

J. KRITCH.
Improvement in Hubs for Carriage Wheels.
No. 122,323. Patented Jan. 2, 1872.

Fig. 1.

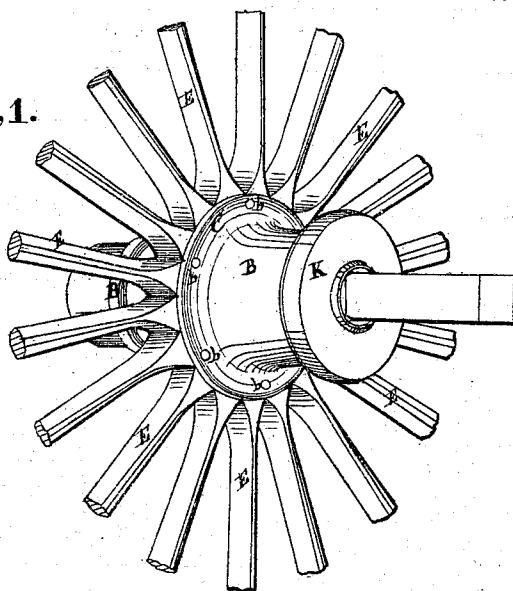


Fig. 6

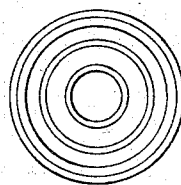


Fig. 2.

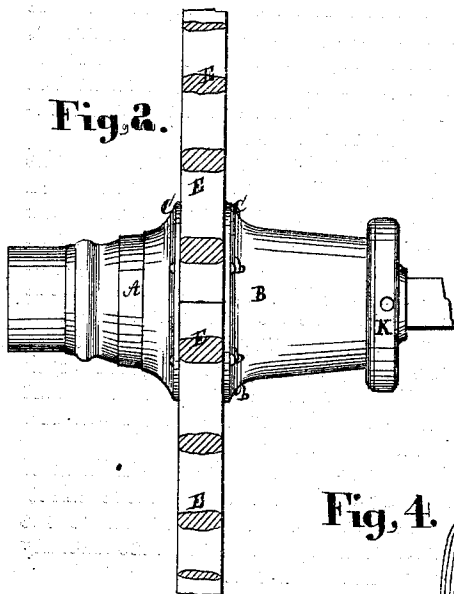


Fig. 3.

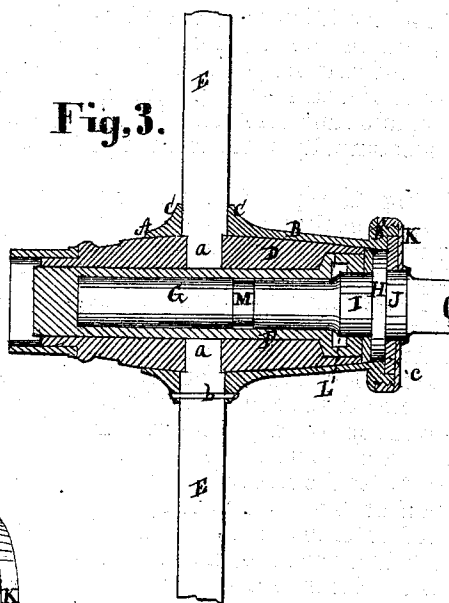
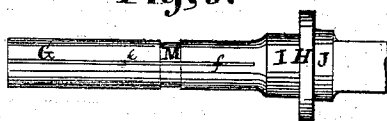


Fig. 4.



Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

JACOB KRITCH, OF CLEVELAND, OHIO.

IMPROVEMENT IN HUBS FOR CARRIAGE-WHEELS.

Specification forming part of Letters Patent No. 122,323, dated January 2, 1872.

To all whom it may concern :

Be it known that I, JACOB KRITCH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Carriage-Wheels, of which the following is a full and complete description, reference being had to the accompanying drawing making a part of this specification.

Figure 1 is a perspective view of the wheel. Fig. 2 is a side view. Fig. 3 is a transverse longitudinal section. Fig. 4 is a detached section. Fig. 5 is a detached view of the axle. Fig. 6 is an end view of the inner end of the hub.

Like letters of reference indicate like parts in the several views.

The nature of this invention relates to a carriage-wheel hub, and the object thereof is to secure said hub to the axle or spindle from the inner end by means of a screw-cap, passed on over the axle or spindle and screwed onto the end of the hub, substantially in the manner as follows:

The drawing, Fig. 1, represents the hub, having sections of the spokes inserted therein. Said hub in part consists of two outer sections, A B, both of which are provided with a broad circular flange, C, between which the base of the spokes are clamped, whereas the tenons of the spokes are inserted in mortises in the wooden core D, Fig. 3, on which is snugly fitted the sections A B, referred to as shown in said Fig. 3, in which E are the spokes and *a* the tenons. Said sections A B are secured to each other, and in close contact with the sides of the spokes, by means of bolts or rivets *b*, whereby said spokes are braced laterally in a substantial manner. In Fig. 3, F is the axle-box, in which the axle G is fitted. H is the axle-collar; I, the enlargement before the collar; and J, the enlargement behind the collar. The enlargement I is fitted in the axle-box, whereas the enlargement J is fitted in the screw-cap K, a detached view of which is shown in Fig. 4, in which it will be seen that it is provided with a female screw, K. The collar H, referred to, is fitted in the end of the thimble or section B, onto which thimble is screwed the cap K by means of a male screw, B'. The posterior side of said collar is flush with the side of the end of the thimble or section B, against which and the side of the collar the leather washer or packing *c*, Fig. 3, is pressed by the bottom of the

chamber *c'* of the cap when said cap is screwed on, as shown in Fig. 3, the washer preventing contact of the two metals—that of the posterior side of the collar and the inside of the cap—so that no frictional abrasion and noise will result from the connection of the wheel with the axle. Also, interposed between the anterior side of the collar and the end of the axle-box is a leather washer, *d*, for the purpose specified of the washer *c*. Immediately within the end of the axle-box is cut a chamber, L, Fig. 3, for the retention of the oil or grease for lubricating the axle. M is a groove around the axle or spindle, for a similar purpose. The end of the axle is hollow and open, forming a chamber, which communicates with the outside by a small hole, *e*, in the bottom of a groove, *f*, Fig. 5. The purpose of the chamber is for the retention of oil for lubricating; and that of the groove *f* is to distribute it along the spindle; hence the hub is self-oiling.

It will be obvious, from the drawing and the description thereof, that the wheel is retained upon the spindle by means of the screw-cap K, which is slipped on over the axle, and screwed onto the posterior end of the hub, as aforesaid, thereby holding and inclosing the collar H and washers *d c* between itself and the end of the hub, making a neat and secure connection of the wheel to the axle, and which is so close fitting as to exclude dirt and dust from the axle-box; hence the wheel will run freely, true, and noiseless.

It will be observed that the collar H is of large diameter; it therefore will, more effectually than one of small diameter, cause the wheel to run steadily, and with less liability to twist or wrench on the axle.

Claim.

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

The screw-cap K and shell or thimble B, provided with the screw B' to receive said cap, and having a chamber, *c'*, between the back of the axle-box and cap K, to receive the large collar H, and washer *c*, when applied to wooden hubs, in the manner substantially as described, and for the purpose set forth.

JACOB KRITCH.

Witnesses:

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(31)