

(No Model.)

2 Sheets—Sheet 1.

R. JONES.

MOLD BOARD.

No. 378,841.

Patented Feb. 28, 1888.

Fig. 1

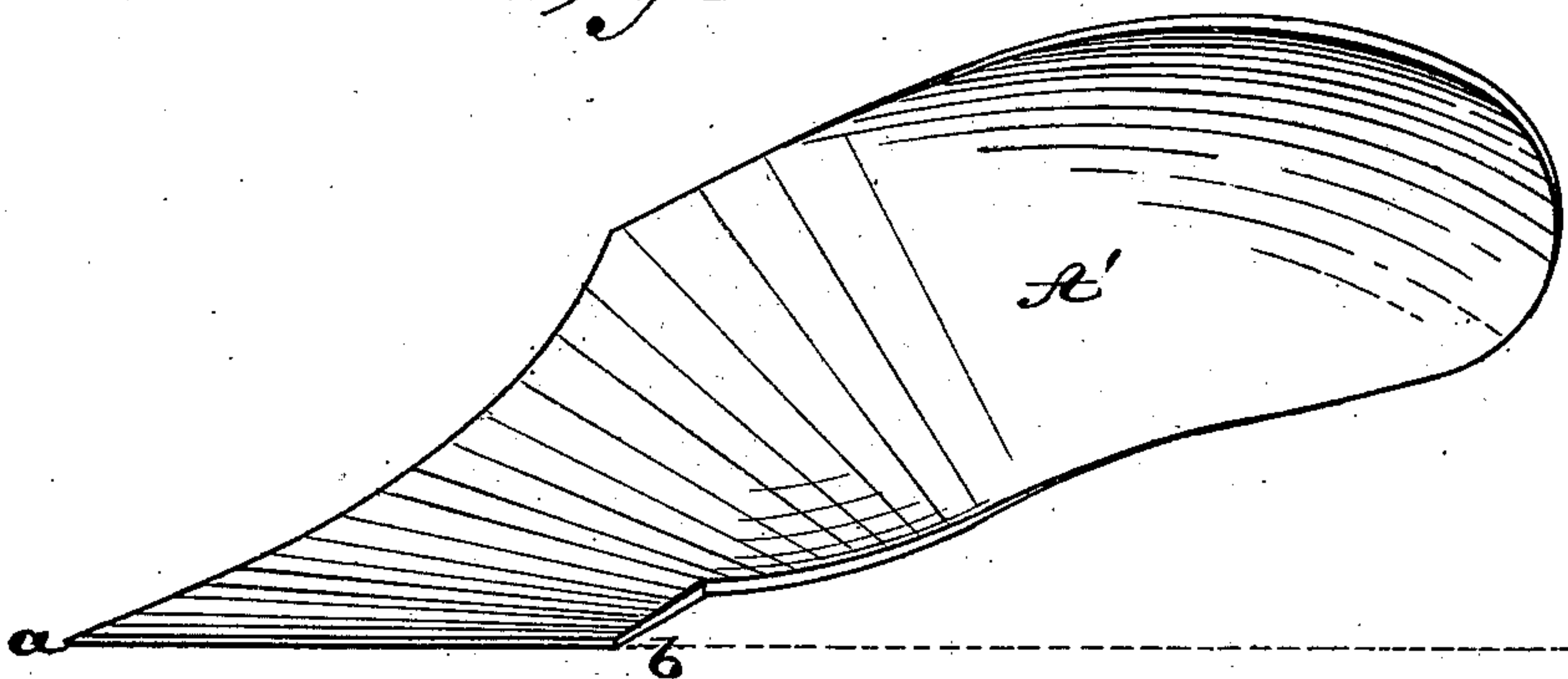


Fig. 2

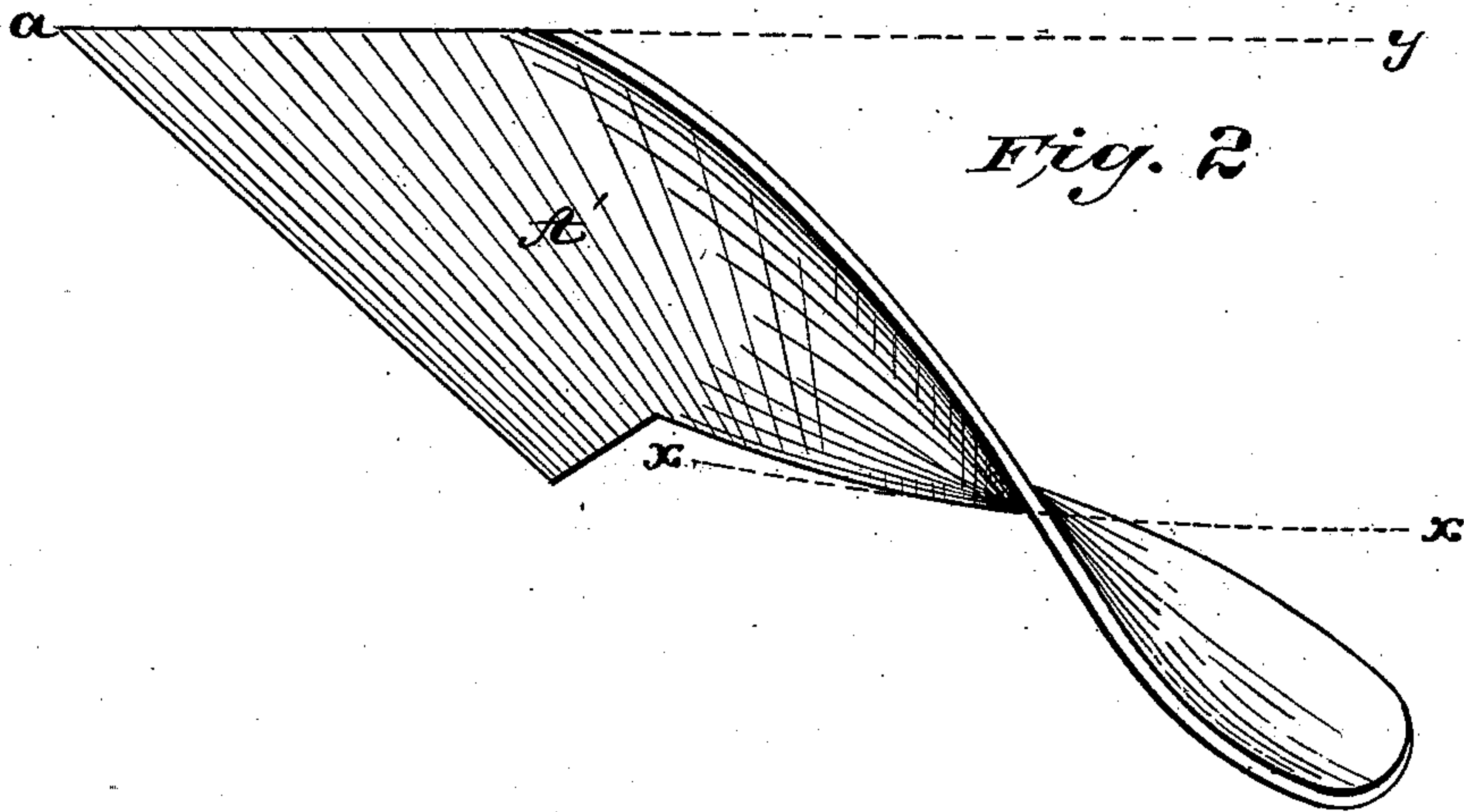
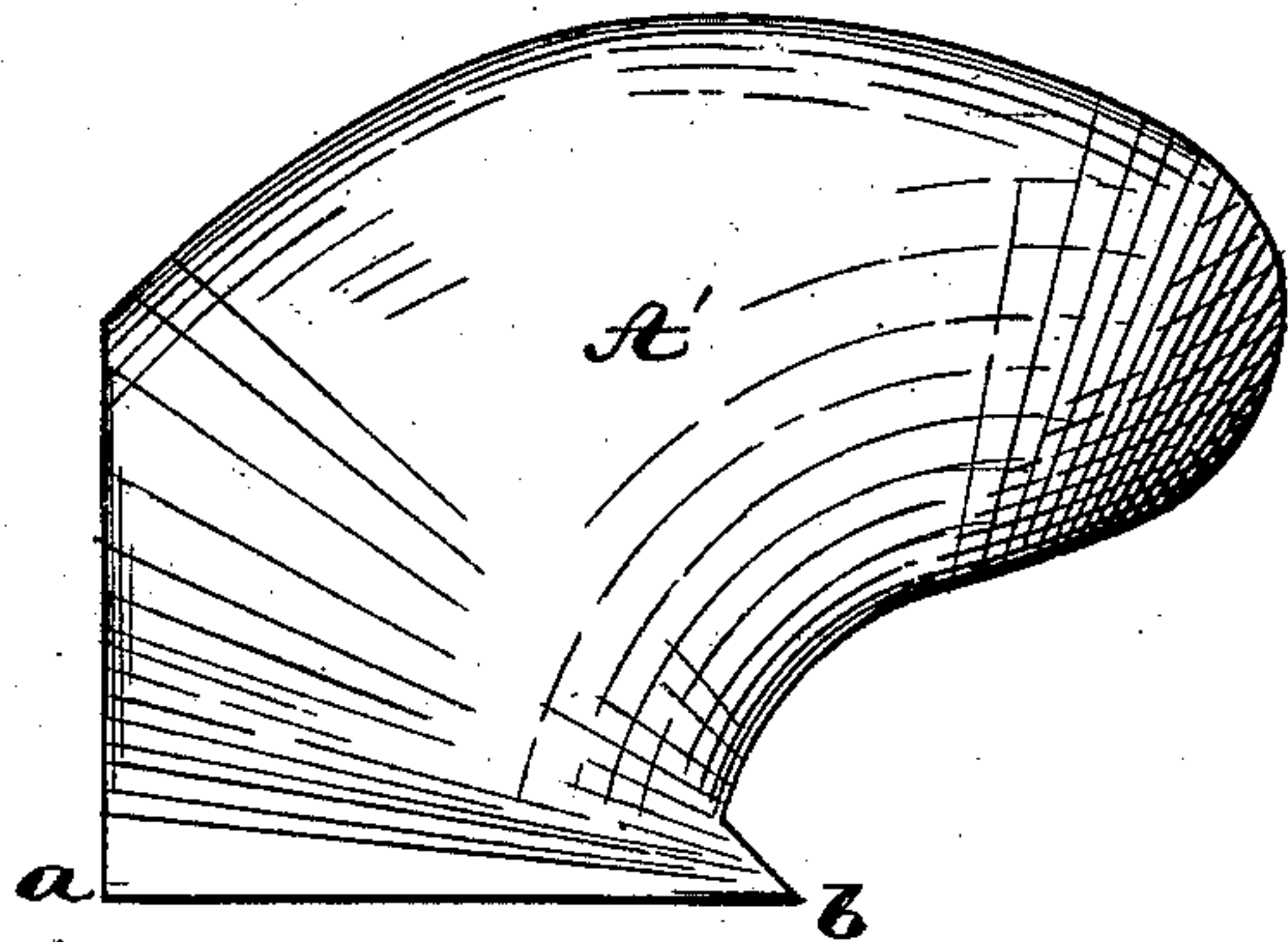


Fig. 3.



Witnesses:

Edward T. Walker,
L. S. Whitaker.

Inventor.

Robert Jones
By his attys.
Whitaker & Smith

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Fig. 4.

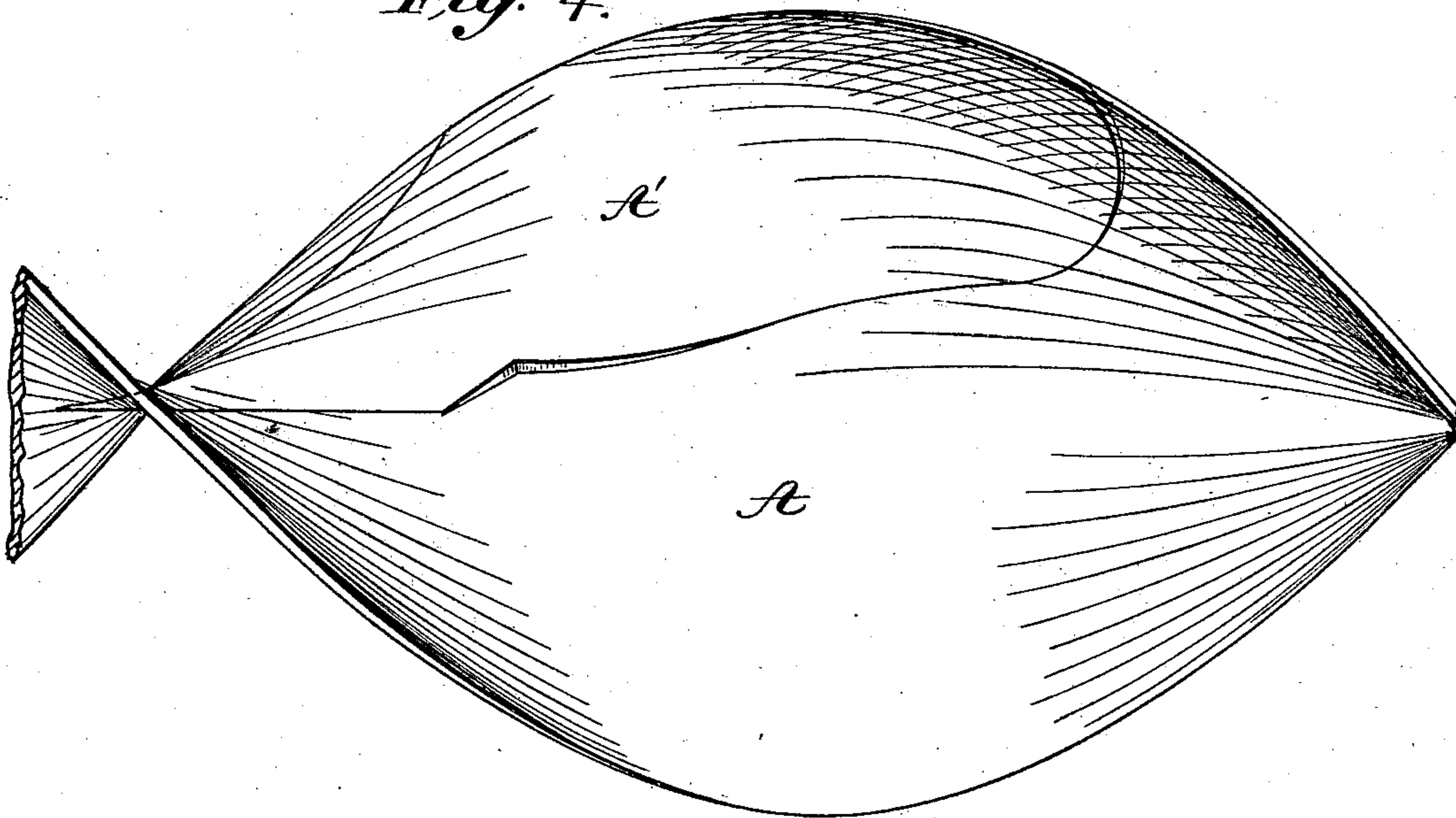
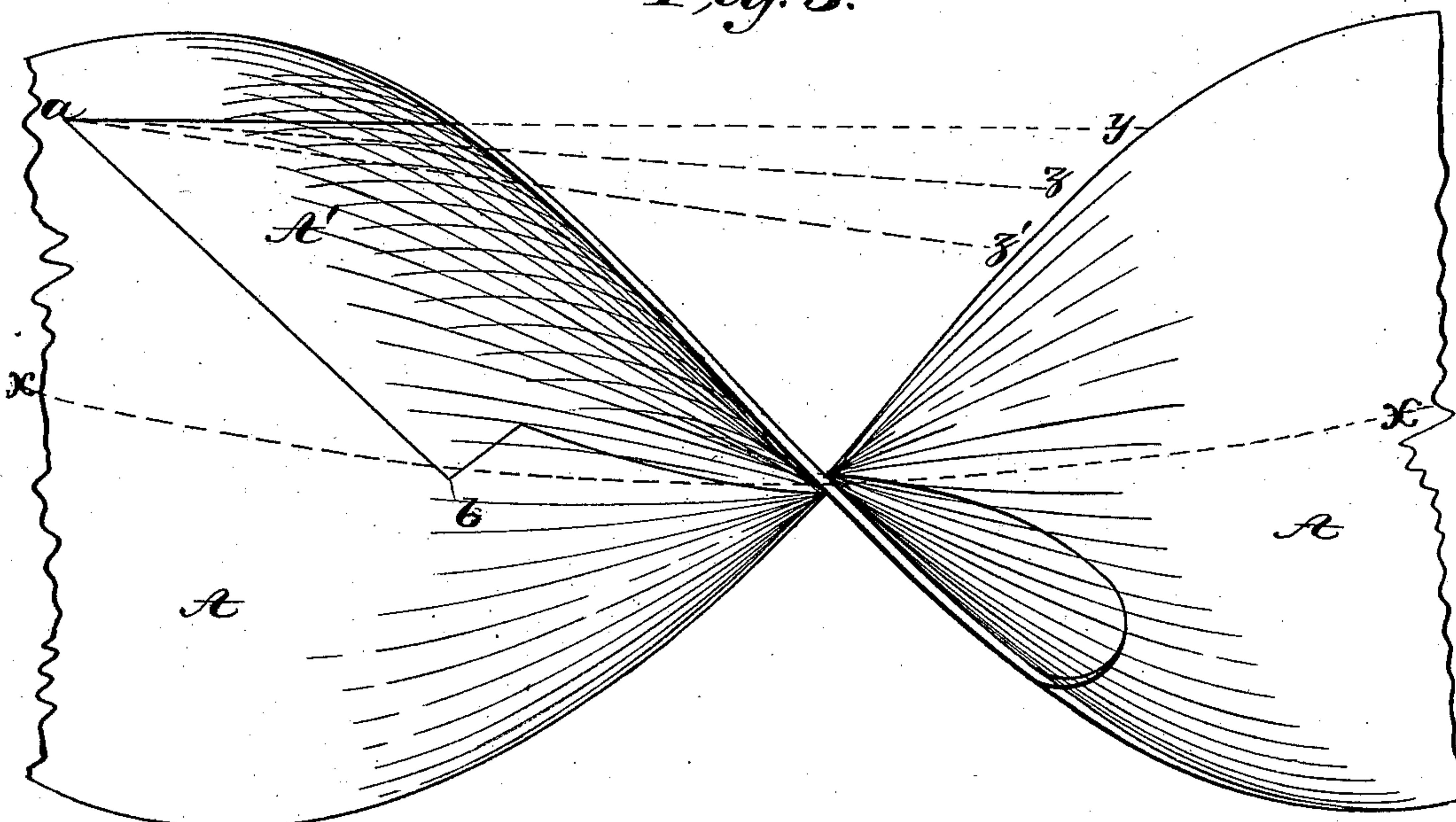


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

ROBERT JONES, OF WAYNESBURG, OHIO, ASSIGNOR OF ONE-HALF TO
CHARLES H. JONES, OF SAME PLACE.

MOLD-BOARD.

SPECIFICATION forming part of Letters Patent No. 378,841, dated February 28, 1888.

Application filed March 10, 1887. Serial No. 230,436. (No model.)

To all whom it may concern:

Be it known that I, ROBERT JONES, a citizen of the United States, residing at Waynesburg, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Mold-Boards; 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.

My invention is an improved construction of mold-boards for plows.

The same is illustrated in the accompanying drawings, and is fully set forth in the following specification and claims.

Figure 1 is a side view of my mold-board. Fig. 2 is a top view of the same. Fig. 3 is a front view. Fig. 4 is a side view. Fig. 5 is a top view of a spiral with the mold-board indicated thereon, showing the way in which it is cut from the same.

In plowing every furrow describes more or less accurately an arc of two separate circles. The first is described by the movement upward to a perpendicular position. The second is described by the furrow as it passes from the vertical position to its position of rest. In order to do the best possible work, a mold-board should press evenly upon the furrow throughout the whole extent of its movement, and as the movement of the furrow is more rapid after leaving the vertical position the part of the mold-board acting thereupon should have a more rapid twist than the forward part of the same. This I accomplish by making the mold-board from a spiral, the axis of which spiral is a curved line or part of a circle having its center on the landward side of the mold-board. The size of the circle and the consequent amount of curvature in the axis of the spiral depend upon the size of the plow and on the length of the mold-board. This construction, it is found, gives the proper twist to the rear part of the mold-board to enable it to press upon the furrow equally throughout its entire length, and the wear upon the same is therefore even and the excess of wear upon the rear lower part of the mold-board is avoided.

In Figs. 4 and 5, A is a section of a spiral. $x x$ is a dotted line showing the axis of the spiral. A' is the mold-board delineated thereon. It will be seen that the said mold-board is a part of the said spiral, and con-

forms in every part to the same except at the point. Here the departure from the form of the scroll is very slight, it being necessary only to make such change as will give an approximately straight horizontal edge along line $a b$. The line $a y$ indicates the landside of the plow. This may be made at a different angle, if desired, as shown by lines $a z a z'$. This would give a greater length in proportion to the width; but the operation of the plow would be the same.

Of course it will be understood that although the mold-board is shown in one piece, in practice it will be preferred to make the usual division and have a detachable point similar to other plows in use.

I do not limit myself to the exact form of plow shown, as the principle of construction is capable of being applied to all forms of plows, whether short or long and for whatever uses they are designed.

By reference to Figs. 2 and 5 it will be seen that the concave side of the axis is toward the landside of the plow, or, in other words, curves toward it.

I am aware that it has been proposed to make a mold-board of a spiral having a straight line for its center; and I am also aware that it has been proposed to make a mold-board of two spirals, forming a straight line from the point of the share to the heel of the mold-board, each of said spirals having a straight line for its center and the centers of said spirals being parallel with each other.

What I claim, and desire to secure by Letters Patent, is—

1. A mold-board the entire face of which is formed of a part of a single spiral, the axis whereof is a curved line forming part of a true circle lying on a level with the bottom of the landside of the plow, substantially as described.

2. A mold-board the entire face of which is formed of a part of a single spiral, and the axis of which is on a level with the bottom of the landside of the plow and forms part of a true circle, the concave face of the axis facing the landside, substantially as described.

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

ROBERT JONES.

Witnesses:

LAURA C. JONES,
JOHN E. YARGER.