(No Model.)

J. F. DAVIDSON.

MANUFACTURE OF THIMBLE SKEINS FOR AXLES.

No. 381,218. Patented Apr. 17, 1888.

Fig. 1.

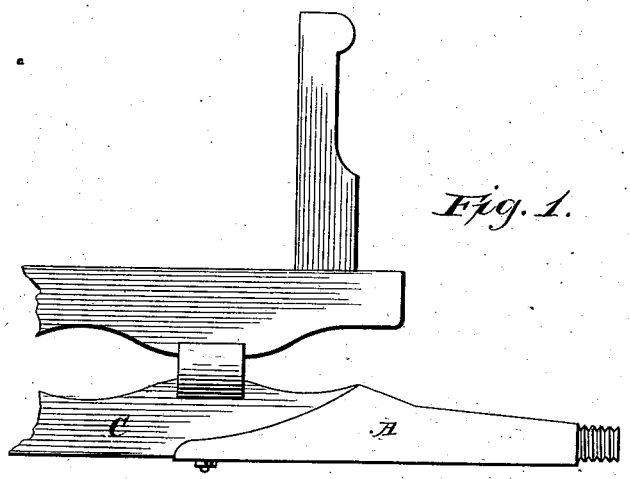


Fig. 2.

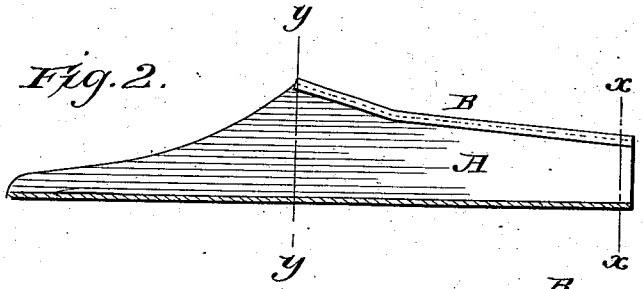


Fig. 3.

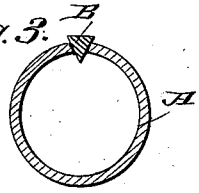


Fig. 4.

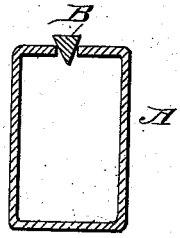


Fig. 5.

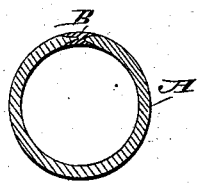
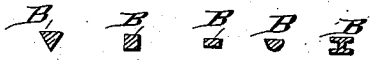


Fig. 6.



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MANUFACTURE OF THIMBLE-SKEINS FOR AXLES.

SPECIFICATION forming part of Letters Patent No. 381,218, dated April 17, 1888.

Application filed February 4, 1888. Serial No. 262,998. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. DAVIDSON, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in the Manufacture of Thimble-Skeins for Axles, of which the following is a full, clear, and exact description.

This invention relates to the manufacture of sheet-metal thimble skeins for wagon and other vehicle axles.

Heretofore in the manufacture of sheet-metal axle-skeins for vehicles the skein was made from a single piece of sheet metal or blank, the longitudinal edges of which were drawn out, the blank afterward suitably bent, and said edges overlapped and subsequently welded together. This often resulted in an imperfect weld, either internally or externally, of the skein. If butt-welded, similar results were produced. My invention obviates this defect, and in every instance produces a solid thimble. To this end I bend up or over the sheet-metal skein-blank until the adjacent longitudinal marginal portions meet, or nearly so, and apply to said edges or marginal portions a separate strip of metal of any suitable shape in transverse section, and submit these two pieces, which united form the skein, to a welding heat, and make a double seam, the added strip of metal connecting the skein-blank and forming a solid thimble.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 represents an axle and wagon in part, with my improved skein applied to the axle. Fig. 2 is a longitudinal section of the skein with the metal strip in position before said two pieces are welded or connected together. Fig. 3 is a transverse section upon the line *x x* in Fig. 2, and Fig. 4 a transverse section upon the line *y y* in Fig. 2. These views (Figs. 3 and 4) mainly show a varying shape for the skein at different points in its length with the uniting-strip in position before welding, the shape of the skein in transverse section gradually merging from the round figure shown in Fig. 3 for the outer end of the skein to that shown in Fig. 4, and assuming an approximately oval shape in between these two points, as usual in other skeins; but my invention is not restricted to any particular shape for the skein in transverse section. Fig. 5 is a transverse sectional view near the outer end of the skein after the same has been closed and a perfect double seam produced by the union of the added metal strip with the longitudinal margins of the bent skein-blank, and Fig. 6 represents views in transverse section of said metal strip in certain of the many different shapes in which it may be made.

A is the sheet or wrought metal skein-blank or body bent to shape to fit the axle C, for which it is intended; and B is the metal strip placed over or between the longitudinal adjacent marginal portions of the bent skein-blank. These longitudinal marginal portions or edges do not require to be drawn out, as they are not united by overlapping one another, but are united by the separate strip B by bringing the pieces A and B to a welding heat and welding them together to make a double seam, substantially as shown in Fig. 5, the connecting or uniting strip B occupying an intermediate position in flattened-out connection with the longitudinal marginal portions of the skein-body on both the inside and outside surfaces of the latter and becoming integral therewith.

In thus manufacturing a sheet or wrought metal thimble-skein both fuel and labor will be economized, and a positive seam, both internal and external, and perfect weld be produced.

The invention is not restricted to any particular shape of skein-blank, nor yet to any particular shape of the uniting-strip of metal for making and closing the longitudinal seam of the skein.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The method, substantially as herein described, of making sheet or wrought metal thimble-skeins, which consists in first bending over the skein-blank until its longitudinal margins nearly meet, and then applying a separate connecting or uniting strip of metal to the adjacent marginal portions of said

blank, then heating said parts or pieces, and welding the same together to form a close double seam both internally and externally of the skein, as set forth.

2. A sheet or wrought metal thimble-skein composed of a bent metal blank and a separate connecting strip at or between the longitudinal seam of the skein, both welded or united together, substantially as specified.

JOSEPH F. DAVIDSON.

Witnesses:
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