

(No Model.)

J. MARIS.  
VEHICLE HUB.

No. 355,698.

Patented Jan. 11, 1887.

FIG. 1

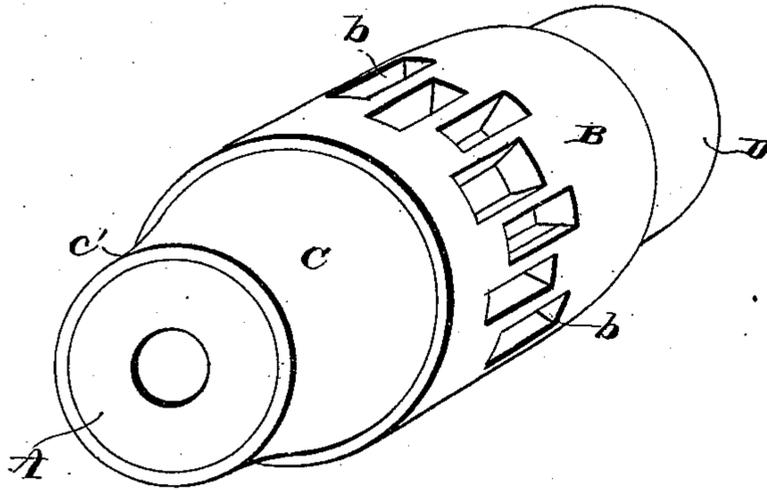
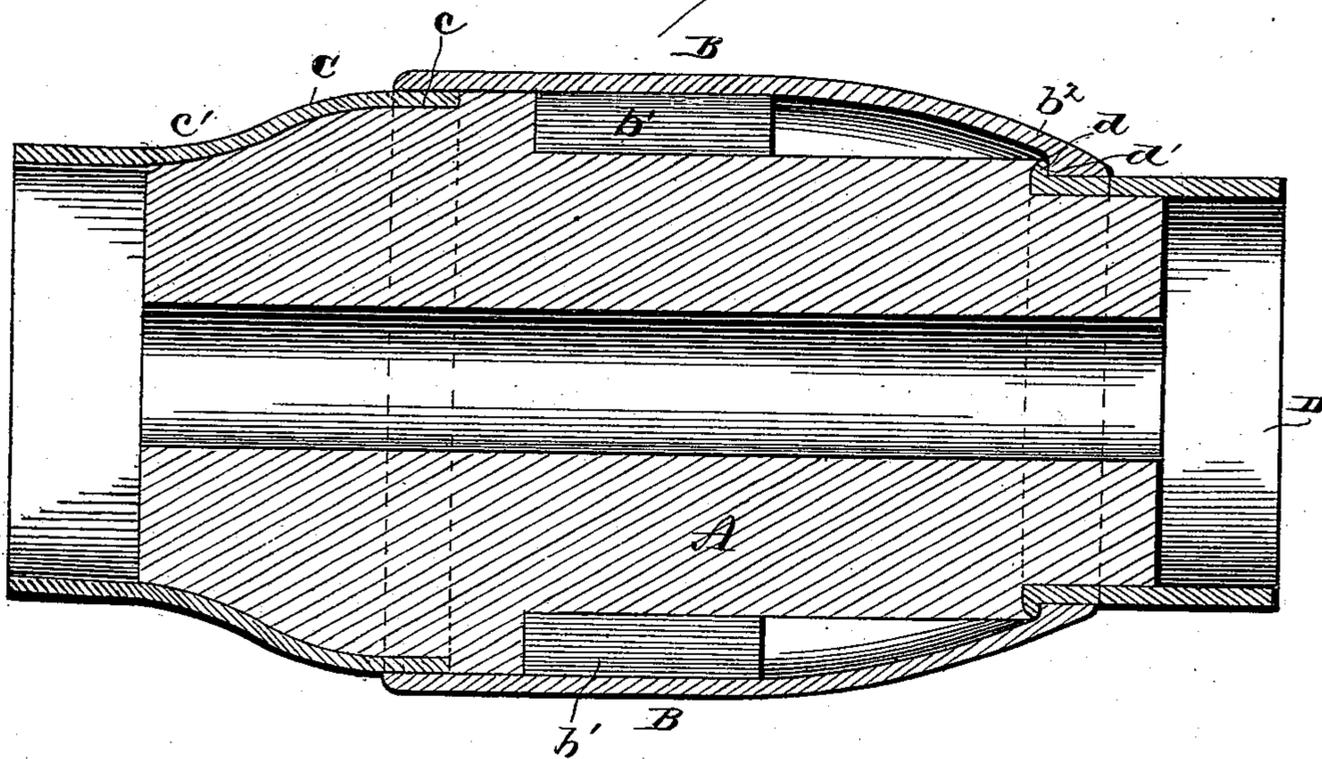


FIG. 2



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JARED MARIS, OF COLUMBUS, OHIO.

## VEHICLE-HUB.

SPECIFICATION forming part of Letters Patent No. 355,698, dated January 11, 1887.

Application filed December 22, 1885. Serial No. 186,448. (No model.)

*To all whom it may concern:*

Be it known that I, JARED MARIS, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful  
5 Improvements in Vehicle-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.

10 My invention relates to an improvement in vehicle-hubs.

In Letters Patent granted me on the 16th of September, 1884, No. 305,398, a metal cap was shown and described, adapted for use in connection with a central band having internal  
15 annular flanges connecting the ends of the internal short flanges at the sides of the spoke-sockets. In order to set the central band there described in its position, the wood part of the  
20 hub was reduced at the rear end, since the internal annular flanges had the effect of reducing to a greater or less degree the diameter of the hollow space within the hub, and the caps were adapted to snugly fit the reduced ends of  
25 the hubs and fill the space between the central band and the wood from the inner end of the central band to the internal annular flange. To give the inner end of the hub a shapely appearance, the thickness of the cap was reduced  
30 at its inner end.

The construction of the central band and inner cap in two parts, instead of one, is an important feature in the manufacture of shell-bands, as it materially reduces the cost of the  
35 casting. It is also found that the internal annular flanges within the central band may be dispensed with, and it is not, therefore, necessary that the rear end of the hub should be reduced to the depth of the internal spoke-  
40 flanges.

The object of my present invention is to provide a metallic cap for the inner end of a hub, which shall be adapted to use in connection with central bands of various constructions,  
45 and which shall present a shapely appearance and can be produced at a reduced cost.

A further object is to provide a central band which shall extend outwardly and contract snugly around the outer point-band, whereby  
50 the central band with its spoke-flanges may be driven on from the outer end of the hub, requiring no grooves at the inner end, and ef-

fectually covering the grooves at the outer end, locking the point-band in position and effectually excluding water from the wood. 55

With these ends in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 60 represents the cap and a central band in position on the hub, and Fig. 2 is a longitudinal section through the same.

A represents the wood portion of the hub. It gradually tapers from its central portion of  
65 greater diameter to its inner and outer ends of less diameter, the contour of the taper being preferably of curved form in longitudinal direction.

The central band herewith shown consists of  
70 the broad flat portion B, covering the larger central portion of the wood hub A, and provided with a series of spoke-sockets, *b*, having inwardly-extending side flanges, *b'*. The inner end of the band B extends to or slightly  
75 beyond the point where the inner end of the hub begins to contract, and the outer end tapers to conform to the outer end of the hub, as shown at *b*<sup>2</sup>, to a point overlapping the cylindrical-shaped point-band D. 80

As the central band is intended to be driven on from the outer end of the hub over the point-band D, it follows that the diameter of the point-band from outside to outside must not exceed the diameter of the central band  
85 between the inner edges of two opposite flanges *b'*, and to insure a perfect locking of the point-band in position it might be advisable to provide its inner end with an external flange or lugs, *d*, for example, and to provide the  
90 outer end of the band B with an internal flange, *d'*, adapted to engage the flange or lugs *d* when driven home; or the inner end of the point-band might be made somewhat thicker than  
95 the outer end, or formed slightly tapering, instead of cylindrical, and the central band be driven snugly into position thereon and lock it securely in place.

The grooves for the reception of the flanges *b'* are cut from the outer end of the hub, the  
100 inner end being left intact.

The same construction of inner cap and outer cap might be employed with a central band in which the ends of the flanges *b'* were connected

by internal annular flanges, since the inner end of the hub needs no cutting away when the said band is driven on from the outer end, and they would work equally well in cases  
5 where the central band had no flanges *b'*. The construction also admits of dispensing with the inner cap, if desired, as there would be no necessity of mutilating the wood at that end.

10 The cap C, for the rear end of the hub, is constructed of substantially the same thickness throughout, and tapers from its larger end, *c*, to its smaller end, *c'*, in conformity with the shape of the wooden hub. The larger end, *c*,  
15 is adapted to fit snugly within the end of the central band, B, and its smaller end, *c'*, may be extended to any desired length in cylindrical shape, forming a sand-band.

The caps may be made of several lengths, to  
20 suit different lengths of hubs or more or less extended sand-bands. The cost of manufacture is thus reduced to a minimum, while the use is made more general.

It is evident that other slight changes might  
25 be resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth; but,

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

1. The combination, with a hub-body, of a  
35 band provided with spoke-openings and adapted to embrace the central portion of the hub-body and a tapered cap secured upon one

end of the hub-body, one end of the tapered cap extending beneath the adjacent end of the central band, substantially as set forth.

2. The combination, with a hub and a cen- 40  
tral band having spoke-sockets therein, of a metallic cap embracing one end of the hub, the larger end of said cap fitting within the inner end of the central band and its smaller end projecting beyond the hub, substantially 45  
as set forth.

3. The combination, with a central band provided with inwardly-extending flanges at the sides of the spoke-sockets, of a tapered metallic cap adapted to embrace the inner end of 50  
the hub, extend within the end of the central band, and form a snug joint therewith, substantially as set forth.

4. The combination, with a band adapted to embrace the outer end of a hub, of a central 55  
band having its outer end contracted and adapted to snugly embrace the end band, substantially as set forth.

5. The combination, with the outer end band and the inner end cap, of the central 60  
band adapted to be driven on from the outer end and overlap the ends of the said outer end band and inner end cap, substantially as set forth.

In testimony whereof I have signed this 65  
specification in the presence of two subscribing witnesses.

JARED MARIS.

Witnesses:

JOHN M. PUGH,  
EZEKIEL METTLES.