A. RIMES.

Hubs.

No. 164,936. Patented June 29, 1875.

Fig. 1

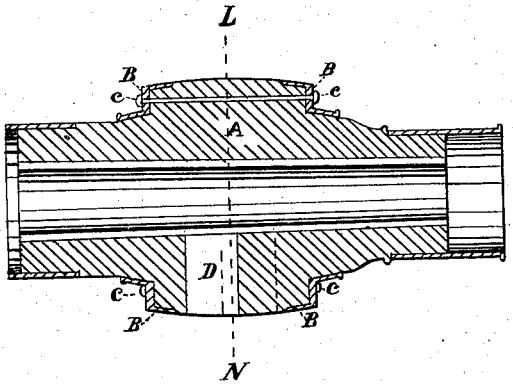
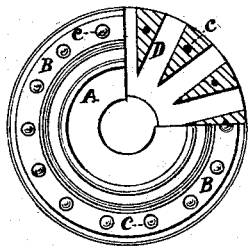


Fig. 2



Witnesses

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UNITED STATES PATENT OFFICE.

ADAM RIMES, OF MARSHALL, MICHIGAN, ASSIGNOR OF ONE-HALF HIS RIGHT TO THEODORE N. AUSTIN, OF SAME PLACE.

IMPROVEMENT IN HUBS.

Specification forming part of Letters Patent No. **164,936**, dated June 29, 1875; application filed April 3, 1875.

To all whom it may concern:

Be it known that I, ADAM RIMES, of the city of Marshall and State of Michigan, have invented a new and useful Improvement in Hubs for Vehicles; and I hereby declare that the following is a full and accurate description of the same, reference being had to the accompanying drawing, in which like letters refer to like parts in the different figures.

Figure 1 is a longitudinal section of the hub. Fig. 2 is an end view with a quadrant sectioned through L N.

My invention relates to that class of hubs of which the body is made of wood and secured from splitting by metallic bands, but are liable, when made of small dimensions, to break across the mortises.

I secure them by means of a band of peculiar form, shown in section at B, Fig. 1, consisting essentially of two slightly-flaring bands of different diameters, connected together by a vertical web, but the whole formed in one piece of metal and forming a single band. The larger part of the band is brought to a thin edge, so that when fitted to the hub and driven home the surfaces of the band and of the body of the hub shall be flush with each other without cutting a shoulder. One of these bands is placed upon the hub on each side of the mortises, and driven up nearly, but not quite, to the mortises. Rivets *c*, passing through the webs of the bands B, and through the solid material of the hub between the mortises, and entirely beneath the surface, secure the bands from working loose, and give great strength to the hub, rendering it almost impossible to break the hub across the mortises, while, at the same time, the web, in connection with the rivets, gives great security against the bursting out of the ends of the mortises from tightly-driven spokes.

I am aware that metal bands connected with rivets or bolts have been long in use, but these are either encumbered with an unnecessary thickness of metal to act as supports for the spokes, or to give support to rivets, and requiring the insertion of the spokes before the hub is completed, as in the patent to R. W. McClelland, May 2, 1871, No. 114,458; or as in the patent of D. B. French, December 9, 1873, No. 149,291, use a thick narrow band with a conical internal bearing-surface of such a decided slope as to bring unnecessary strain upon the bolts.

In my invention it will be seen that I use a band of two distinct and slightly-conical rings, one of larger diameter than the other, with a vertical web between for carrying the rivets or bolts, thus securing strength where necessary without any useless thickness of metal. These bands, by not touching the spokes, adapt them to use upon wheels in which the spokes are set either in single line or "dodging." Also, for general use it is desirable that the hub should be complete in itself, requiring no additional bands or rivets when manufactured for the trade.

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

The combination of band B formed of two conical bands of different diameters united by a vertical web, all in one piece, with a wooden hub and bolts *c*, substantially as set forth.

ADAM RIMES.

Witnesses:

CHAS. A. DIBBLE,

EDWIN C. WAY.