(No Model.)

J. MARIS.

END BAND FOR HUBS.

No. 437,496. **Patented Sept. 30, 1890.**

Fig 1

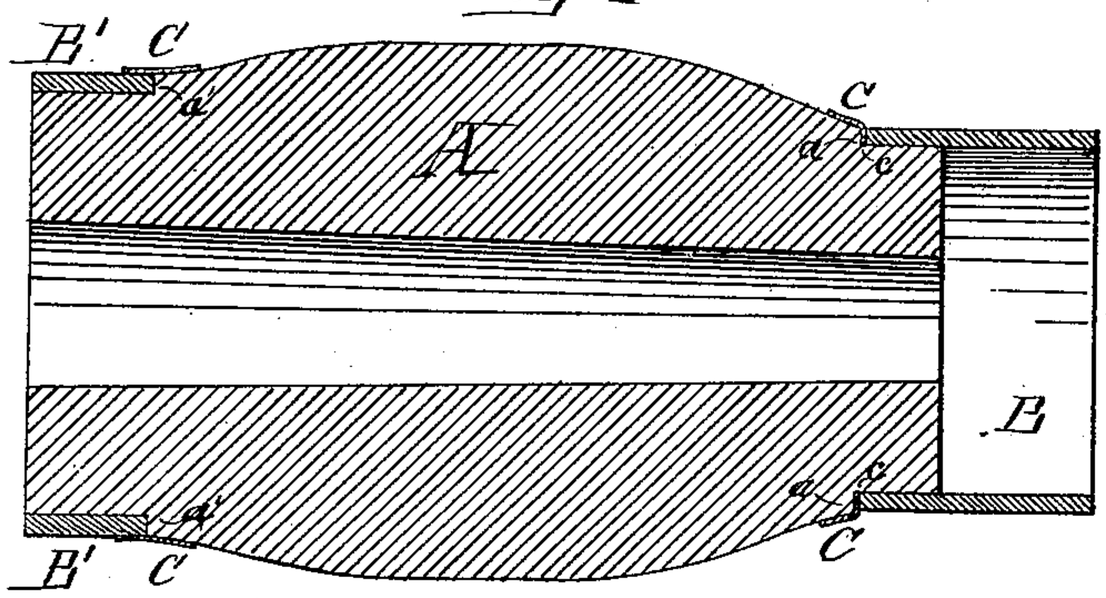


Fig 2.

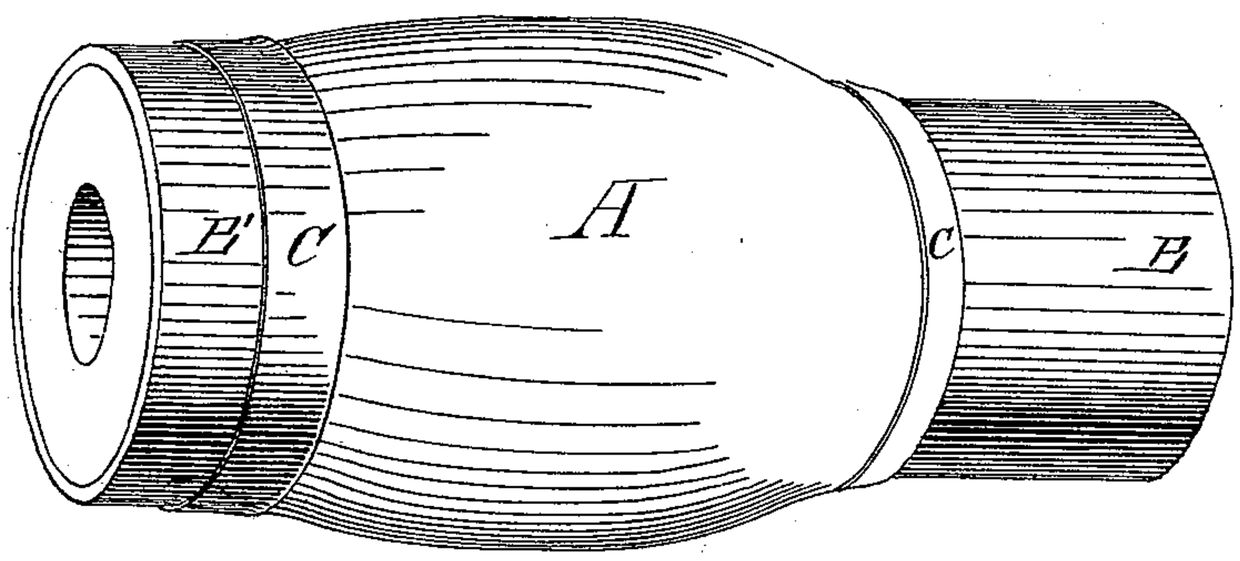
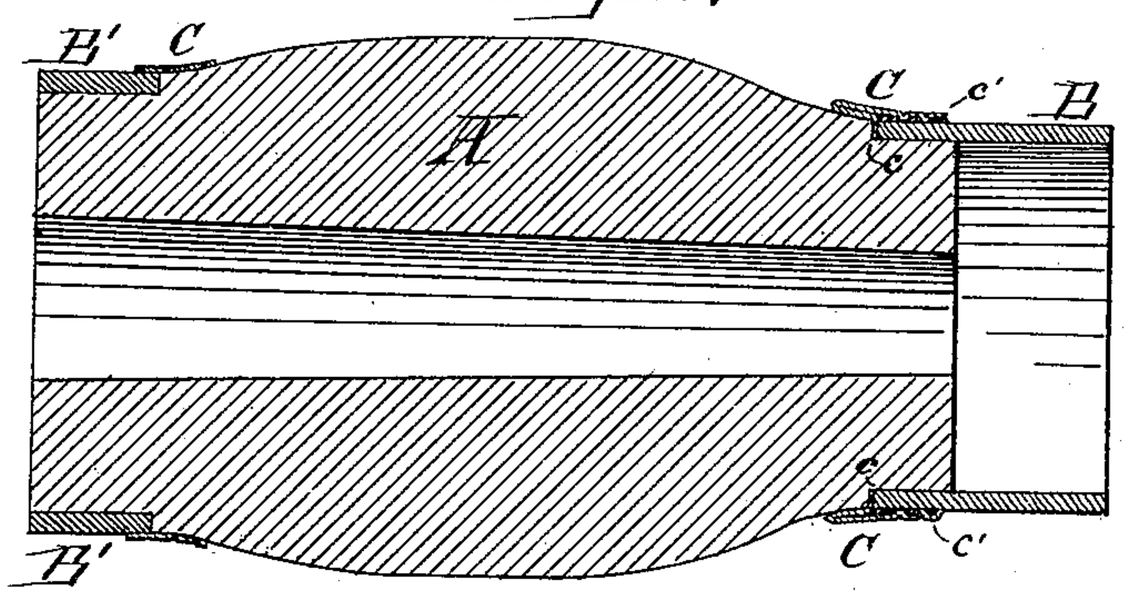


Fig 3.



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UNITED STATES PATENT OFFICE.

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END BAND FOR HUBS.

SPECIFICATION forming part of Letters Patent No. 437,496, dated September 30, 1890.

Application filed May 26, 1890. Serial No. 353,276. (No model.)

To all whom it may concern:

Be it known that I, JARED MARIS, a citizen of the United States, residing at Lebanon, in the county of Warren and State of Ohio, have invented a new and useful Improvement in End Bands for Hubs, of which the following is a specification.

Wheel-hubs as now made are usually provided with metallic end bands, known as "point" and "butt" bands, which take against annular shoulders near the respective ends of the hub. It is found in practice that hubs are liable to swell at the shoulder-points, causing the paint to crack and leaving the shoulders projecting above the periphery of the band. The portion of the hub beneath the end bands being held against radial expansion, the swelling frequently causes the hub to split or "shell." This is especially liable to occur when, as is frequently the case, the hubs are provided with compressive bands adjacent to the spoke-zone.

The object of my invention is to provide a hub that will be free from these objections; and the invention consists in the combination, with the end band, of a metallic guard adapted to take over the shoulder against which the band abuts and embrace the portion of the hub immediately adjacent thereto.

In the drawings, Figure 1 is a longitudinal section of a wheel-hub embodying my invention; Fig. 2, a perspective view of the same. Fig. 3 is a longitudinal section of a wheel-hub, showing a modified form of guard.

A represents the wooden portion of a wheel-hub, and *a* and *a'* the point and butt shoulders thereof, hereinafter called the "band-shoulders."

B represents the point-band, and B' a butt-band.

C is a guard consisting in its simplest form of a thin metallic band or fillet adapted to embrace the inner end of the portion of the hub immediately adjacent to the band-shoulder and also the inner end of the end band, thereby covering or "breaking" the joint between the hub and the end band. This guard may be pressed into position and held by its gripping action, or it may be secured by nails. Another form of guard consists of a band taking over the band-shoulder and having its outer edge or a portion thereof bent to form an inwardly-projecting flange. This guard is placed on the hub in such manner that the band takes over the shoulder and closely embraces the portion of the hub immediately adjacent thereto, while the internal flange takes against the shoulder. The point or butt band is then placed on the hub, its inner end taking against the internal flange and serving to hold it in place. The form of guard shown in Fig. 3 has the inwardly-projecting flange and an extension *c'* embracing a portion of the point-band.

I claim as my invention—

1. The combination, in a wheel-hub having a reduced end, of an end band the inner end of which rests on said reduced portion, with a metallic guard taking over and breaking the joint between the end band and the band-shoulder, the internal diameter of the inner end of the band adjacent to the shoulder being as great as the diameter of the outer end of the reduced portion of the hub, substantially as set forth.

2. The combination, in a wheel-hub having a reduced end, of an end band with a metallic guard having an inwardly-projecting flange and adapted to take over the band-shoulder and embrace the portion of the hub immediately adjacent thereto, the internal diameter of the inner end of the band adjacent to the shoulder being as great as the diameter of the outer end of the reduced portion of the hub, substantially as set forth.

3. The combination, in a wheel-hub having a reduced end, of an end band with a metallic guard adapted to take over the band-shoulder and embrace the portion of the hub immediately adjacent thereto, and also to take over and embrace a portion of the band and having an inwardly-projecting flange against which the band abuts, the internal diameter of the inner end of the band adjacent to the shoulder being as great as the diameter of the outer end of the reduced portion of the hub, substantially as set forth.

JARED MARIS.

Witnesses:
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