C. H. GUARD.
Vehicle Wheel-Hub.

No. 214,504. Patented April 22, 1879.

Fig. 1.

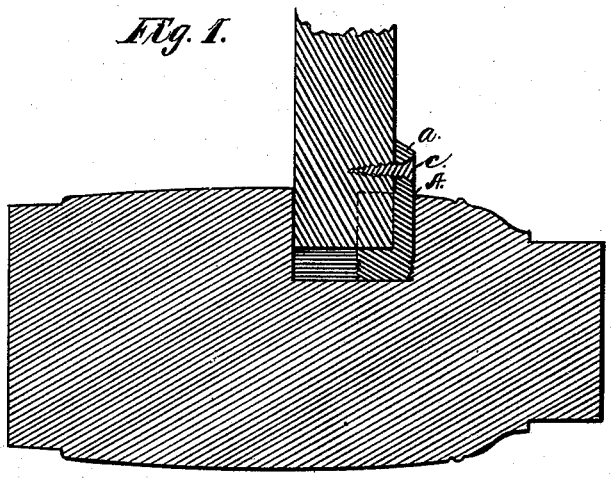

Fig. 2.

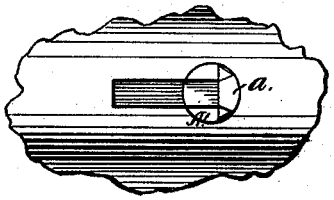

Fig. 3.

Witnesses;
Chas. M. Peck
Wm Ritchie

Inventor;
Chauncey H. Guard
by his Attys
Peck & Co.

UNITED STATES PATENT OFFICE.

CHAUNCEY H. GUARD, OF DAYTON, OHIO, ASSIGNOR TO SAMUEL N. BROWN, OF SAME PLACE.

IMPROVEMENT IN VEHICLE-WHEEL HUBS.

Specification forming part of Letters Patent No. **214,504**, dated April 22, 1879; application filed September 25, 1878.

To all whom it may concern:

Be it known that I, CHAUNCEY H. GUARD, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Vehicle-Wheel Hubs; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to all classes of vehicle-wheel hubs; and my improvement consists in the application of a stay-piece, preferably of metal, for holding the spoke-tenons, and for preventing both their splitting and the removal of the spoke, as will be hereinafter set forth.

To enable others skilled in the art to which my invention appertains to make and use the same, I would thus proceed to describe it, referring herein to the accompanying drawings, in which—

Figure 1 represents a central longitudinal section of a hub provided with my improved stay-piece. Fig. 2 is a plan view of a portion of the hub, showing the mortise and the stay-piece. Fig. 3 is a perspective view of the stay-piece.

I provide a cylindrical piece, A, preferably of metal, and of the shape represented, having its exterior surface near the bottom threaded. The interior of the piece is mortised on one side, the mortise being of the same width as that in the hub, leaving an upwardly-extending side portion, *a*.

The diameter of the stay is somewhat greater than the width of the mortise in the hub.

In a light stagger-wheel, only one of these stays is applied to each spoke on the outer edges of the tenons, in the following manner: With a brace or other instrument, a hole is bored at the outer edge of each mortise, and into it is screwed the stay-piece A until its mortise corresponds with that of the hub, the portion *a* being left projecting above the surface of the hub, as seen in Fig. 1. The tenon is then driven in in the usual manner, and is secured from being withdrawn by a screw or bolt through the ear *a*.

The advantage of this arrangement is that the spoke is firmly and securely locked to the hub, and the tenon, held by the piece A, is prevented from splitting the hub, or from being itself split. In addition to this the raised portion *a* forms a brace to the spoke, and holds it from lateral deflection.

In some cases it is not necessary to have the raised portion *a*, nor the screw or bolt for holding the spoke, the top of the stay being flush with the surface of the hub.

I do not wish to limit myself to the shape of the stay, nor to the method of securing it in the hub; but

What I do claim and wish to secure is as follows:

1. In a vehicle-wheel hub, a stay-piece, A, preferably of metal, mortised to embrace a portion of the spoke-tenon, and applied to the hub in the manner and for the purpose specified.

2. In a vehicle-wheel hub, a stay-piece, A, preferably of metal, embracing a portion of the tenon, and having a projecting portion, *a*, for bracing the spoke, substantially as and for the purpose specified.

Witness my hand this 31st day of August, A. D. 1876.

CHAUNCEY H. GUARD.

Witnesses:

WM. RITCHIE,

EDWARD L. ROWE.