

H. H. RICHARDS.

Improvement in Thimble Skeins for Wagons.

No. 118,391.

Patented Aug. 22, 1871.

Fig. 1.

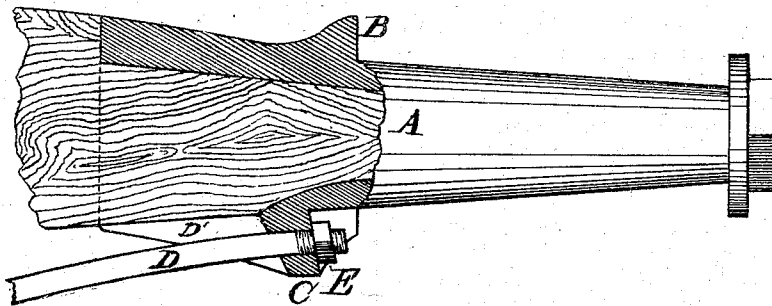
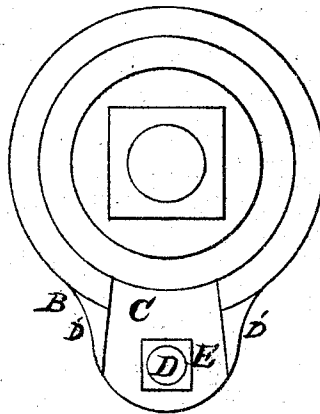


Fig. 2.



Witnesses.

E. H. Bates.

Village Anderson.

Inventor

H. H. Richards  
Chipman & Sonnet Co  
Atty

# UNITED STATES PATENT OFFICE.

HEZEKIAH H. RICHARDS, OF FOND DU LAC, WISCONSIN.

## IMPROVEMENT IN THIMBLE-SKEINS FOR WAGONS.

Specification forming part of Letters Patent No. 118,391, dated August 22, 1871.

*To all whom it may concern:*

Be it known that I, HEZEKIAH H. RICHARDS, of Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented a new and valuable Improvement in Thimble-Skeins with attachment admitting a brace; 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a side elevation and partial section of my invention. Fig. 2 is an end view of an axle embodying my improvement.

This invention has relation to an improvement in means for attaching the brace which extends from side to side under the axle to the axle-skeins; and it consists in the novel construction and arrangement of the ear on the under side of the skein.

Referring to the drawing, A designates the skein, made long and extending some distance beyond the shoulder B, against which the hub bears. C represents a downwardly-projecting lug on the under side of the skein, to which the end of the brace is attached by passing it through an opening in the lug and applying a nut. The construction of the lug C is designed to secure great strength, in order to withstand successfully the strain on the brace. It may be described as follows: The end of the skein in rear of the

shoulder B extends around the top and sides of the spindle, but underneath it is open, and the wall of the skein extends downward on each side, forming the flanges or bracing-walls D' D', between which the perforated stop or lug C is formed. This stop extends down in an inclined direction outward, so that its face, against which the nut works, is perpendicular to the direction of the strain, or nearly so. Again, this stop C is placed not at the end of the skein but some distance therefrom, just behind the shoulder B, so that the strain upon the lug will be more equally distributed over the skein.

I am aware that lugs have heretofore been formed on the under side of axle-skeins; hence I do not claim such broadly; but

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

The axle-skein herein described, provided with an extension in the rear of the shoulder B, whose wall extends downward to form the bracing-flanges D' D', between which and at or about the shoulder B the downwardly and outwardly-inclined lug C is formed, substantially as specified.

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

HEZEKIAH H. RICHARDS.

Witnesses:

H. BENSON,  
JOHN NICHOLS.