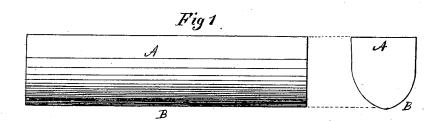
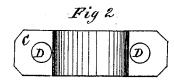
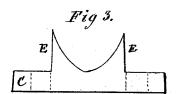
S. ROWELL. Carriage Axle.

No. 109,842.

Patented Dec. 6, 1870.







Witnesses.

Morfelleaman Daniel Breed Inventor. Samuel Rowell Byhis Alty'f Dennis Ju

United States Patent Office.

SAMUEL ROWELL, OF AMESBURY, MASSACHUSETTS.

Letters Patent No. 109,842, dated December 6, 1870.

IMPROVEMENT IN CARRIAGE-AXLES AND AXLE-YOKES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Samuel Rowell, of Amesbury, Essex county, in the State of Massachusetts, have invented certain new and useful Improvements in Iron for Carriage-Axles and Axle-Yokes; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawing forming part of this specification.

The nature or essence of my invention consists in a new manufacture of iron for carriage-axles, rolled with one side or one edge rounded, and in an axleyoke, provided with wings or lugs formed to fit the rounded side or edge of the axle.

In the accompanying drawing-

Figure 1 is an elevation and section of my improved axle-iron.

Figures 2 and 3 are a plan and elevation of the axleyoke.

In this drawing—

A is a bar of improved axle-iron, with its upper side or top square, and its lower side or edge B rounded, either semicircular or semi-elliptical, as may be preferred, the iron being rolled in that shape by grooving one of the rollers, so as to give the iron the form desired.

To use with my improved axle-iron, I make an

axle-yoke, such as is shown in figs. 2 and 3 of the drawing, in which C is the bar, perforated near each end with holes D D, for the ends of the clip to pass through, which fastens the yoke to the axle.

Upon the bar C I make two lugs or flanges, E E, and curve their inner sides to fit the curvature of my improved axle-iron, as shown in the drawing, so that when the yoke is applied to the axle, it will fit snug and tight, so as to hold the axle firmly to its stock.

My invention is an important improvement in the construction of carriages, as it enables me to make a better, more perfect, and cheaper finish than I could do without it.

Having described my improvement,

I claim—

1. The above-described axle-iron, rolled solid, with one flat and one rounded side, substantially as described, as a new article of manufacture.

2. In combination with solid axle-iron, rolled with one flat and one rounded side, the axle-yoke C, provided with lugs or flanges E, fitted to the rounded side of the axle-iron.

SAMUEL ROWELL.

Witnesses:

STEPHEN C. PATTEN, GEORGE TURNER.