

(No Model.)

J. M. SWEET.
VEHICLE HUB.

No. 369,892.

Patented Sept. 13, 1887.

Fig. 1.

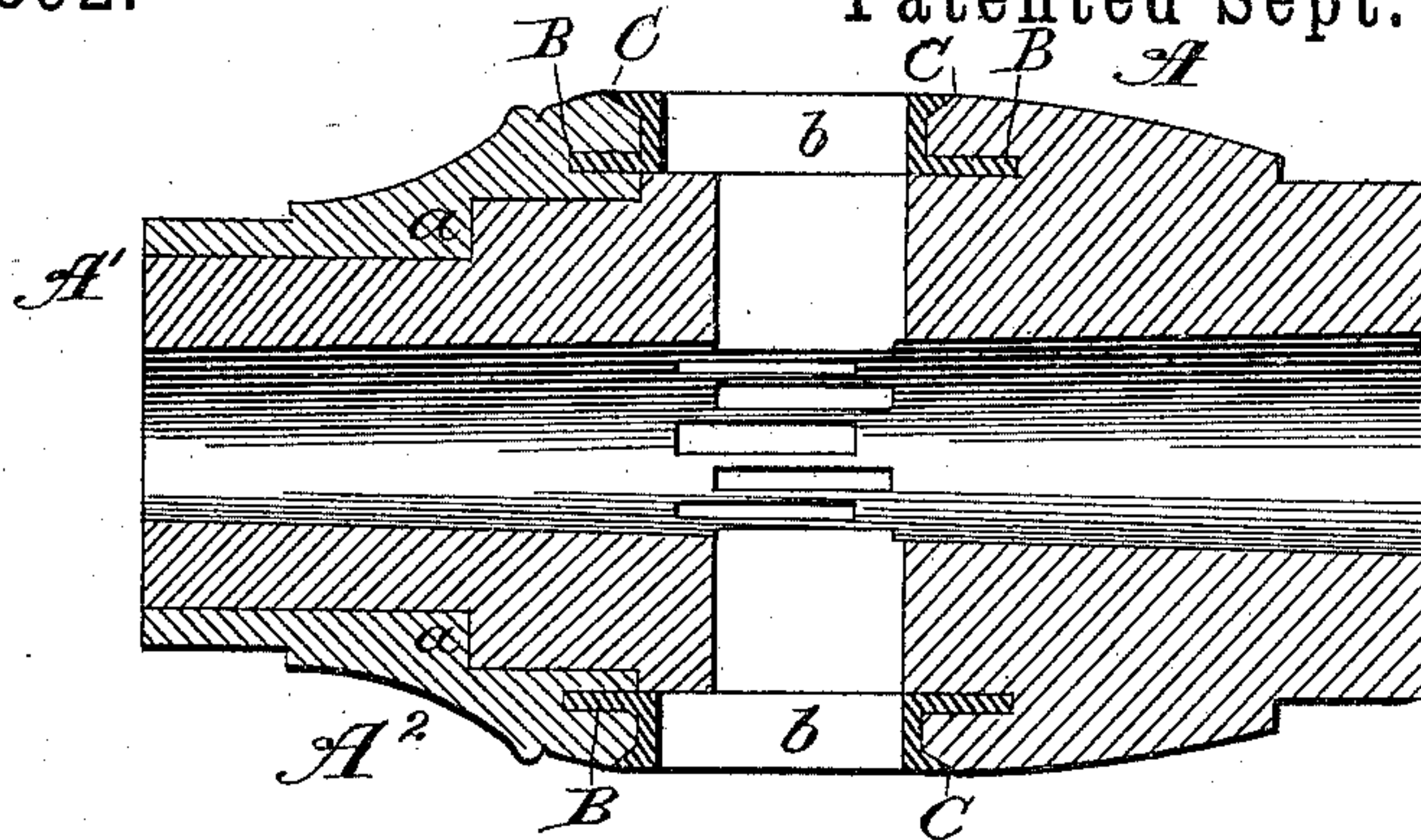


Fig. 2.

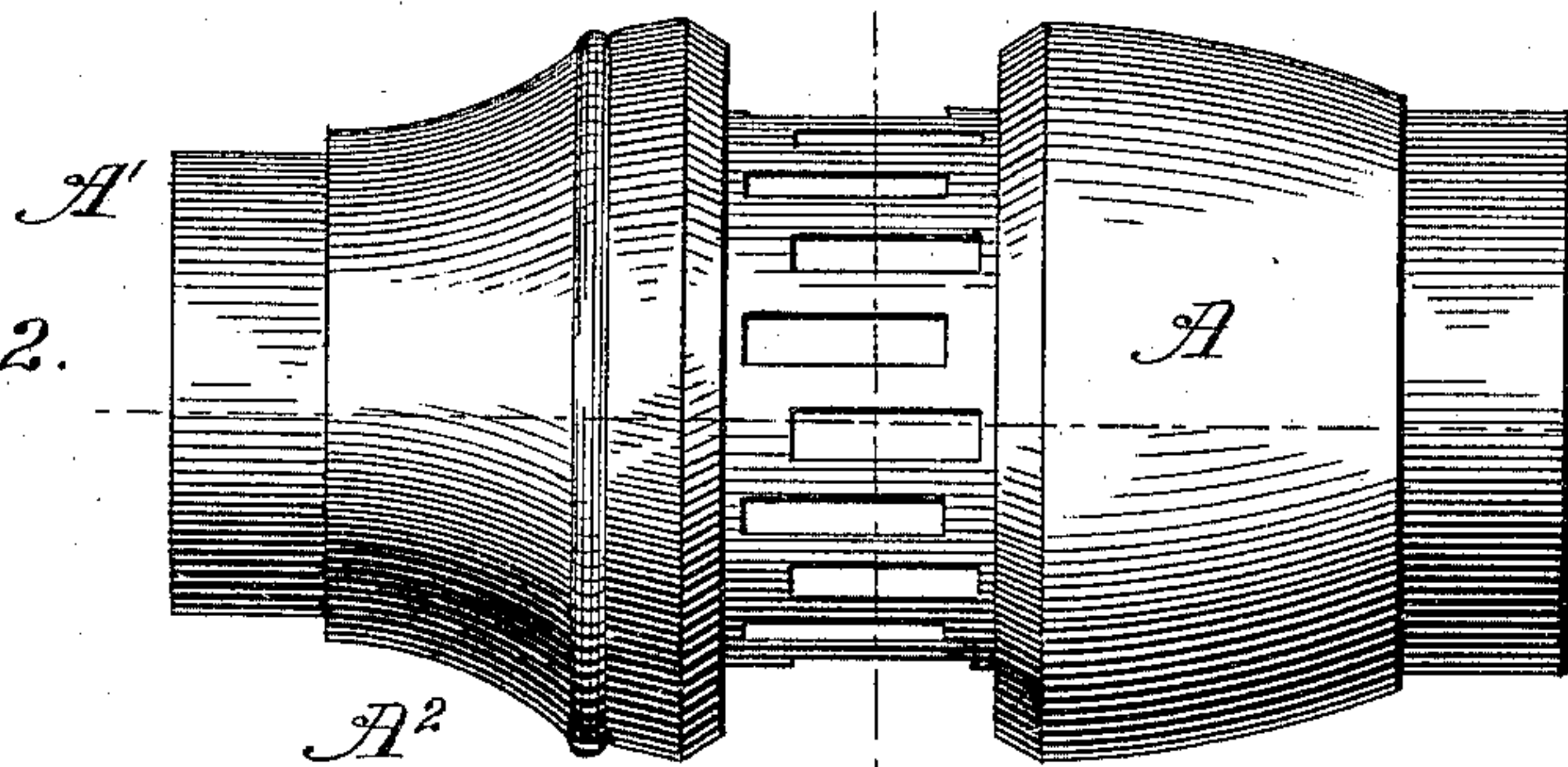


Fig. 3.

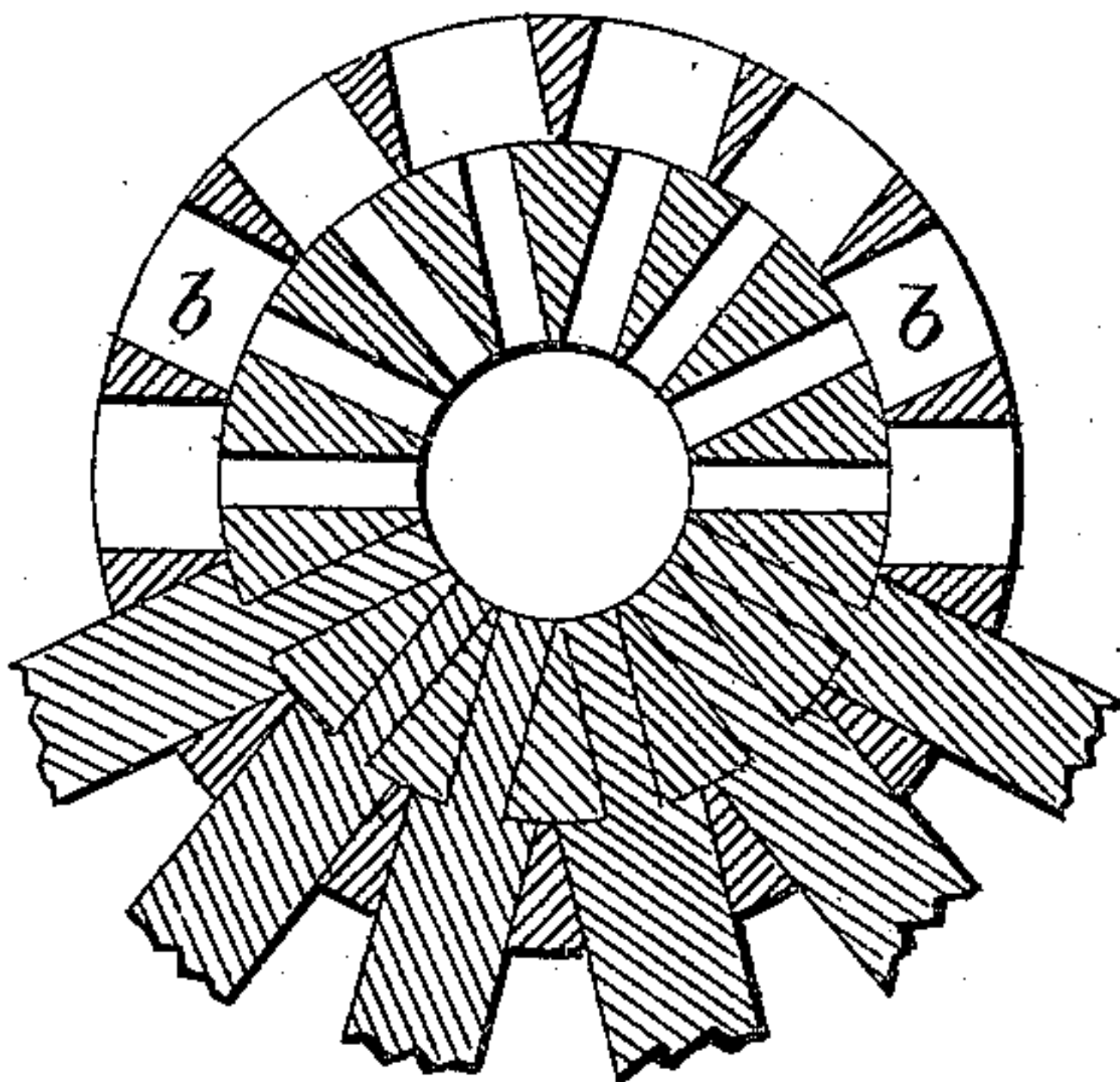
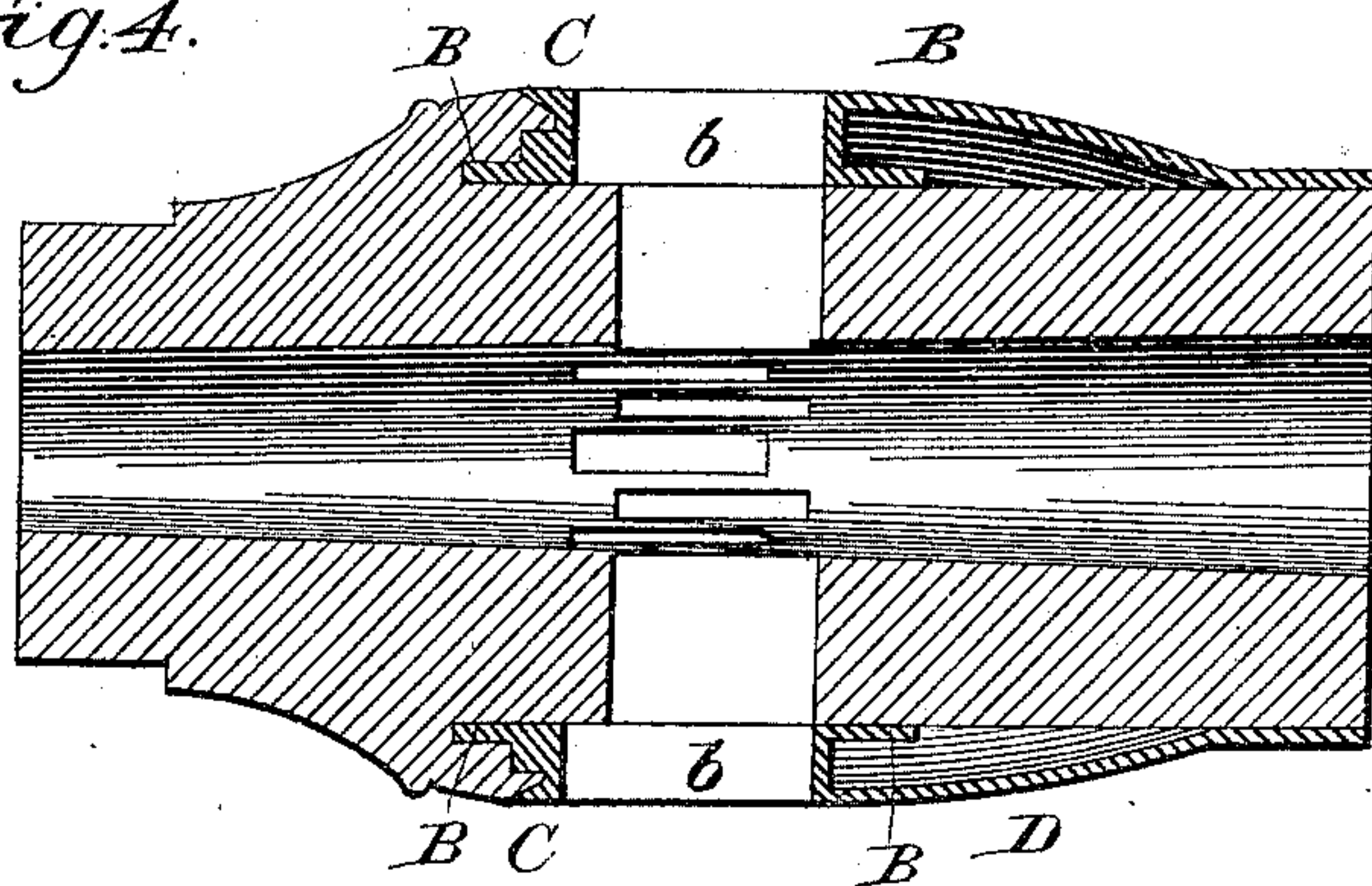


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN M. SWEET, OF BATAVIA, NEW YORK, ASSIGNOR TO THE BATAVIA WHEEL COMPANY, OF SAME PLACE.

VEHICLE-HUB.

SPECIFICATION forming part of Letters Patent No. 369,892, dated September 13, 1887.

Application filed July 6, 1887. Serial No. 243,588. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. SWEET, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Vehicle-Hubs, of which the following is a specification.

My invention relates to improvements in vehicle-hubs in which wood is used for the hub proper, but having a central metallic band provided with outwardly - extending spoke-sockets; and the objects of the improvements are, first, to provide means for placing the band proper within the hub, so that the outer edge of the sockets will come flush with the circumferential part of the wooden portion; second, to afford facilities for uniting the metal and wood portions, so that each will secure and strengthen the other, and, third, to improve the appearance of the hub without detracting from the strength thereof. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of the complete hub, taken through the longitudinal center. Fig. 2 is a view of the wood portion before the metal band is placed in position. Fig. 3 is a cross-sectional view, taken through the center of the spoke-sockets, showing a portion of the spokes in position, and Fig. 4 is a modification showing the metallic band adapted for use upon a hub made from a single piece of wood and having an additional metal band.

Similar letters refer to similar parts throughout the several views.

The construction of the wooden portion of this hub is similar to that shown in Patents Nos. 341,861 and 345,006, patented to me May 11, 1886, and July 6, 1886, so far as having a wooden core and an abutting shoulder near one end, the said core being surmounted with an annular shouldered wooden collar, so as to form a complete hub, each end of which is diametrically the same. I have, however, in the modification shown in Fig. 4 dispensed with the wooden collar and substituted therefor metal, all of which will be hereinafter described.

A represents the rear end of the wooden hub, A' the reduced front or core end of the same,

and a the annular shoulder in the collar A', the said annular shoulder abutting against a corresponding shoulder upon the hub proper.

B is a metallic band provided with spoke-sockets *b* of dimensions sufficient to receive the base of the spoke in its full size. The ends of this band B (which project beyond the raised sockets) enter annular channels made in the recessed shoulders of the wooden hub and upon a longitudinal line with the base of the same. This recess is made of a depth corresponding with the socket, the outer edges of which come flush with the hub's periphery. It will be observed that the portion of the band forming the spoke-sockets is of some considerable thickness, so that the spokes at the weak part found at their base may be strengthened by having the metal support upon the four sides of the same, while the reduced tenon enters the wood hub, as is done in my former patents, before mentioned.

C is a beveled lip extending outward from the face of the end wall of the socket portion of the band, as shown in Fig. 1; but in the modification (see Fig. 4) this lip does not extend beyond the face, but is formed by having a V-shaped groove made in the metal within which a wooden lip enters. This lip upon the metal band is solely for the prevention of any uprising of the grain of wood whenever the same may become affected by exposure to the weather, the concealed portion of the band designated B being relied upon for preventing any displacement of the wheel-rim incident upon the side strain of the parts when bearing a heavy load.

In this modification shown in Fig. 4 the hub is made from a single piece of wood, the rear end of which is made smaller, so that the band may be driven over, the forward end of the socket-wall being made to abut against the shoulder upon the front end of the hub, the band proper entering the wood, as hereinbefore described. To preserve the contour of the hub a metal shell is placed about the rear end of the said hub, the forward end of which band abuts against or is otherwise joined to the uprising portion of the band forming the socket-wall, so that diametrically the hub is the same at both ends. After the

band has been placed in position and the hub otherwise completed the spoke-mortises are made in the wood, so as to register with the sockets in the metal, as is usually done.

5 I am aware that metal bands having outwardly-extending spoke-sockets as well as inwardly-extending ones have been heretofore placed about the peripheral center of a wooden hub; but as far as I am aware I am the first to
10 organize a vehicle-hub having a centrally concealed metallic band carrying outwardly-extending spoke-sockets, the peripheral lines of which are co-extensive with the outside of the wooden hub and are alone exposed to view.
15 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The two-part wooden hub having the annular band-channels, in combination with the
20 metallic band made in a single piece diametri-

cally smaller than the hub, the ends of the band extending laterally beyond the sockets and within the hub-channel, the walls of the said sockets rising above the band to the peripheral line of the wooden hub, substantially 25 as described, and for the purpose set forth.

2. The combination of the wooden hub having the central recess, the metallic band made from a single piece, having the radial outwardly - extending spoke - sockets entering 30 within the hub-recess, the band proper extending laterally beyond the walls of the same within the wood, and the peripheral lip forming a part of the band slightly overlapping the wood, for the purpose described, and substantially as set forth.

JOHN M. SWEET.

Witnesses:

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