M. C. BUFFINGTON.

VEHICLE-HUB.

No. 191,926. Patented June 12, 1877.

Fig 1

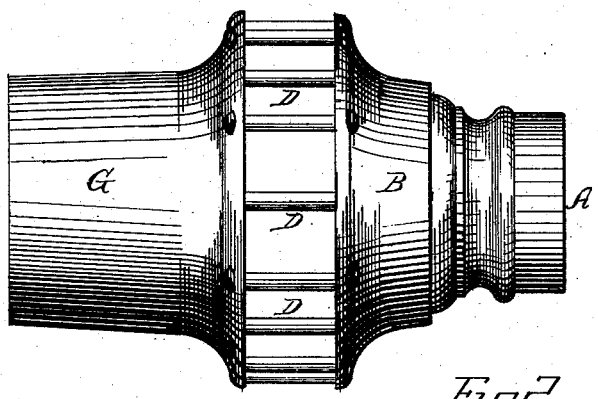


Fig 2

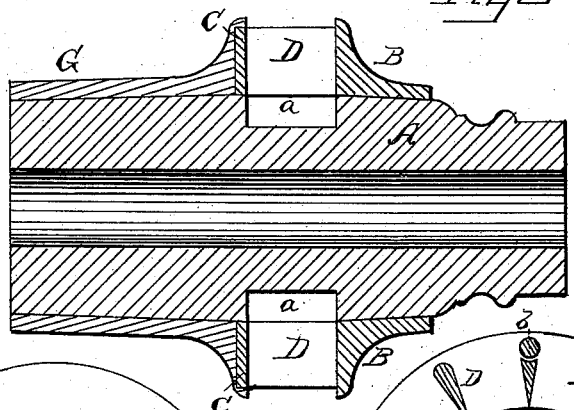


Fig 3

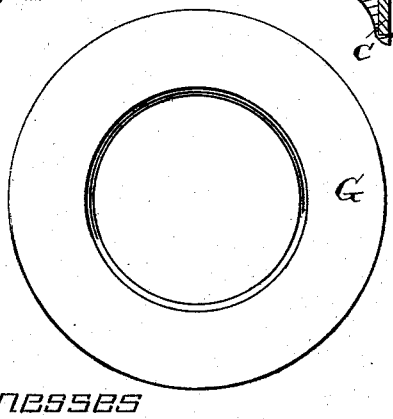
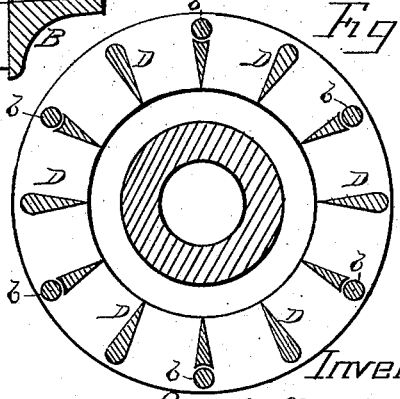


Fig 4



Witnesses

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UNITED STATES PATENT OFFICE.

MOSES C. BUFFINGTON, OF BURLINGTON, IOWA.

IMPROVEMENT IN VEHICLE-HUBS.

Specification forming part of Letters Patent No. **191,926**, dated June 12, 1877; application filed April 7, 1877.

To all whom it may concern:

Be it known that I, MOSES C. BUFFINGTON, of Burlington, in the county of Des Moines, and State of Iowa, have invented certain new and useful Improvements in Vehicle-Hubs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to hubs for vehicle-wheels; and it consists in a metallic mortised shell put on the wooden hub from one end, the mortises in said shell corresponding with mortises or a groove in the wooden hub and a metallic band put on from the opposite end of the wooden hub, forming a junction with the shell, and the band and shell then fastened together, so as to secure the wooden hub under and between the band and the mortised shell, all as hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view of my hub. Fig. 2 is a longitudinal section of the same. Fig. 3 is an inside view of the band. Fig. 4 is a transverse section through the mortised shell and hub.

A represents an ordinary wooden hub, provided with a circumferential groove, *a*, or a series of mortises to receive the tenons of the spokes in the usual manner.

From one end, over the wooden hub A, is placed a metal shell provided with a series of mortises through which the spokes pass. This shell is composed of a flanged band, B, and a ring, C, connected by a series of V-shaped pieces, D D, between which V-shaped pieces the mortises are formed; and said pieces may have their outer ends made convex, as shown, or of other desirable form.

From the other end of the wooden hub is forced a flanged metal band, G, the projecting flange of which is recessed to receive the ring C of the shell. The shell and band tighten on the hub as they approach each other, while the mortises in the shell support the spokes in connection with the groove or mortises in the wooden hub.

The shell and band are formed with suitable bearings, as shown, where they meet, or may be of any other suitable form, and are then fastened together by rivets *b b*, as shown in the drawing, or it may be done by rolling or welding, by machinery or otherwise, the rim or flange of one band over the other one dispensing with the rivets.

It will thus be seen that the hub is locked under and between the shell and the band, the hub being larger at the center than at the outer edges of the shell and band, and these cannot be released unless they are separated, while at the same time there is formed a socket for each spoke to rest in.

The spokes may be so constructed as to meet on the outside of the connecting-pieces D D. When rivets *b* are used some of these pieces are made lower and the rivets are on the outside of such lower pieces, and the spokes cover the same entirely.

I am aware that metallic mortised shells on wooden hubs are not new. Such have, however, uniformly been made solid, the same as if my band G were connected with the flanged band B, by being cast solid on the ring C and bars D. Such shells must be put on from one end of the wooden hub, and are only held in their position by their own friction. As the hole which receives the wooden hub is the largest at one end of the shell it is evident that such a shell will easily release the wooden hub.

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

The mortised metallic shell, composed of the band B, ring C, and connecting-pieces D, all formed in one piece, and the band G, in combination with a wooden hub, made slightly tapering from the center, and provided with a circumferential groove or series of mortises, and the shell and band forced toward each other from opposite ends of the hub, and then fastened together, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

MOSES C. BUFFINGTON.

Witnesses:

JAMES H. BREMMERMAN,

J. L. LANE.