

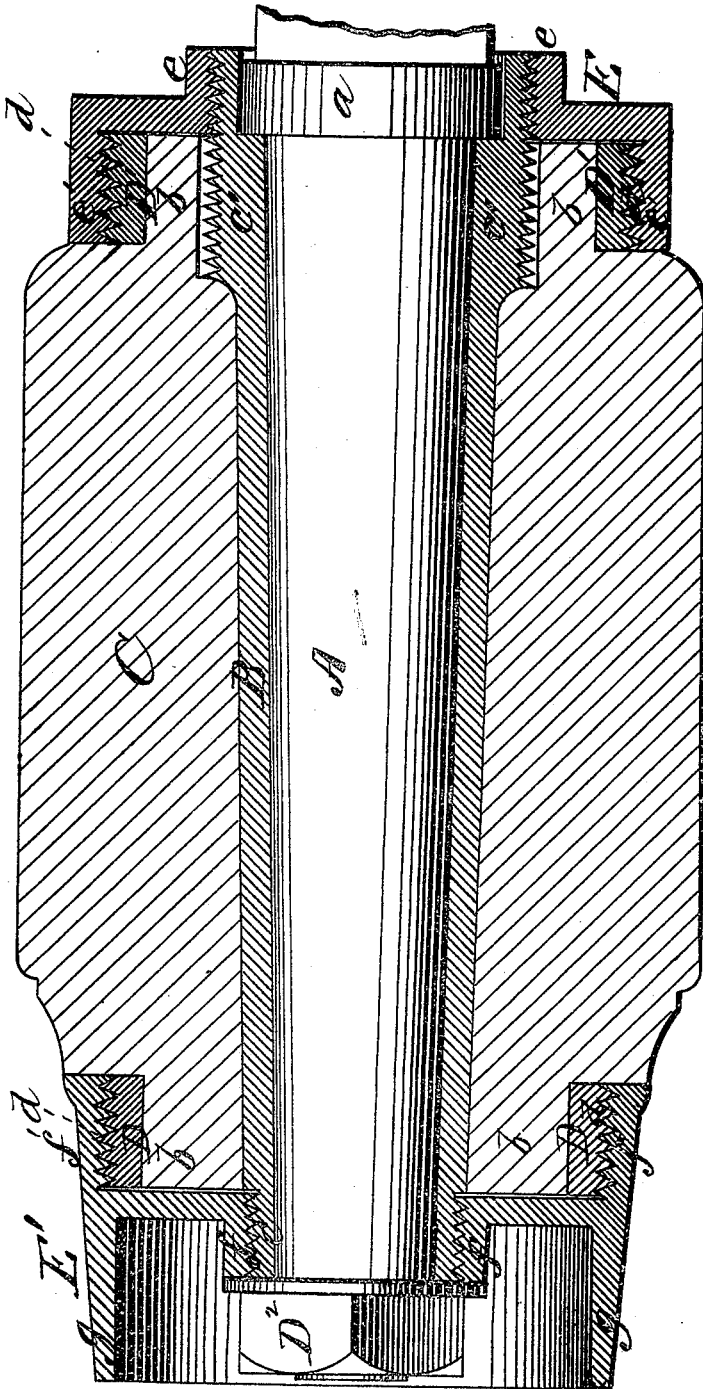
L. N. BEWLEY.

Hub.

No. 168,445.

Patented Oct. 5, 1875.

Fig 1



WITNESSES
E. H. Bates
George E. Upham,

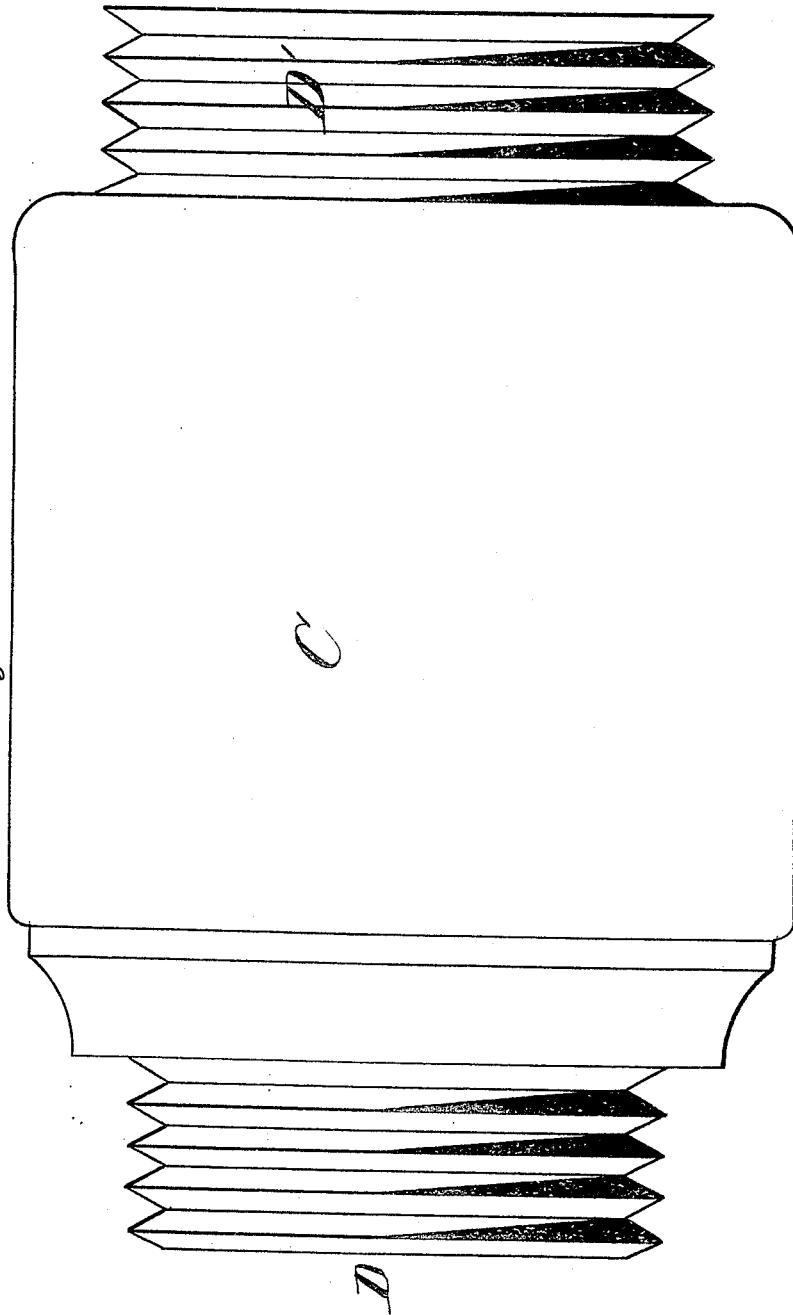
INVENTOR
Levi N. Bewley,
Chipman & Assocs
 ATTORNEYS

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Fig. 2.



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UNITED STATES PATENT OFFICE.

LEVI N. BEWLEY, OF CORNING, NEW YORK.

IMPROVEMENT IN HUBS.

Specification forming part of Letters Patent No. 168,445, dated October 5, 1875; application filed July 3, 1875.

To all whom it may concern:

Be it known that I, LEVI N. BEWLEY, of Corning, in the county of Steuben and State of New York, have invented a new and valuable Improvement in Hub-Bands; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal central section of my hub and axle, and Fig. 2 is a plan view of my hub with caps removed.

This invention has relation to improvements in hubs.

The object of the invention is to provide a means whereby the band upon each end of the hub may be secured in place and prevented from rattling. To this end the nature of my invention consists in a metallic band shrunken on each end of a wooden hub, which band is made screw-threaded, in combination with a cap, which is adapted to be screwed upon the projecting end of the box and upon the aforesaid band, whereby a very secure attachment of the caps and hub is obtained, which will be proof against rattling, and the necessity of bushing the axle-box is done away with, as will be hereinafter more fully explained.

In the annexed drawings, A designates a tapering axle-arm of the usual well-known form and construction, which is provided, near its point of union with the body of the axle, with a collar, *a*. This collar is designed to be received into an enlargement of corresponding form in the end of an axle-box, B, which fits snugly in a wooden hub, C, and of which the two screw-threaded ends *c c'* project slightly outward beyond the vertical faces of the hub, as shown in Fig. 1. At each end of the hub an annular rabbet, *b*, is formed, upon which are shrunken strong metallic bands D D¹, the exterior surfaces of which are male-screw threaded, as shown at *d*, Fig. 1, for a purpose hereinafter explained.

E E' represent caps, of any suitable metal, the former of which is designed to be secured upon the inner, and the latter upon the outer, end of the said hub. Cap E has a female-

screw threaded neck, *e*, adapted to be applied upon the projecting screw-threaded end *c'* of the axle-box, and an enlarged neck, *e'*, also similarly screw-threaded, which is designed to be applied on the shrunken band D¹ on the inner end of the hub. Cap E' has also two necks, *f f'*, both of which are female-screw threaded, and are designed to be applied upon the projecting end of the said box and the band. It has also an annular guard, *g*, designed to protect the holding-nut D², which is applied upon the end of the spindle for the purpose of preventing the same from being drawn through the box and allowing the wheel to leave the axle.

Caps E E' being applied upon their respective ends of the hub, and their female-screw threaded necks *e e'* and *f f'* being applied, respectively, upon the ends of the axle-box and upon bands D D¹, which are immovable upon the said hub, a very safe, strong, and reliable attachment of the caps to the hubs will have been obtained, and any rotation of the said box independent of the hub will be effectually prevented.

By this means the necessity of wedging or bushing the axle-box, as it is more commonly called, is done away with, and the hub, being maintained in its integrity, is allowed to preserve its full strength, thereby greatly increasing its durability and power of resistance to strain.

What I claim as new, and desire to secure by Letters Patent, is—

1. The cap E', having screw-threaded necks *f f'*, in combination with the wooden hub C, having screw-threaded band D and the axle-box B, having screw-threaded end *c*, substantially as and for the purpose set forth.

2. The caps E E', having screw-threaded necks *e e' f f'*, the wooden hub C, having screw-threaded bands D D¹, and the axle-box B, having screw-threaded ends *c c'*, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEVI N. BEWLEY.

Witnesses:

WALTER C. MASI,
GEORGE E. UPHAM.