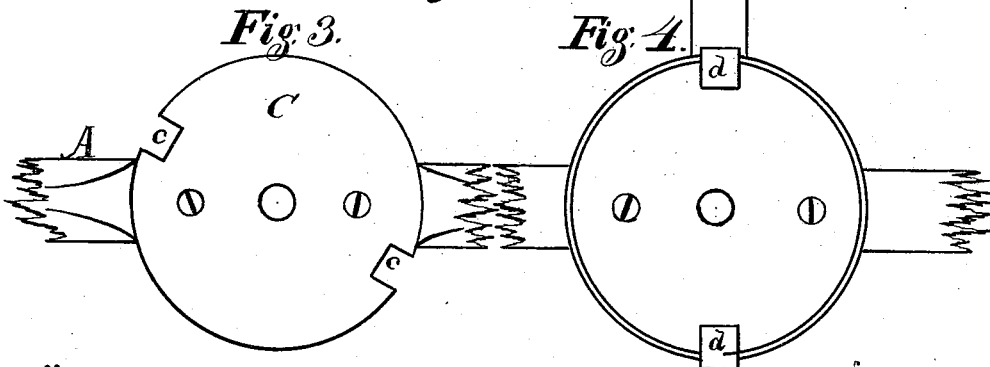
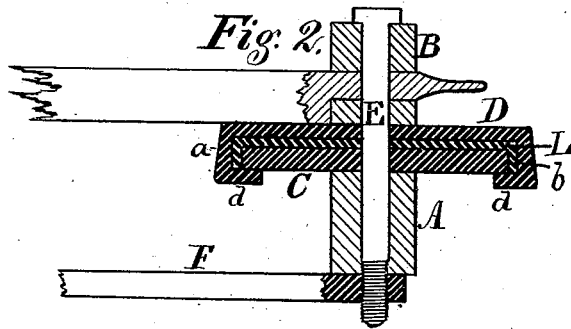
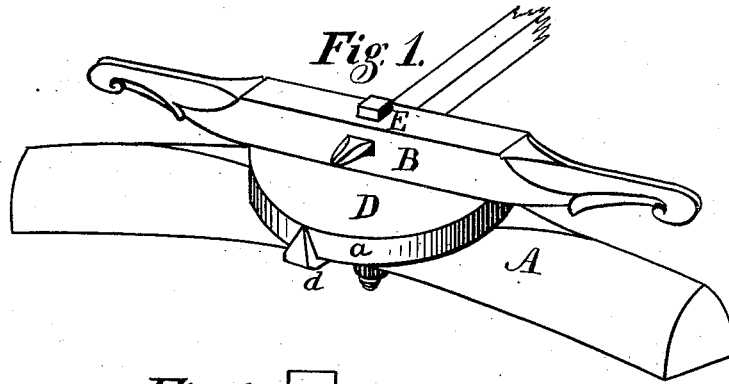


J. J. BLACK.  
 FIFTH-WHEEL FOR WAGONS.

No. 193,594.

Patented July 31, 1877.



Witnesses  
 Samuel Ostrhold  
 E. W. Laird

*[Signature]*

John J. Black Inventor

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Attorneys

# UNITED STATES PATENT OFFICE.

JOHN J. BLACK, OF CLEVELAND, OHIO.

## IMPROVEMENT IN FIFTH-WHEELS FOR WAGONS.

Specification forming part of Letters Patent No. 193,594, dated July 31, 1877; application filed May 26, 1877.

*To all whom it may concern:*

Be it known that I, JOHN J. BLACK, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Fifth-Wheels for Wagons, which improvements are fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view. Fig. 2 is a vertical section. Figs. 3 and 4 are detached views of the two plates composing the fifth-wheel.

The object of my invention is to furnish a device for fifth-wheels for buggies and wagons which shall be noiseless, self-lubricating, and simple and durable in construction and operation.

Fifth-wheels, before my invention, have, among other modes, been constructed of two disks or plates, one fitting within the other, and secured together by overlocking ears and studs, bosses, or bolts. Leather packing has also been used in fifth-wheels constructed in segments. Now, my invention consists in a fifth-wheel composed of a flat circular plate attached to the head-block or bolster of a vehicle, having a central orifice or opening, an annular downwardly-projecting flange, and hook-shaped ears; also, of a flat circular plate attached to the axle-tree, and having notches in its edge, adapted to permit the passage therethrough of the ears on the other plate, which notched plate fits within the flanged plate, a piece of leather containing a lubricant being interposed between the two plates, and of like shape with the first-named plate, so as to cover the inner surface and periphery of the last-named plate, thereby preventing its contact with and injury of the first named, and serving to lubricate the two; also, of a central orifice or opening in said last-named plate, and a king-bolt passed through the axle-tree, plates, and bolster, and serving to unite the several parts, substantially as hereinafter specified, the combination of these

several elements constituting my invention, as before set forth.

In the drawing, A is an axle-tree, and B is a short bolster. To the axle-tree A is secured a metal plate or disk, C, by screws or clips. To the under side of the bolster B is secured a like metal plate or disk, D, having a downward-projecting flange, *a*, which fits over and embraces the lower disk C. To the front and rear side of the disk D are made two ears, *d d*, which reach under and help to hold the plate C in place. Corresponding notches *c c* are made in the edge of the disk C, but they are located very near the axle-tree. The king-bolt E passes down through the whole, and the nut for holding it at the lower end is made on the end of the brace F.

Between the two disks C D is placed a disk of leather, L, whose periphery *b* is bent down, and embraces the lower disk C, as can be seen in Fig. 2. The lower face of the leather is coated with black lead or plumbago, which supplies all the needed lubrication.

From the foregoing it will be seen that when the wheels are on the axles the axle-tree cannot be cramped around far enough for the ears *d d* to come near enough to the notches *c c* to uncouple the plates, even if the king-bolt should be broken, and that the nut cannot get loose, because it is permanently a part of the brace, and should the bolt become loose, it is easily tightened with a wrench from the top.

Having described my invention, I claim—

The combination of the plate D, having the flange *a* and ears *d*, the plate C, having the notches *c*, the leather lubricant L, having its periphery *b* bent down like the flange *a*, and embracing the periphery of the plate C, and the axle-tree A, bolster B, and the uniting king-bolt E, all substantially as described.

JNO. J. BLACK.

Witnesses.

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