(Model.)

J. L. SANFORD.

WICK TRIMMER.

No. 404,736. Patented June 4, 1889.

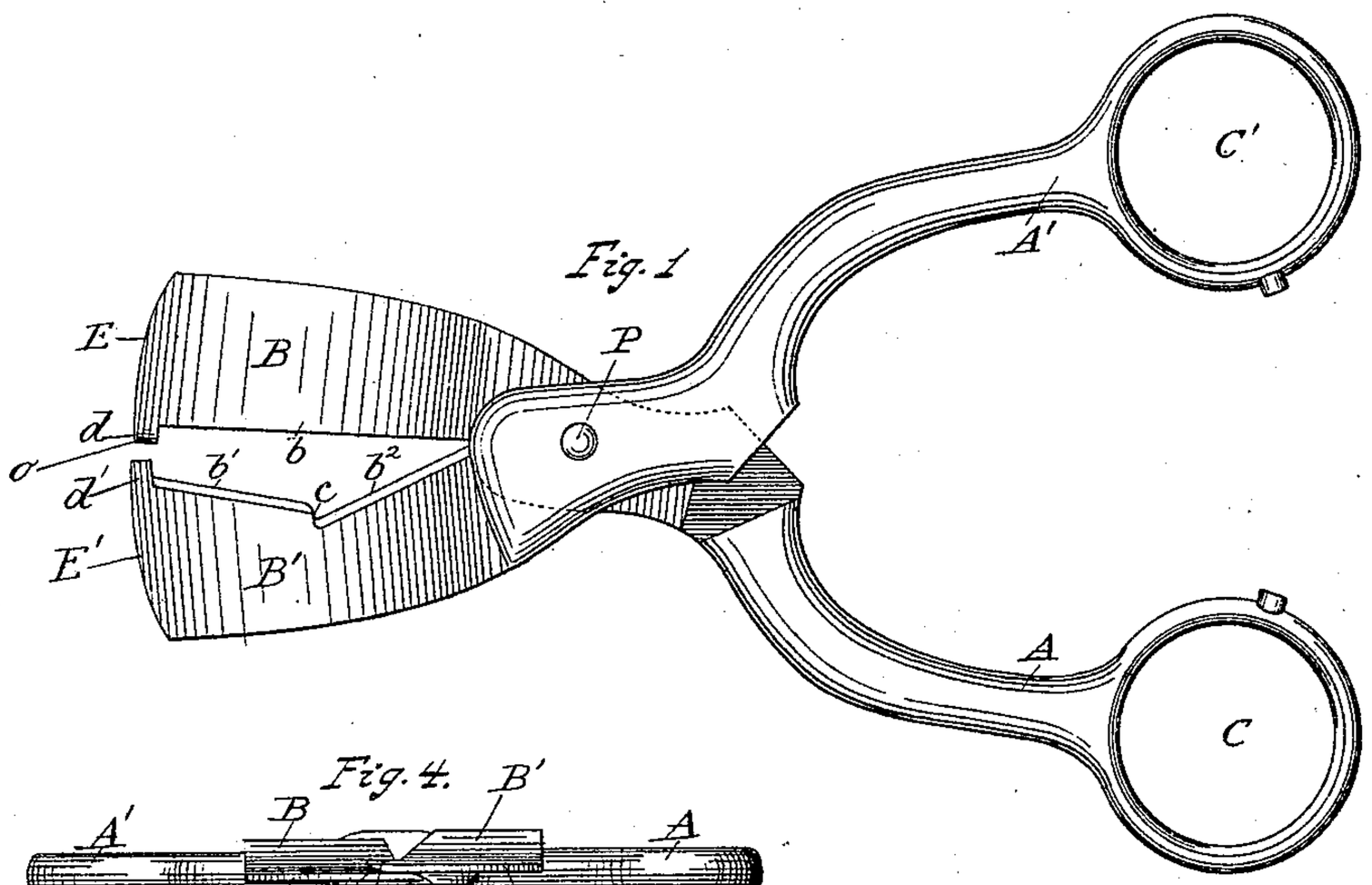

Fig. 1

Fig. 4.

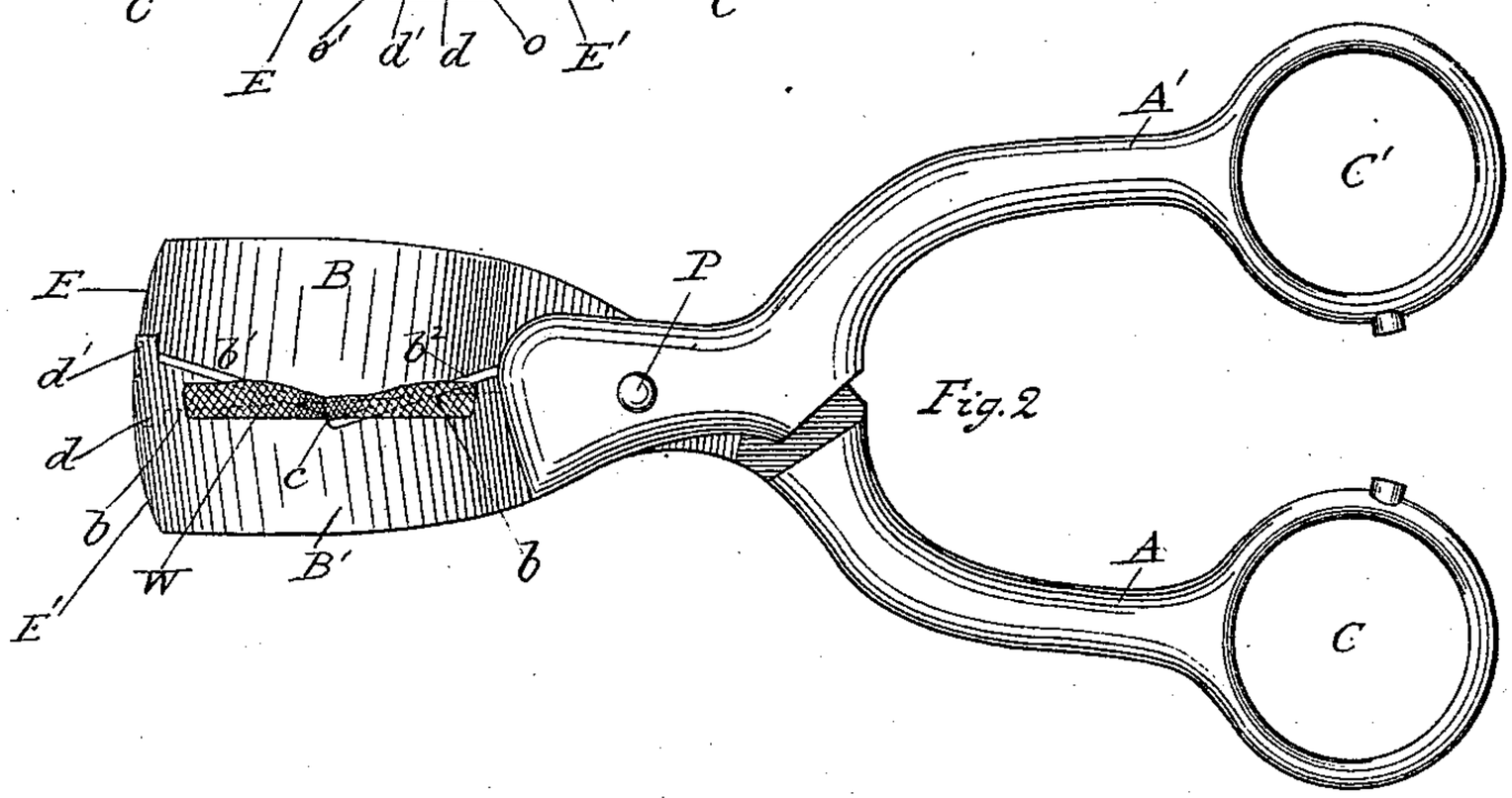

Fig. 2

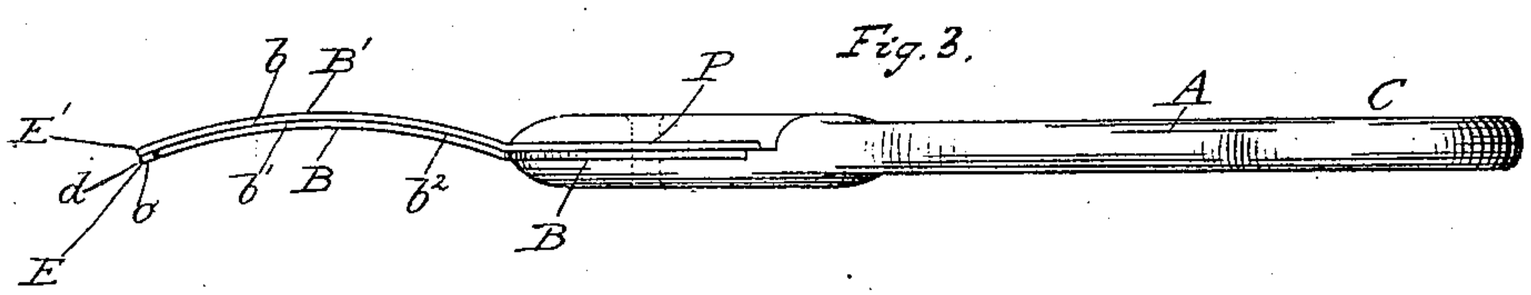

Fig. 3.

Witnesses:
J. Lowell Wilson, Jr.
Geo. W. Gibbons

John L. Sanford,
Inventor.
by Horace L. Hotchkiss,
his Attorney.

UNITED STATES PATENT OFFICE.

JOHN L. SANFORD, OF ALBANY, NEW YORK, ASSIGNOR OF ONE-HALF TO JOHN F. STEPHENSON, OF SAME PLACE.

WICK-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 404,736, dated June 4, 1889.

Application filed February 23, 1889. Serial No. 300,821. (Model.)

To all whom it may concern:

Be it known that I, JOHN L. SANFORD, of the city of Albany, county of Albany, and State of New York, have invented new and useful Improvements in Lamp-Wick Shears, of which the following is a specification.

My invention relates especially to shears designed for trimming the wicks of kerosene lamps and stoves, in which the cutting-blades are curved so as to conform to the shape of the top of the ordinary burner and to give a rounded form to the trimmed wick; and my invention consists in so constructing said curved blades and shaping their cutting-edges as to produce as the result of the use of my shears an evenly-rounded wick that requires no subsequent trimming or shaping. Another feature of my shears is that when used the cutting begins at the heels of the blades, is taken up directly by the forward ends of the blades, and continues with unequal progress from either end toward the center of the blades, at about which point it is completed, as will hereinafter be more fully described and set forth.

Accompanying and forming a part of this specification is one plate of drawings containing four figures illustrating my invention, in all of which similar letters refer to corresponding parts.

Figure 1 is a plan view of my shears. Fig. 2 is a plan view of my shears partly closed, showing a wick W partly cut through. Fig. 3 is a side view of my shears closed. Fig. 4 is a view of the cutting ends of my shears partly closed.

Referring to the drawings, A A′ are the handles, pivoted or joined at P in the usual manner and provided with the thumb and finger pieces C C′. At its other extremity the handle A is provided with the blade B or under blade, and the handle A′ with the blade B′ or upper blade. The blade B has the straight cutting-edge *b*, while the blade B′ has the angular cutting-edges *b′* and b^2 and the recess *c*. These cutting-edges and the edge of the recess are beveled abruptly from the outer faces of the blades inwardly. The blades are both curved, B being curved just enough more than B′ to put the ends E′ and E in the same plane when the shears are open. The blades B and B′ are also furnished, respectively, with the spurs *d* and *d′*, said spurs being beveled on their respective opposing faces *o* and *o′*.

In using my shears, which are made of different lengths to suit any sized wicks, the wick is caught between the angular cutting-edges of the blade B′ and the straight cutting-edge of the blade B, the convexity of the blades, of course, being uppermost. Forcing the handles A and A′ toward one another, the spaces *d* and *d′* meet and their respective faces *o* and *o′* move on and lap one another, as shown in Fig. 4, being adapted thereto by being beveled. Following the spurs the blades meet and lap one another, the concave surface of the blade B′ moving upon the convex surface of the blade B, the two said surfaces held snugly against one another as they move by means of the pressure exerted by the end E′ against the unequally-curved end E. While the blades are thus moving the cutting-edges have seized the wick on opposite sides first by the heel of the edge *b* and the heel of the angular edge b^2, and directly after by the forward end of the edge *b* and the forward end of the angular edge *b′*. As the blades move upon one another in opposite directions, the said edges cut the wick from either end with unequal progress toward the center. Naturally the ends E and E′ of the blades move faster than the other ends, so that the edge *b′* and the opposing part of the edge *b* will have cut entirely through the wick before the edge b^2 and its opposing part of the edge *b* will have cut scarcely more than half the length of b^2. (See Fig. 2.)

Cutting, as my shears do, from both ends toward the center of the wick, there is an additional resistance of the wick to the cutting-edges, caused by the compression of the wick toward its center. This is met and accommodated by the recess *c*, which, when the edge *b′* has cut entirely through the wick, receives and holds the uncut part of the wick until the cutting-edge b^2 and the edge of the recess *c* have met the opposing part of the edge *b* and passed it, cutting the wick entirely through. The result is always an evenly-cut wick.

I am aware that curved blades have here-

tofore been used in the construction of shears for various purposes, and I do not therefore claim, broadly, curving shear-blades.

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

1. Lamp-wick shears consisting of thumb and finger pieces C and C′, handles A and A′, and the curved blades B and B′, said blades being unequally curved and furnished with the spurs d and d', beveled on their opposing faces, substantially as set forth.

2. In lamp-wick shears, substantially such as described, one of the blades having a straight cutting-edge b, and the other blade formed with the angular cutting-edge b' and b^2, and the recess c, as hereinbefore set forth.

3. Lamp-wick shears consisting of thumb and finger pieces C and C′, handles A and A′, and blades B and B′, said blades being unequally curved and furnished with the spurs d and d', beveled on their opposing faces, the blade B having a straight cutting-edge b, and the blade B′ formed with the angular cutting-edges b' and b^2 and the recess c, substantially as set forth.

In witness whereof I have hereunto set my hand this 21st day of February, 1889.

JOHN L. SANFORD.

In presence of—
THOMAS WILSON, Jr.,
GEO. W. GIBBONS.