

H. GWYNN.
Wheels for Vehicles.

No. 157,390.

Patented Dec. 1, 1874.

Fig. 1.

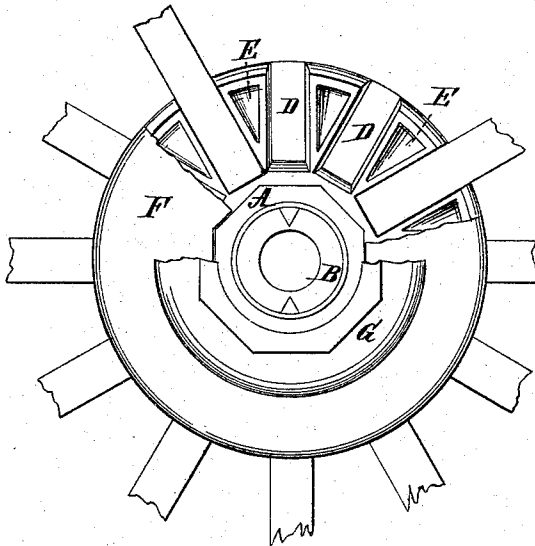


Fig. 2.

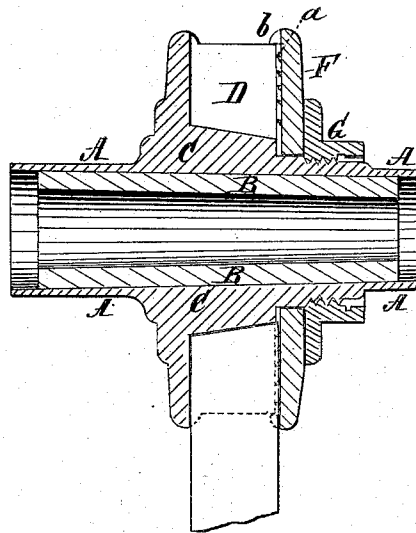


Fig. 3.

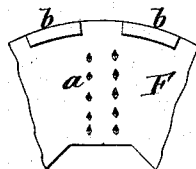
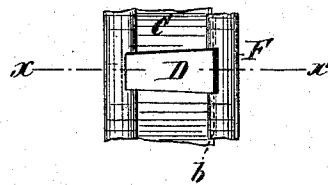


Fig. 4.



WITNESSES:

G. Matthews.
George K. Mow

INVENTOR:

Henry Gwynn

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY GWYNN, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. 157,390, dated December 1, 1874; application filed September 25, 1874.

To all whom it may concern:

Be it known that I, HENRY GWYNN, of Baltimore city, in the State of Maryland, have invented a new and Improved Wheel; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a side elevation of the hub with a portion broken away; Fig. 2, a vertical section through line *xx*; Fig. 3, detail, showing projections and flanges; Fig. 4, detail, showing the tapering of the side walls of the socket.

This invention relates to certain improvements upon the patent of HENRY GWYNN, No. 145,646, dated December 16, 1873. It consists in the combination, with the spokes and other coacting parts, of a socket-plate, which is cast in one and the same piece with the shell or hub, and provided with sockets, which have inclined bottoms and tapering sides, the said socket-plate being cast in one piece with the hub to prevent the revolving of the spokes upon the hub, and the sockets being tapering laterally, and provided with inclined seats to tighten the spokes both laterally and longitudinally when screwed up by a nut and binding-plate.

In the drawing, A represents a metallic shell, tapering on the inside from the inner to the outer end, and having fitted within it a wooden journal-box, B, which is rigidly held to shell by means of the V-shaped flange attached to said shell. The shell A projects at the outer end over the nut that fastens the wheel to the axle, said nut bearing against the ends of the V-shaped flanges, as also against the wooden journal-box. C is the socket-plate, which is cast with the shell A, and in the construction of which lies the improvement which constitutes my invention. Said plate is cast with sockets D, which are both wider and deeper at the front than at

the back, the taper or incline of the base of the socket being intended to tighten the spoke longitudinally, and the taper of the sides of said socket to tighten the spoke laterally. The spokes are made with their sides and ends inclined to adapt them to the peculiar shape of the sockets, and rest in the same between the triangular sections of metal E. F is an annular plate, provided with roughened surfaces *a*, which clutch the spokes and flanges *b* which pass between them. G is a screw-threaded nut, which meshes with a screw-thread upon the shell A, and forces plate F against the spokes.

When the spokes are to be introduced their extremities are first placed in the sockets in the felly, and then the other extremity, with the inclined end and sides, placed in the laterally-tapering socket D. Now, when the nut forces the plate F, with its roughened sides against the spokes, the latter are tightened longitudinally by the inclined base of the socket, and laterally by the inclined sides of the same.

By means of this arrangement I have a much simpler and more effective mode of fastening and adjusting the spokes, and one in which the cost of manufacture is greatly reduced.

Having thus described my invention, what I claim as new is—

The combination, with spokes having inclined ends and sides, plate F, and tap G, of a socket-plate, C, cast in one piece with the shell A and the triangular section E, forming sockets which are deepest and widest at the point where the spokes are introduced, substantially as and for the purpose described.

HENRY GWYNN.

Witnesses:

DANIEL M. WORTHINGTON,
E. J. SHRIVER.