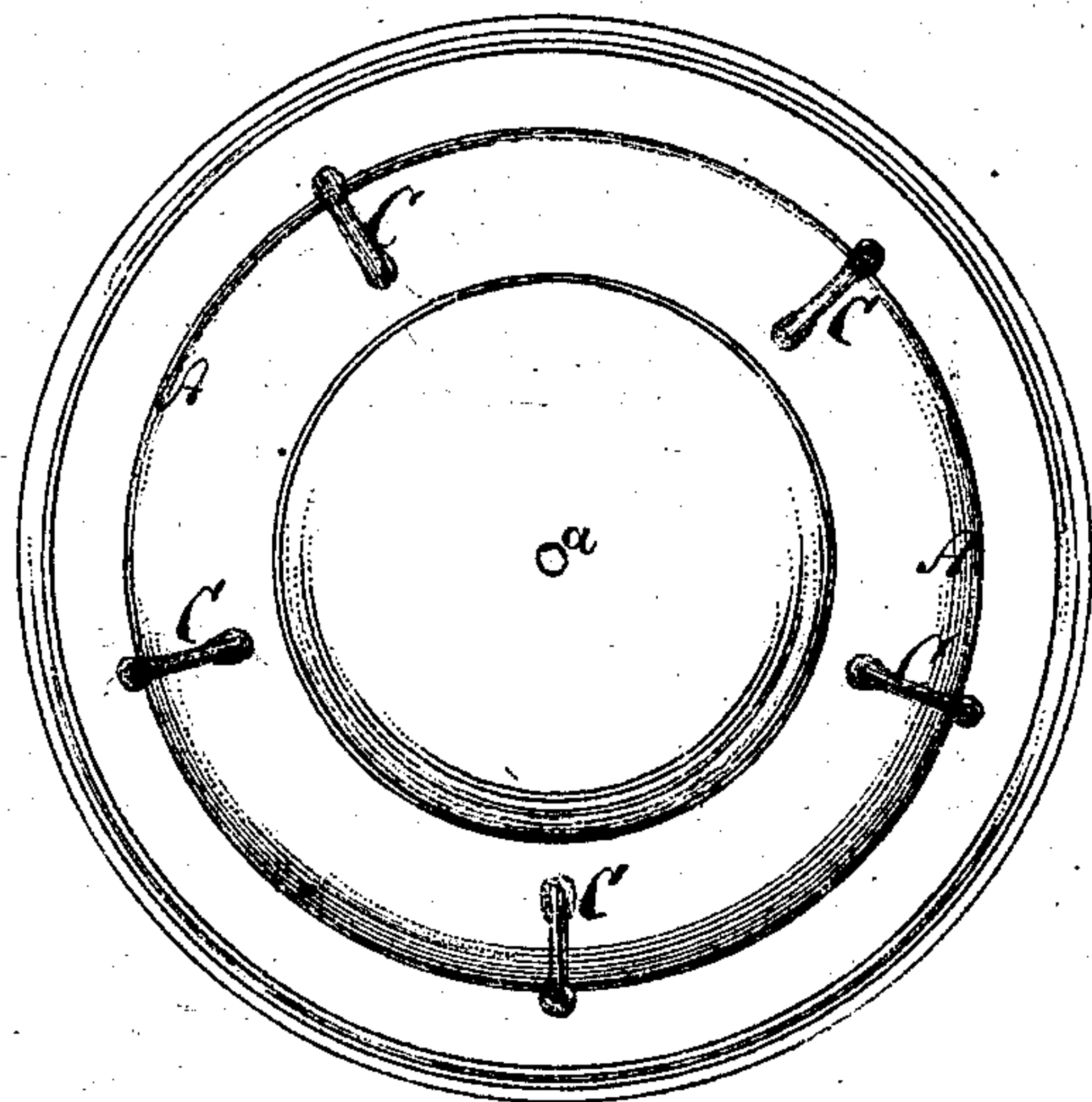
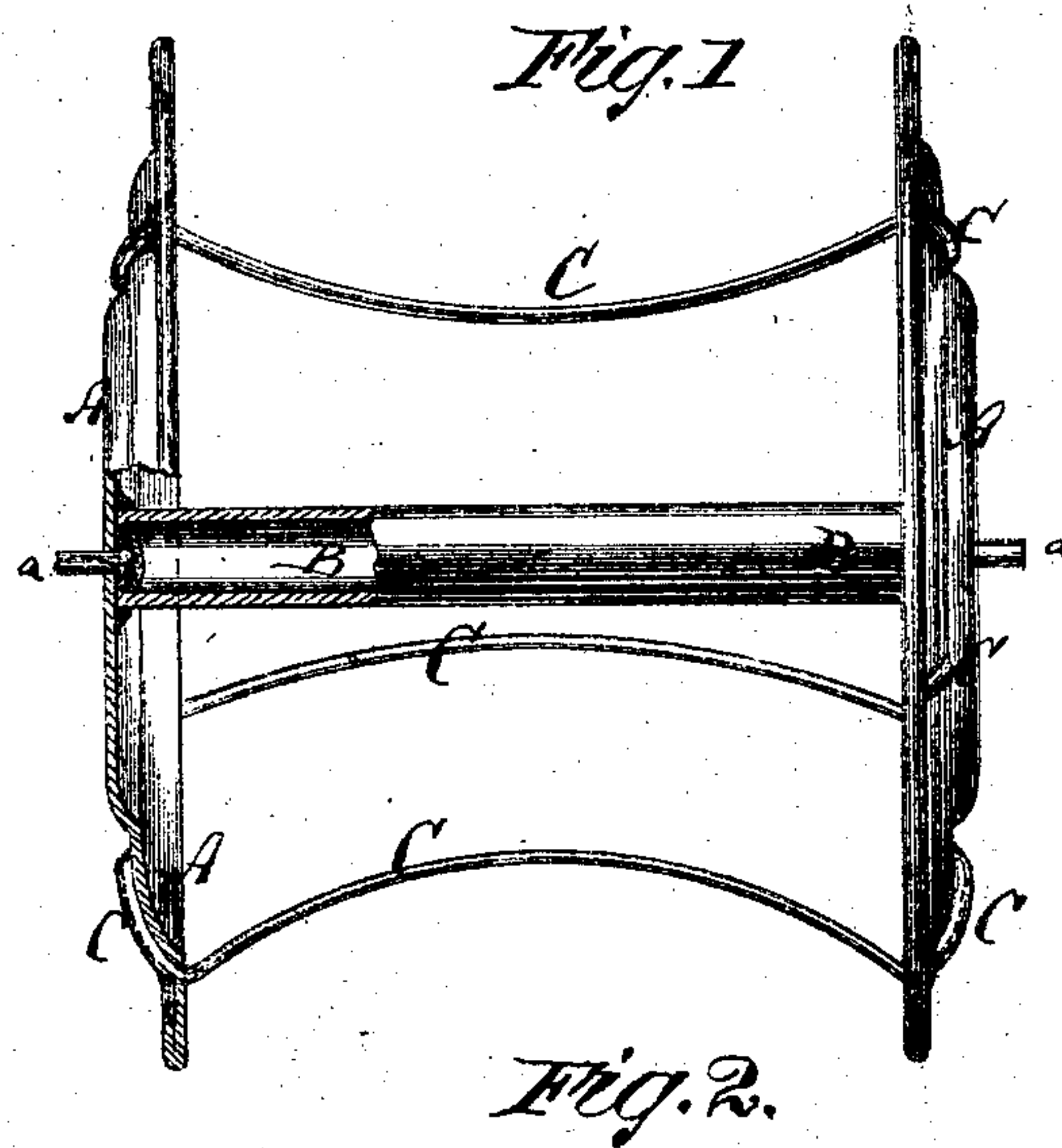


JOHN N. STEARNS.
Improvement in Bobbins.

No. 116,108.

Patented June 20, 1871.



Witnesses:
John Becker
Wm C. C. Smith.

Inventor:
J. N. Stearns.
PER *Munn & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN N. STEARNS, OF NEW YORK, N. Y.

IMPROVEMENT IN BOBBINS.

Specification forming part of Letters Patent No. 116,108, dated June 20, 1871.

To all whom it may concern:

Be it known that I, JOHN N. STEARNS, of New York city, in the county and State of New York, have invented a new and Improved Silk-Barrel or Swift; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a side view, partly in section, of my improved silk-barrel or swift. Fig. 2 is an end view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to make silk-barrels or swifts, which are used for holding skeins of silk while the same is transferred to spools or bobbins, more economically and durable than the wooden barrels now in use for the same purpose. The invention consists in a new construction thereof, as hereinafter fully described and subsequently pointed out in the claim.

A A in the drawing represent the heads of the swift. They are made of sheet metal, of circular or other suitable form. B is the central axle of the same, made also of sheet metal,

tubular, and soldered to the centers of the heads. The projecting gudgeons *a a*, by which the swift is hung in the supporting-frame, are rivets driven through the plates A so that their heads abut against the inner faces of said plates. They are retained in place by solder.

The tube B is applied after the rivets have been secured, and covers their heads, as shown in Fig. 1. C C are the wires or silk-holders. Their ends are fitted through apertures in the plates A and soldered to the outer faces of the same. They may as well be laid over the edges of the plates and then soldered to their outer faces.

By making a metallic swift in the manner specified lightness, durability, and cheapness are all thereby secured.

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

The tubular axle, soldered to the sheet-metal heads A A of a swift, and covering the heads of the rivets *a* which constitute the gudgeons, substantially as herein shown and described.

JNO. N. STEARNS.

Witnesses:

GEO. W. MABEE,
ALEX. F. ROBERTS.