

S. J. DENNIS.
Carriage-Axle Irons.

No. 138,795.

Patented May 13, 1873.

Fig. 1.

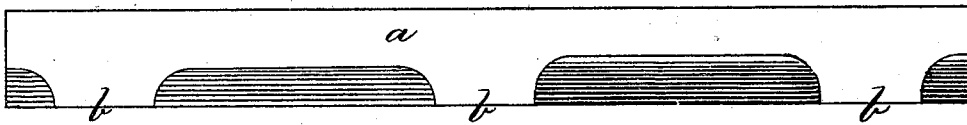


Fig. 2.

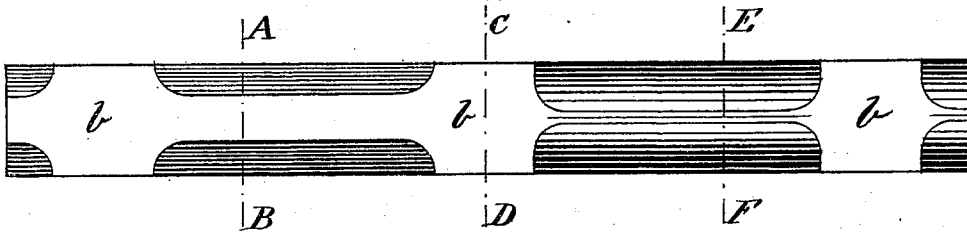


Fig. 3.

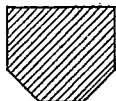


Fig. 4.

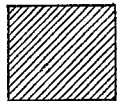
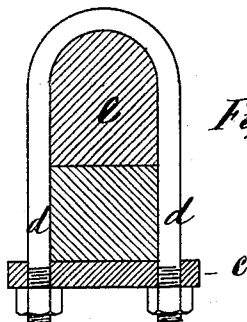


Fig. 5.



Fig. 6.

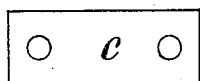


Witnesses:

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UNITED STATES PATENT OFFICE.

S. JAMES DENNIS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN CARRIAGE-AXLE IRON.

Specification forming part of Letters Patent No. **138,795**, dated May 13, 1873; application filed March 1, 1873.

To all whom it may concern:

Be it known that I, SAMUEL JAMES DENNIS, of Boston, Suffolk county, in the State of Massachusetts, have invented an Improved Axle-Iron for Carriages; 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 axle-iron rolled with two of its corners alternately round and square—the parts made square to receive the clasps which fasten the wooden stock to the axle, while the space or portion between the clasps has two of its corners rounded.

Figure 1 in the accompanying drawing is an elevation of a bar of my improved axle-iron. Fig. 2 is a plan of the under side of the bar. Figs. 3, 4, and 5 are sections of Fig. 2 on the lines A B, C D, and E F. Fig. 6 is a section of the axle *a*, wooden stock *e*, with yoke *d d*; and Fig. 7, flat plate *c* under the axle.

To make my improved axle-iron I make a roller with a groove in it, and make or form the bottom of the groove the reverse of the

side of the bar which has its corners alternately square and rounded, and this groove may be the depth of half the thickness of the bar. I then make a groove in another roller half the thickness of the bar in depth; then, when a bar of iron has been rolled nearly or quite as small as it is required to be where the corners are not rounded, it is run through the rollers or the groove in the rollers, which rounds two of the corners on such parts of the bar as it is desirable to have them rounded, and leaves the other parts square, thus perfecting the iron ready for sale, or for the making of axles for carriages.

In using my improved iron to make carriage-axles, it may be welded to pivots previously prepared, or it may be cut so long that the ends may be rounded under a trip-hammer or swage to form pivots for the wheels.

I claim—

The new article of manufacture described, to wit, axle-iron rolled with two of its corners alternately round and square, as described.

Witnesses: S. JAMES DENNIS.

CHAS. H. BROWN,
W. B. DENNIS.