

J. M. EMMERICH.

Wheel Hub.

No. 106,678.

Patented Aug. 23, 1870.

Fig. 1.

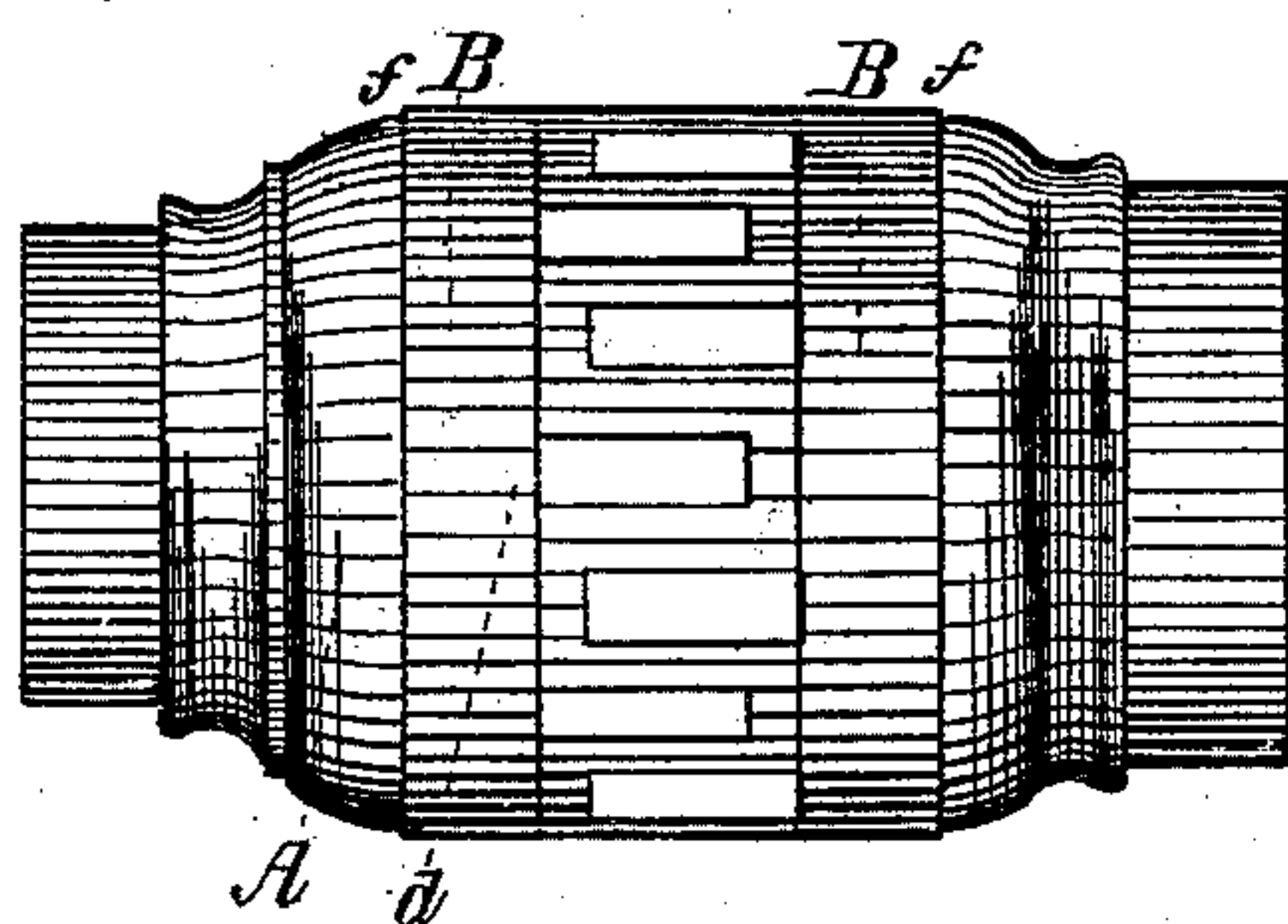


Fig. 2.

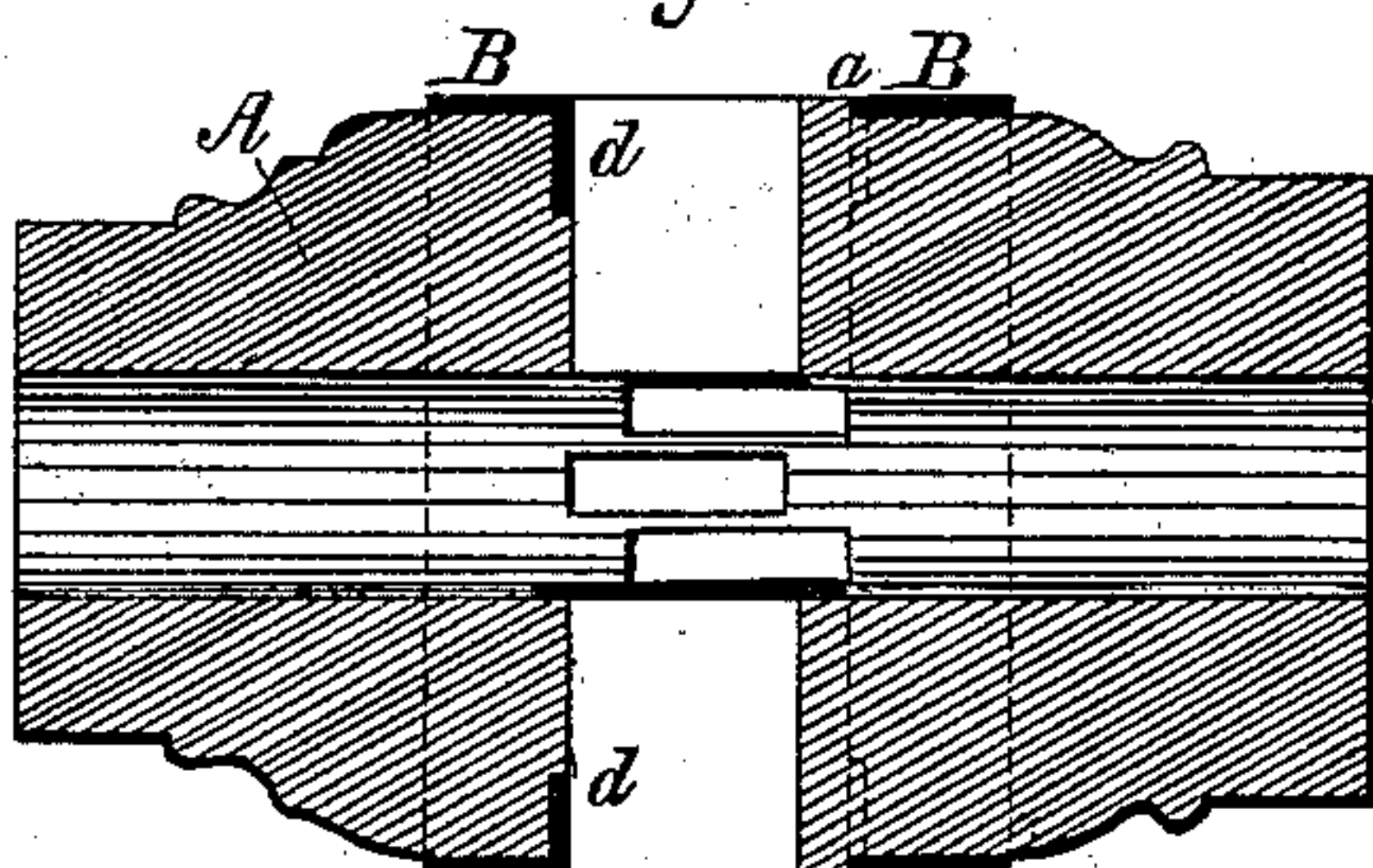
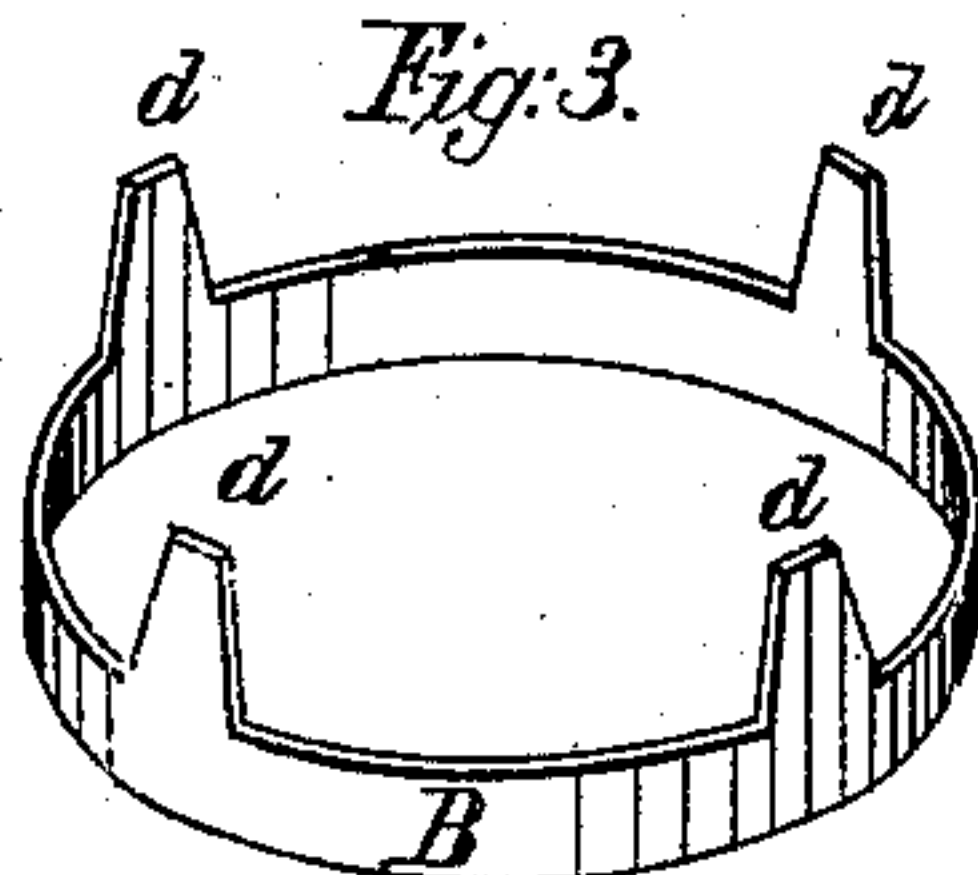


Fig. 3.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN M. EMMERICH, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN HUBS FOR CARRIAGE-WHEELS.

Specification forming part of Letters Patent No. **106,678**, dated August 23, 1870.

*To all whom it may concern:*

Be it known that I, JOHN M. EMMERICH, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Hub for Carriage - Wheels; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in—

Figure 1, a side view; Fig. 2, a longitudinal central section; and in Fig. 3, a perspective view of the band.

This invention relates to an improvement in the arrangement and application of bands upon wooden hubs to prevent their splitting, the object being to insure the retaining of the bands in position regardless of the shrinkage or swelling of the hub; and the invention consists in providing the bands with lugs or projections, and the said lugs or projections turned down into mortises in the hub.

A is a wooden hub, of common construction, mortised to receive the spokes in the usual manner.

B B are two bands, arranged upon opposite sides of the spokes, and in close proximity thereto.

By preference a shoulder is formed on the hub at the outer line of the spokes, as seen at *a*, Fig. 2, corresponding to the thickness of the band.

The band B, as denoted in Fig. 3, is provided with two or more lugs or projections, *d*, in position corresponding to certain spoke-mortises in the hub, and these certain mortises, as denoted in Fig. 2, are cut out to receive the said lugs.

Previous to inserting the spokes these bands are driven onto the hub, and the lugs *d* turned down into the respective mortises, as denoted in Fig. 2, and then the spokes driven hard into the hub.

The arrangement of the bands prevents the driving of the spokes from splitting the hub, and therefore allows the spokes to be driven harder than can be done without the bands.

The bands thus applied in no way disfigure the hub, as the shape of the hub is not changed, it being common to form a shoulder on the hub, as at *f*, Fig. 1, which, by this arrangement, is made by the outer edge of the metallic band, and when the hub is painted the metallic bands do not show as such, but yet are there to prevent the checking or splitting of the hub, and are so firmly fixed as not to be accidentally removed.

I claim as my invention—

The arrangement of the bands B B upon a wooden hub, the said bands provided with two or more lugs, *d*, turned into the hub, in the manner and for the purpose described.

JOHN M. EMMERICH.

Witnesses:

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