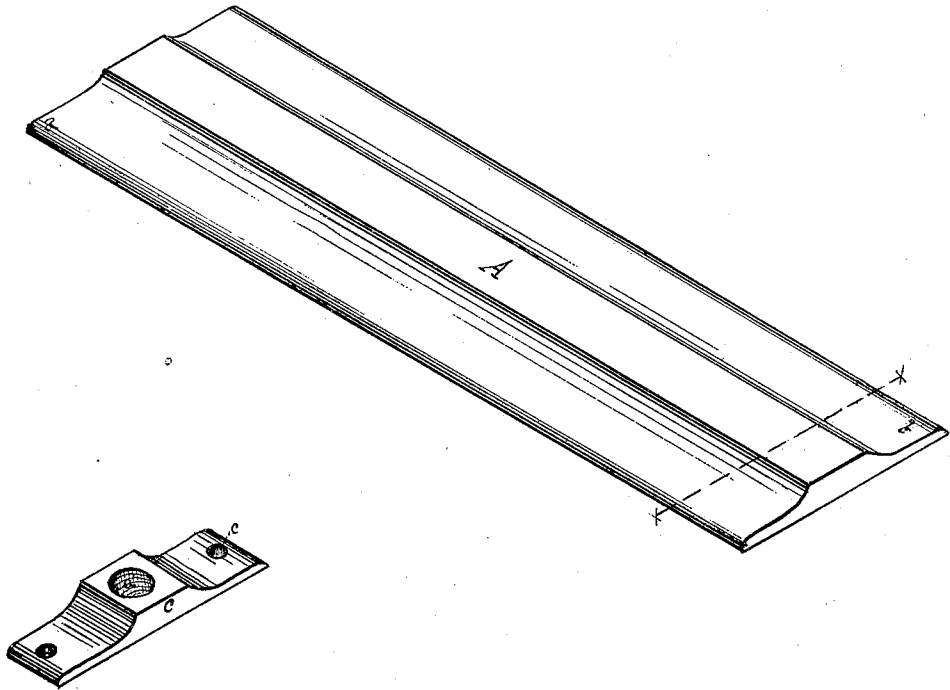


H. W. Oliver Jr.,

Roller Bar for Mill Blanks.

No. 111,772.

Patented Feb. 14, 1871.



Witnesses:

R. C. Wrenshall

Mos. B. Kern

Inventor:

*Henry W. Oliver Jr.
by Bakewell & Knolly
his Atty's.*

UNITED STATES PATENT OFFICE.

HENRY W. OLIVER, JR., OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN ROLLED BARS FOR NUT-BLANKS.

Specification forming part of Letters Patent No. **111,772**, dated February 14, 1871.

To all whom it may concern:

Be it known that I, HENRY W. OLIVER, JR., of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Box-Nuts; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a rolled bar from which my improved box-nut is made, and Fig. 2 is a like view of a finished nut.

Like letters of reference indicate like parts in each.

Box-nuts used in the construction of wagon-beds, &c., have heretofore been made by forging, which method of manufacture involves a great loss of time and labor, and the nuts so produced have a very poor finish. By my improvement I will, from flat bar-iron, form nut-blanks of a very superior finish, and at a much cheaper rate than they can be produced by forging.

To enable others skilled in the art to make my invention, I will describe its construction.

In a pair of cylindrical grooved rolls I will turn flat bar-iron, a bar, *a*, having a raised flat surface on its upper face, extending longitudinally from end to end of the bar, and with both sides tapering or thinning down toward each edge *b*, as shown in Fig. 1. The bar thus made is then sawed or otherwise cut

transversely, in the direction of the dotted line in Fig. 1, into as many blanks as it will furnish of the desired width for the nut-blank. These blanks are then punched through the raised portion, midway from either end, to form the eye *d* of the nut, which may be tapped with a screw-thread, as desired. Smaller holes are also punched near each end of the nut-blanks, as at *e*. By this operation a long bar of iron being rolled of suitable width and shape the box-nut blanks are obtained very rapidly, and of superior quality and finish, by merely cutting up the bar into short pieces.

I do not confine myself to the exact shape of bar or blank shown, as the form of the central or ribbed part of the bar or blank may be varied somewhat.

These box-nuts are often used as washers, in which case they need not necessarily be tapped.

What I claim as my invention, and desire to secure by Letters Patent, is—

The rolled nut-blank bar made substantially as described, as a new article of manufacture.

In testimony whereof I, the said HENRY W. OLIVER, Jr., have hereunto set my hand.

HENRY W. OLIVER, JR.

Witnesses:

JOHN GLENN,

THOS. B. KERR.