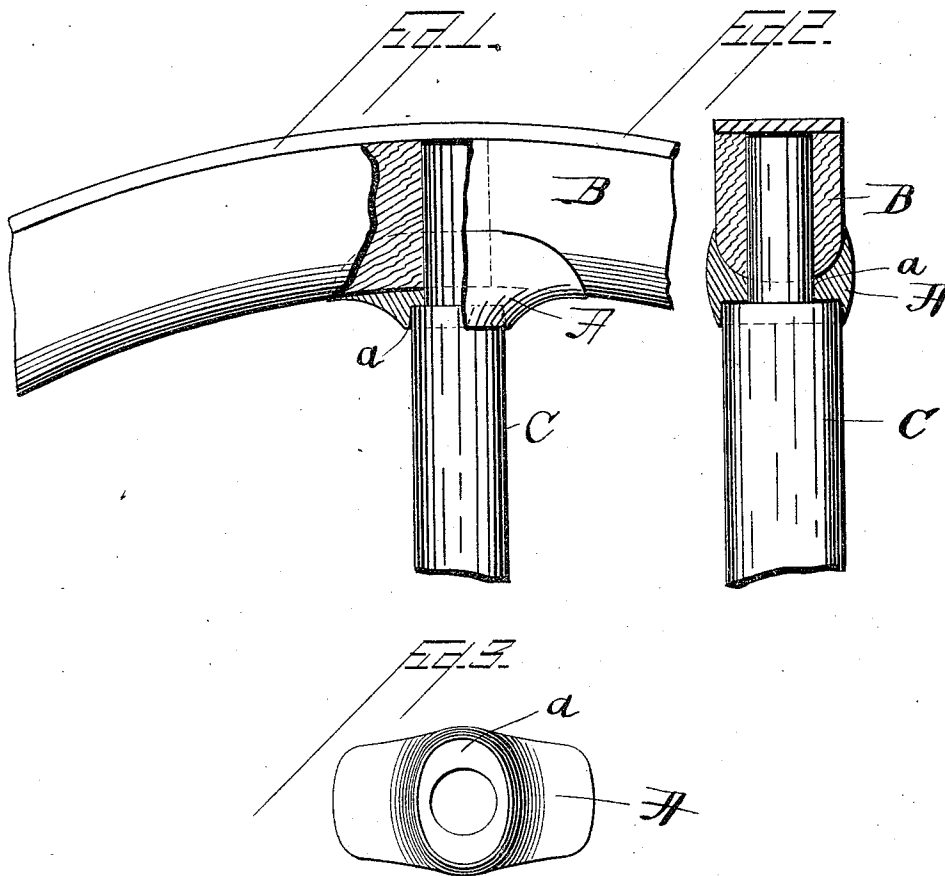


(No Model.)

J. F. FUSS.
SPOKE SOCKET FOR VEHICLE WHEELS.

No. 428,302.

Patented May 20, 1890.



Attest:

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UNITED STATES PATENT OFFICE.

JOHN F. FUSS, OF ATLANTA, GEORGIA.

SPOKE-SOCKET FOR VEHICLE-WHEELS.

SPECIFICATION forming part of Letters Patent No. 428,302, dated May 20, 1890.

Application filed November 4, 1889. - Serial No. 329,102. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. FUSS, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Vehicle-Wheels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to vehicle-wheels, the object being to so improve the manner of the engagement of the spokes with the fellys as to render them more durable and protect the end of the spoke from spreading or upsetting, as is usual in devices of this character as heretofore constructed as well as in direct contact between spoke and felly. The details of construction whereby this end is accomplished are hereinafter fully explained.

In the accompanying drawings, Figure 1 is a side elevation of a portion of felly and spoke, showing the form and construction of step, a portion thereof being broken away to more plainly show its construction. Fig. 2 is a vertical cross-section of the felly at the center of the spoke, further showing the form of the spoke-step. Fig. 3 is a view of the step from the direction from which the spoke is inserted.

In these figures, like reference-marks indicating corresponding parts in the several views, A is the step, B the felly, and C the spoke. The felly and spoke are of the ordinary construction, no change being required to adapt them to the use of the step. The step A conforms to the felly in shape where they come in contact, the step being concave in cross-section and extending slightly over the sides of the felly, for reasons hereinafter explained, and rounded longitudinally for that purpose. A hole for the passage of the spoke is provided, which hole has a counterbore *a*, the sides of which are preferably tapered, being larger on the outer end and tapering inwardly.

The hole for the passage of the spoke conforms in size to the tenon in its smaller part and to the spoke in its larger part, while the shoulder of the spoke caused by the reduction in tenoning rests squarely on the bottom of the counterbore, causing a tight fit and obviating all lateral play therein. To prevent the turning or twisting of the spoke in its socket, the counterbore is given an elliptical shape. The socket is so placed that the longer axis of the elliptical part is at right angles to the main general direction taken by the felly. It is obvious that the spoke, resting squarely on the bottom of the counterbore and the sides of the spoke being sustained by the sides thereof, cannot be spread or upset on its end and become loose, and that for this reason it will remain tight and will not indent the felly by reason of the broad bearing which the step A has thereon to support the superincumbent weight. The step conforming to the oval of the felly and extending as it does for a slight distance down the sides of said felly effectually prevents the splitting of said felly. This step by providing so close a fit for the spoke and so long a bearing on the felly all around the tenon will prevent the entrance of sand, and hence the rapid cutting out of the parts found in other devices of this class.

Having thus described my invention, I claim as new and desire to secure by Letters Patent the following:

In a vehicle-wheel, the combination of the spoke, the felly, and the spoke-socket A, conforming to the oval surface of the felly and having an opening for the passage of the spoke, said opening having an elliptically-shaped counterbore, substantially as and for the purpose specified.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN F. FUSS.

Witnesses:

A. P. WOOD,
S. C. WOOD.