

(No Model.)

M. L. SMITH.
WHEEL HUB CASTING.

No. 480,044.

Patented Aug. 2, 1892.

FIG. 1.

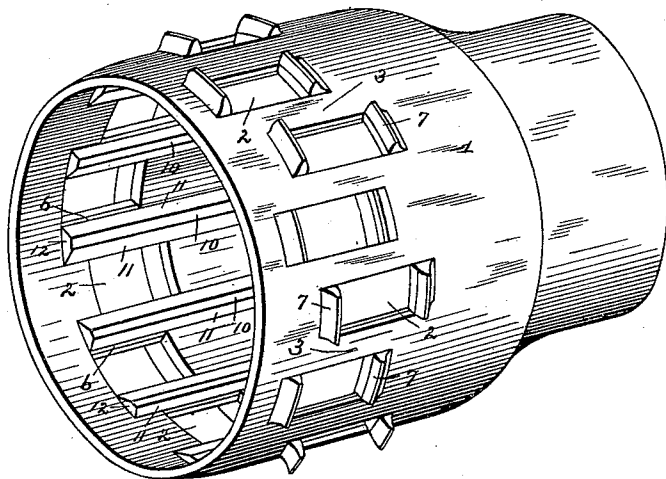


FIG. 2.

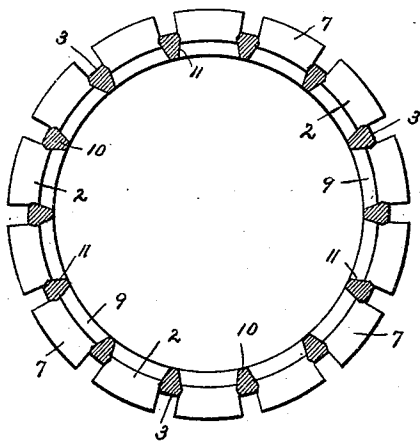
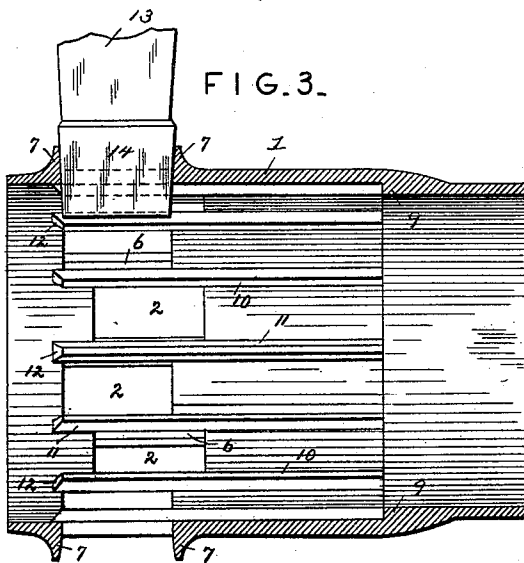


FIG. 3.



Witnesses

Harry L. Jones.

J. H. Diggers

Inventor

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

MELVIN L. SMITH, OF MUNCIE, INDIANA, ASSIGNOR OF ONE-HALF TO SARAH B. SMITH, OF SAME PLACE.

WHEEL-HUB CASTING.

SPECIFICATION forming part of Letters Patent No. 480,044, dated August 2, 1892.

Application filed April 11, 1892. Serial No. 428,693. (No model.)

To all whom it may concern:

Be it known that I, MELVIN L. SMITH, a citizen of the United States, residing at Muncie, in the county of Delaware and State of Indiana, have invented a new and useful Wheel-Hub Casting, of which the following is a specification.

My invention relates to improvements in cast-metal hubs for vehicle-wheels; and the objects in view are to provide a hub-band so constructed or cast as to be readily applied and securely held in position upon the hub-block and adapted to receive and retain in a secure manner the tenons or spokes whereby they are prevented from longitudinal movement, as caused by the shrinking and expanding of the tire or rim, and, furthermore, to so form the mortise openings of the casting or band that it will not shave or reduce the tenons of the spokes as they are inserted.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a hub casting or band constructed in accordance with my invention. Fig. 2 is a transverse section thereof. Fig. 3 is a longitudinal section of the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the usual cylindrical casting or band, adapted to be applied to the exterior of the wooden hub-block, and the same is provided with an annular series of staggered mortises or tenon-receiving openings 2. By the relative location of these mortises or tenon-receiving openings intermediate bars 3 are formed, and these bars are in cross-section somewhat of a diamond shape, inasmuch as they have their outer edges flared and their inner edges or corners inwardly flared, or what would be converged with relation to their outer edges, as indicated at 6. Upon the exterior of the bands at the ends of the mortises lugs 7 are formed, and the inner faces of these lugs are diverged so as to form a flaring guide to the mortises.

The casting is provided near its end with

an internal annular shoulder 9, and abutting against the front face of this shoulder is an annular series of internal superficial ribs 11, which lie along the under side of each of the intermediate bars 3, dividing the mortises. These superficial ribs have their opposite sides converged toward their inner faces, as shown at 11^a, and in shape form substantial continuations of the inner beveled edges of the bars 3.

The front ends of the bars 10 are beveled at 12, and are so formed for the purpose of offering but slight opposition to the introduction of the casting over the hub-block. In applying the band or casting to the block the usual operation is followed, and the block is provided, it will be understood, with a shoulder designed to abut against the annular internal shoulder with which the casting is provided. The ribs 10 take into the fiber of the wood of the hub-block, and thus the casting is prevented from having rotary movement upon the hub-block.

13 designates the spokes, which are driven into the mortises, their tenons 14 being guided by the pairs of diverging lugs located at the ends of the mortises. The tenons, as is usual, are somewhat larger than the mortises, and as they are driven into position the peculiar shape given to the bars 3 and 10 serves to reduce the tenons as they are forced between the same. By avoiding sharp outer edges of the bars 3 I also avoid shaving the tenons off as they are driven in, and, to the contrary, the tenons are simply reduced or compressed and may afterward expand so as to engage with the openings or mortises, and hence be prevented by the edges of the same interlocking therewith from being withdrawn. The front end of the casting is cupped slightly after it is applied to the hub-block, and thus it is prevented from having longitudinal movement upon said block.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a hub-band casting of simple construction, in which the tenons of the spokes will readily interlock and be prevented from accidentally withdrawing or becoming loose and which will interlock

with the hub-block and be prevented from having any rotary or longitudinal movement thereon.

Having described my invention, what I claim is—

1. The herein-described hub-band casting, the same being provided with mortise openings, having upon its outer side and at the front and rear ends of the openings diverging lugs, and the bars between the openings having their outer edges flared and their inner edges converged, substantially as specified.

2. The herein-described hub-band casting, the same having the series of mortises or openings and intermediate bars, which have their opposite outer edges flared and their inner edges converged or inwardly flared, substantially as specified.

3. The herein-described hub-band, the same having the series of mortises, the intermediate bars of which have their outer edges flared outwardly and their inner edges flared inwardly, and the intermediate superficial internal ribs located upon the under side of

each bar and having their opposite faces inwardly converged and forming a continuation of the inner face of the bars, substantially as specified.

4. The herein-described cast-metal hub-band, having series of mortises, the intermediate bars of which have their outer corners or edges flared outwardly and their inner corners or edges flared inwardly, the internal annular shoulder formed in rear of the mortise, and the series of ribs extending from the shoulder forwardly upon the under side of the bars, said ribs having their front ends beveled and their opposite faces converged toward their inner edges and forming continuations of the faces of the bars, substantially as specified.

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

MELVIN L. SMITH.

Witnesses:

FRANK R. THRALL,
R. I. PATTERSON.