

W. BEERS.
Wheels for Vehicles.

No. 134,241.

Patented Dec. 24, 1872.

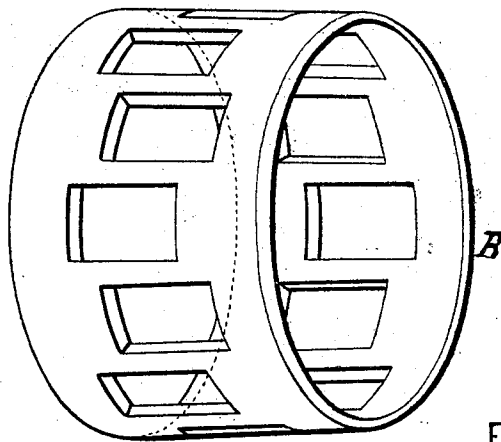
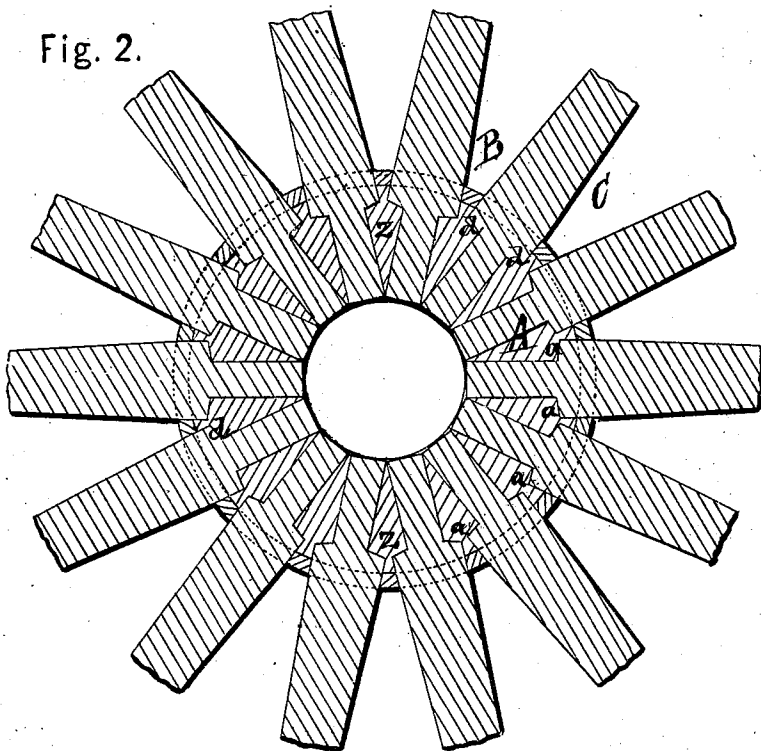


Fig. 1.

Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM BEERS, OF MILAN, OHIO.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. **134,241**, dated December 24, 1872.

To all whom it may concern:

Be it known that I, WILLIAM BEERS, of Milan, in the county of Erie and State of Ohio, have invented a new and valuable Improvement in Wheel-Hubs; 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my invention in detail, showing the metallic band. Fig. 2 is a vertical section of my invention.

This invention has relation to wheel-hubs of that class which are provided with slotted iron bands about their middle parts, for the purpose of preventing the splitting of such hubs and of otherwise strengthening the same; and it consists in the construction and novel arrangement of the mortises in the hub and the broad slots of the band, whereby the spokes are enabled to be inserted in full width through the slots of the band, which is designed to be shrunk or otherwise firmly secured upon the hub.

Referring to the accompanying drawing, the letter A designates the wheel-hub, mortised at the proper intervals to receive the ends of the spokes. These mortises, as they extend into the hub, are at first fully as wide as the spoke-butt, and are then, by sloping shoulders *a*, contracted to form the narrow lower portion *c*, which receives the tenon of the spoke. The ring B, provided with slots for the passage of the spoke ends, is made of iron, and shrunk or otherwise fastened upon the central portion of the hub. The slots of the hub are of the full width of the spoke ends, which are inserted

through them, and rest upon the shoulders or offsets *a* of the mortises and upon the axle-box. The slots of the band are arranged in stagger order. This band is designed to be made of thin metal, so that it will add but little to the weight of the wheel, while, on account of its broad slots, it will allow the full width of the spokes to be driven into the hub, and will at the same time be strong enough to prevent the hub from being broken by the strain or wringing of the spokes. The band is preferably made of wrought-iron, and shrunk upon the hub. The hub-mortises have a radial arrangement, and are separated by means of V-shaped partitions Z, shouldered on each side of their outer extremities, as shown, to support the corresponding shoulders of the spokes, these shoulders being beveled or sloping toward each other, both in the partitions and in the spokes. Outward from said shoulders the partitions extend, in contracted form, to the surface of the hub, and are covered exactly by the partitions between the slots of the hub.

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

The combination, with the hub A having the V-shaped partitions Z shouldered at *a* and extending to the surface of the hub, of the metallic ring B, having slots arranged in stagger order and shrunk upon the hub, and the spokes C shouldered at *a* below the band, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM BEERS.

Witnesses:

DARWIN FAY,
G. R. GASTON.