P. JONES.

Improvement in Wheels for Vehicles.

No. 132,666. Patented Oct. 29, 1872.

fig. 1

fig. 3

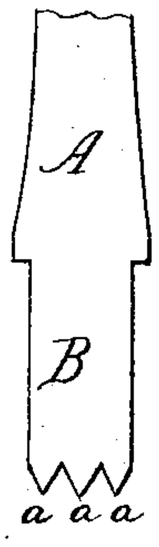
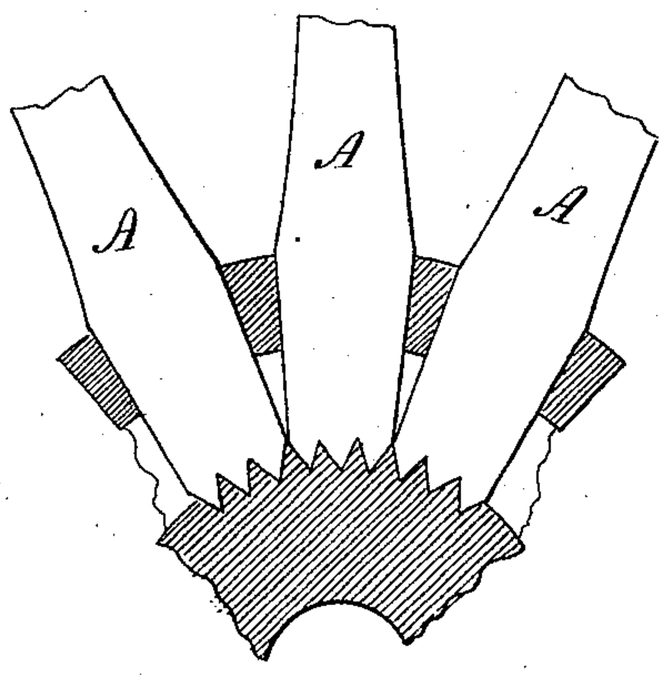


fig. 2.



Witnessies

J. H. Shumway

A. J. Tibbets

Phineas Jones

Inventor

By Atty.

John P. Earle

UNITED STATES PATENT OFFICE.

PHINEAS JONES, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. **132,666**, dated October 29, 1872.

To all whom it may concern:

Be it known that I, PHINEAS JONES, of Newark, in the county of Essex and State of New Jersey, have invented a new Improvement in Carriage-Wheels; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification and represents, in—

Figure 1, an edge view of one spoke; Fig. 2, a transverse section at the hub; and in Fig. 3, a tenoned spoke embodying my improvement.

This invention relates to an improvement in the construction of the lower or inner end of the spoke with special reference to that class of wheels which have a wood center surrounded by a metallic band, through which the spokes pass, such as was patented to me, but applicable alike to other constructions.

In driving the spokes where the mortise is not through the wood, if the spokes are driven down so as to strike solid upon the wood they are liable to rebound, striking, as they do, solidly upon the wood. The object of this invention is to construct the end of the spoke so that when it comes solidly upon the wood of the hub the wood will yield and allow the spoke to indent into it; and it consists in constructing the lower end of the spoke serrated or with V-shaped grooves in line with the axis of the hub—that is, grooves which form a sharp edge, or several sharp edges or teeth, as more fully hereinafter described.

A represents a spoke for the metal-banded hub before referred to, made tapering at its lower end, or of the form to correspond to the mortise in the band, and at its lower end cut transversely—that is to say, in a line parallel to the line of the axis of the hub—so as to form one or more sharp edges, *a*, as seen in Fig. 1. The spoke is then driven through the band onto the wooden hub, and these teeth or sharp edges are readily set into the wood, and while they avoid the "dead set" of the spoke they at the same time serve, to a certain extent, to prevent the band turning upon the hub, thus producing a better and stronger wheel than can be done by the ordinary blunt-end spokes.

In ordinary wooden hubs the mortises are made through the center in order that the end of the spoke may not "fetch up" at the bottom of the mortise. This opening of the mortise through to the box opens a passage for the oil from the box to the tenon, which is objectionable in that it tends to loosen the tenon. By my improvement the necessity of cutting the mortise through is avoided. I form the tenon B upon the spoke in the usual manner, as in Fig. 3, and serrate the lower end of the tenon, as before described and as seen in Fig. 3; hence the mortise may be cut only to the required depth for the length of the tenon, or a little less; then, when the spoke is driven, these serrations indent and are forced into the wood at the bottom of the mortise; thus the interior of the wood hub is preserved solid.

I claim as my invention—

The inner or hub end of a spoke for a carriage-wheel grooved or serrated to present points or edges, substantially as and for the purpose specified.

PHINEAS JONES.

Witnesses:
SAML. W. BOND,
E. E. BOND.