

S. B. HINDMAN.
Wheels for Vehicles.

No. 136,376.

Patented March 4, 1873.

Fig 1.

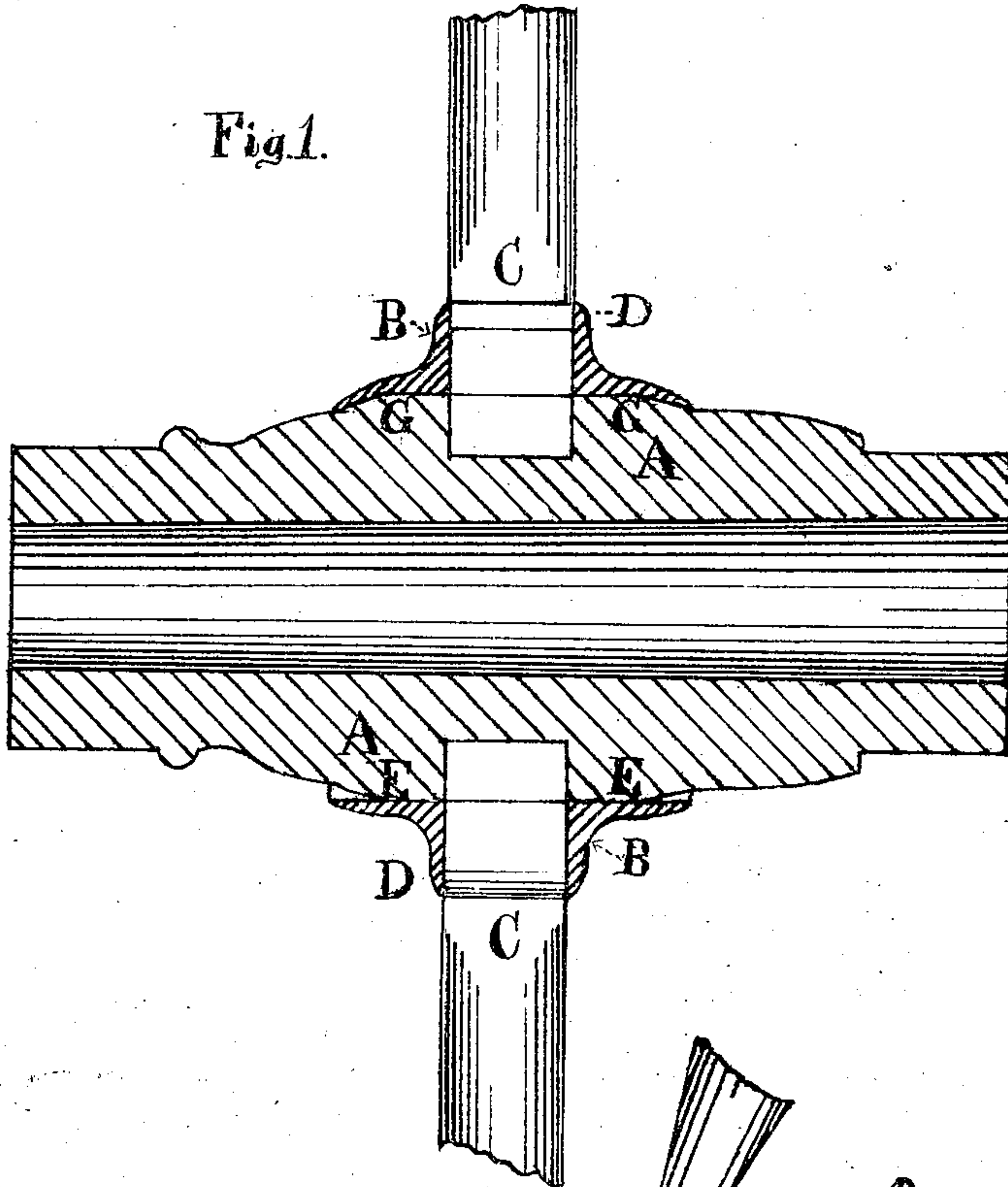
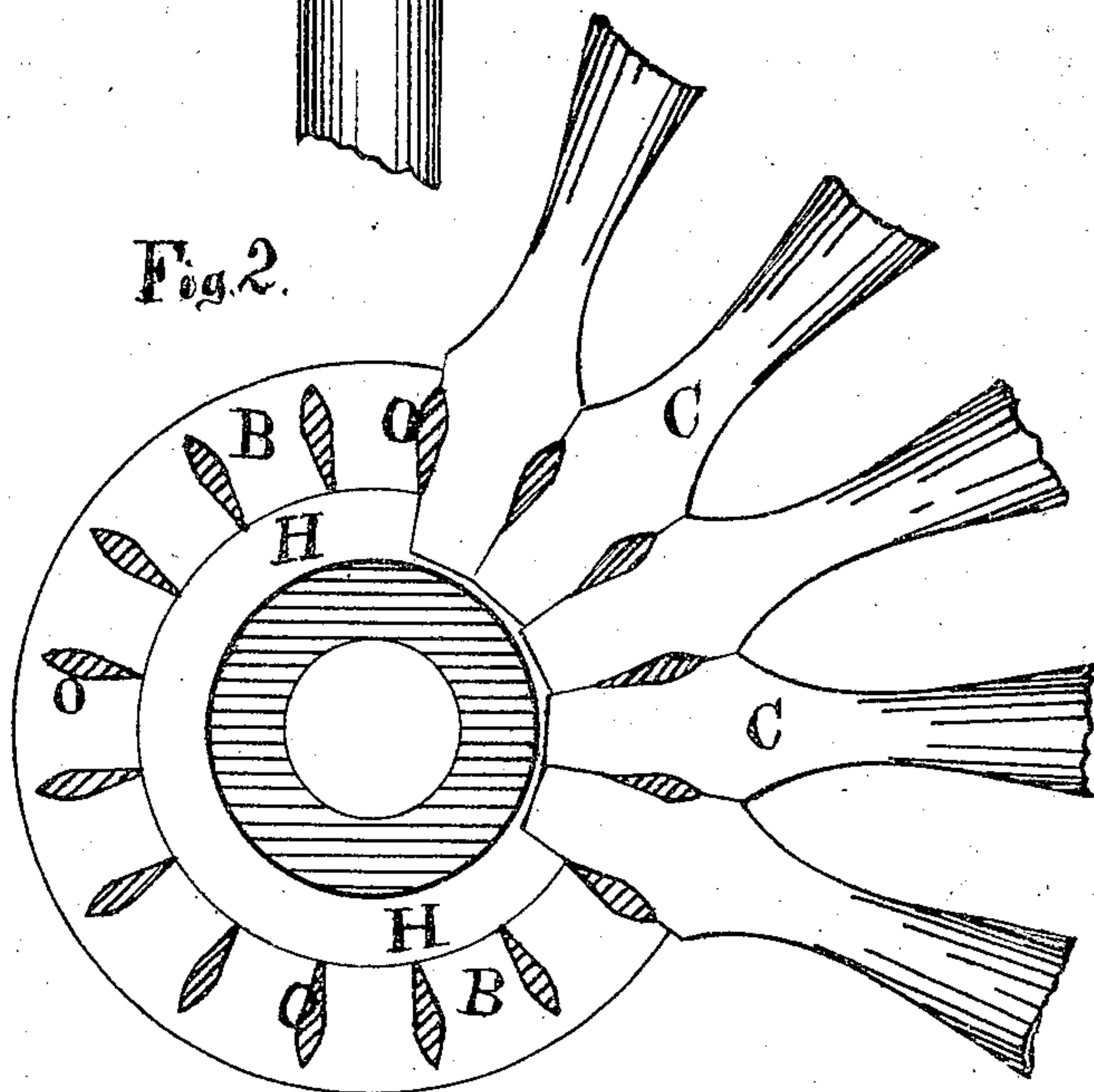


Fig 2.



Witnesses

Nelson A. Hunt
T. D. Tuttle

Inventor

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UNITED STATES PATENT OFFICE.

SAMUEL B. HINDMAN, OF RICHMOND, INDIANA, ASSIGNOR OF ONE-HALF
HIS RIGHT TO MATTHEWS BROS., OF SAME PLACE.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. 136,376, dated March 4, 1873.

To all whom it may concern:

Be it known that I, SAMUEL B. HINDMAN, of Richmond, county of Wayne and State of Indiana, have invented certain Improvements in Carriage-Wheels, of which the following is a specification:

My invention relates to that class of carriage-wheels wherein there is a groove or channel instead of mortises in the hub, the spokes being fitted into the groove by being driven through a mortised band or collar; also having flanges which embrace the spokes near the hub.

Figure 1 is a longitudinal section, showing the band or collar as pressed on. Fig. 2 is a cross-section, showing the band or collar and the construction of the spokes as fitted to the same within the groove.

A is the hub, B the mortised collar, and C the spokes fitted thereto.

In constructing my wheel I first prepare the hub by turning a groove of sufficient depth, leaving a small space on each side of the groove straight or parallel to the center of the hub. The band B is pressed onto this straight or parallel space, which is narrower than the mortised band B, as shown at E, Fig. 1, and, after the band or collar is thus pressed on, it is compressed at its ends onto the smaller portion of the hub, as shown at G, Fig. 1, by any suitable means for that purpose.

The band B is straight on its inner surface, as shown at E, Fig. 1, performing the usual function of giving vertical support to the hub, and when rolled down, as shown at G, Fig. 1, performs the additional function of giving lateral support to the surface of the hub. The connections O of the mortised band B form the ribs between the spoke-tenons. These ribs are rounded at their upper extremities, and are

chamfered down to an edge at their lower extremity, allowing the spoke-tenons to be made straight so far as they come in contact with the ribs, but are tapered below the ribs, and arch together from the ribs downward toward the bottom of the channel. The flanges D are connected with the mortised band B, and extend outward beyond the outer extremity of the ribs or connections O, and embrace the faces of the spokes. The spoke-tenons are scalloped to fit on the rounded upper edges of the ribs O. The tenons are made a little shorter than the depth of the channel to allow the downward pressure of the spokes to rest upon the rounded ribs and the arch above them, and prevent the pressure from coming upon the core around the axle-box.

What I claim, and desire to secure by Letters Patent, is—

1. A mortised metallic band, applied to a carriage-wheel in such manner as to present an arched form in its longitudinal section, and bearing upon a wooden arch of the hub, substantially as described.

2. The scalloped spoke-tenons fitted to and resting upon the rounded metallic ribs or connections O of the mortised band B, and inserted in a groove in the core A, and forming an arch below the ribs, substantially as set forth.

3. The spoke-tenons made shorter than the depth of the channel H, in combination with the channel H, whereby the core around the axle-box is relieved from strain, and the strain sustained by the ribs O and the arch above and below the ribs, substantially as set forth.

SAMUEL B. HINDMAN.

Witnesses:

NELSON A. HUNT,
S. D. TUTTLE.