

(No Model.)

M. M. SHERWOOD.
FIFTH WHEEL FOR WAGONS.

No. 586,670.

Patented July 20, 1897.

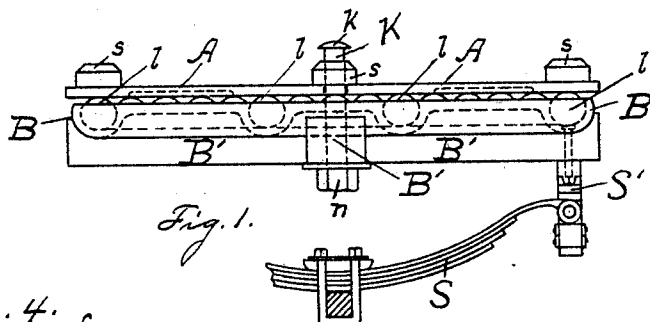


Fig. 1.

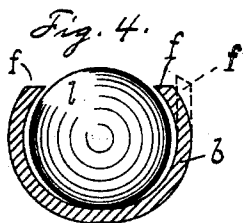


Fig. 4.

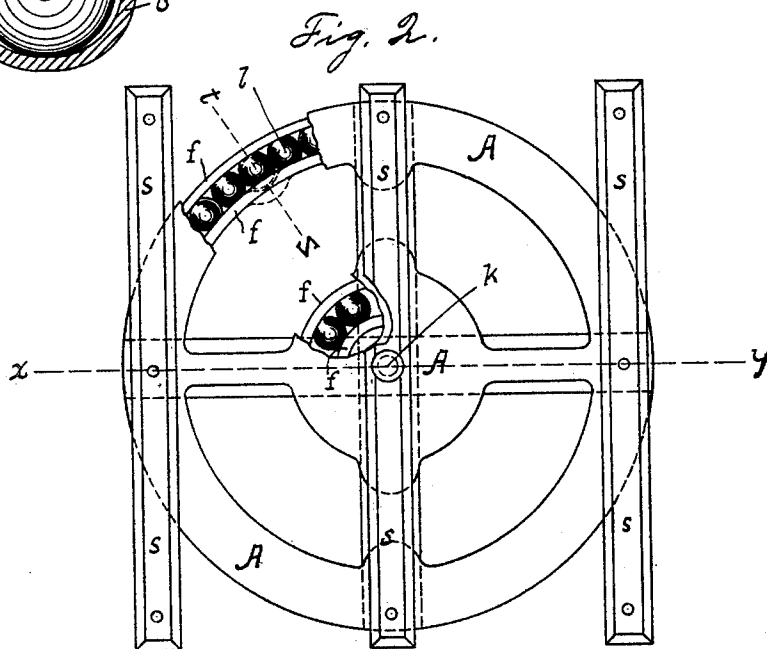


Fig. 2.

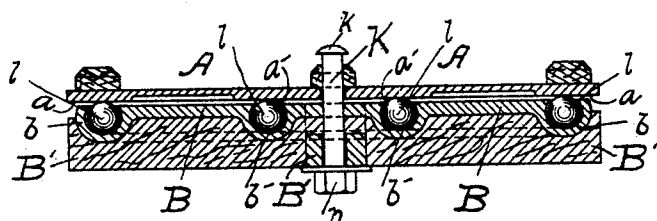


Fig. 3.

Witnesses.
Walter C. Fellows.
M. Lee.

Inventor.
Matthew M. Sherwood
per D. B. Replegle
att'y.

UNITED STATES PATENT OFFICE.

MATTHEW M. SHERWOOD, OF SCRANTON, PENNSYLVANIA.

FIFTH-WHEEL FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 586,670, dated July 20, 1897.

Application filed February 1, 1896. Renewed January 15, 1897. Serial No. 619,389. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW M. SHERWOOD, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Fifth-Wheels for Wagons; and I 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 of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a fifth-wheel for a wagon which will not cramp nor become gummed and stiff while in use by furnishing suitable means of supplying the same with antifriction material. I attain this object by the construction and combination of parts as set forth in this specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my fifth-wheel, showing part of the construction in dotted lines and parts of the vehicle to which it is attached. Fig. 2 is a top view of the same with parts cut away to show the arrangement of the bearings. Fig. 3 is a cross-section on the line xy of Fig. 2. Fig. 4 is a cross-section on the line tz of part of Fig. 2.

Referring to the drawings, A designates a flat circular plate constituting the part of my device which is rigidly attached to the body of the vehicle by means of the strips $s s$, which also serve to make said plate more firm.

B designates the lower plate of my fifth-wheel, which is attached to the springs, axle, or running-gear of the vehicle, and said plate B is provided with the annular grooved portions b and b' , which are concentric around the king-bolt K, which passes through both plates and the framework B' of the device and is retained from slipping out by means of the head k and nut n . The said king-bolt of course serves as an axis around which the lower plate B revolves, the upper end k being solidly attached to the box or body of the vehicle when in use.

S and S' designate parts of a vehicle, showing my device in its relation to those parts. They form no part of the invention. In the grooves b and b' are placed the balls ll , &c. The said grooves are shallow enough to allow

the balls to project above the surface of the lower plate B sufficiently to permit the surface a and a' to rest on the said balls when in use. The upper edges ff are sufficiently curved inward to prevent the balls ll , &c., from dropping or losing out of the said groove in the event of the plate A being removed or displaced. In the construction of the groove I prefer to have the balls admitted to the groove by bending a section of the edge f away, as shown by the dotted lines in Fig. 4 and at tz in Fig. 2. All the balls being entered successively at this opening, the edge f is driven back into position with a hammer. The balls in the inner circle being entered in the same manner, the main bearing of my device is then complete.

The operation of my device is readily understood. The grooves b and b' serve as a path for the antifriction-balls ll and, having no outlets except at the top, serve as good receptacles for such antifriction material as graphite, which may be freely used in connection with the balls with economy and benefit. No grease or gummy lubricator need be applied, and the solidity and strength of the device when graphite is thus used are not perceptibly changed by any amount of wear, as there are no surfaces into which sand and grit accumulate to wear out the plates, and the great ease of working the parts which I thus attain is apparent.

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

In a fifth-wheel for vehicles the combination of the circular plate A having the annular flat surfaces a and a' concentric and opposed to two corresponding concentric grooves b and b' , the said grooves having edges ff turned inwardly to retain antifriction-balls ll &c. and one of the said edges adapted to be bent outward for admitting and removing said balls, and the balls ll arranged within said grooves but extending above the level of the said edges, for the purpose and in the manner shown, substantially as specified.

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

MATTHEW M. SHERWOOD.

Witnesses:

E. F. MERRIAM,
F. F. GIBBS.