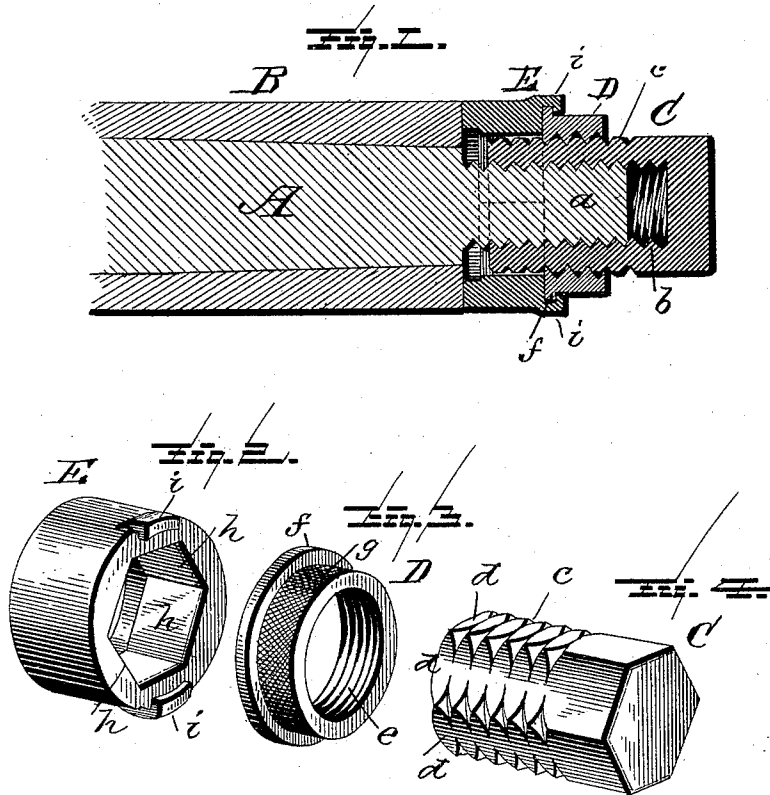


(No. Model.)

I. SHARAF.  
NUT FOR CARRIAGE AXLES.

No. 443,117.

Patented Dec. 23, 1890.



Witnesses

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# UNITED STATES PATENT OFFICE.

ISRAEL SHARAF, OF LIVERMORE FALLS, MAINE.

## NUT FOR CARRIAGE-AXLES.

SPECIFICATION forming part of Letters Patent No. 443,117, dated December 23, 1890.

Application filed November 5, 1890. Serial No. 370,414. (No model.)

*To all whom it may concern:*

Be it known that I, ISRAEL SHARAF, a citizen of the United States, residing at Livermore Falls, in the county of Androscoggin and State of Maine, have invented certain new and useful Improvements in Nuts for Carriage-Axles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

Figure 1 of the drawings is a longitudinal section of a vehicle-axle box and spindle, showing the application of my invention thereto; Figs. 2, 3, and 4, detail views in perspective of the three parts composing the nut or hub attaching device which constitutes my invention.

The present invention has for its object to provide a simple and effective means for taking up the wear of vehicle-axle boxes to prevent the box from moving longitudinally upon the spindle; and it consists in the details of construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the spindle, and B the axle-box, both of which are of the usual construction, and the former having the usual screw-threaded shank *a*.

The nut consists of three sections C D E, the former having interior screw-threads, as shown at *b*, to engage with the exterior screw-threads of the shank *a*, and has exterior screw-threads *c*, and is polygonal-sided, as shown at *d*.

The section D has interior screw-threads *e*, and upon its exterior has a circumferential flange *f*, and has a milled exterior surface, as shown at *g*, to facilitate turning it, the screw-threads of section D engaging with the screw-threads *c* upon the exterior of section C.

The section E has polygonal sides *h* upon its interior, to correspond with those upon

the exterior of the section C, hereinbefore described, so that when they engage with each other, as shown in Fig. 1, they will be prevented from turning upon each other.

The section E has lugs *i*, which embrace the flange *f* on the section D so that they will be connected together and at the same time admit of the latter-mentioned section turning.

In taking up the wear of the axle-box the section D is turned upon the screw-threaded exterior of the section C, which will traverse the same and carry with it the section E to force it against the end of the axle-box.

The polygonal-sided exterior of the section C and that of the interior of section E prevents them from turning, but admits of the latter-named section moving longitudinally through the medium of the section D, as before described.

A very simple and effective device is provided for taking up the wear of the axle-box that can be readily operated to attain the end desired and will effectually perform its office in preventing any longitudinal movement of the axle-box caused by wear.

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

The axle-nut herein described, consisting of the section C, having interior and exterior screw-threads and polygonal sides, the section D, having interior screw-threads and exterior circumferential flange, and the section E, having interior polygonal sides and lugs to embrace the flange of section D, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ISRAEL SHARAF.

Witnesses:

F. A. MILLETT,  
E. EDGECOMB.