

(No Model.)

H. GOULD.
LEATHER CUTTING KNIFE.

No. 370,736.

Patented Sept. 27, 1887.

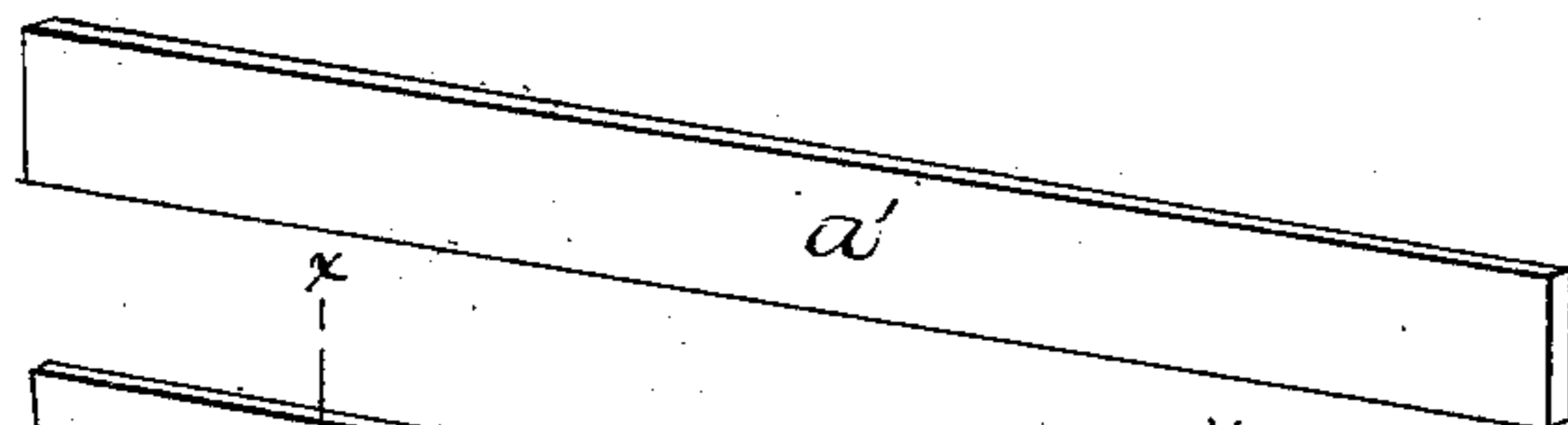


Fig. 1.

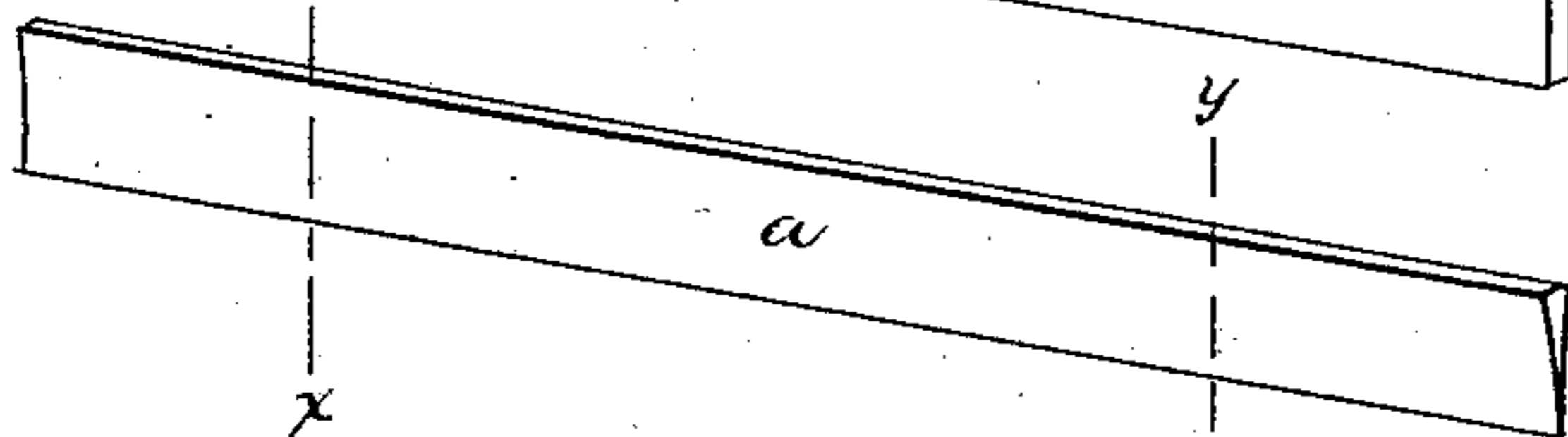


Fig. 2.

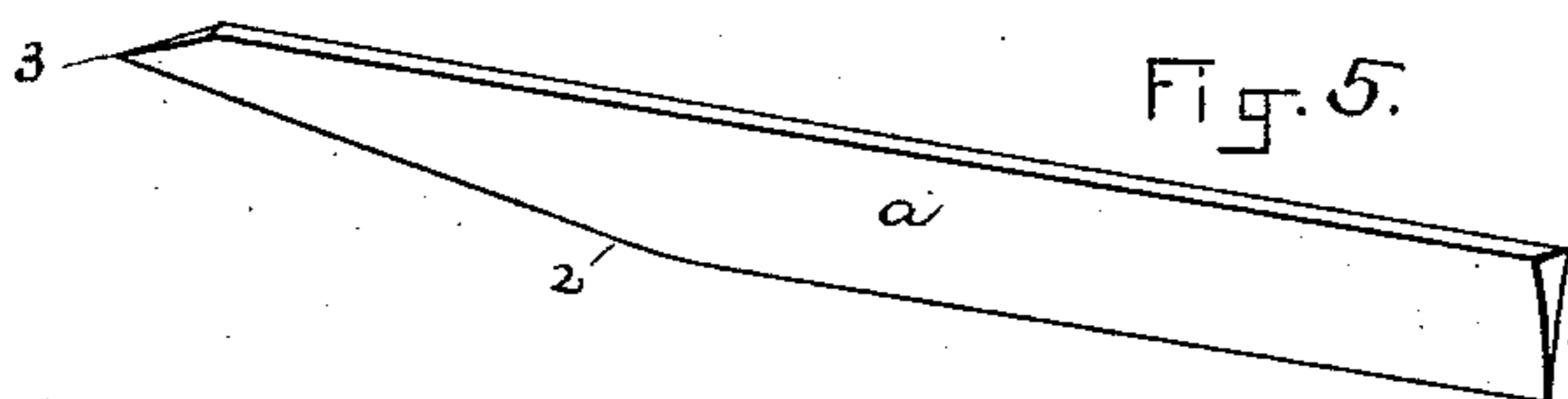
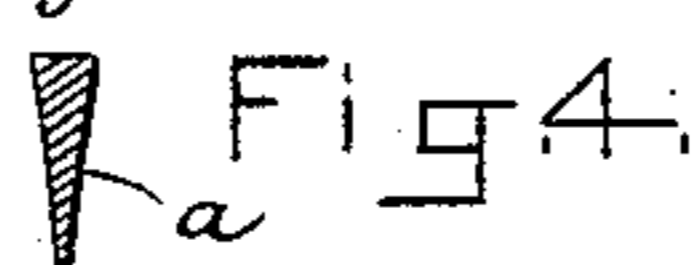
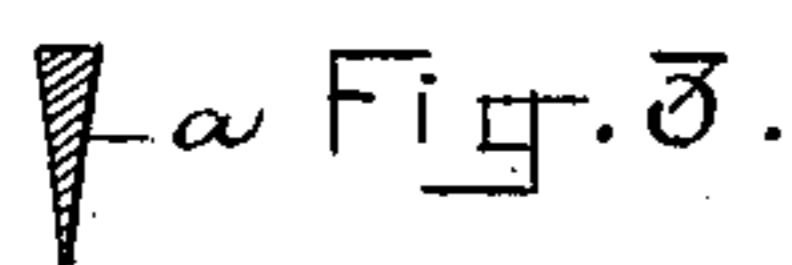


Fig. 5.

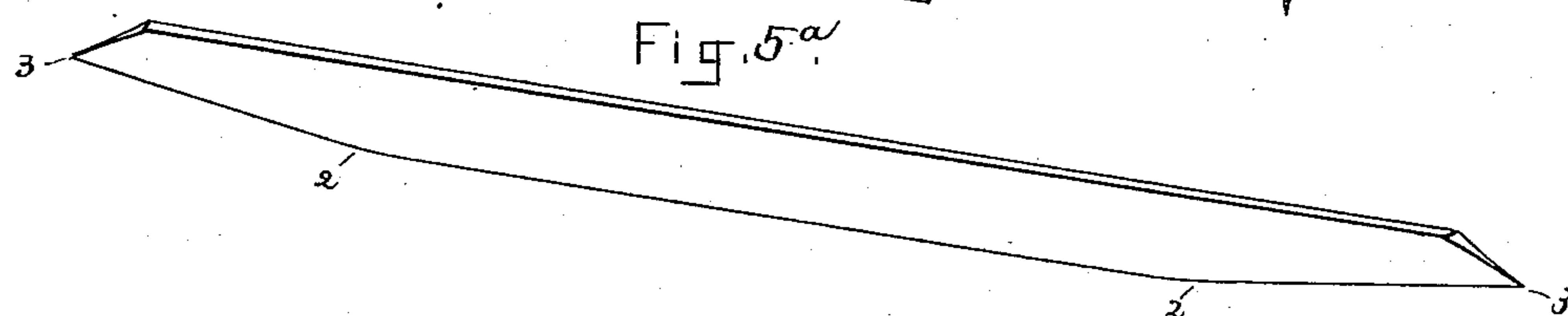


Fig. 5a.

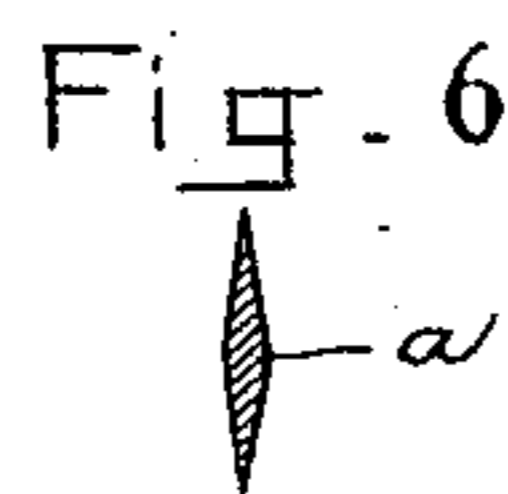


Fig. 6.

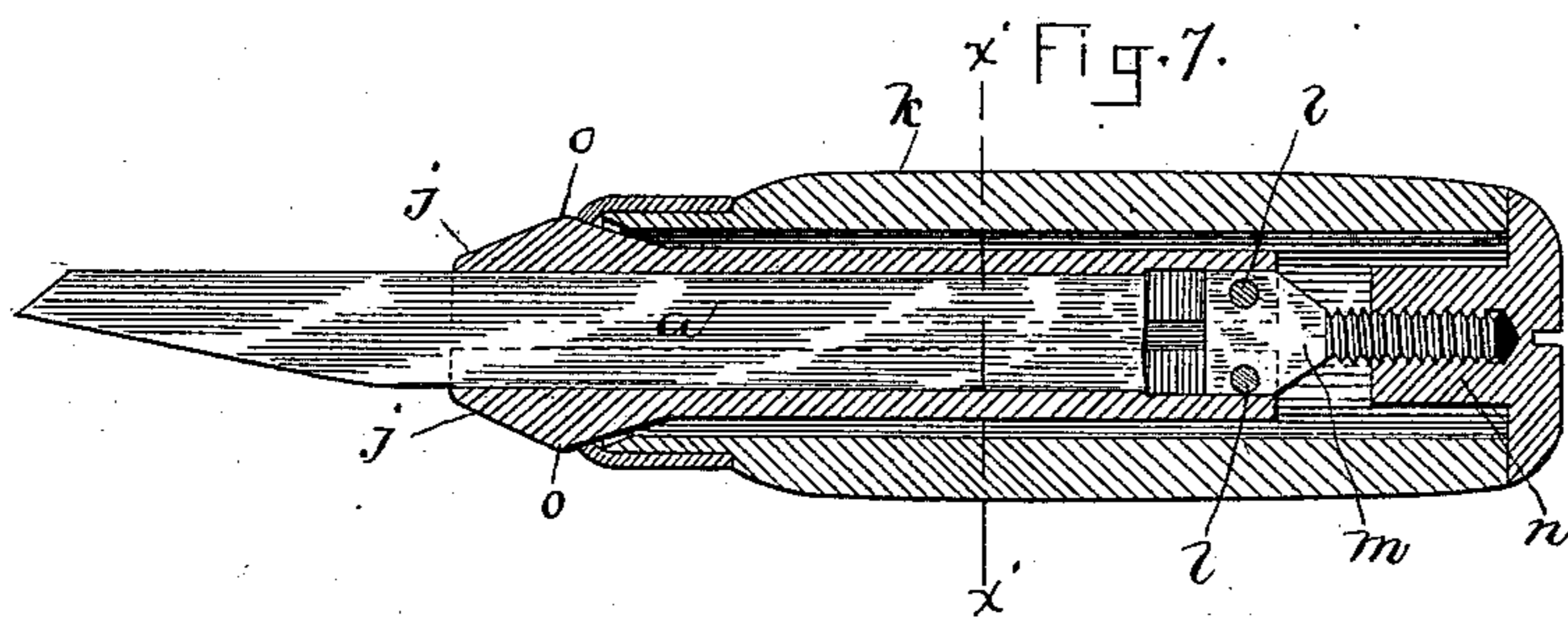


Fig. 7.

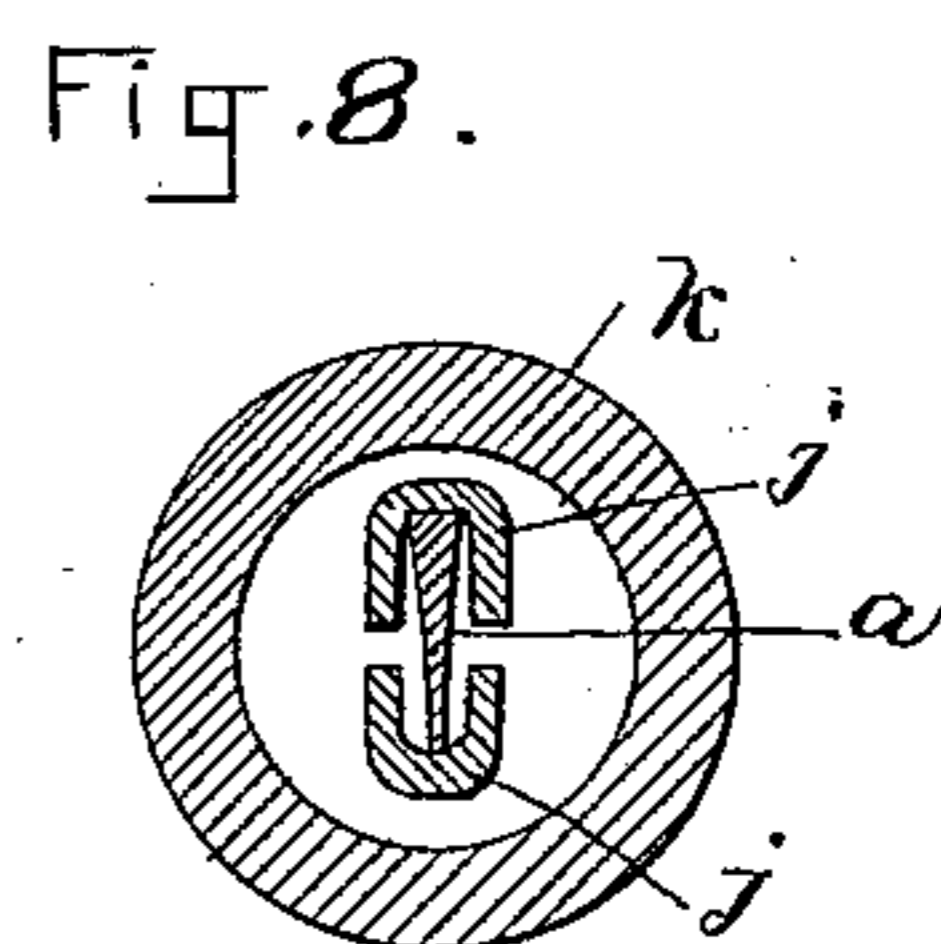


Fig. 8.

Witnesses:
H. Brown.
R. L. Perkins

Inventor:
Holman Gould
by Wright Brown & Conoley
Attys.

UNITED STATES PATENT OFFICE.

HOLMAN GOULD, OF BROCKTON, MASSACHUSETTS.

LEATHER-CUTTING KNIFE.

SPECIFICATION forming part of Letters Patent No. 370,736, dated September 27, 1887.

Application filed September 11, 1886. Serial No. 213,279. (No model.)

To all whom it may concern:

Be it known that I, HOLMAN GOULD, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Leather-Cutting Knives, of which the following is a specification.

This invention relates to knives for cutting out the parts of uppers of boots and shoes from pieces of leather. These parts are cut by a knife held in the hand of the cutter, who moves the blade of the knife along the edge of a pattern which he holds upon the leather to be cut.

The knife employed usually for this purpose, and known as an "extension-blade," is composed of a blade of indefinite length and a handle containing a portion of said blade and provided with clamping devices whereby the blade may be held and released, so that it may be drawn out from the handle from time to time, as wear may require, and firmly secured in each position to which it may be adjusted, the blade being thus made capable of use so long as enough of its length remains to be grasped by the clamping devices of the handle. The portion of the blade that projects outside of the handle has to be sharpened from time to time.

Heretofore the blade has usually been made with both edges blunt, so that it has been necessary for the operator to spend considerable time in grinding the cutting portion of the blade whenever it is moved out to compensate for wear, and the time thus spent is in a large factory a serious item of expense. In some cases, however, the blade has been beveled along its entire length to sharpen one edge, each side of the blade being made flat, so that the blade is wedge-shaped in cross-section.

My invention has for its object to lessen the time required to keep the blades of this class in order; and to this end it consists in the improvements hereinafter described and set forth.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of the blade-blank in its original form. Fig. 2 represents a similar view of the blade as improved. Figs. 3 and 4 represent sections on lines xx and yy , Fig. 5 represents the improved blade as prepared for use. Fig. 5^a represents a blade of double the length of any of the other blades.

Fig. 6 represents a transverse section of a modification. Fig. 7 represents a longitudinal section of my improved blade and its handle. Fig. 8 represents a section on line $x'x'$, Fig. 7.

The same letters of reference indicate the same parts in all the figures.

In the drawings, a represents the extension cutting-blade, the same being formed from a blank, a' , cut from a sheet of steel, said blank being of uniform width from end to end and of uniform thickness from edge to edge, as shown in Fig. 1. The cutting portion of the blade is at one end, which is ground away to form the cutting-edge from 2 to 3, said edge being usually diagonal to the length of the blade, as shown in Fig. 5.

In carrying out my invention I provide a blade, a , which is ground practically to an edge along its entire length by concaving one or both sides, so as to leave one edge thick and bring the other to a cutting-edge, or nearly so. It will be seen that the blade thus formed can be sharpened at its cutting end much more readily and in less time than if it had not been ground along its entire length. The grinding may be done by the usual methods and appliances known to edge-tool manufacturers, and constituting a part of the process of manufacturing. The blade can be done very rapidly and at much less expenditure of time than would be required if the entire original thickness of the blade had to be ground away at every sharpening of the blade.

If desired, the blade can be sharpened at both edges, as shown in Fig. 6.

It will be seen that by concaving the blade more metal is removed therefrom midway between its edges than by simply beveling, so that the operation of grinding involves less labor when the blade is concaved than when it is wedge-shaped in cross-section, particularly when the cutting portion of the blade is diagonal.

The blade, when in use, is held in two grooved jaws, $j j$, which are contained in a hollow handle, k . Said jaws are grooved to receive the edges of the blade, as shown in Fig. 8, and are pivoted at their rear ends, at $l l$, to a threaded shank, m , which enters a threaded socket in a nut, n , the head of which bears against the rear end of the handle k .

The jaws *j j* have wedge-shaped protuberances *o o* near their outer ends, which, when the jaws are drawn into the handle *k* by the rotation of the nut *m*, are caused to bear on the end of the handle, the jaws being thereby pressed toward each other and caused to grasp or clasp the portion of the blade between them.

It will be seen that the blade is protected by the jaws and handle until it is drawn out for use.

I prefer to make the blade of double the length that is required by a single blade and point it at both ends, as shown in Fig. 5^a, so that the operator can provide himself with two blades by breaking one of the long blades at the middle of its length.

I claim—

As an improved article of manufacture, an

extension-blade for a leather-cutting knife, the same being concaved, as described, and thereby reduced to a thin edge along its entire length, and provided with a cutting portion, 2 3, which is diagonal to the length of the blade, in combination with a handle adapted to incase a portion of said blade and permit its removal or a gradual feeding of the same, to make up for wear, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

HOLMAN GOULD.

Witnesses:

CHARLES W. SUMNER,
HERBERT H. CHASE.