

(No Model.)

N. HARRIS.
AXLE COLLAR.

No. 451,970.

Patented May 12, 1891.

Fig. 1.

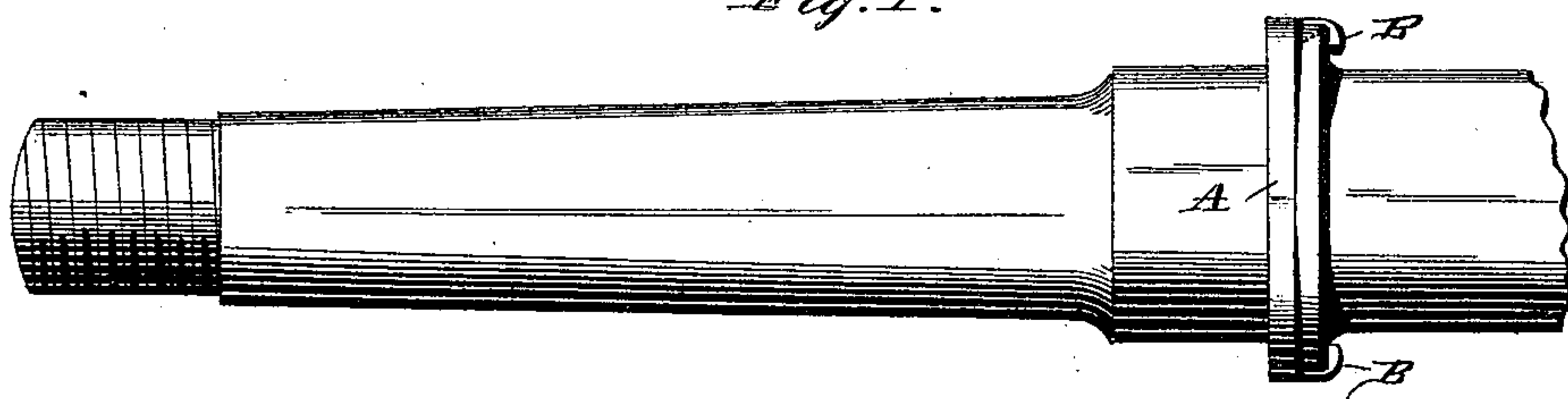


Fig. 2.

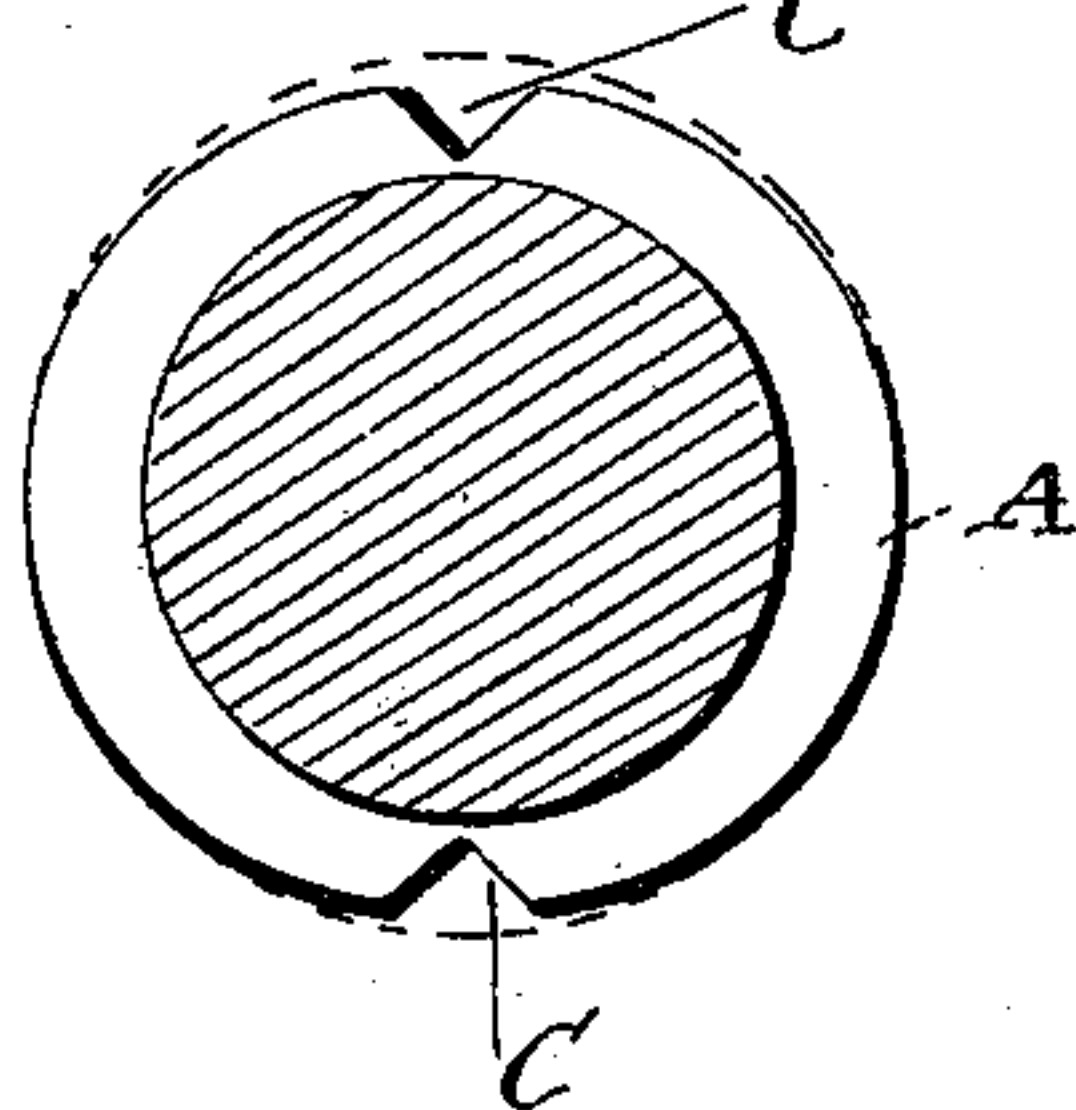
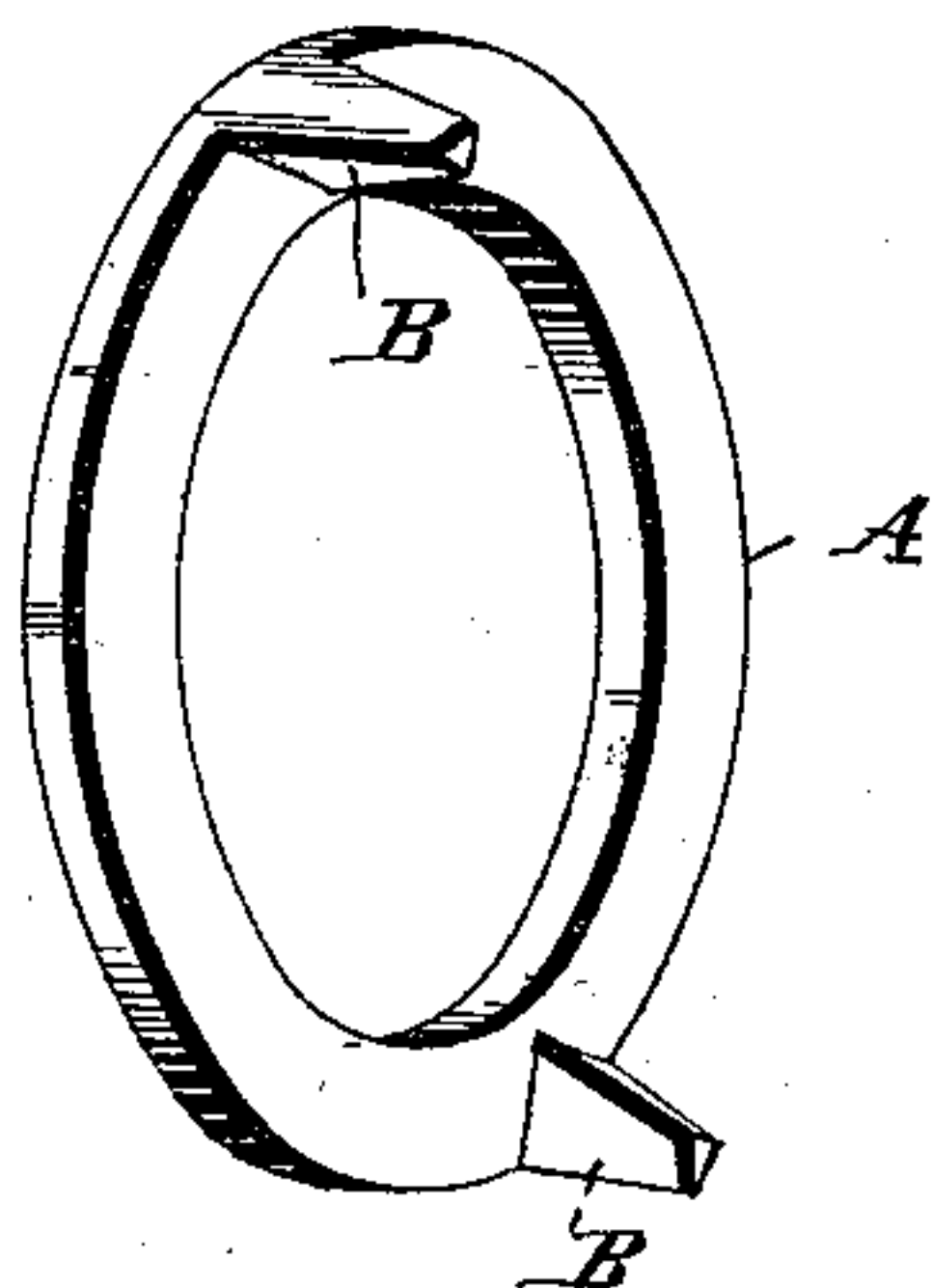


Fig. 3.



Witnesses:
C. H. Raeder
Thomas E. Durpin

Inventor
Noah Harris
by James Shueh
Attorney

UNITED STATES PATENT OFFICE.

NOAH HARRIS, OF INDIANAPOLIS, INDIANA.

AXLE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 451,970, dated May 12, 1891.

Application filed February 19, 1891. Serial No. 382,058. (No model.)

To all whom it may concern:

Be it known that I, NOAH HARRIS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Axle-Collars; 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.

My invention relates to improvements in axle-collars, designed to be attached to the collar-flange of an axle to compensate for the wear thereof caused by frictional contact with the wheel-hub; and the novelty will be fully understood from the following description and claims, when taken in connection with the accompanying drawings, in which—

Figure 1 is a longitudinal elevation of a wheel-axle, illustrating my improved compensating collar in position. Fig. 2 is a transverse section of the same, illustrating the notches which are cut in the collar-flange to receive the attaching-lugs of my improved device. Fig. 3 is a perspective view of my improved compensating collar.

It is well known that the collar-flange of an axle after being sometime in use becomes worn by frictional contact with the inner end of the wheel-hub or boxing until it assumes a beveled shape on the side subjected to friction, and also becomes worn directly on its top and bottom, thus changing its configuration from a circle to an oval and ceases to fill the box, permitting the wheel to play or rock on the axle. This, as is obvious, subjects the wheel, and in fact the entire vehicle, to strain, and thus greatly impairs their usefulness. To remedy these evils I have provided a false or compensating collar, which is placed on the axle and attached directly to the collar-flange thereof, as will be presently described.

Referring by letter to the said drawings, A indicates my improved false or compensating axle collar or shoulder, which is of a size in accordance with the axle-spindle on which it is to be employed, and formed integral with the collar at diametrically-opposite points are two lugs B, which extend laterally therefrom and are of a length to enable them to be bent over and upon the back of the axle-collar flange. These lugs B are preferably of a triangular form in cross-section, and are tapered

toward their free end, as better shown in Fig. 3; but it is obvious that they may be of any suitable form, and it is furthermore obvious that if desired only one lug might be employed; but I prefer to employ two, as illustrated.

In order to provide for the application or attachment of my improved compensating collar or shoulder, I take a suitable die-plate or other suitable implement and cut away the beveled side of the original axle flange or collar, and form notches, as C, in the periphery of said flange, as better shown in Fig. 2 of the drawings, which notches are preferably of a triangular or V-shaped form, and are situated at diametrically-opposite points to conform to the situation of the lugs upon the supplementary collar or shoulder.

In applying my improved device the collar or shoulder A is placed on the axle-spindle and is moved up against the side of the flange or collar thereon, so that the lugs B take through the notches in said flange, after which the said lugs are bent down upon the inside of the flange and the attachment is effected and the operation completed.

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

1. An axle collar or washer for the purpose described, comprising a ring or collar having a lug formed integral therewith and extending laterally therefrom, said lug being of a triangular form in cross-section and tapered toward its free end, substantially as specified.

2. The combination, with an axle-spindle having a flange or collar provided with a notch in its periphery, of a ring or washer having a laterally-extending lug formed integral therewith and tapering toward its free end, said lug being of a form in cross-section to be seated in the notch of the collar-flange and of a length to enable it to be bent over and upon the back of said collar-flange, whereby a positive attachment is effected, substantially as and for the purpose described.

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

NOAH HARRIS.

Witnesses:

JAMES M. MANN,
JOHN C. ESTEL,