C. J. VALENTINE.

VEHICLE HUB.

No. 192,799. Patented July 3, 1877.

Fig. 1.

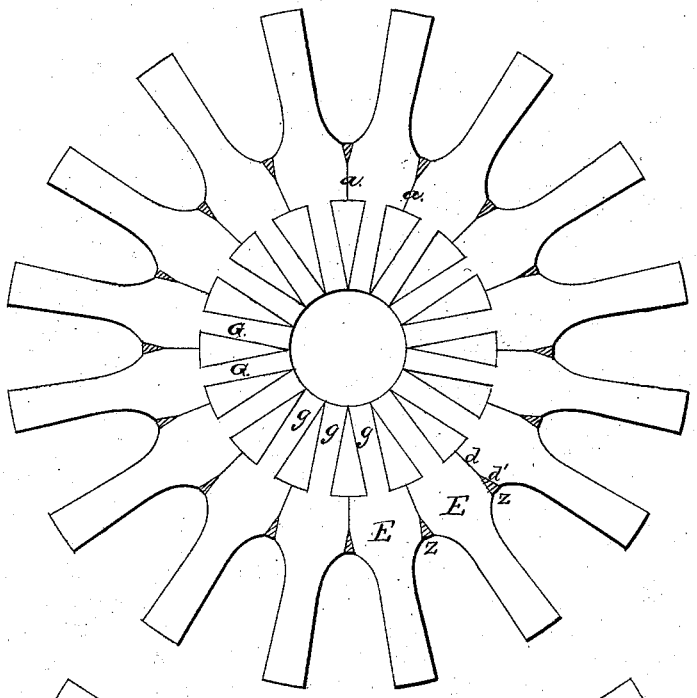


Fig. 3.

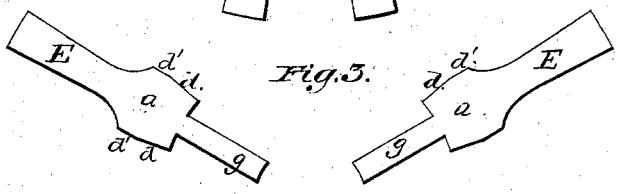
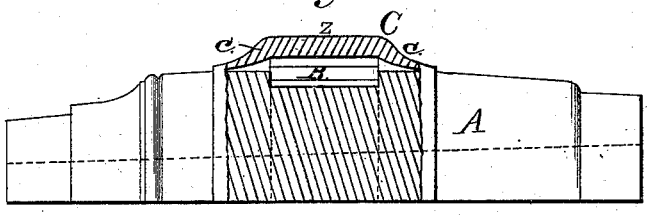


Fig. 2.



Attest:

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UNITED STATES PATENT OFFICE

CHARLES J. VALENTINE, OF BELVIDERE, NEW JERSEY.

IMPROVEMENT IN VEHICLE-HUBS.

Specification forming part of Letters Patent No. **192,799**, dated July 3, 1877; application filed November 27, 1876.

To all whom it may concern:

Be it known that I, CHARLES J. VALENTINE, of Belvidere, in the county of Warren and State of New Jersey, have invented certain new and valuable Improvements in Vehicle-Wheels; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a vertical section at the ends of the radial partitions. Fig. 2 is a partial side view of the invention, showing section at right angles to the section shown in Fig. 1. Fig. 3 shows the spoke ends detached.

This invention has relation to wheel-hubs; and it consists in the construction and novel arrangement of the solid hub, having an annular groove about its central portion, the annular metallic web around said hub slotted for the passage of the spoke ends, and having the V-shaped partitions between the slots extending to the groove, and the double bevels of the spoke ends above the tenons, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the body of the hub, which is annularly grooved at B around its central portion, and is provided with radial mortises G, extending inward from the floor of the annular groove for the reception of the spoke-tenons. The spokes are indicated at E, and are provided with tenons *g*. Exterior to said tenons are shoulder portions or heads *a*, which are provided on their contact-faces with double bevels *d d'*, and are designed, when driven home, to come in forcible contact with each other by their inner bevels *d*, and thereby to form a solid arch around the hub center, within its groove B. C represents the metallic internally arched or raised annular band which encircles the central portion of the body of the hub. This is provided with the usual side-bearing flanges *c*, and is slotted around the central portion for the passage of the ends of the spokes. Between the slots are narrow but comparatively deep radial partitions *z*, made in V shape and terminating in an angular inner edge, which is designed to be even with the division-line or angular summit between the bevels *d d'* of the heads or inner portions of the spokes when driven home, the outer bevels *d'* of said portions then bearing against the sides of these V-shaped portions, which are designed to keep the spokes from rising out of the hub in case of accident.

The groove B in the hub receives the full heads of the spokes and gives firm lateral support thereto. The double-beveled heads of the spoke act as self-tighteners in connection with the V-shaped partitions of the metallic annular band, and form a solid arch within the groove of the hub.

I am aware that it is not new to provide a metallic band with angular bars between the spokes extending to the superficial limit of the wooden hub-body; nor to use in connection therewith a grooved hub, the spokes forming a solid arch therein, without tenons. Hence I do not claim such devices broadly.

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

The combination, with the solid hub having the annular groove B and the radial mortises extending inward therefrom, of the metallic annular band C having the V-shaped partitions between its slots, and the tenoned double-beveled spoke-heads, in contact with said partitions on each side, and forming a solid arch within said groove, substantially as specified.

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Witnesses:

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