E. S. PARMELEE & B. A. TREAT.

Vehicle-Hub.

No. 205,975. Patented July 16, 1878.

Fig. 1.

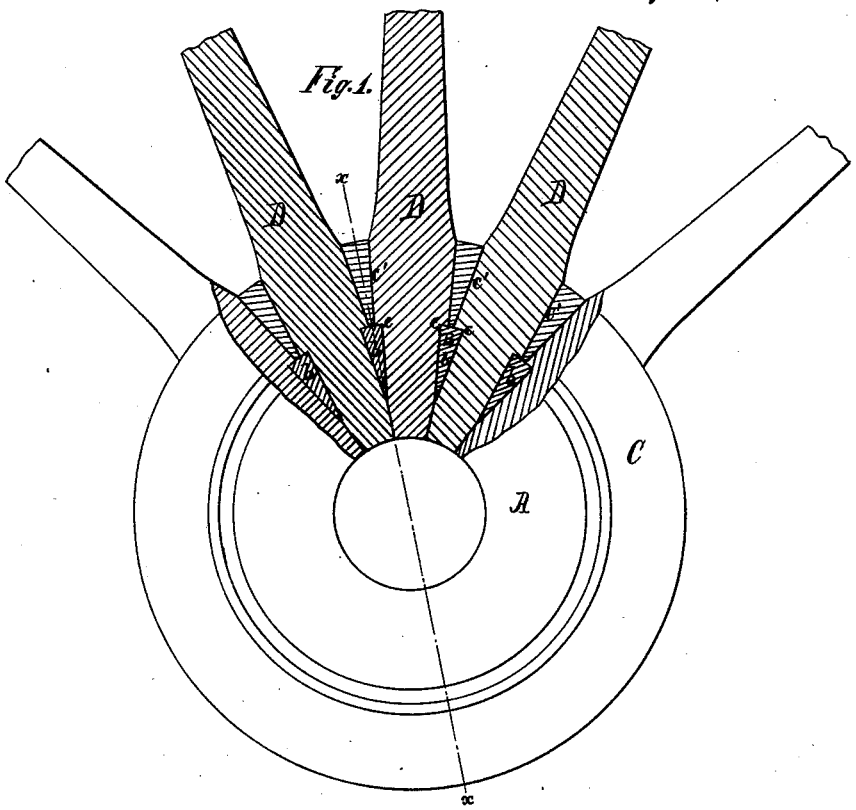


Fig. 2.

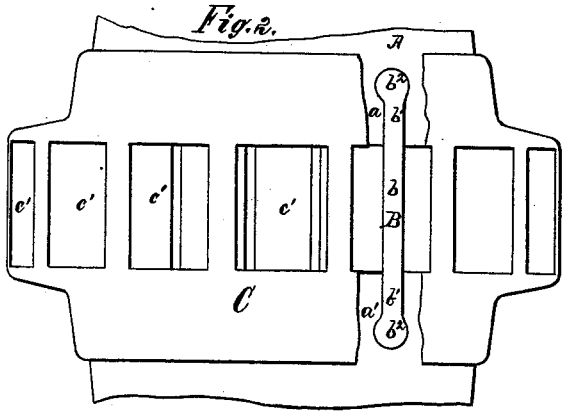
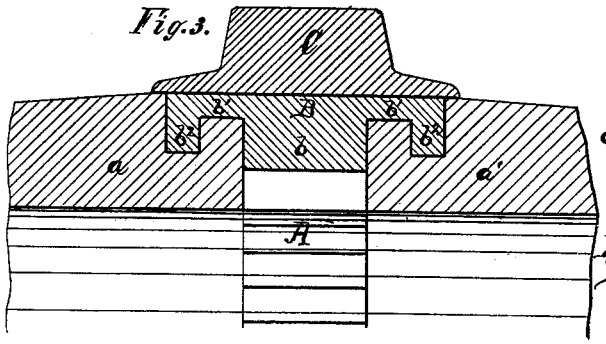


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWIN S. PARMELEE AND BRYAN A. TREAT, OF NAUGATUCK, CONNECTICUT.

IMPROVEMENT IN VEHICLE-HUBS.

Specification forming part of Letters Patent No. **205,975**, dated July 16, 1878; application filed January 3, 1878.

To all whom it may concern:

Be it known that we, EDWIN S. PARMELEE and BRYAN A. TREAT, both of Naugatuck, New Haven county, in the State of Connecticut, have invented an Improved Vehicle-Hub, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Our invention relates to a hub for vehicle-wheels, and its object is to construct a hub with a double metal mortise for the spoke-tenons, thus securing great strength and durability; and it consists in the devices and their combinations, hereinafter particularly set forth and claimed.

Figure 1 is an end elevation, partly in section, of a hub embodying our invention. Fig. 2 is a plan of the hub. Fig. 3 is a longitudinal section of the same on the line *x x*, Fig. 1.

In carrying out our invention, we construct the wooden portion A of our hub preferably in two ends or sections, *a a'*, as shown. The wooden portion may, however, be made in one piece, with a circumferential groove midway between its ends deep enough to receive the mortises and spoke-tenon ends.

The two portions *a* and *a'* are arranged at such a distance apart as will admit the entrance of the spoke-tenons between them, and are secured together by the metal mortise plates or bars B. These plates we prefer to make separate and distinct from each other, as shown in the drawings, with the wedge-shaped bodies *b*, which extend down between the adjoining faces of the parts *a* and *a'*, and thus partition the space aforesaid into equal mortise-spaces radiating from the axis of the hub, and with the arms b^1 and pins b^2, which enter suitable recesses in the faces of the wood end parts *a* and *a'*, and thus secure the said parts together, as shown in the drawings, Fig. 3. The upper edges of the bodies *b* of these plates thus form shoulders, upon which the shoulder of the adjacent spoke-tenons abut, as shown at *c*, Fig. 1.

If it is desired, the plates B may be cast together in two or more segments of a circle, and with a bead on the inner face of a flange extending laterally from such segments outwardly on each side. The mortise-spaces may then be formed in the hub, and the wooden ends of the hub fastened together by joining together these segments around the wooden parts and passing the bead on the flange into a suitable circumferential groove on each of the parts *a* and *a'*.

When the metal plates B are in position, as set forth, the metal ring C, which we form with the radiating mortise-spaces *c'*, equal in number to the mortise-spaces formed by the plates B in the wooden hub, is passed upon the hub, and by severe pressure is imposed on the same over the space occupied by the plates B and their mortise-spaces, the mortises of the ring C being arranged each over one of the mortises formed by the plates B.

The spokes D are now driven into their places, the tenon of each spoke entering one of the mortises in the metal ring C and passing into and being seated in one of the mortises formed by the plates B, and the shoulders of the adjacent spoke-tenons being supported on the upper edges of said plates B, and the body of the spoke being held by the walls of the mortises of the upper ring C. We thus constitute a hub with a double metal mortise for the spokes, and give to the wheel great durability and strength.

What we claim as our invention, and desire to secure by Letters Patent, is—

In a hub for vehicle-wheels, the combination of the wooden parts *a a'*, the metal plates B, with their wedge-shaped bodies *b*, arms b^1, and pins b^2, together with the metal ring C, with its openings *c'*, all arranged to operate as and for the purpose specified.

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Witnesses:
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