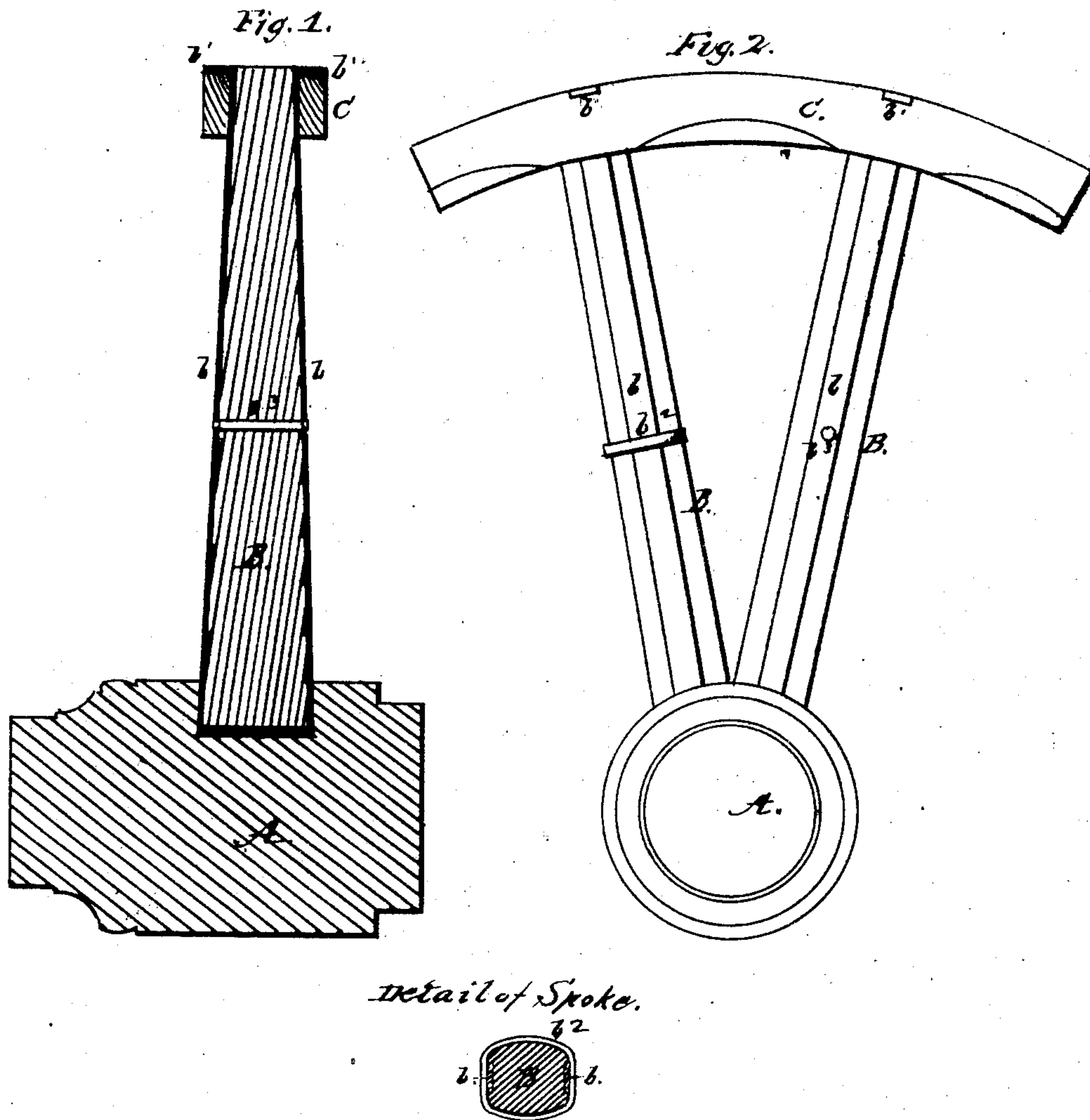


*P. R. Ridgely.*  
*Wagon-Wheel.*

*Nº 76249*

*Patented Mar. 31, 1868.*



*Witnesses;*

*H. Pauli*  
*R. Simon*

*Inventor;*

*P. R. Ridgely*  
*By his Atty*  
*W. Randolph & Co*

# United States Patent Office.

P. R. RIDGELY, OF IRON MOUNTAIN, MISSOURI.

*Letters Patent No. 76,249, dated March 31, 1868.*

## IMPROVEMENT IN WAGON-WHEELS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, P. R. RIDGELY, of Iron Mountain, in the county of St. Francis, and State of Missouri, have made certain new and useful Improvements in Wagon-Wheels; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to strengthen the spokes of the wheel by means of metallic ribs let into grooves in the edges of the spokes, thus forming the spoke of a compound material, and giving it great strength and elasticity.

To enable those skilled in the art to make and use my improved wheel, I will proceed to describe its construction and operation.

Figure 1 of the drawings is a sectional transverse elevation of the improved wheel.

Figure 2 is a sectional side elevation of the same.

The hub A is mortised for the spokes B in the usual manner, and the felloes C are also placed upon the ends of the spokes, as is customary. Both edges of the spokes are grooved for the reception of the iron rib *b*, which is a flat bar of wrought iron. The detail drawing of the spoke exhibits the manner in which the bar or rib is let into the spoke. This rib will be a continuous bar, which will extend quite around the tenon that enters the hub, as is shown clearly in fig. 1, and thence pass up on each side of the spoke, and have its upper end secured by means of two lugs, *b*<sup>1</sup>, which are to be let into notches cut in the periphery of the felloe. The ribs *b* will extend quite up through the felloe by the side of the spoke-tenon, notches being cut in the felloe for their reception, and not in the spoke-tenon, which would be too much weakened if it were reduced for the reception of the iron rib. The lugs *b*<sup>1</sup>, which secure the upper ends of the ribs *b*, should be bent outwardly at an angle of about ninety degrees from the side portions of the said ribs. The central portion of the ribs may, if necessary, be secured to the spoke by means of a band, *b*<sup>2</sup>, or a rivet, *b*<sup>3</sup>.

Having described my invention, what I claim, is—

The rib *b*, when combined with the spoke B and felloe C, in the manner herein shown and for the purpose set forth.

In testimony of which invention, I hereunto set my hand in presence of—

P. R. RIDGELY.

Witnesses:

M. RANDOLPH,

H. PAULI.