

T. BEATTY.  
VEHICLE-HUB.

No. 180,524.

Patented Aug. 1, 1876.

Fig. 1.

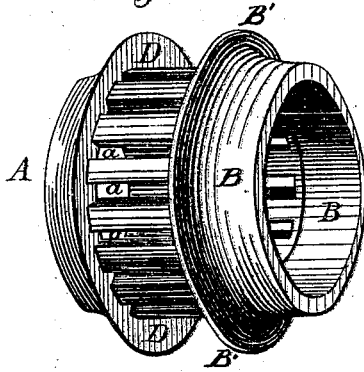


Fig. 2.

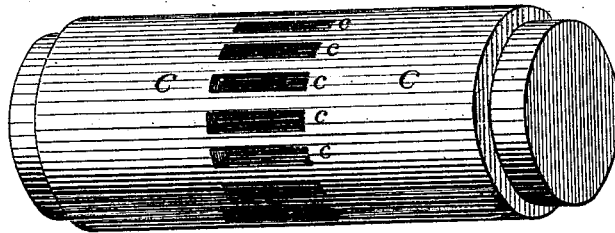
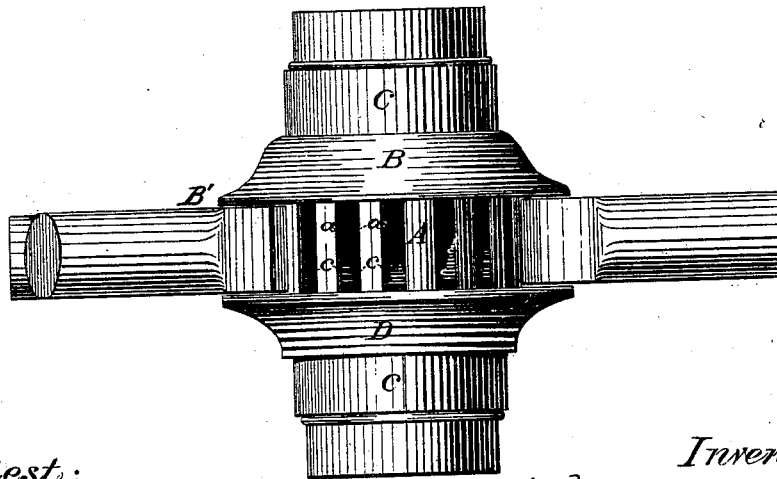


Fig. 3.



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# UNITED STATES PATENT OFFICE.

THORNTON BEATTY, OF VERMILLION, ILLINOIS.

## IMPROVEMENT IN VEHICLE-HUBS.

Specification forming part of Letters Patent No. 180,524, dated August 1, 1876; application filed April 12, 1876.

*To all whom it may concern:*

Be it known that I, THORNTON BEATTY, of Vermillion, in the county of Edgar and State of Illinois, have invented certain new and useful Improvements in Hubs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view of the metallic hub A and flange B, detached. Fig. 2 shows the wooden core of my improved hub, and Fig. 3 shows the hub complete.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to the combination of a wooden core with a metallic hub and flange; and it consists in the combination, with the wooden core, of two separate metallic bands, one mortised for the insertion of the spokes, and the other sliding laterally upon the former, so as to clamp the spokes between raised flanges or shoulders on each part, in the manner hereinafter more fully shown and described.

In the drawing, C is the wooden core used in combination with my metallic hub. The shape of this is somewhat similar to that of an ordinary wooden hub, it having a series of mortises, *c*, for the insertion of the spokes. A is a metallic sleeve, fitting closely over core C, and having a series of slots, *a*, equal in number to the mortises in core C, one slot fitting over each mortise. At one side it has a projection or flange, D, against which the spokes rest when inserted. B is a ring or flange fitting upon sleeve A, over which it slides. The shape of this ring is similar to that of flange D, and it serves the same purpose.

The manner in which my improved hub is used will be readily understood by reference to Fig. 3 in the drawings, from which it will be seen that the sleeve A is slid over the wooden core in such a manner that one of the slots *a* in the same is exactly over one of the

mortises *c* in the wooden core. The mortise being somewhat smaller than the slots, the wood of which the core is formed projects slightly below the slots. The spokes are now inserted in the usual manner, and the ring B is then slid upon sleeve A until it presses against the side of the spokes. It is then secured, by means of bolts or rivets, to the projecting flange D, thus clinching the spokes between flanges B and D, and preventing them effectually from working loose.

The advantage of my improved hub will be readily understood from the foregoing description. It combines the desirable qualities of a wooden and a metallic hub, and the flange B being removable, the spokes may be easily renewed in case any of them should break or become injured by some accident.

I am aware that hubs have been made consisting of a wooden core having a screw-threaded metallic band, and two flanges or rings adjustable thereupon. These, however, are objectionable on account of the difficulty of properly adjusting them. The flanges are also apt to work loose by the motion of the vehicle, thus making the spokes of the wheel loose and rickety. This is not the case with my invention, where the flange B is bolted to flange D, which latter forms a part of the metallic sleeve *a* itself, thus preventing all possibility of working loose.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a vehicle-hub, the combination of a wooden core, C, having mortises *c*, with the stationary sleeve A, having vertical flange or shoulder D and slots *a*, and removable collar B, having flange or shoulder B', the latter placed upon and secured to the sleeve A, substantially in the manner and for the purpose shown and described.

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

THORNTON BEATTY.

Witnesses:

R. B. HIGGINS,  
S. J. DANCEY.