

(No Model.)

J. M. COOMBS.

WAGON AXLE.

No. 288,029.

Patented Nov. 6, 1883.

Fig. 1-

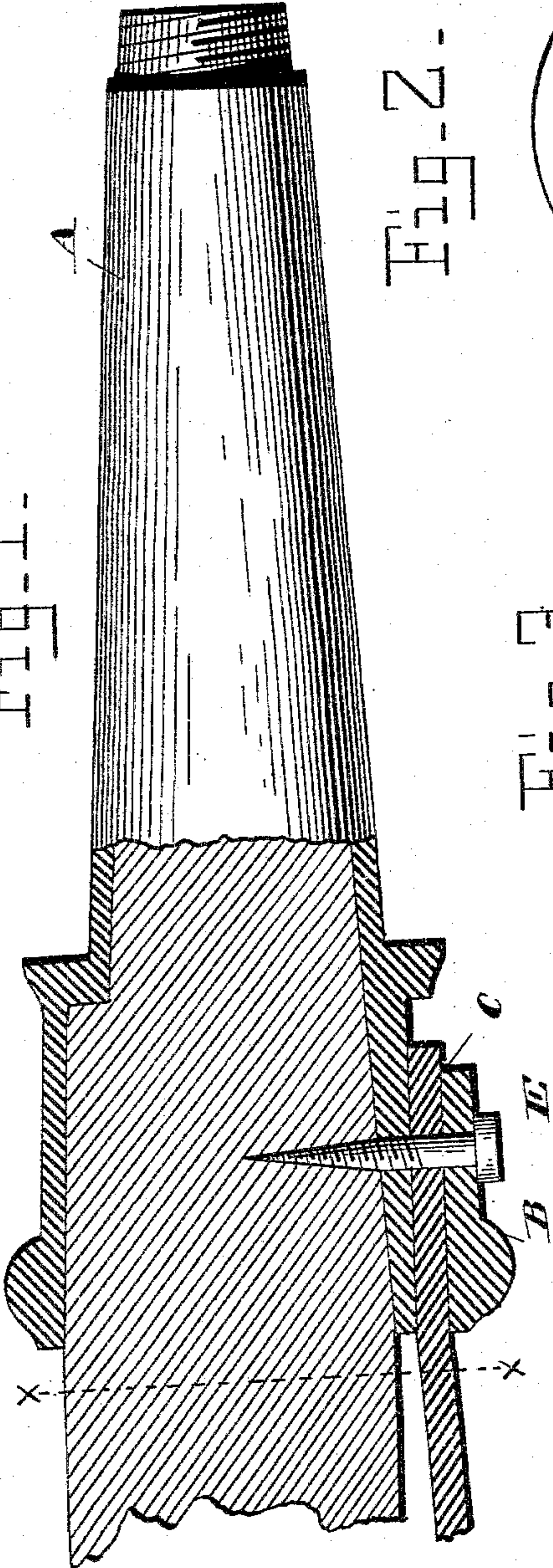


Fig. 2-

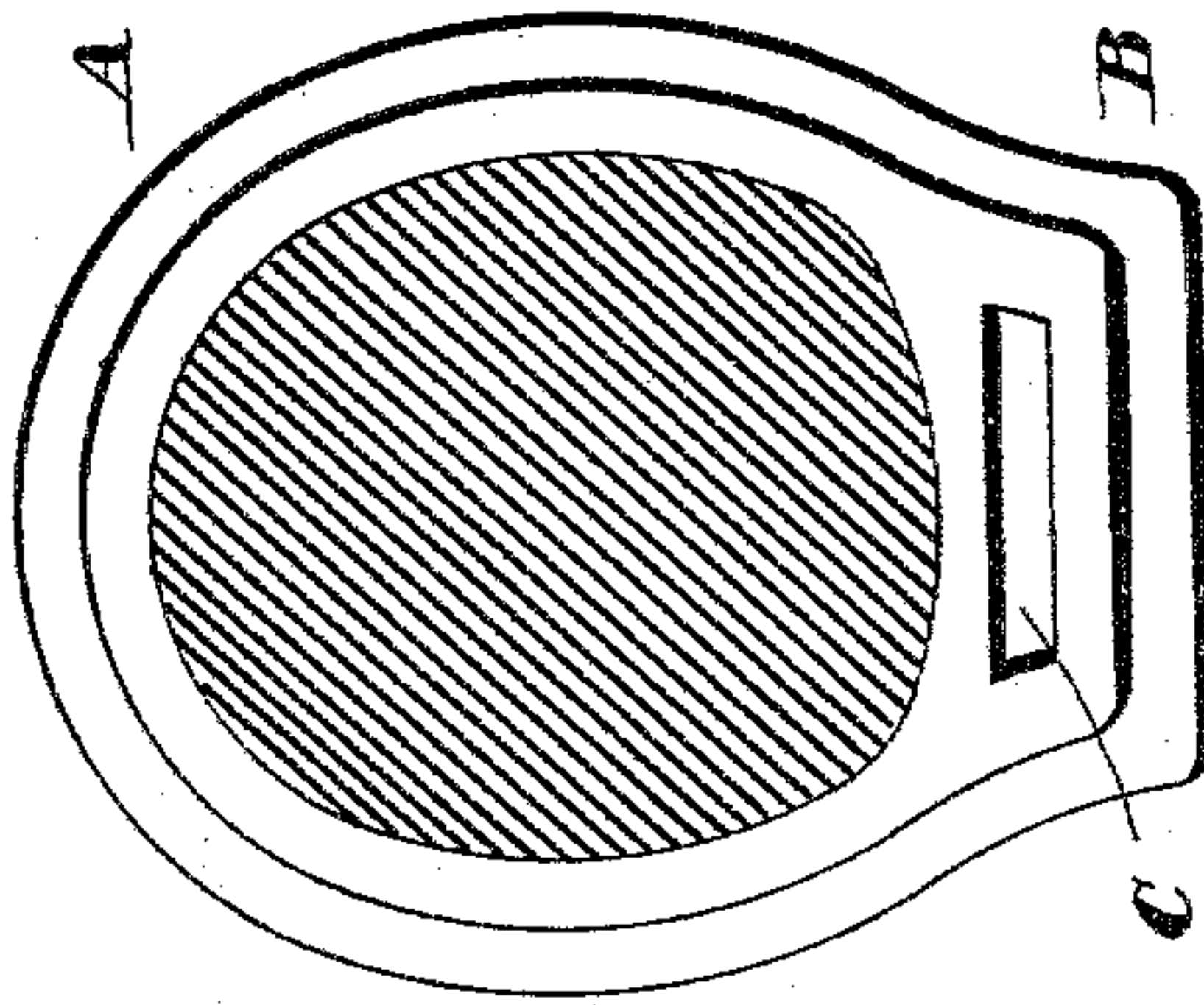
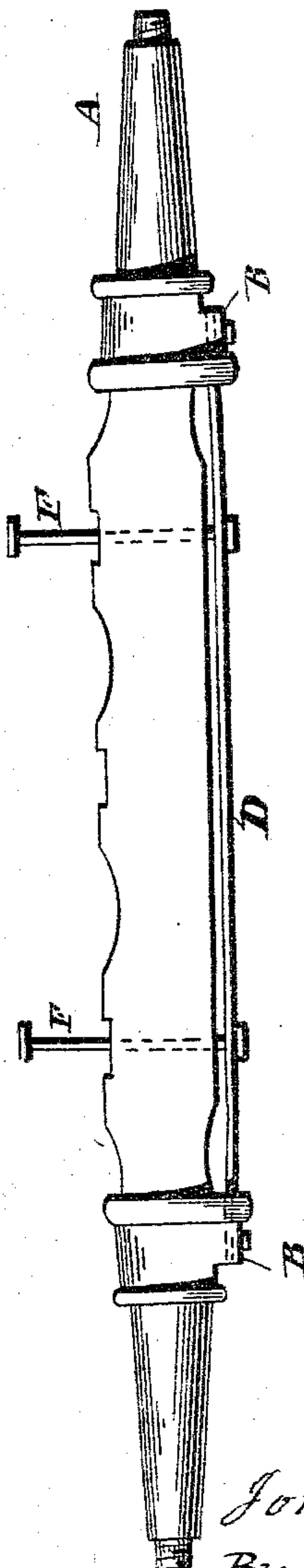


Fig. 3-



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## WAGON-AXLE.

SPECIFICATION forming part of Letters Patent No. 288,029, dated November 6, 1883.

Application filed September 3, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN MARSHALL COOMBS, a citizen of the United States of America, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Thimble-Truss Skeins for Wagon-Axles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain improvements in axle-skeins, and it has for its objects to provide for securing the same to the axle and bracing them to each other when in place, as more fully hereinafter specified. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a view, partly in section and partly in elevation, showing my invention. Fig. 2 represents a cross-section taken on the line *xx* of Fig. 1; and Fig. 3 represents an elevation of an axle, showing my invention applied thereto.

The letter A indicates an axle-skein, which is provided on its lower side, at the inner end, with an enlargement, B, which is slotted or recessed longitudinally, as indicated by the letter C, for the reception of the end of the truss-bar D, which passes under the axle and connects the skeins at each end of the same.

The enlargement and lower wall of the skein are drilled and perforated, as well as the end of the truss-bar, for the passage of a screw, E, which extends up into the axle, as indicated in Fig. 1 of the drawings.

The screw may be gimlet-pointed, as indicated in the drawings, so as to be driven directly into the wood of the axle, or it may be cut short and driven into a suitable hole bored in the axle for its reception. The queen-bolts F are passed through suitable apertures in the truss-bars, so as to bind the same firmly to the axle.

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

The combination, with the axle of the skeins A, having longitudinally-slotted enlargements at their lower sides, of the bent truss-bars D, the through-bolts F, and the screws C, the latter passing through the skein and truss-bar into the body of the axle, whereby the whole are secured together, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN MARSHALL COOMBS.

Witnesses:

WILL A. DIFFENDERFER,  
FREDERICK A. NEWTON.