

M. FANCHER.

Improvement in Wheels for Vehicles.

No. 130,117.

Patented Aug. 6, 1872.

Fig. 1.

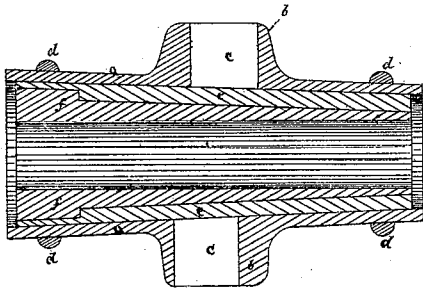
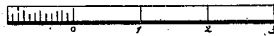
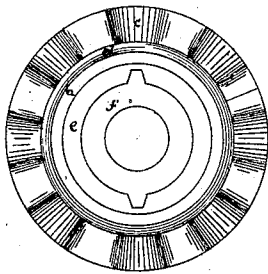


Fig. 2.



Scale.

Witnesses.

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IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. 130,117, dated August 6, 1872.

To all whom it may concern:

Be it known that I, MATTHEW FANCHER, of West Granby, county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Car or Wagon Wheel Hubs; and to enable others skilled in the art to make and use the same I will proceed to describe the same, referring to the drawing, in which the same letters indicate like parts in each of the figures.

The invention consists in the combination of a wooden hub or core of tapering form with a casing of metal throughout the entire length of the hub, said casing being provided with flanged spoke-sockets for the reception of the spokes.

In the accompanying drawing, Figure 1 is a section side view of this invention. Fig. 2 is a sectional end view of the same.

a represents a metallic hub-case, having projections *b*, in which are formed staggering spoke-sockets *c*. *d* are half-circle wrought-metal bands shrunk onto the outer surface and near the ends of the case *a*. *e* represents a wooden core of tapering form, corresponding to the form of the inner periphery of the metal casing, within which it is compressed until the small end comes in contact with the casing, in which position it is securely held by the axle-box *f*. *f* is an axle-box, constructed and fitted into the wood hub or core *e* in the common way.

Now, in the manufacture of this improved hub-case I first make a pattern in the common way of making patterns for forming the chamber of the case and the sockets for the spokes, so that when a casting is produced therefrom, and in readiness for use, I compress the tapering wood core *e* into the chamber of the hub-

case *a*; then I fix into said wood core *e* an axle-box, *f*, in the common way; then I cut or extend the spoke-sockets into the wood hub, so that, as each spoke is driven into the sockets, the wood of the core *e* will become more firmly compressed into the case *a*.

I sometimes make bands *d*, heat and shrink them onto the outer ends of the hub-case *a*, thereby strengthening the case and rendering it more ornamental.

Thus constructed, it will be obvious that the tapering form of the metal casing permits of its being cast in one piece, so that the wooden core can be driven within it, and, when fitted, there will be an equal bearing of wood and metal throughout the entire length of the hub. The spokes, passing through the metal flanges and wooden core, serve to bind all together. Wagon-wheel hubs of this description combine lightness with great strength, and, owing to their tapering form, may be cheaply constructed and put together without the use of screws or bolts.

I am aware that wooden carriage-wheel hubs having metal bands and sockets for the reception of the spokes have been before invented, and are in common use. I do not, therefore, claim such as my invention.

What I claim is—

The combination of the tapering wooden core *e*, shouldered to fit the axle-box, and tapering metal case *a* having staggering sockets *c* and bands *d*, with axle-box *f*, as set forth, for the purpose specified.

MATTHEW FANCHER. [L. S.]

Witnesses:

LORENZO HEMASTEAD,
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