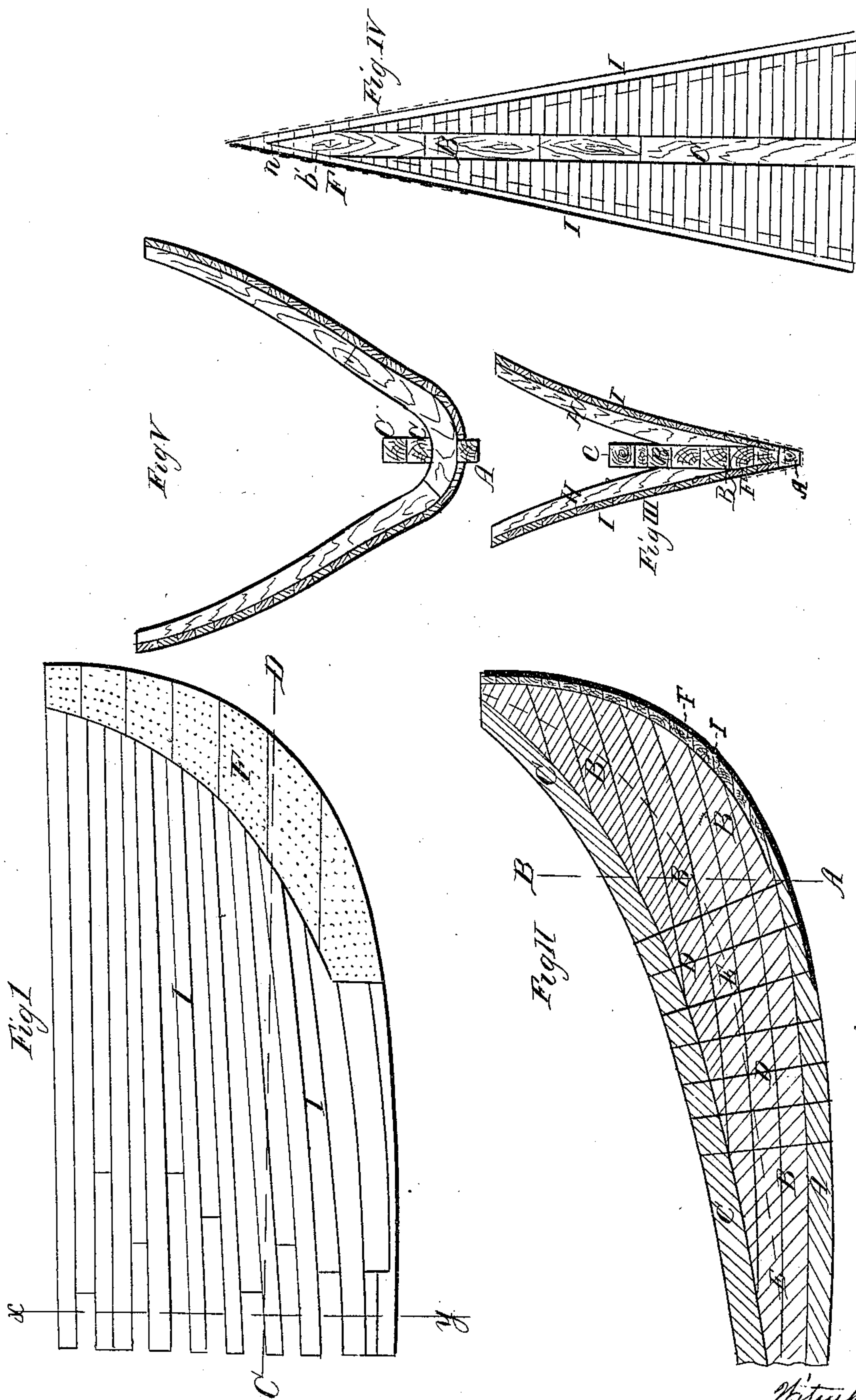


*J. W. Banta.*  
*Ship Building.*  
*No. 26060.* *Patented Nov. 15. 1859*



*Jacob W. Banta*

*Witnesses*  
*H. de F. Furbush*  
*J. M. Whaley*

# UNITED STATES PATENT OFFICE.

JACOB W. BANTA, OF BUFFALO, NEW YORK.

## SHIP-BUILDING.

Specification of Letters Patent No. 26,080, dated November 15, 1859.

*To all whom it may concern:*

Be it known that I, JACOB W. BANTA, of the city of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in the Construction of the Bows of Vessels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters of reference marked thereon, in which—

Figure I is a side elevation of the bow of a vessel with my improvement. Fig. II is a longitudinal section of the same. Fig. III is a transverse section of the same on line (A—B), Fig. II. Fig. IV is a longitudinal section on line (C—D) (Fig. I) parallel to the water line. Fig. V is a transverse section on line ( $x-y$ ) Fig. I.

Like letters refer to like parts in each of the figures.

The keel (A) is made in the usual manner, the stern post being dispensed with. The dead wood (B) is built up to the height of an ordinary stem, and the keelson (C) is laid over the dead wood. The keel, dead wood, and the keelson are secured together by metal bolts (D) as shown in the drawings. The heels of the foremost ribs (H) are secured to the dead-wood at the bearding line (E) as shown in (Fig. III). The dead wood is chamfered or beveled-off, from the bearing line as shown in Fig. IV at  $b$ , so as to allow the planks (I) to be run over and come together forward of the dead wood. The planks are extended on each side of the bow forward of the dead wood, and are chamfered to a bevel angle on their contiguous sides, and are fastened together in front of the dead wood, as shown at ( $n$ ).

This mode of construction enables me to make a sharper bow than can be made in the old way when a stern post is used, which is a desideratum for increasing the speed of vessels. It also enables me to make a much stronger bow, than can be made in the old way, especially when the bow is to be very sharp, as will be evident to any person acquainted with ship building. I also protect the ends of the plank and strengthen the bow by a sheathing of boiler iron (or other metal) plates as represented at (F.) This sheathing is brought together forward of the ends of the planks, and riveted or otherwise fastened together, and sharpened so as to form an edge which will open the water easily and with but little friction. The whole surface is made as smooth as possible. It is fastened to the bow by means of counter sunk bolts, rivets or spikes and serves the purpose to protect strengthen and sharpen the bow.

My improvement is intended for steam boats, and all vessels for navigation of twenty or more tons burden.

For the purpose of combining great strength and sharpness in the construction of the bows of vessels of twenty or more tons burden, I claim—

Extending the planking upon both sides of the bow, and uniting their contiguous ends forward of the dead wood the planking and dead wood being chamfered, to admit of such extension and union substantially as herein described.

JACOB W. BANTA.

Witnesses:

W. H. FORBUSH,  
A. M. WHEELER.