

L. J. WILSON.  
WHEEL SPOKE TIGHTENER.  
APPLICATION FILED DEC. 6, 1921.

1,429,706.

Patented Sept. 19, 1922.

Fig. 1.

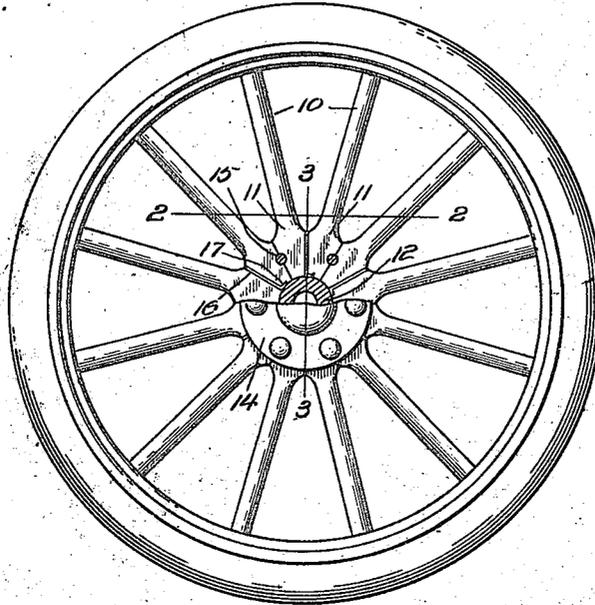


Fig. 2.

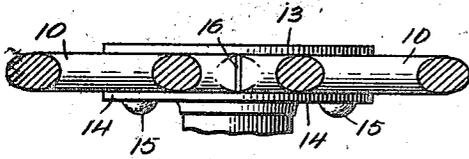


Fig. 3.

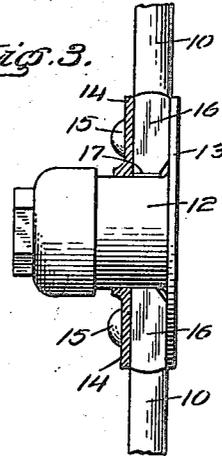


Fig. 4.

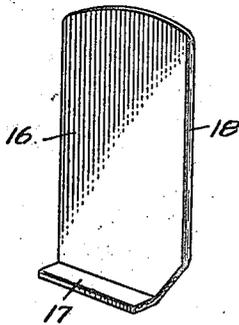
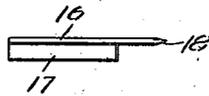


Fig. 5.



L. J. Wilson. INVENTOR.

BY  
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# UNITED STATES PATENT OFFICE.

LAWRENCE J. WILSON, OF COLEMAN, TEXAS.

WHEEL-SPOKE TIGHTENER.

Application filed December 6, 1921. Serial No. 520,275.

*To all whom it may concern:*

Be it known that I, LAWRENCE J. WILSON, a citizen of the United States, residing at Coleman, in the county of Coleman and State of Texas, have invented certain new and useful Improvements in Wheel-Spoke Tighteners, of which the following is a specification.

This invention relates to wheels of the class of wood spoke wheels employed more particularly upon motor driven vehicles, and has for one of its objects to provide a simply constructed means whereby loosened spokes may be effectually tightened without dismembering the wheel.

With these and other objects in view the invention consists in certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claim, and in the drawings illustrative of the preferred embodiment of the invention;—

Figure 1 is a side elevation of a conventional wheel, partly in section, with the improved spoke tightening device applied.

Fig. 2 is a detail section on the line 2—2 of Fig. 1.

Fig. 3 is a detail in section on the line 3—3 of Fig. 1.

Fig. 4 is an enlarged perspective view of one of the fastening devices.

Fig. 5 is a plan view of the structure shown in Fig. 4.

The improved device is applicable to wheels constructed as shown in Figs. 1, 2 and 3 and including spokes 10 wedge shaped at their inner ends as at 11 with the confronting faces of the wedging portions initially in close contact. A sleeve formed hub member 12 is disposed at the inner ends of the spokes, the sleeve having an integral plate 13 at one end bearing against the wedging portion of the spokes at one side and with an annular plate 14 fitting over the sleeve and bearing against the spokes at the other side. Clamp bolts 15 connect the plates 13 and 14 through seats in the confronting faces of the portions 11 of the spokes. This construction is of the usual form, and when first assembled, the spokes are held tightly in position, by the strain applied to the rim and by the clamp plates and bolts.

The spokes work loose at times by shrink-

age of the spoke material and from other causes, and to take up this shrinkage and firmly tighten the loosened spokes, is the object of the present invention which consists in a relatively thin metal plate forced between the contiguous faces of the wedging terminals 11 of certain of the spokes.

Each fastening device is constructed as shown more particularly in Figs. 4 and 5, and consists of an oblong body portion with a lateral offset 17 at one end and with one edge chamfered or knife edged, as at 18.

When looseness develops between the inner or converging ends of the spokes, the clamp bolts 15 and the plate 14 are removed, and the knife edge 18 of one or more of the plates forced between the separated or shrunken faces of the spokes, with the offset portions 17 between the inner ends of the spokes and the sleeve 12, as illustrated in Fig. 1.

As many of the tightener devices may be employed as required. When relatively slight looseness develops a limited number only of the fastening devices will be necessary, but where greater looseness develops, a greater number may be required.

The fasteners will be manufactured in various sizes to correspond to the sizes of the spokes, and of varying thickness to adapt them to the degree of looseness developed.

The preferred embodiment of the invention is disclosed in the drawings and set forth in the specification, but it will be understood that modifications within the scope of the claimed invention may be made in the construction without departing from the principle of the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is:—

As an article of manufacture, a fastening plate for wheel spokes comprising a body portion having one knife edge and a lateral offset at one end, and adapted to be forced between the converging portions of the spokes of a wheel with the offset engaging the hub sleeve thereof.

In testimony whereof, I affix my signature hereto.

LAWRENCE J. WILSON.