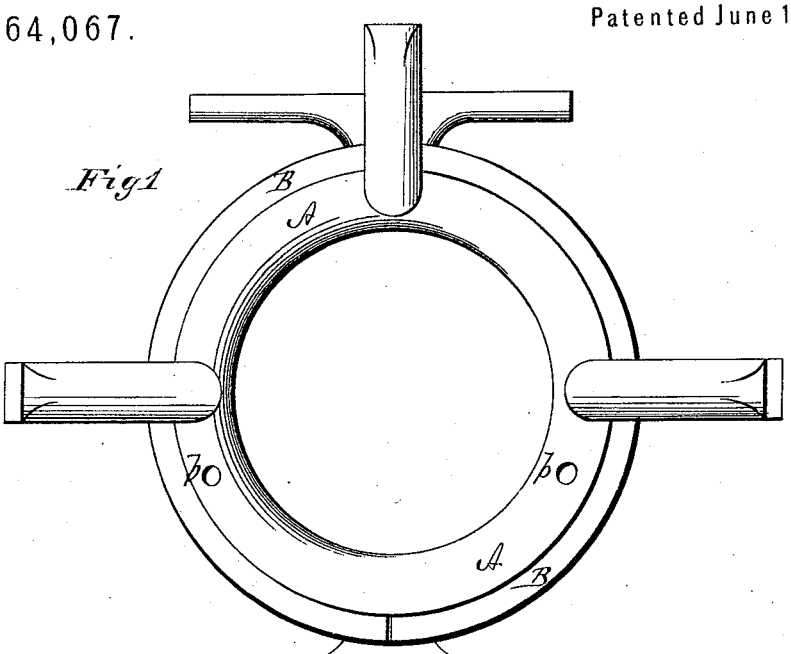


Fig 2

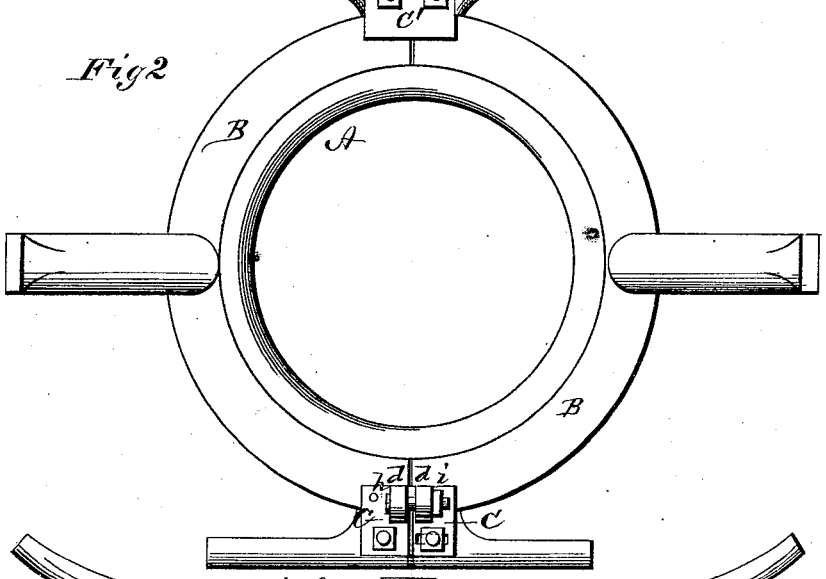
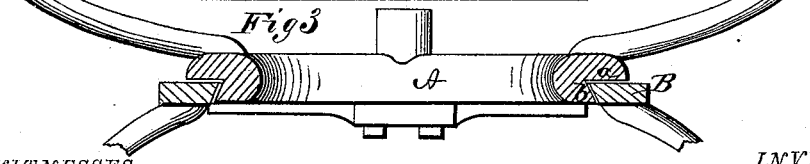


Fig 3



WITNESSES

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IMPROVEMENT IN FIFTH-WHEELS.

Specification forming part of Letters Patent No. **164,067**, dated June 1, 1875; application filed May 6, 1875.

To all whom it may concern:

Be it known that I, CHARLES B. WOOD, of New York, in the county of New York and in the State of New York, have invented certain new and useful Improvements in Fifth-Wheels for Vehicles; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists, first, in the employment of two annular plates, which form the fifth-wheel of a vehicle, and which are suitably connected to the running-gear and body, respectively, whereby the usual king-bolt is dispensed with; second, in so constructing and connecting the two annular plates that one part may freely rotate upon the other, but the two cannot have an upward or downward movement to cause their separation; third, in the employment of a device, in connection with said plates, whereby they can be adjusted to take up the lost motion caused by the wear of the parts, all as hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my fifth-wheel. Fig. 2 is a bottom view of the same, and Fig. 3 is a longitudinal vertical section thereof.

My fifth-wheel is composed of an interior upper annular plate, A, made in one or more pieces, and an exterior lower annular plate, made in two or more parts, B B, the two plates being provided with suitable arms or clips, or their equivalents, for permanent attachment, respectively, to the body of the vehicle and to the front axle. The upper plate A is provided with a circumferential offset, forming a suitable groove, preferably made with one horizontal side, *a*, and one inclined side, *b*, as shown in Fig. 3. The exterior plate B is formed around its inner periphery with an edge to fit in the groove in the plate A. The ends of the parts B B of the outer plate are, on the under side, formed with, or may have attached thereto, plates C C, which plates are provided with projecting ears or lugs *d d*, and through these lugs is horizontally passed a bolt, *h*, with nut *i*. One of the plates C has an elongated slot, through which a vertical bolt passes to secure it to the necessary parts of the running-gear. By unscrewing this bolt and tightening the horizontal bolt the parts of the bisected plate are drawn together, so that the lost motion caused by the wear of the parts is readily taken up.

This device may be used at one or both of the joints of the plate B, and when used only on one joint, at the other joint is attached a plate, C′, uniting the two parts, as shown in Fig. 2.

By this construction of a fifth-wheel a central or king bolt is entirely dispensed with, and the strain which in ordinary fifth-wheels is concentrated on the king-bolt is in this case distributed all around the circle.

The two annular plates cannot easily become separated by an upward or downward strain.

In the upper annular plate A are made suitable oil-holes, *p p*, for oiling the joint between the two plates, and the construction of the groove *a b* will cause it to retain the oil. If deemed necessary, however, a circular groove or gutter may be formed in the upper surface of the plate B below the shoulder *a* of the plate A, to more effectually retain the oil.

This fifth-wheel can be manufactured cheap. It is light and yet durable, and presents a handsome appearance on the vehicle.

The arrangement for taking up the lost motion heretofore described prevents the disagreeable rattling of the parts; also, a fifth-wheel constructed in this manner is much stronger and more secure than a king-bolt as ordinarily used.

Each of the plates A and B is provided with arms or suitable bars for attachment to the respective parts of the vehicle.

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

1. The combination, in a fifth-wheel, of an interior upper annular plate, A, formed with an exterior circumferential groove, and the

exterior annular plate B, made in two or more parts, and fitting in the groove in the plate A, substantially as herein set forth.

2. An adjustable fastener, in combination with the bisected plate B and interior plate A, for holding said bisected plate in the groove on the interior plate, and taking up all lost motion thereof, substantially as herein set forth.

3. The combination of the annular plate A, provided with a circumferential groove, *a b*, the exterior bisected annular plate B, fitting in said groove, and one or more adjustable fastenings, consisting of the plates C, with lugs *d*, bolt *h*, and nut *i*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of April, 1875.

CHAS. B. WOOD.

Witnesses:
C. L. EVERT,
W. A. SKINKLE.