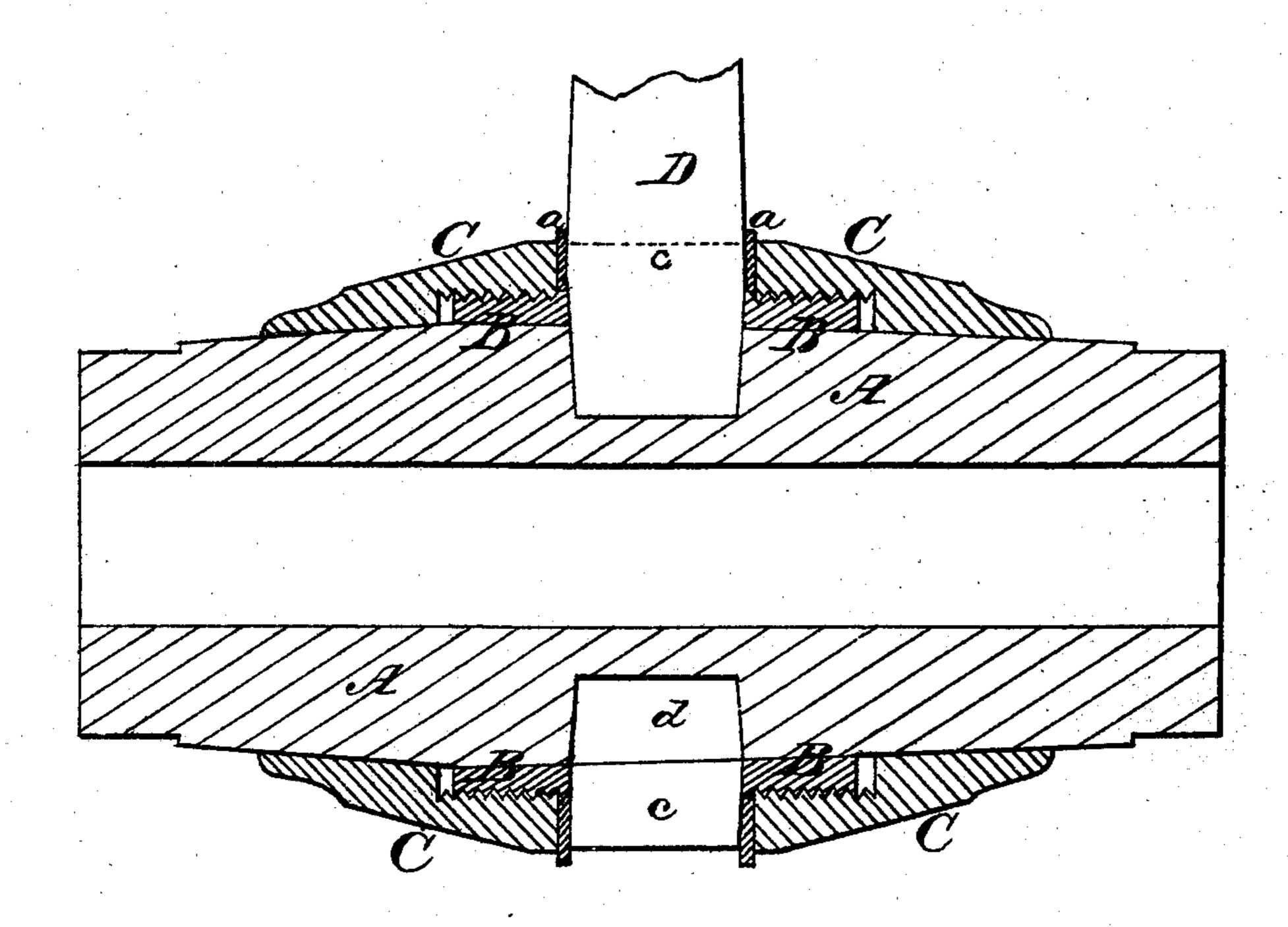
O. B. LITTLE.

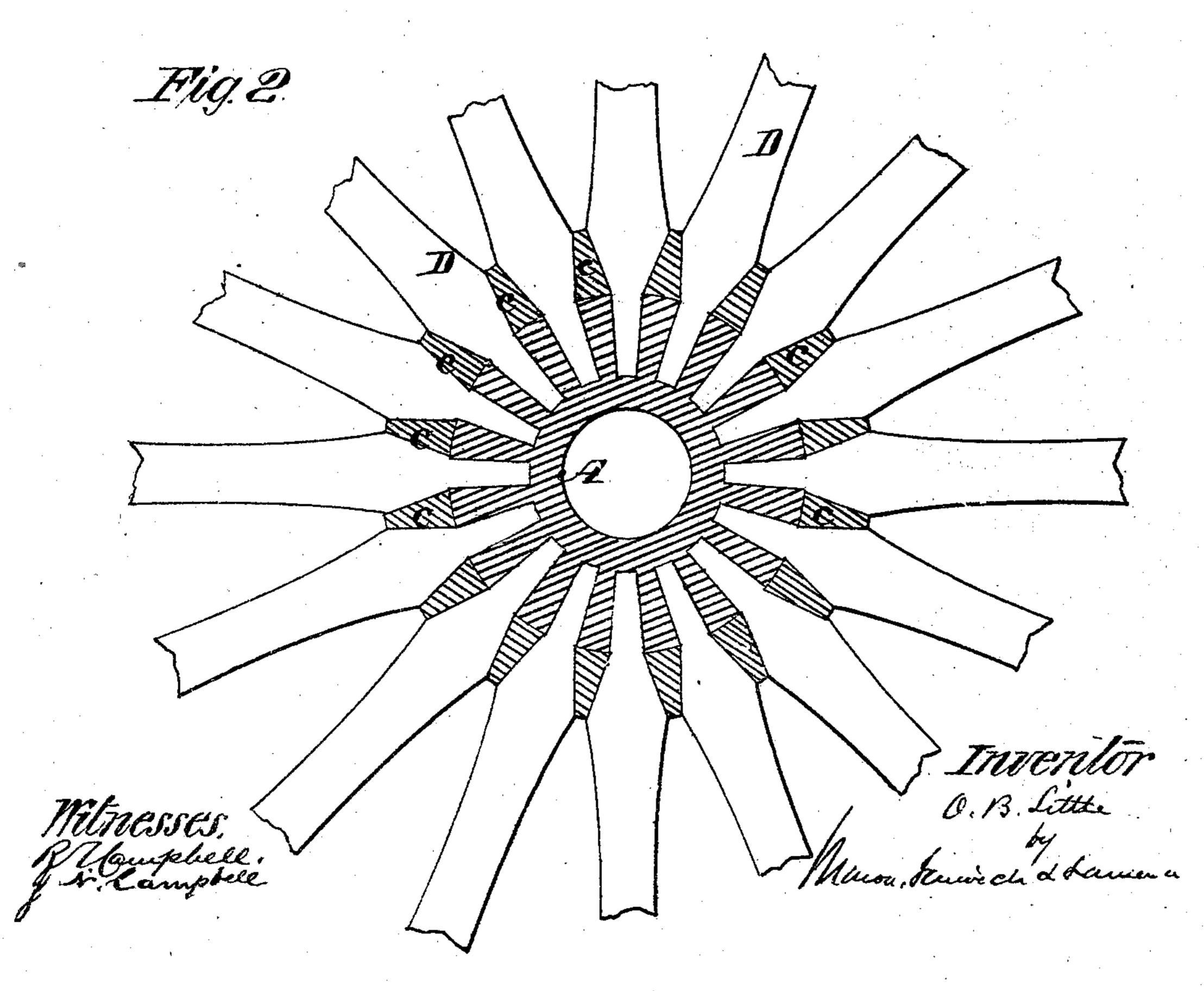
Improvement in Wheel Hub.

No. 123,030.

Fig.1

Patented Jan. 23, 1872.





O. B. LITTLE.

Improvement in Wheel Hub.

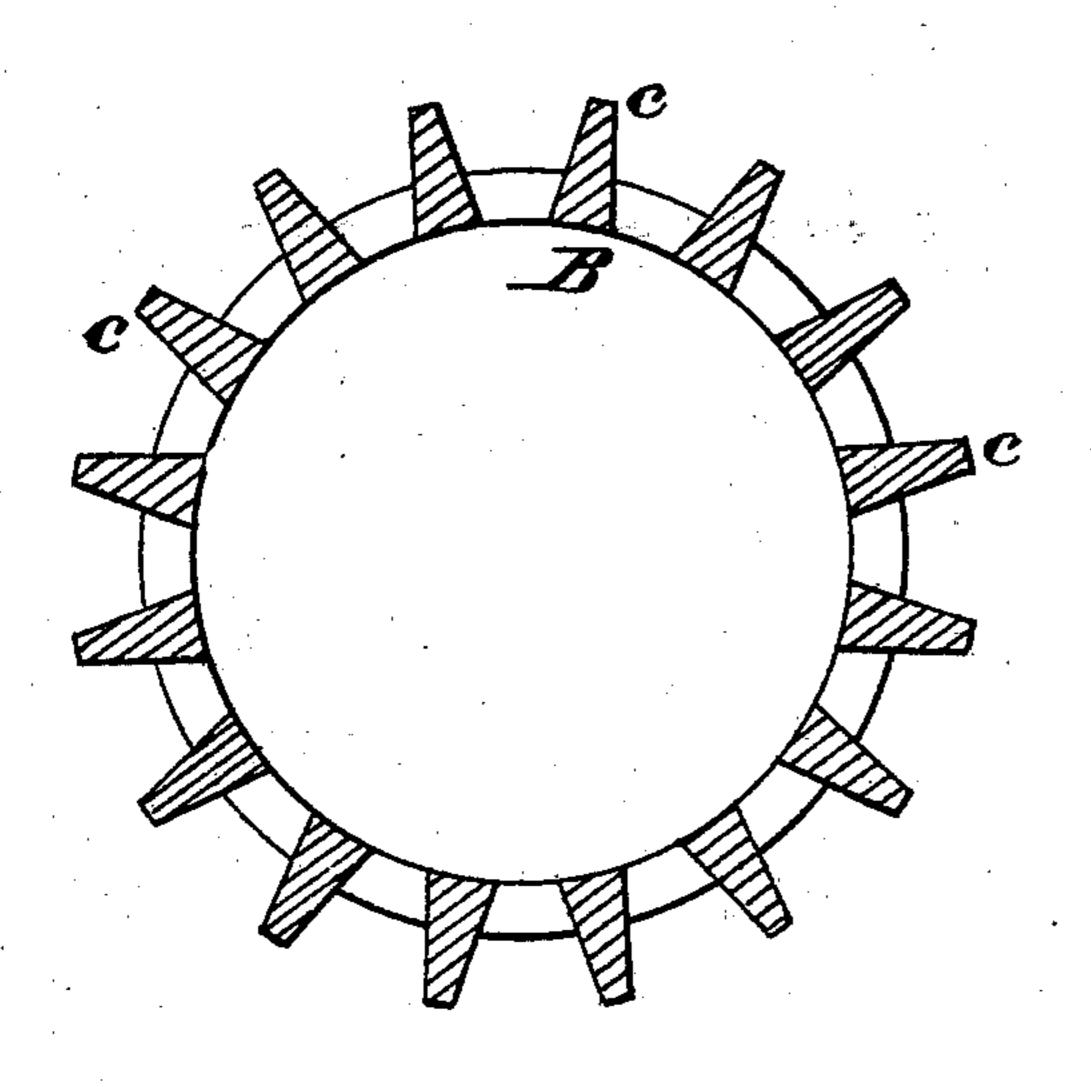
No. 123,030.

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Fig. 3.





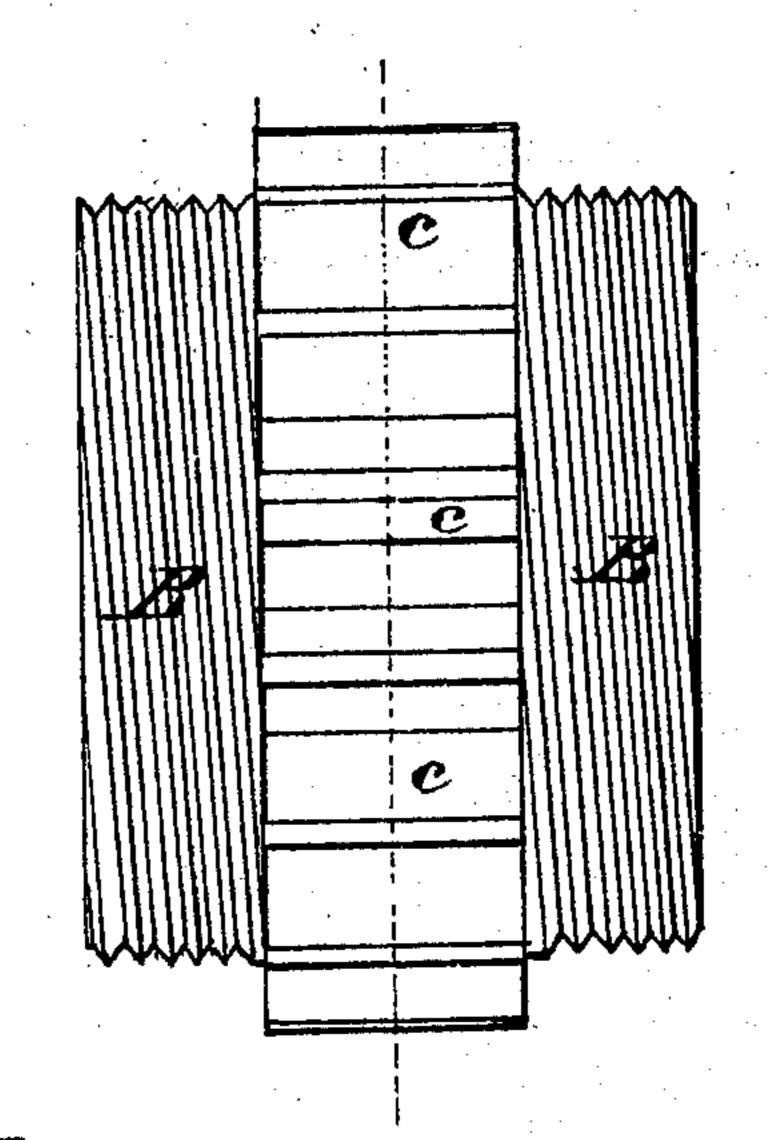
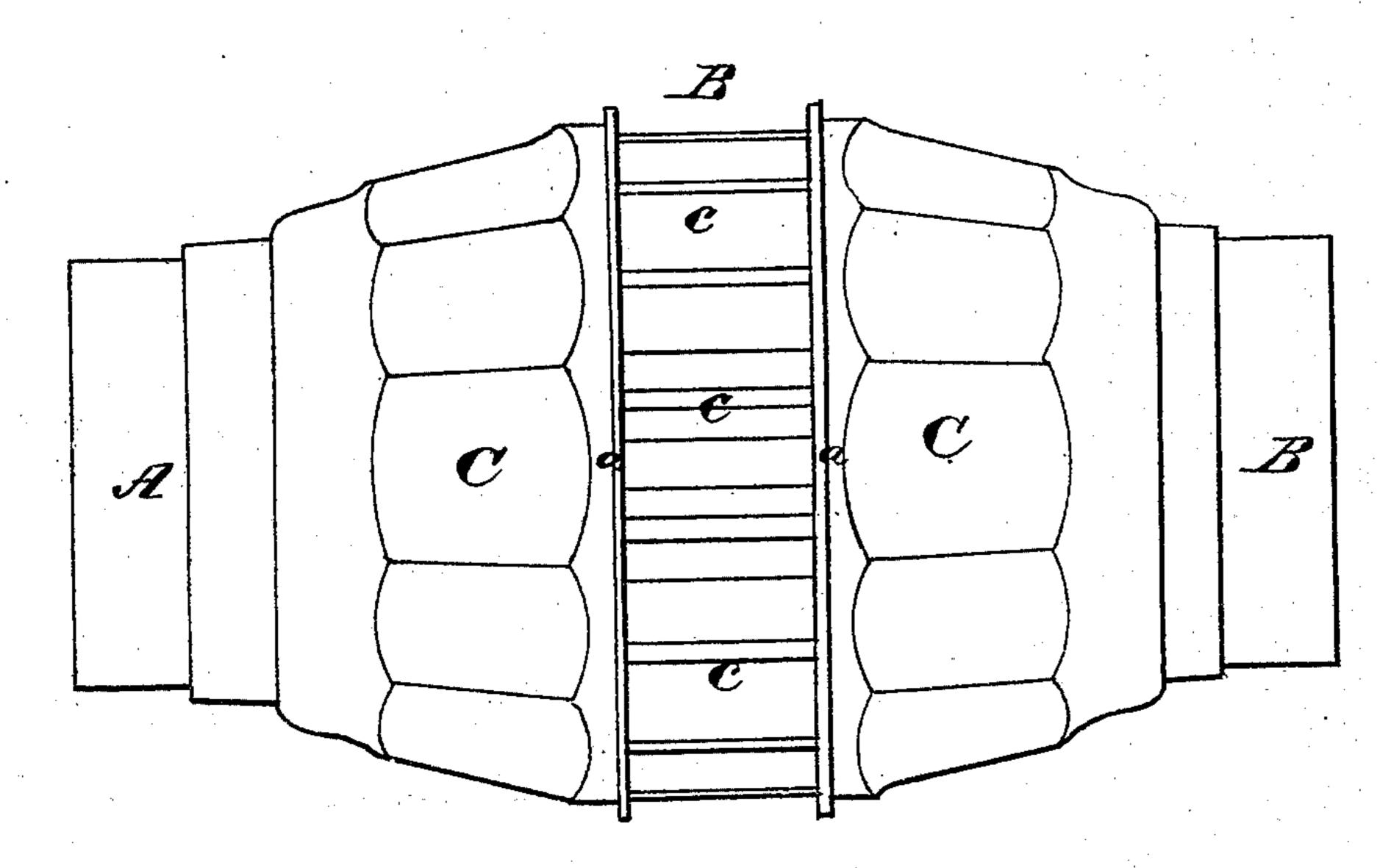


Fig. 5



Witnesses. Republiell Klampbell Inventor O.B. Little Man. Fawick 2 Lawener

United States Patent Office.

OTIS B. LITTLE, OF WHEELING, WEST VIRGINIA.

IMPROVEMENT IN WHEEL-HUBS.

Specification forming part of Letters Patent No. 123,030, dated January 23, 1872.

To all whom it may concern:

Beitknown that I, OTISB. LITTLE, of Wheeling, in the county of Ohio and State of West Virginia, have invented an Improved Wheel-Hub; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1, Plate 1, is a section taken diametrically through the hub with one spoke removed. Fig. 2, Plate 1, is a section through the hub and its band taken in the plane of the spokes. Fig. 3, Plate 2, is a section through the band. Fig. 4, Plate 2, is an external view of the band. Fig. 5, Plate 2, is an external view of the hub without the spokes.

Similar letters of reference indicate corre-

sponding parts in the several figures.

The nature of my invention consists in a wooden hub, the ends of which are exposed and adapted for being finished with the ordinary end bands provided with a flanged slotted central screw-band, and with screw-caps which screw respectively upon the ends of this screw-band up against sides of the shoulders of the spokes, and also bear upon the surface of the hub, all as hereinafter shown and described.

The following description of my invention will enable others skilled in the art to understand it.

In the accompanying drawing, A represents the wood part of the hub, which is made slightly tapering to receive upon it a metal band, B. This band B is forcibly driven upon the hub A so as to strengthen and support it at the point where it is subsequently mortised for receiving the spokes D. The band B may be made of any desired length and thickness properly proportioned to the size of the hub. It is a single piece of metal formed with beveled partitions cc separating the metal portions of the mortises d for the spokes. These

partitions c may be much thicker than the other portions of the band B, so as to form supporting-lips beyond the circumference of the band, as shown in the drawing; or the partitions need not be thicker than the other parts of the band, in which latter case they may be mitered so as to abut against each other beyond the partitions and completely close in the latter. After the band B is driven to its place on the hub the latter is mortised for the spokes and the spokes driven into it. The tenons on the spokes D are of such form that they are thickest and of course strongest at the outer edges of the partitions, as shown in Fig. 2, and are not liable to break at these points. The band B is screw-threaded on both sides of the partitions, and on this band nuts C C are screwed, which confine between them the spokes D and afford lateral support for these spokes beyond the band B. Between the edges of the spokes and the ends of the nuts C washers a may be interposed, if desirable.

It will be seen from the above description that the band B is in fact a tubular bolt through which the spoke-tenons pass, and to which the spokes are firmly confined by the two nuts C C. This band or bolt adds great strength to the wooden hub; and while it does this, it does not detract from the wood any of the good qualities which it possesses as a hub.

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

ent, is—

The combination of the extension partitions $c\,c$, screw-band B B, short screw-caps C C, and wooden hub A, extended beyond the caps C C and finished at its ends in the ordinary manner, all substantially as described.

OTIS B. LITTLE.

Witnesses:

EDWARD REID, Jr., FRED. HEISEMAN.