

No. 832,229.

PATENTED OCT. 2, 1906.

H. A. BELCHER.
AXLE SPINDLE.

APPLICATION FILED JULY 3, 1905.

FIG. 1

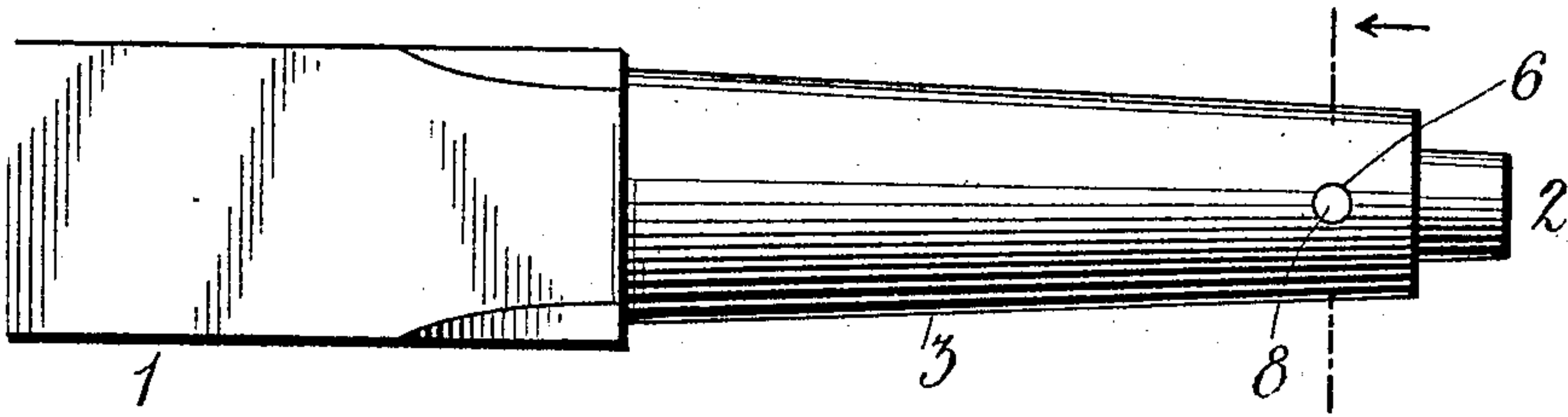


FIG. 2

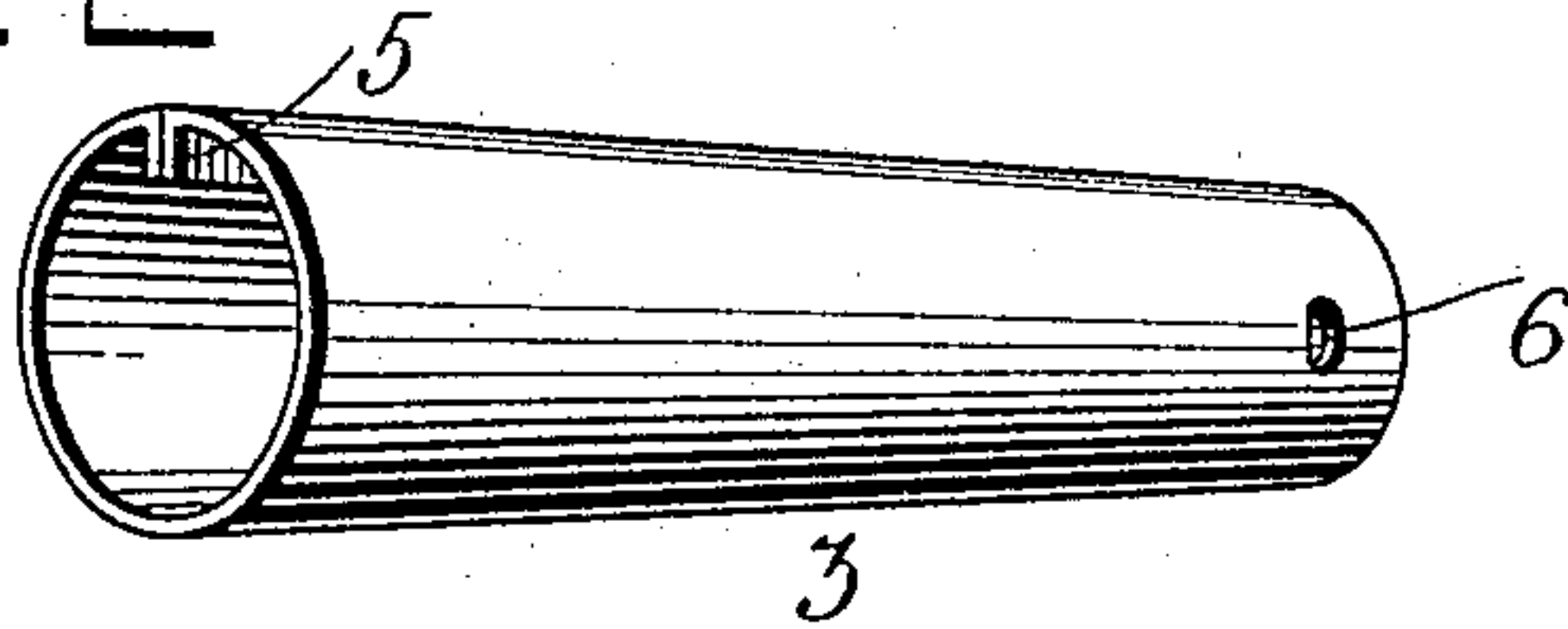


FIG. 3

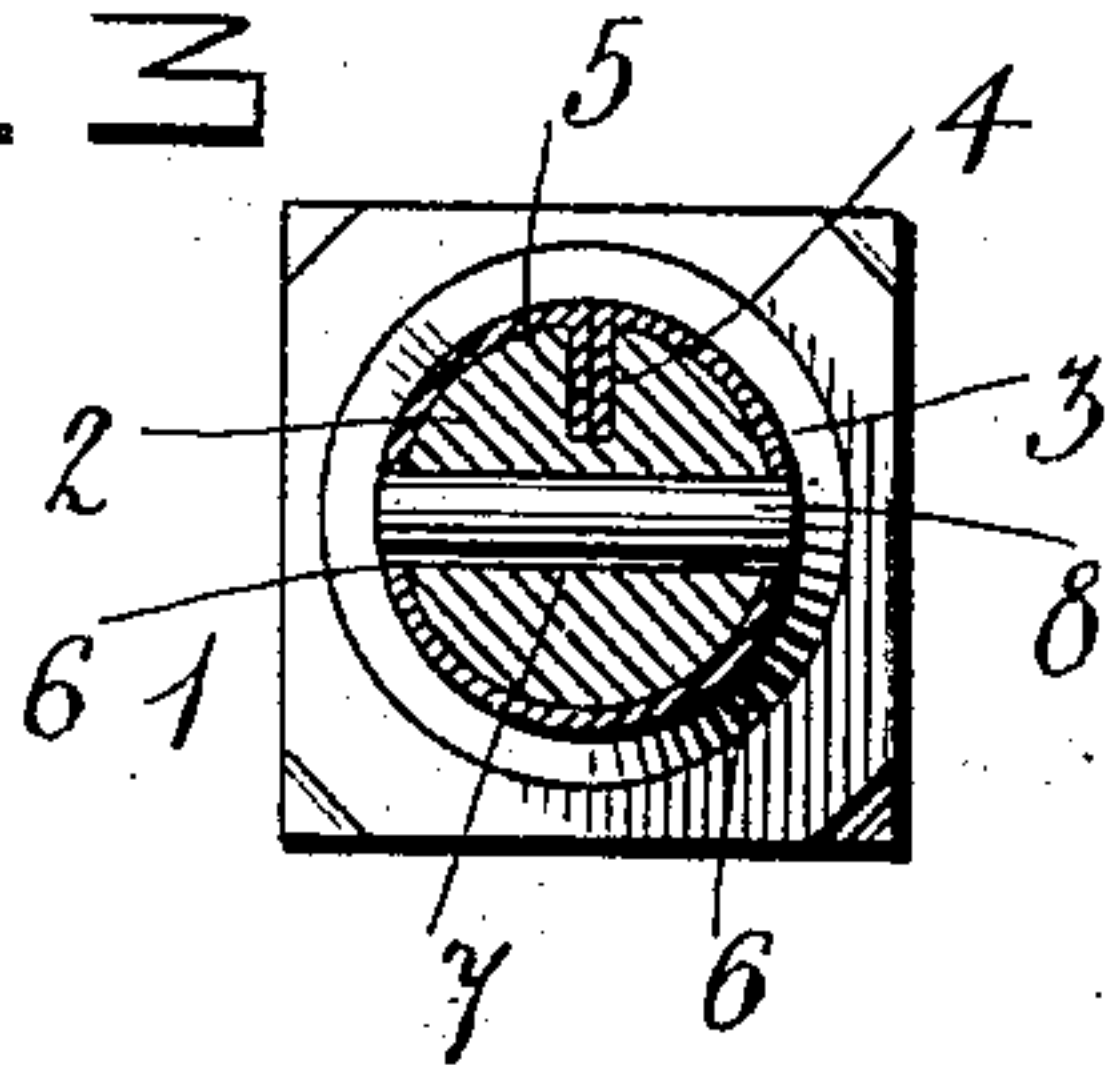
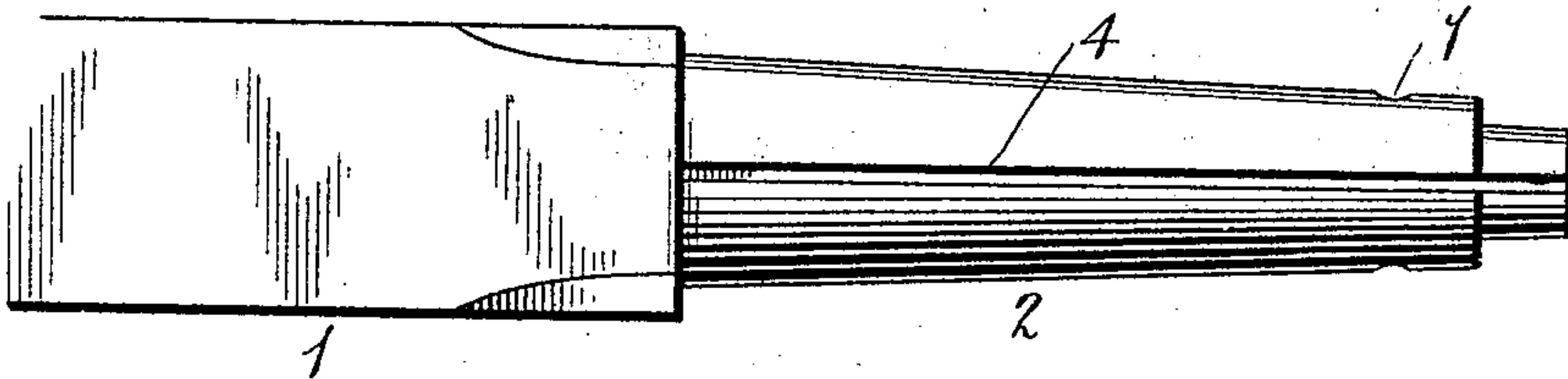


FIG. 4



Witnesses
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UNITED STATES PATENT OFFICE.

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AXLE-SPINDLE.

No. 832,229.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed July 3, 1905. Serial No. 268,137.

To all whom it may concern:

Be it known that I, HENRY ALBERT BELCHER, a citizen of the United States, residing at Marion, in the county of Cassia and State of Idaho, have invented certain new and useful Improvements in Axle-Spindles; and I do 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.

This invention relates to improvements in axle-spindles.

The object of the invention is to provide a spindle for vehicle-axles having means applied thereto whereby the same will be prevented from being worn, thus saving the expense of providing new spindles.

A further object is to provide a simple and efficient attachment for axle-spindles which may be readily removed when worn and replaced by another, means being provided to prevent the turning of the attachment upon the spindle and means whereby the same is prevented from being casually removed therefrom.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of a spindle and a portion of the axle to which the same is attached, showing the application of the invention thereto. Fig. 2 is a perspective view of the attachment removed from the spindle. Fig. 3 is a cross-sectional view through the axle-spindle, showing the attachment applied thereto; and Fig. 4 is a side view of the axle-spindle with the attachment removed.

Referring more particularly to the drawings, 1 denotes an axle, 2 denotes the spindle, and 3 denotes a wear-sleeve which is formed of sheet metal of equal thickness from end to end adapted to be slipped upon the spindle 2 and to enter the box of the wheel, thus saving the wear upon the spindle.

The spindle 2 is provided on one side with a longitudinally-disposed groove or channel 4, and the sleeve 3 is provided with an inwardly-projecting rib or flange 5, said rib or flange being preferably formed by bending the meeting edges of the sleeve inwardly and

securing the same together in any suitable manner. When the sleeve 3 is slipped upon the spindle 2, the rib or flange 5 is engaged with the groove 4, thereby preventing the sleeve from turning upon the spindle when the hub revolves upon the same. In order to prevent the sleeve 3 from being casually removed from the spindle 2 when the wheel is taken off, the sleeve is provided with diametrically-arranged apertures 6, which are adapted to aline with an aperture 7, formed in the spindle, and through said alined apertures is adapted to be inserted a locking-pin 8, the opposite ends of which are adapted to lie flush with the surface of the sleeve, thus preventing the casual removal of the same from the spindle.

By providing an attachment of this character for the spindles of vehicle-axles the latter will be prevented from becoming worn, thus saving the expense of frequently replacing the same. The sleeves when worn may be easily slipped off the spindles and replaced by new sleeves at a comparatively small expense.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A device of the character described comprising an axle, a spindle therewith having a longitudinal groove therein extending the entire length of the same, said groove being also extended into the reduced or nut end of the spindle, said spindle having near its outer end an opening which extends transversely through the same, a sleeve having longitudinally-bent edges to form interior contacting flanges secured together, said sleeve being provided with diametrically-opposite openings near its outer end to register with the opening of the spindle, said flanges serving to be slidably mounted in the groove of the spindle by means of the grooved reduced end,

and a straight pin loosely and detachably mounted in the openings of the sleeve and the opening of the spindle, said pin having its ends constructed to conform to the configuration of the periphery of the sleeve, substantially as specified.

In testimony whereof I have hereunto set

my hand in presence of two subscribing witnesses.

HENRY ALBERT BELCHER.

Witnesses:

B. P. HOWELLS,
JOSIE HOWELLS.