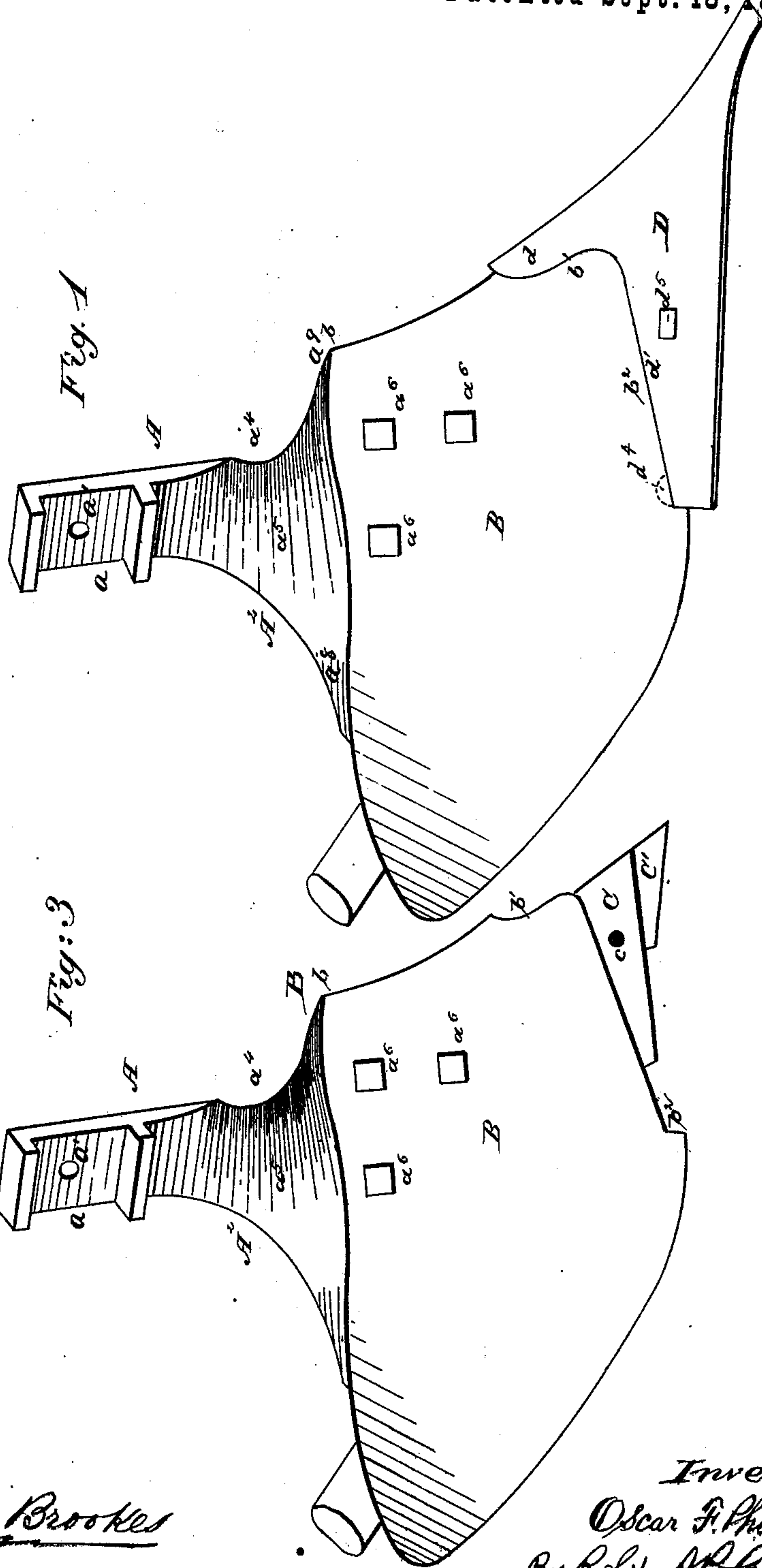


O. F. PHILLIPS.
PLOWS.

3 Sheets—Sheet 1.

No. 195,303

Patented Sept. 18, 1877.



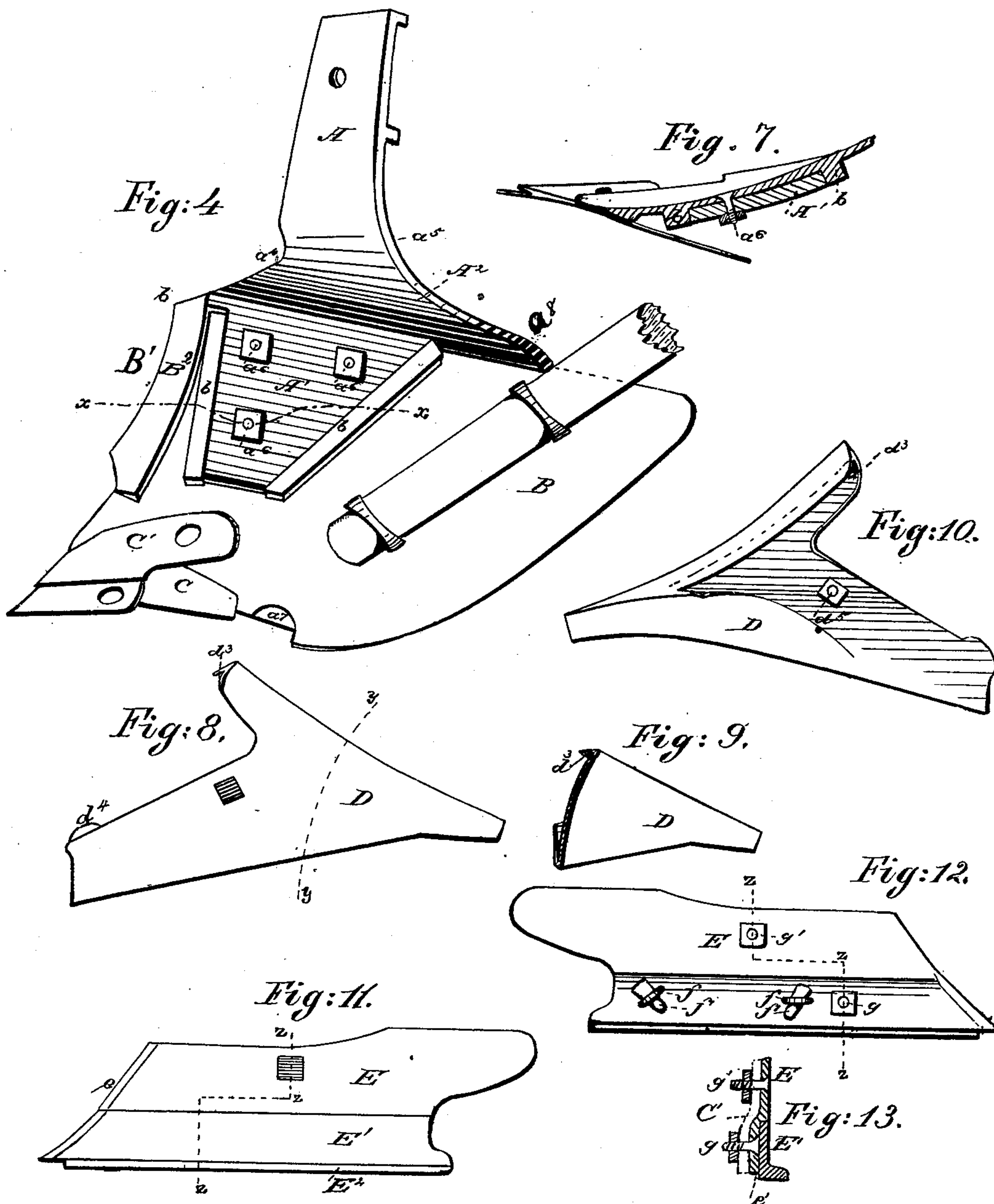
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Inventor:
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O. F. PHILLIPS.
PLOW.

No. 195,303.

Patented Sept. 18, 1877.



WITNESSES

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R. H. Lacey

INVENTOR

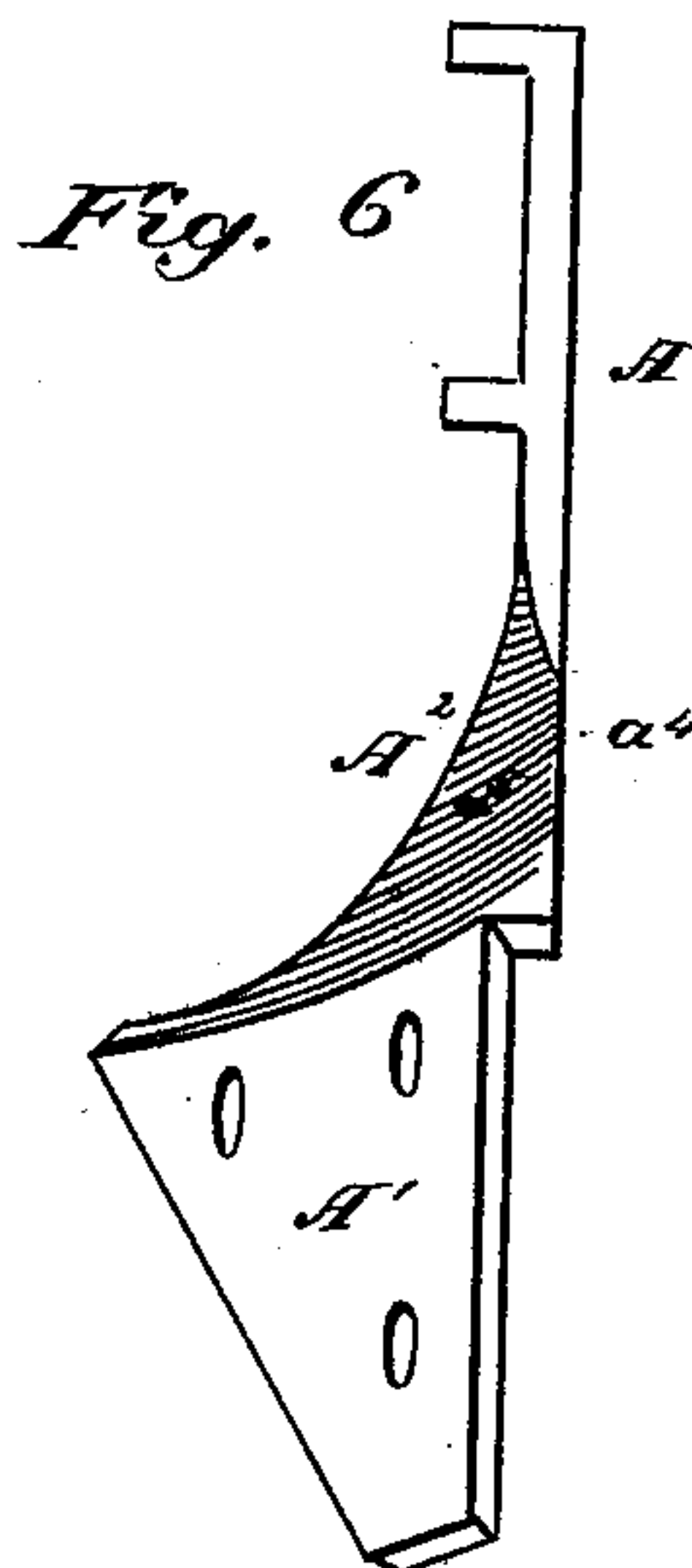
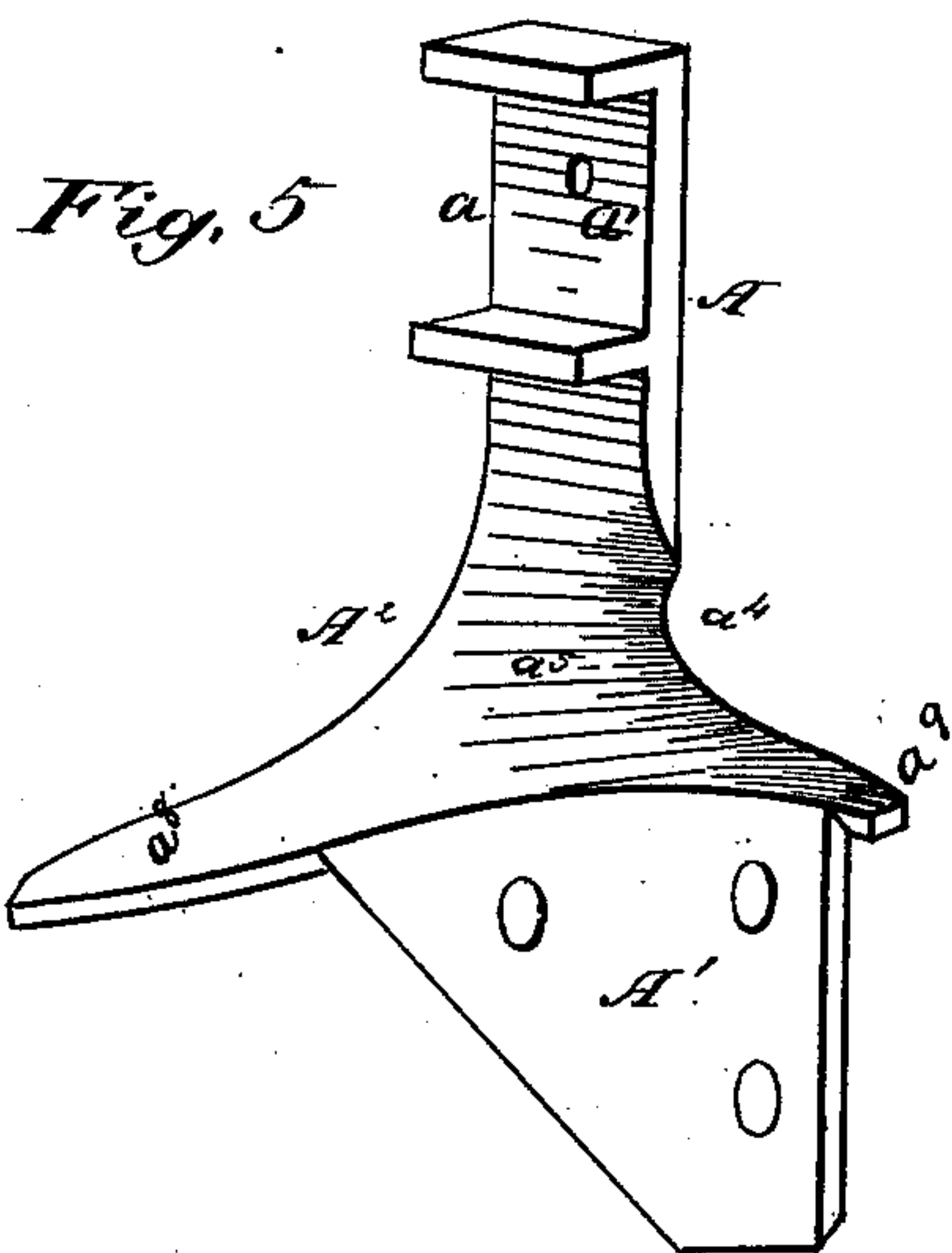
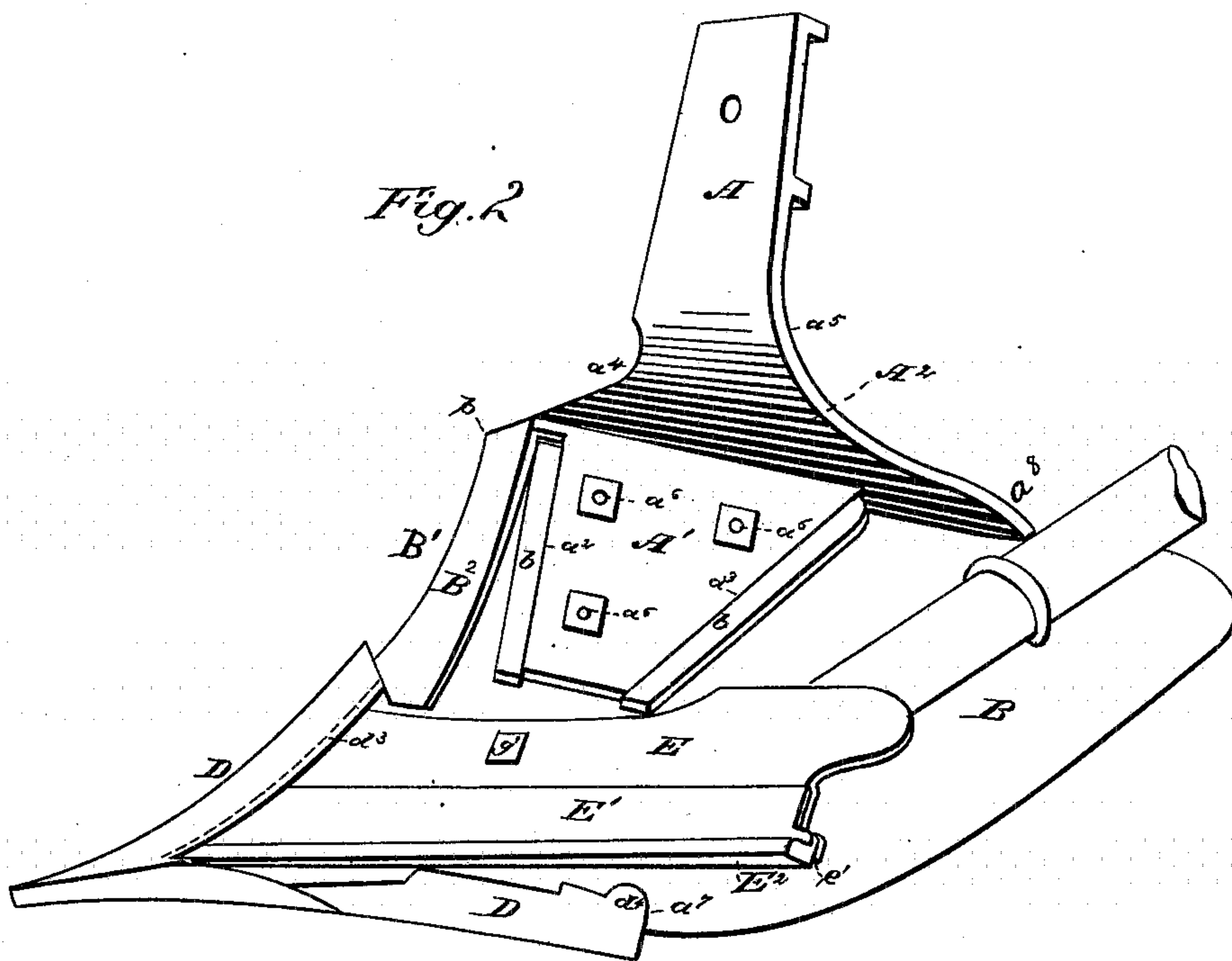
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O. F. PHILLIPS.
PLOWS.

3 Sheets—Sheet 3.

No. 195,303.

Patented Sept. 18, 1877.



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UNITED STATES PATENT OFFICE.

OSCAR F. PHILLIPS, OF LYNCHBURG, VIRGINIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 195,303, dated September 18, 1877; application filed July 17, 1877.

To all whom it may concern:

Be it known that I, OSCAR F. PHILLIPS, of Lynchburg, in the county of Campbell and State of Virginia, have invented certain new and useful Improvements in Plows; 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 which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in plows, the nature of which will be fully explained by reference to the accompanying drawing, in which—

Figures 1 and 2 represent opposite side views of parts of a plow constructed according to my invention. Figs. 3 and 4 show similar views to Figs. 1 and 2, with parts removed. Fig. 5 shows a detached view of the neck and standard; and Figs. 6 to 11 show detail views of parts separately.

In each of the views similar letters of reference are employed to indicate corresponding parts wherever they occur.

A represents the standard, to which the beam is attached by means of the socket a , and a bolt passed through the socket-hole a^1 , as will be readily understood.

The standard A is attached to the mold-board B by means of a coupling-plate, A^1 , which, on its front edge, is provided with a vertical bearing-surface, a^2 , and an inclined bearing-surface, a^3 . It is also provided with a rear extension, a^4 , and a front lip or extension, a^5 , which fit snugly on the upper edge of the mold-board, and give a firm support to the standard and a smooth continuous surface to mold-board.

The coupling-plate A^1 is held between projecting ribs b , formed on or affixed to the mold-board B, and it is secured thereto by bolts a^6 .

The standard A is connected to the plate A^1 by means of a neck, A^2 , which is so formed that its front face shall form a continuous sharp surface, extending from and forming a continuation of the upper surface B^4 of the mold-board B, while it is formed of such a

contour sidewise that its face a^5 shall gradually recede with a curve somewhat similar to that of a mold-board, gradually increasing in area from front to rear, the object of this construction being that little or no resistance may be presented by the standard A and neck A^1 , and "choking" of the plow is thereby prevented.

The mold-board B, on its upper front face, is formed with an enlargement, B^1 , the front edge of which is sharp, while its face B^2 extends laterally at an angle, so as to form a guard to the ribs b and bolts a^6 , by which the plate A^1 is connected thereto.

The mold-board B, on its lower front face, is formed with a curved recess, b^1 , and on its under side with an angular recess, b^2 , and on its forward inner surface is formed or attached an angular brace, C, for the purpose of the attachment of the point D and land-side E, the surface C' of which forms an inner land-side.

The point D, at d^1 , is formed so as to fit into the recesses b^1 b^2 of the mold-board B, and at d^2 is provided with an inclined lateral projection leaving a V-shaped recess, d^3 , for the purpose of receiving and holding the front end of the land-side E, and it is held to the mold-board B by means of a projection, d^4 , which passes into a correspondingly-formed recess, b^3 , in the rear of the under side of the mold-board, and also by a single countersunk bolt, d^5 , which passes through a hole, c , in the angular brace C, the part C' of which forms an inner land-side.

The land-side E, at e' , is recessed, so as to receive a face-plate, E^1 , to the under surface of which is applied a sole-plate, E^2 , the object of the face and sole plate E^1 E^2 being to prevent wear of the land-side E.

The plate E^1 is attached to the land-side E by means of loops or eyes, f , passing through suitable holes in the land-side E, and secured, by preference, by means of wooden pegs f' , passed through the loops or eyes f on the rear of the land-side E.

The plates E^1 E^2 are secured to the angular brace C by means of countersunk bolts g g' , which pass through the plate E^1 , only the bolt g being applied beneath the plate E^2 , in order that the plate E^2 may present a perfectly smooth outer surface.

The plate E^2 , it will thus be seen, is capable of removal at any time, without disturbing the other parts of the plow, and can readily be replaced, or a new one applied at any time.

By forming the plates $E^1 E^2$ at e so as to lock into the V-shaped recess d^3 of the point D the parts afford mutual support, while a continuous surface is provided, and friction and consequent wear avoided.

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

1. A standard, A, formed with a neck, A^2 , constructed with a front face, a^4 , having a sharp curved surface and curved side face, a^5 , gradually increasing in area, and extensions $a^8 a^9$, and coupling-plate A^1 , substantially as and for the purposes shown and described.

2. The combination, with a mold-board, B,

provided with ribs $b b$, as described, of a standard, A, formed with a coupling-plate, A^1 , having vertical and inclined surfaces $a^2 a^3$, and a neck, A^2 , having a front face, a^4 , and side face a^5 , constructed to operate substantially as shown and described.

3. The combination, with the mold-board B, angular brace C, and point D, all constructed as described, of the land-side E, constructed with an inclined front face, e , recess e' , and removable face-plate E^1 , having a sole-plate, E, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

OSCAR F. PHILLIPS.

Witnesses:

WM. H. WREN,

J. J. MAHONE.