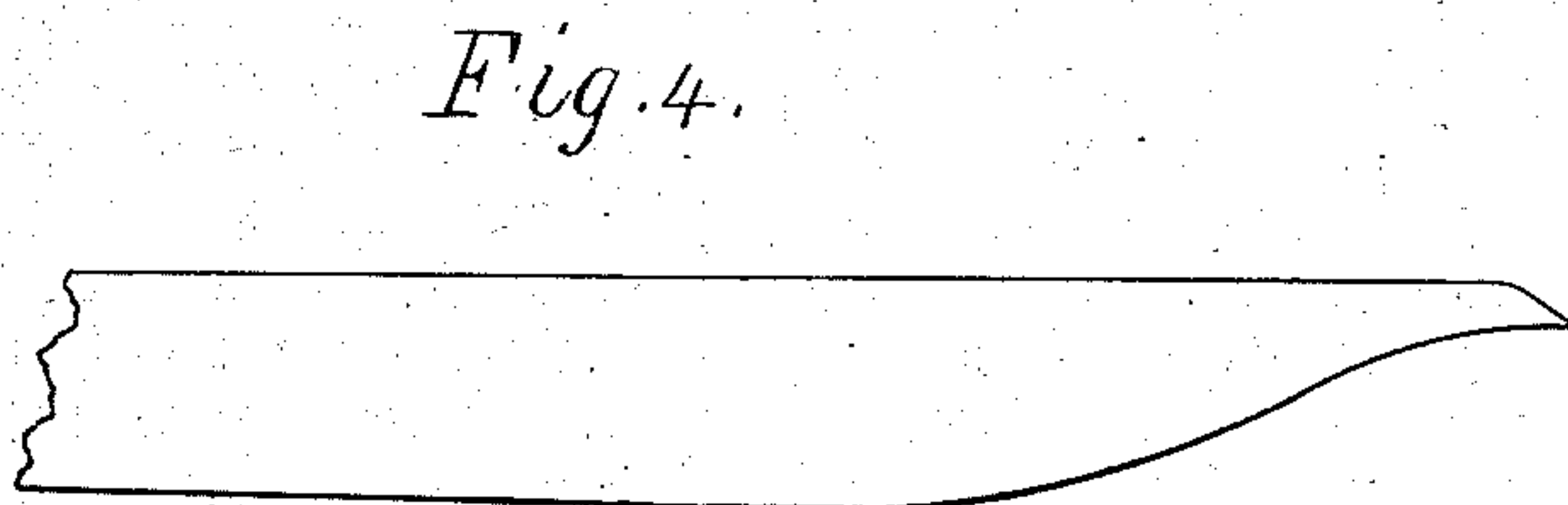
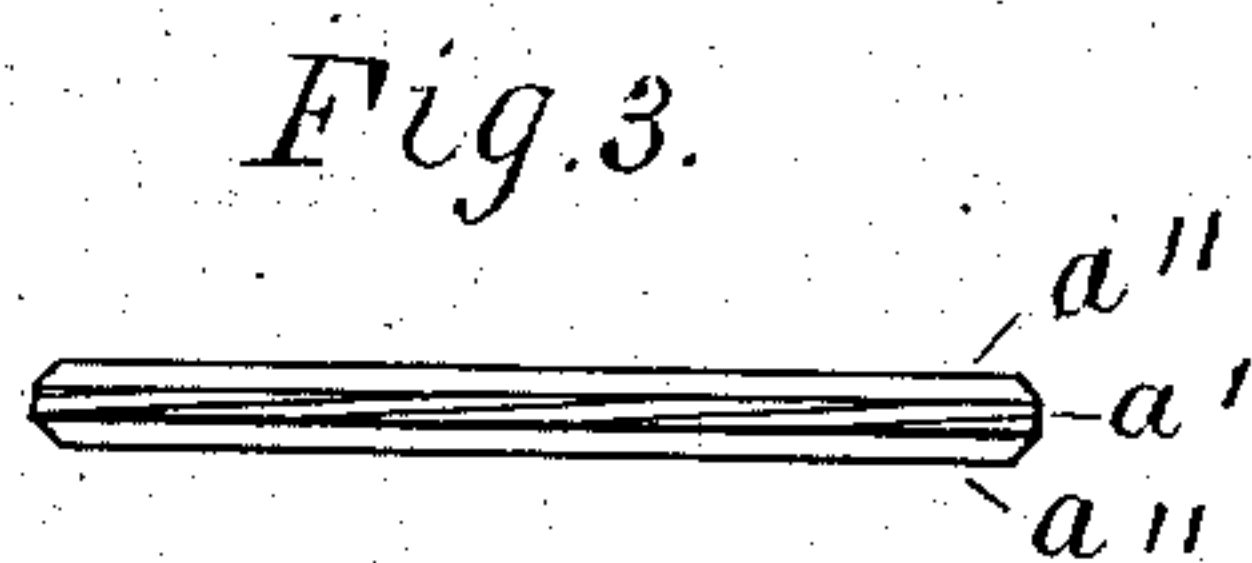
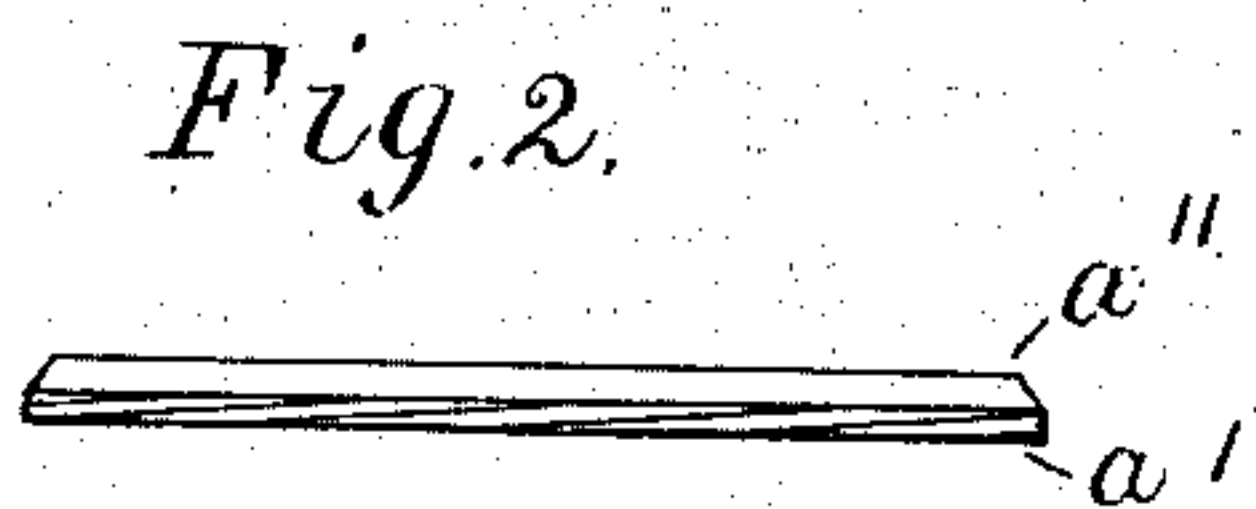
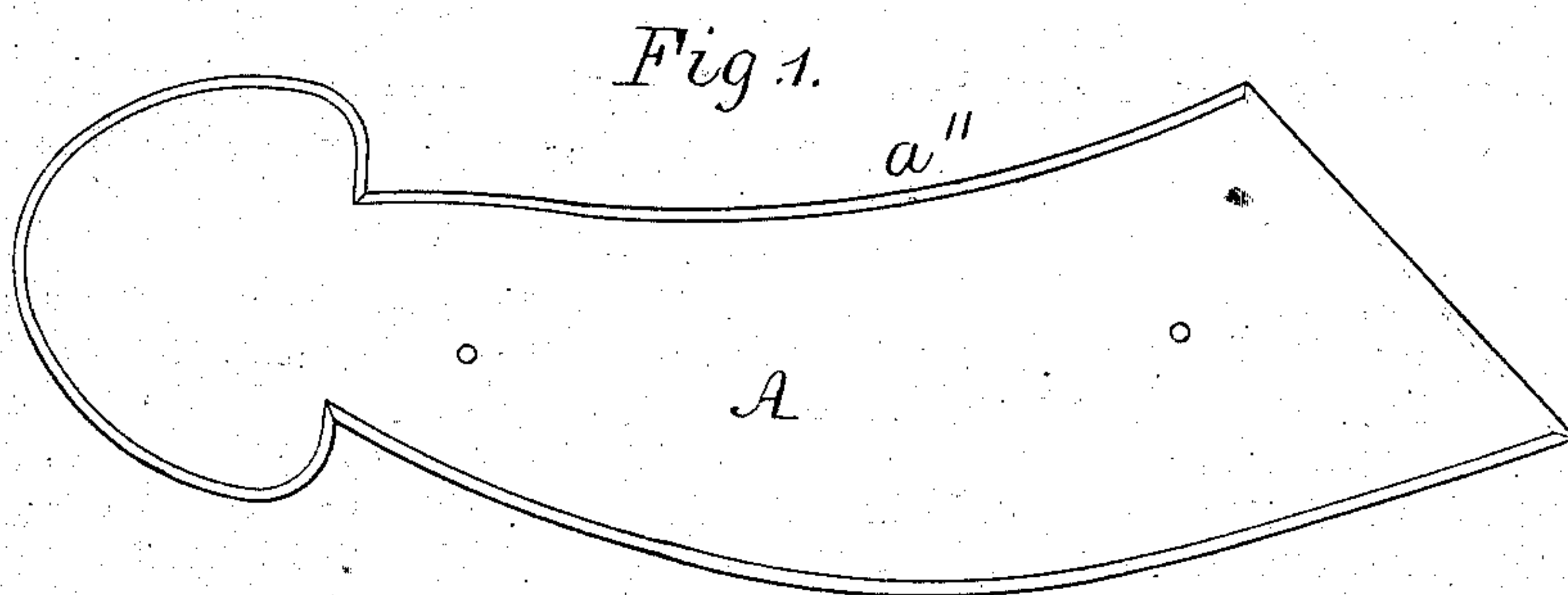


J. LACMANN.
Plates for Guiding a Hand-Knife in Cutting
Cloth, &c.

No. 158,801.

Patented Jan. 19, 1875.



Witnesses:

Benj Morison.
Wm H. Morison.

Inventor:

Jacob Lacmann

UNITED STATES PATENT OFFICE.

JACOB LACMANN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PLATES FOR GUIDING A HAND-KNIFE IN CUTTING CLOTH, &c.

Specification forming part of Letters Patent No. **158,801**, dated January 19, 1875; application filed October 16, 1874.

To all whom it may concern:

Be it known that I, JACOB LACMANN, of the city of Philadelphia, in the State of Pennsylvania, have invented an improvement in the metallic plates for guiding a hand-knife in cutting through layers of kid-skin, cloth, muslin, or other similar fabric, of which the following is a specification:

The object of my invention is to improve the metallic plates required to guide the hand-knife used in cutting through the series of layers of leather, cloth, muslin, or other fabric, required in the manufacture of gloves, shoes, and wearing apparel generally, by constructing the said plates of steel, with finely roughened and hardened edges, whereby the said edges, while serving as grinding-surfaces, will keep the knife sharpened as it is passed along in close contact with said roughened edges.

Figure 1 is a plan view of a metal plate-guide, embodying my invention, used by me in the manufacture of the covering for the arms and hands of dolls. Figs. 2 and 3 are, respectively, two edge views of double and single beveled edges. Fig. 4 is a side view of the knife-blade with the slightly concave and pointed cutting-edge found to be the best form for cutting the layers of fabrics required.

The plate A is made of cast-steel, about an eighth of an inch thick, and of any size and contour required for the fabrics or articles to be cut out. The boundary edges of the plates may be left square, or at right angles to the plane of the plate, or, if preferred, the said edges may be beveled back slightly from the middle of the same, as represented in Fig. 2, the square portion *a'* being roughened to serve as a grinding-edge against the passing knife; but, when so made, the plate must be applied with the square edge next to the fabric to be operated upon. If it be desired to have the

plate reversible—*i. e.*, so as to be applied to the fabric by either side, as where both right and left forms of the fabric are required to be cut from the same face side thereof—about one-third of the thickness of the plate (at the middle) is to be left at right angles to its plane, and the two outer thirds slightly beveled inward, as shown at *a'' a''*, Fig. 3, the rectangular portion *a'*, in either case, being the roughened one, against which the hand-knife is pressed in cutting. After the plate is formed, and the said portion roughened, it is to be hardened substantially in the same manner as files are hardened, and it is then ready for use. The curved or concave form of the pointed edge of the knife (see Fig. 4) is found by experience to be the best, and it will be seen that the grinding effect of the roughened part of the edges of the plate against the contact side of the sloping knife will be to keep that curved, and main cutting portion of the knife in a sharpened condition, thus saving the labor and time heretofore consumed by grinding on a stone.

The ordinary wooden patterns are soon cut and ruined by the knife, and the ordinary smooth-edged iron patterns wear away rapidly and dull the edge of the knife.

The advantages of my invention will be readily perceived without any further description or explanation.

I claim as my invention—

A pattern-plate for guiding a hand-knife in cutting out layers of leather, cloth, or other fabric, when the boundary edges of said plates are of steel roughened and hardened, substantially as and for the purposes set forth.

JACOB LACMANN.

Witnesses:

BENJ. MORISON,
WM. H. MORISON.