(No Model.)

J. MARIS.

VEHICLE HUB BAND.

No. 417,735. Patented Dec. 24, 1889.

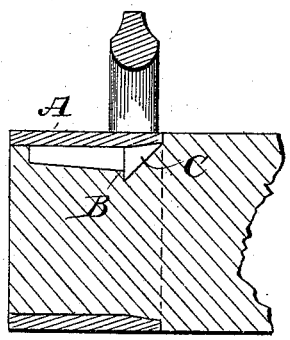


Fig. 1.

Fig. 3.

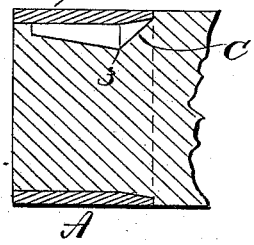


Fig. 2.

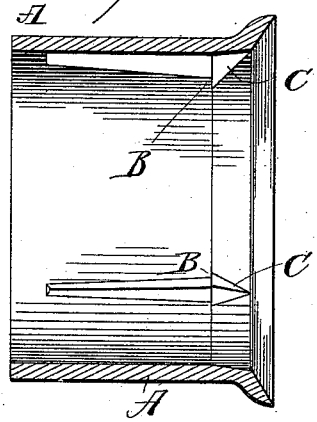


Fig. 4.

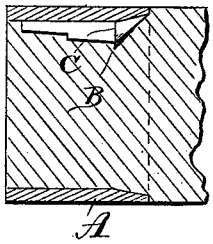
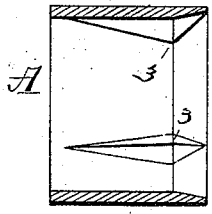


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JARED MARIS, OF COLUMBUS, OHIO.

VEHICLE-HUB BAND.

SPECIFICATION forming part of Letters Patent No. 417,735, dated December 24, 1889.

Application filed October 26, 1889. Serial No. 328,284. (No model.)

To all whom it may concern:

Be it known that I, JARED MARIS, of Columbus, in the State of Ohio, have invented certain new and useful Improvements in Metallic Bands for the Ends of Carriage or Wagon Hubs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in metallic bands for the ends of carriage or wagon hubs, poles, singletrees, &c., and is designed more particularly as an improvement on the band shown in Patent No. 403,357, granted to me May 14, 1889.

Metallic bands have been provided on their inner walls with inwardly-projecting radial ribs extending from nearly the inner end of the band flush with its outer end. When a band of such construction is driven onto an article, the ribs embed themselves in the wood and prevent rotary displacement; but no provision is made to prevent endwise displacement, except the frictional contact of the band and ribs with the wood.

With the improvement disclosed in my patent above referred to ribs located near the inner ends of the bands are provided. These ribs are sharpened on top and taper from the inner end outwardly and terminate at their outer ends in blunt shoulders, against which the fibers close after the band has been driven into position and prevent accidental endwise displacement and, to a great extent, rotary displacement. The ribs, being located wholly at one end of the band, prevent the inner end of the band from turning, but leave the outer end in a condition to turn or twist slightly or yield sidewise.

The object of this invention is to provide means for absolutely preventing any movement of the band throughout its length; and it consists in certain details of construction and combinations of parts, as will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in section of the end of the singletree, showing my invention in the form of a clip applied thereto. Fig. 2 is a view in section of a hub-band, showing the improvement; and Figs. 3, 4, and 5 are views in section of modified forms applied to clips.

A represents the band, cast or drawn in the usual manner, and when employed for hubs and similar articles is outwardly crimped or flanged at its inner end to receive the device on which it is to be driven and facilitate the starting of the band upon the end of the article.

The band can and preferably should be tapering at its inner end inward to a point about on a line with the shoulders of the ribs B. These ribs, which are preferably triangular in cross-section, project inwardly from the inner wall of the band and extend from the inner end to a point near the outer end, and each is provided at its inner end with a barb C, formed by gradually inclining or sloping the extreme inner end of the rib rearwardly and inwardly toward the center of the band to a point beyond the ribs proper, forming abrupt shoulders B, against which the displaced fibers close as soon as the shoulders have passed, and effectually prevent a withdrawal, while the portions of the ribs to the outside of the barbed ends rest in the grooves behind the barbs and prevent the band from turning at its outer end or yielding sidewise. The bodies of the ribs, being smaller than the barbs or heads, permit the wood behind or to the outside of the barbs to be somewhat compressed, and they completely fill the grooves made by the barbs, and consequently prevent the entrance of water in the event of shrinkage, the portions of the ribs behind the barbed ends holding the band against movement sidewise.

In placing the band it is evident that the gradually-tapering and sharpened barbs of the ribs will pass gradually into the wood without cutting or destroying the elasticity of the fibers, thus permitting the latter to close onto the ribs immediately on the passage of the barbs, and if the end of the article should not entirely fill the band the entrance of the ribs will cause an expansion by entering between the fibers.

In Fig. 3 the abrupt shouldered barb is omitted, the rib gradually decreasing in depth from the point 3 to the outer end.

In Fig. 4 a second barb is formed at a point between the end barb and outer end of rib. In Fig. 5 the rib is wedge shape, and increases in size to the point 3 and then gradually de-

creasing in size as it approaches the outer end of the band. By this latter construction the wedge can be driven in place, and by exerting considerable power thereon can be withdrawn endwise.

It is evident that slight changes in the details of construction might be resorted to without departing from the spirit of my invention; hence I would have it understood that I do not confine myself to the exact construction shown and described, but consider myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

1. A metallic band provided on its inner surface with one or more inwardly-projecting ribs, each being elongated in form and having a head sharpened or pointed at its inner end, the body of said rib being smaller than the head, substantially as set forth.

2. A metallic band provided on its inner surface with one or more inwardly-projecting ribs, each being elongated in form and provided with a barbed inner end, substantially as set forth.

3. A metallic band provided on its inner surface with one or more inwardly-projecting ribs, each being elongated in form and provided with two or more barbs or heads, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JARED MARIS.

Witnesses:
GEO. W. CAREY,
CAROLINE S. ADAMS.