

(31.)

JOHN T. HENRY.

Improvement in Axle Boxes.

No. 122,829.

Patented Jan. 16, 1872.

fig. 1.

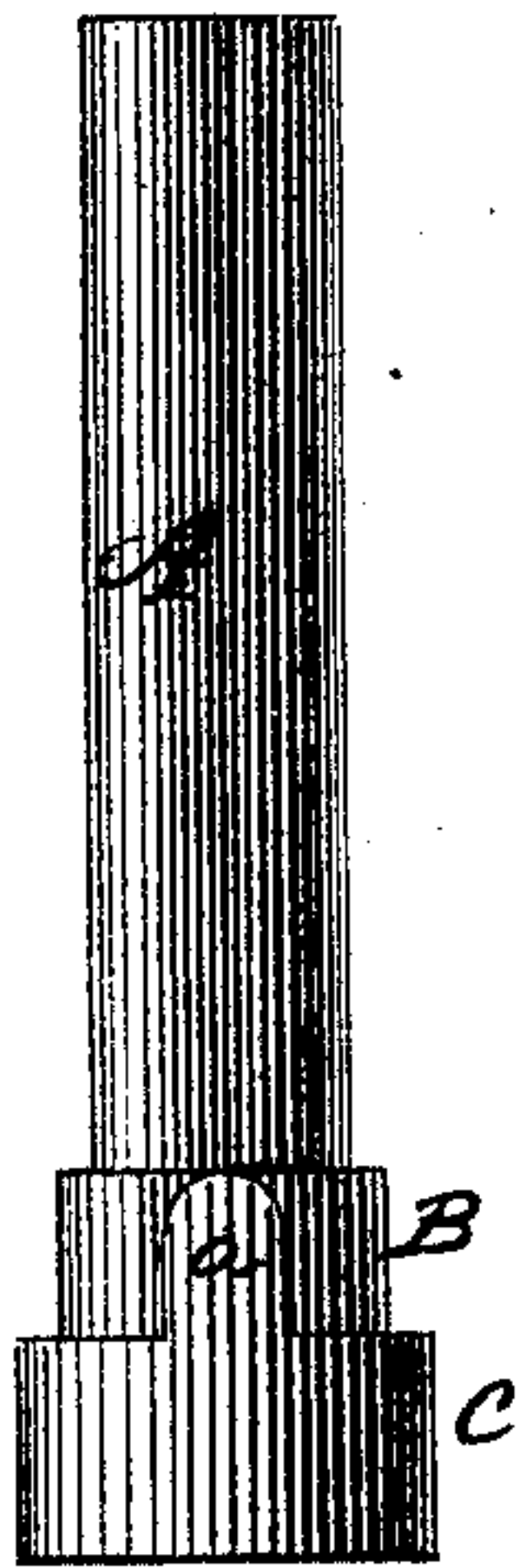


fig. 2.

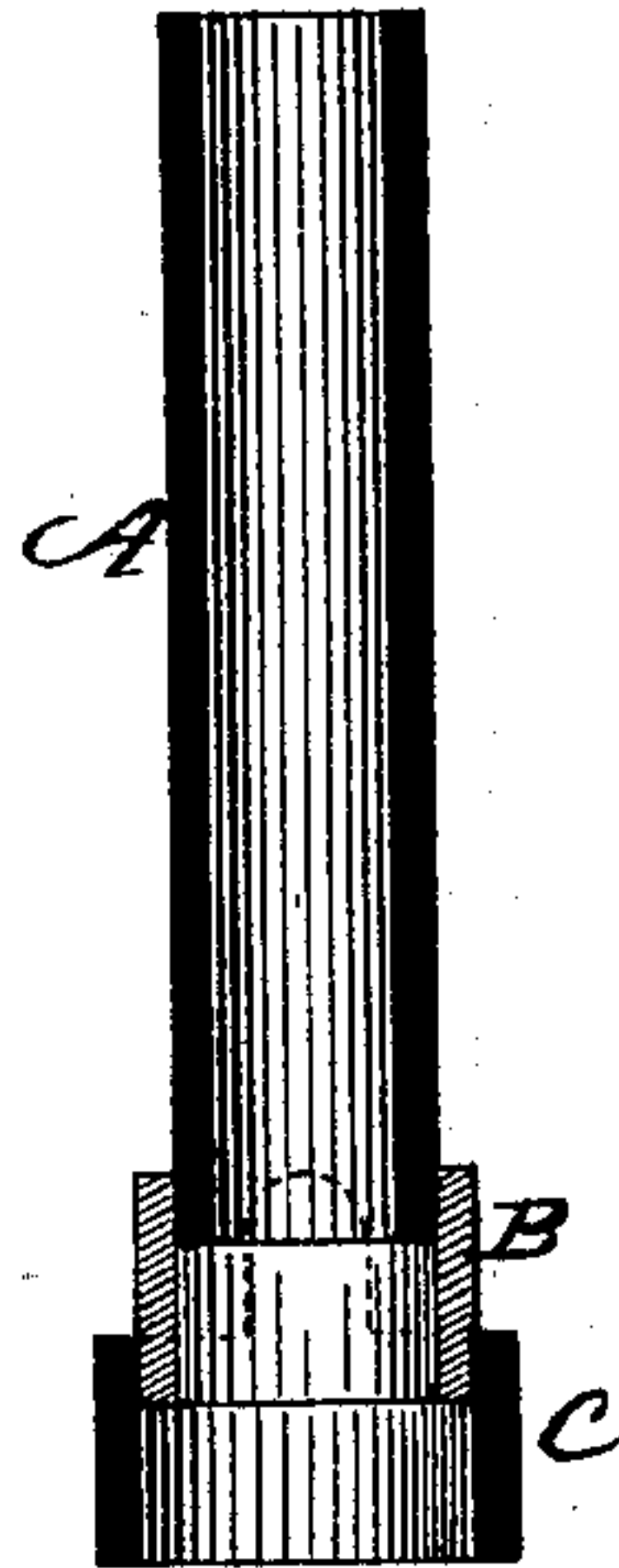


fig. 3.



fig. 4.

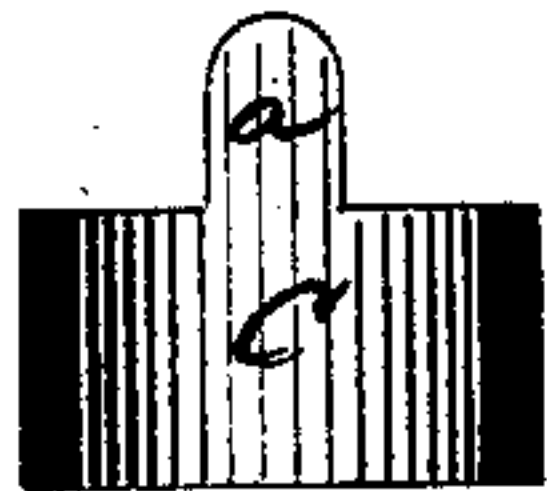


fig. 5.



Witnesses
J. H. Thumway
A. J. Tibbitts

John T. Henry
Inventor
By his Att'y.
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UNITED STATES PATENT OFFICE.

JOHN T. HENRY, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN AXLE-BOXES.

Specification forming part of Letters Patent No. 122,829, dated January 16, 1872.

To all whom it may concern:

Be it known that I, JOHN T. HENRY, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Axle-Boxes; and I do hereby declare the following, when taken in connection with the accompanying drawing, and the letters of reference marked thereon to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents in—

Figure 1, a side view of the box complete; Fig. 2, a vertical central section; and in Figs. 3, 4, and 5, vertical central sections of the parts of which the box is composed.

This invention relates to an improvement in the article of manufacture known to the trade as axle-boxes—that is, the box or tube which is fitted into the hub of a carriage-wheel to fit the axle-arm. These boxes are usually made of cast metal, and are therefore necessarily of a considerably larger external diameter than the axle-arm, in order to give the required strength to the box. In very light carriages this necessitates a larger hub than should be to maintain perfect symmetry in all the parts. To overcome this difficulty various devices have been resorted to, in order to employ a wrought-metal box. The neck, or that portion of the box which lies upon the inner end of the hub, has been formed from cast metal, and in some manner secured to a wrought-metal tube. This construction does not fully accomplish the desired end which is the object of my in-

vention; and it consists in forming the box of three sections of wrought metal of the size desired, welded together so as to form, practically, a solid entire wrought-metal box.

A is the tube or box proper; B, a second section or first shoulder; C, the third section, which forms a second shoulder; each of these parts shown detached in Figs. 3, 4, and 5. The internal diameter of each successive part corresponds to the external diameter of the previous part. The part C I form with ears *a*, one or more. These three parts I set together as seen in Fig. 2, and subject the parts so set together to a welding heat, and by suitable dies or other device weld these parts together so as to form a complete and solid wrought-metal box, the shoulders of which need be of no greater thickness than the tube itself; hence the box may be produced very light, and so as to accomplish to the fullest extent the object of this invention, and enabling me to make these boxes from common iron tubing.

I do not wish to be understood as broadly claiming the manufacture of a carriage axle-box in different parts secured together, as such is not new; but

I do claim—

As an article of manufacture, the herein-described axle-box, when constructed complete from wrought metal, substantially as set forth.
JNO. T. HENRY.

Witnesses:

A. J. TIBBITS,
J. H. SHUMWAY.

(31)