

(No Model.)

L. D. BUSELL.

EDGE PLANE.

No. 258,628.

Patented May 30, 1882.

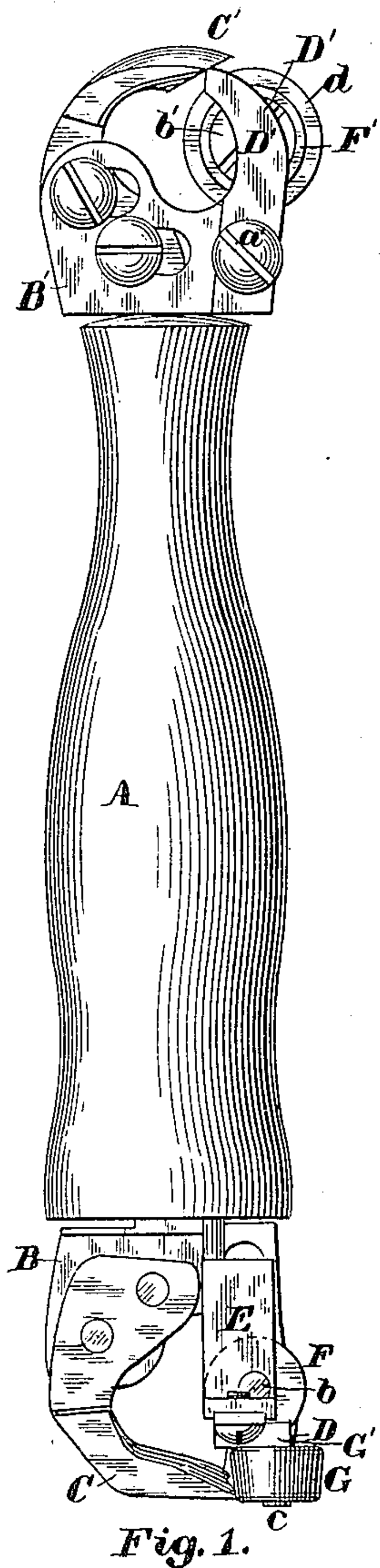


Fig. 1.

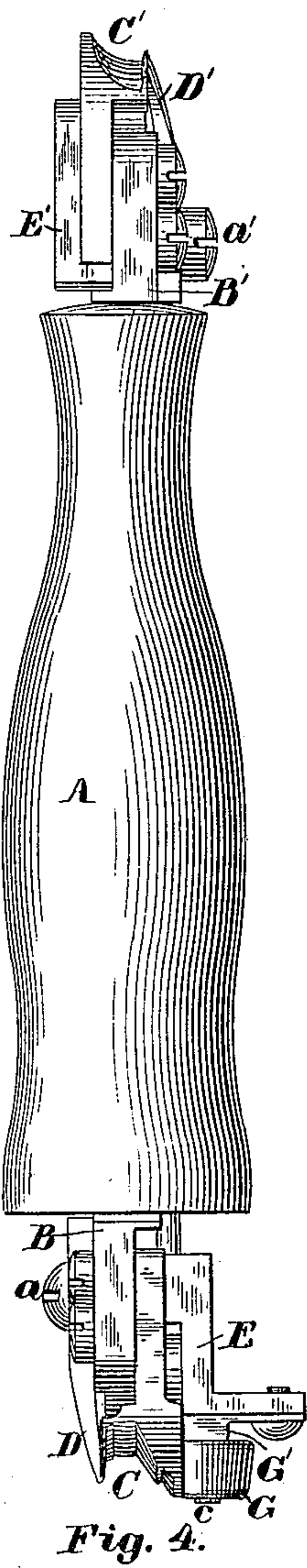


Fig. 4.

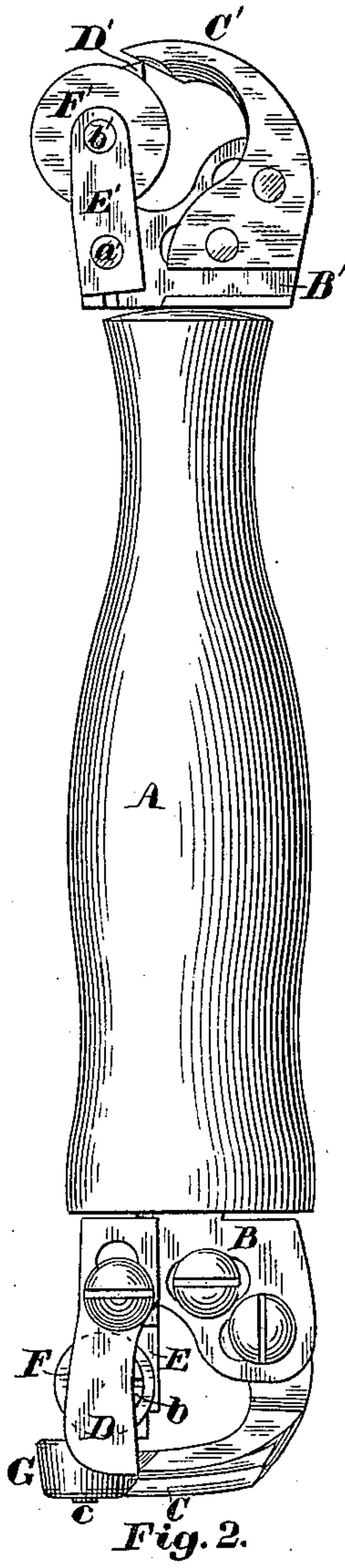


Fig. 2.

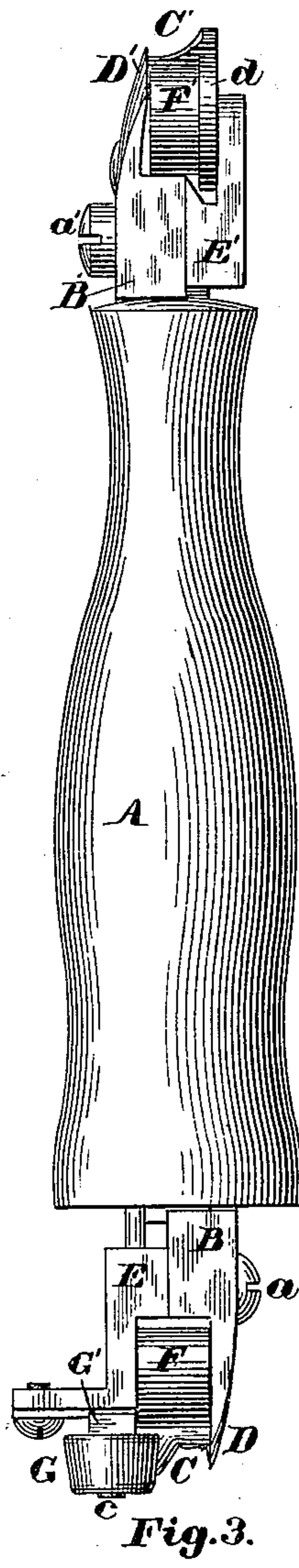


Fig. 3.

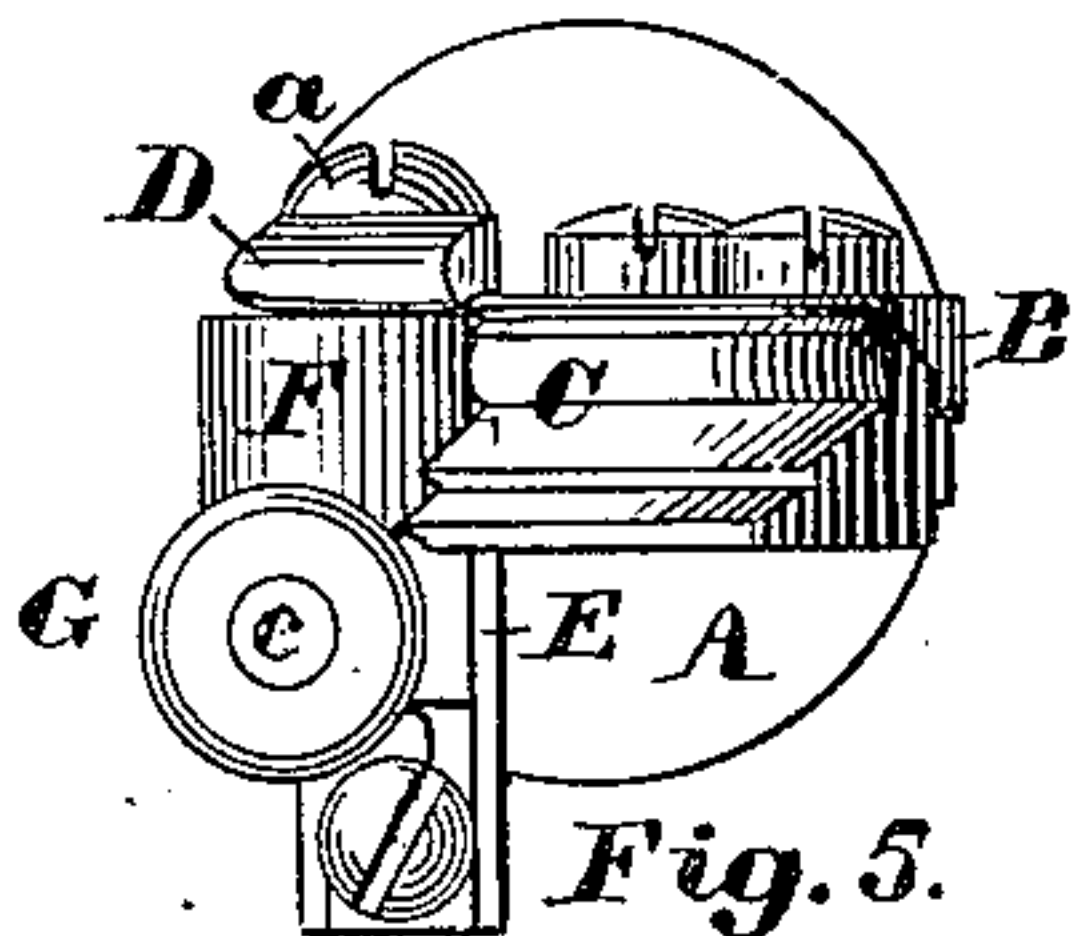


Fig. 5.

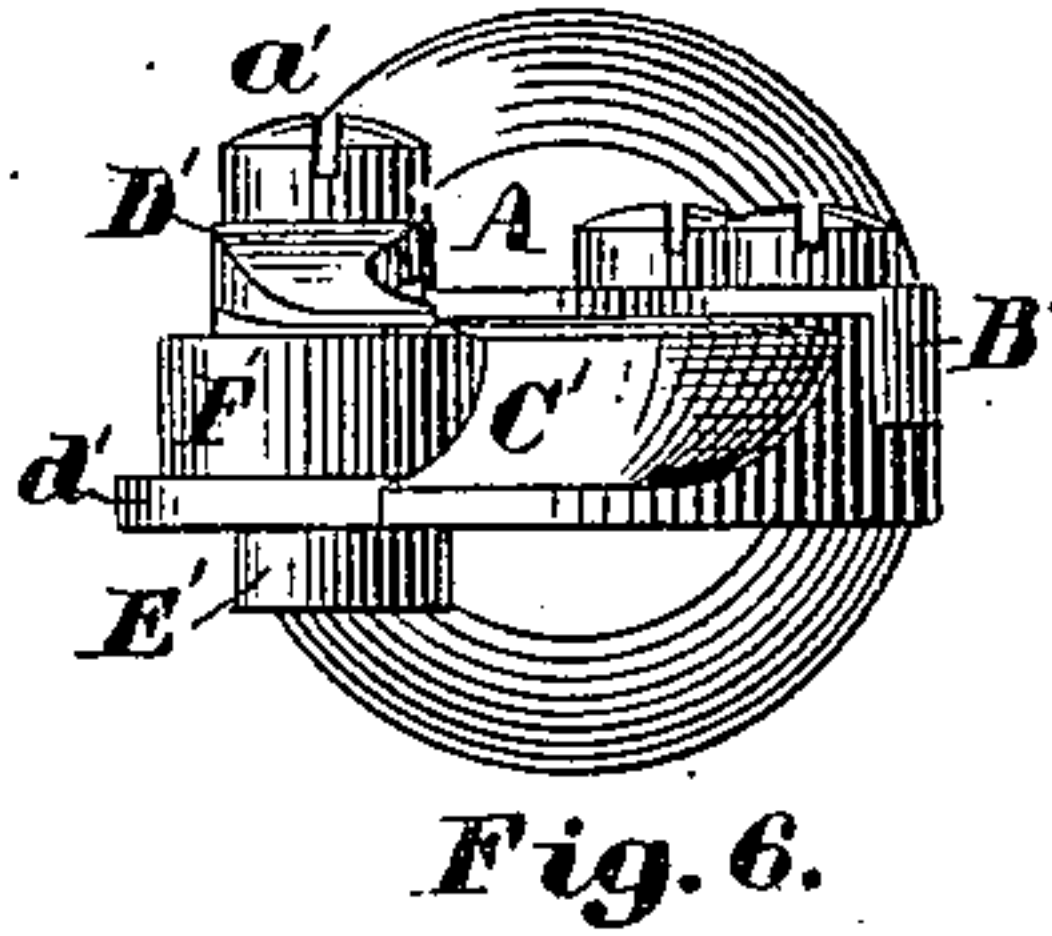


Fig. 6.

Witnesses:

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UNITED STATES PATENT OFFICE.

LUTHER D. BUSELL, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO JAMES H. BUSELL, OF SAME PLACE.

EDGE-PLANE.

SPECIFICATION forming part of Letters Patent No. 258,628, dated May 30, 1882.

Application filed April 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, LUTHER D. BUSELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and
5 useful Improvements in Edge-Planes for Trimming the Edges of Boot and Shoe Soles, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to a hand-tool for trim-
10 ming the edges of boot and shoe soles, which is usually termed an "edge-plane;" and it consists in the combination of a cutting- to 1 adapted to trim and shape the edge of the sole, a revolving gage-roll adapted to bear upon the edge of the sole in advance of the cut-
15 ter, and a revolving guide-roll adapted to bear against the tread-surface of the sole, as will be described.

Figure 1 of the drawings is a side elevation
20 of an edge-plane embodying my invention. Fig. 2 is an elevation of the opposite side. Fig. 3 is a front elevation. Fig. 4 is a rear elevation, and Figs. 5 and 6 are views looking at the opposite ends of the same.

25 A is the tool-handle, having set in the opposite ends thereof the shanks B and B', to which are adjustably secured the cutting-tools C and C', respectively. The cutter C, secured to the larger end of the handle A, has its outer face
30 molded to the converse of the shape that it is desired to give to the fore-part edge of the sole, while the cutter C', secured to the opposite end of the handle A, is molded to the desired shape to be given to the edge of the shank
35 portion of the sole.

D and D' are stationary rand-guards rigidly secured to or formed in one piece with the shanks B and B', respectively.

40 E and E' are brackets or stands adjustably secured to the shanks B and B', respectively, upon the sides opposite to the rand-guards D and D', and held in position by the screws a and a', respectively, as shown.

45 F is a gage-roll mounted on a journal or stud, b, set in the side of the bracket E, said roll occupying a position a little in advance of the cutting-edge of the cutter C and adapted to bear upon and roll along the edge of the sole in advance of the cutter.

50 G is a guide-roll mounted upon a stud, c, set in the stand G', adjustably secured to the bracket E in such a manner that said roll may

be moved toward or from the stationary rand-guard D to adapt it to soles of different thicknesses.

Owing to the peculiar shape of the shank-
55 trimming cutter C' and the shape of the sole in the shank of the boot or shoe, a modified form of gage-roll, F', is used in connection with the shank-cutter, which roll is mounted upon
60 the stud b', set in the bracket E', and is provided with the annular flange d, which serves as a rotating guide in lieu of the roll G.

By the use of the revolving gage and guide
65 rolls or surfaces the edge-plane is rendered much more effective and easy of operation, for the reason that the friction is very much reduced, and as a consequence the resistance to the forward movement of the cutter is greatly diminished, and the operator is there-
70 fore enabled to carry a steadier hand, and thus do a smoother and better job, than he could do without such rotating gage and guide-surfaces, and work can be done with much greater ease and in less time.

75 What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a hand edge-plane for trimming boot and shoe soles, of a cutting-
80 tool the cutting-edge of which is shaped to cut away portions of the thickness of the sole to a greater depth than other portions, and a gage-roll of equal diameter throughout, arranged to bear upon the sole in front of said cutting-edge and form between it and said cut-
85 ting-edge a throat of varying width, whereby a chip of varying thickness in cross-section may be cut from the sole-edge, and thus reduce it to the desired form at one operation, substantially as described.

2. In an edge-plane for trimming boot and shoe soles by hand, the combination of a cutting-tool adapted to trim and shape the edge of the sole, a revolving gage-roll adapted to
90 bear upon the edge of the sole in advance of the cutter, and a revolving guide-roll adapted to bear against the tread-surface of the sole, substantially as described.

Executed at Boston, Massachusetts, this 2d day of April, A. D. 1881.

LUTHER D. BUSELL.

Witnesses:

E. A. HEMMENWAY,
WALTER E. LOMBARD.