

2 Sheets—Sheet 1.

MACHINE FOR TRIMMING, PLANING, AND SAWING STEREOTYPE PLATES.

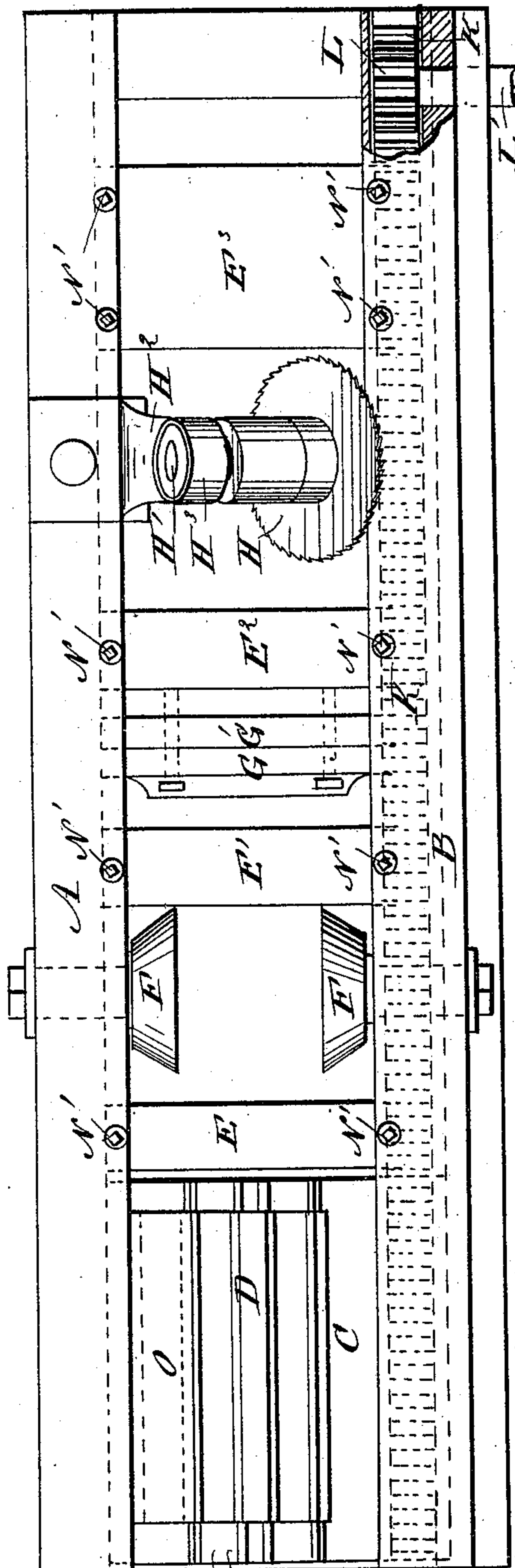
Patented Jan. 22, 1889.



WITNESSES:

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INVENTOR,

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(No Model.)

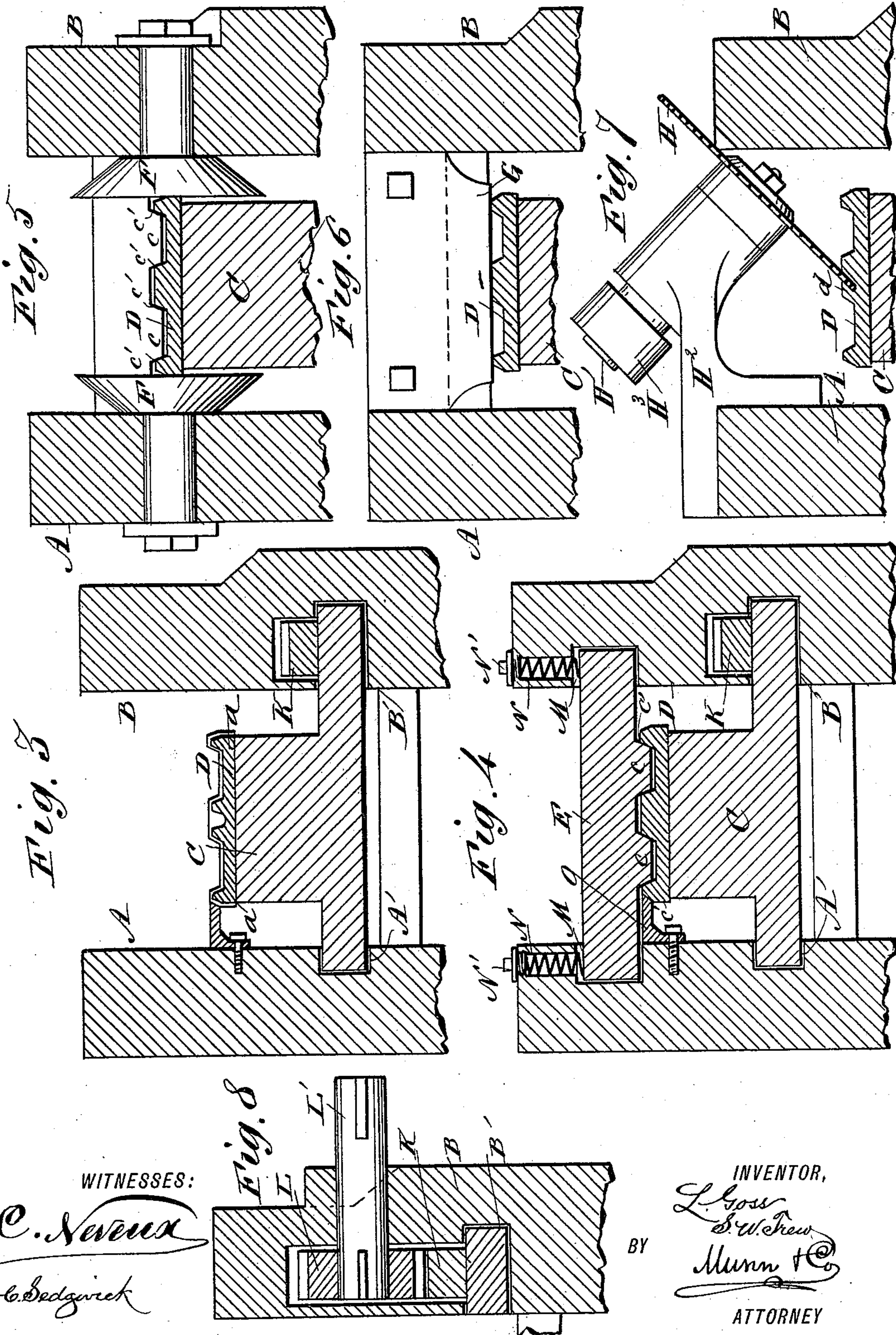
2 Sheets—Sheet 2.

L. GOSS & S. W. TREW.

MACHINE FOR TRIMMING, PLANING, AND SAWING STEREOTYPE PLATES.

No. 396,478.

Patented Jan. 22, 1889.



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LUCIUS GOSS, OF UPPER MONTCLAIR, NEW JERSEY, AND SAMUEL W. TREW,
OF BROOKLYN, NEW YORK.

MACHINE FOR TRIMMING, PLANING, AND SAWING STEREOTYPE-PLATES.

SPECIFICATION forming part of Letters Patent No. 396,478, dated January 22, 1889.

Application filed April 11, 1888. Serial No. 270,349. (No model.)

To all whom it may concern:

Be it known that we, LUCIUS GOSS, of Upper Montclair, in the county of Essex and State of New Jersey, and SAMUEL W. TREW, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Machine for Trimming, Planing, and Sawing Stereotype-Plates, of which the following is a full, clear, and exact description.

The object of our invention is to provide a machine having such construction that it is adapted to trim, plane, and saw stereotype-plates, and thus fit them for the form by a single passage of the plate through the machine, thus saving time, labor, and power; and the invention consists of the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of our invention, the side rail of the frame of the machine being removed. Fig. 2 is a plan view of the machine complete. Figs. 3, 4, 5, 6, and 7 are enlarged transverse sectional elevations taken, respectively, on the lines 3 3, 4 4, 5 5, 6 6, 7 7; and Fig. 8 is an enlarged detailed sectional view taken on the line 8 8 of Fig. 1.

The frame of the machine is composed of the two side pieces, A B, constructed in this instance with ways A' B' for the traveling bed-plate C, on which the plate D to be trimmed, planed, and sawed is placed. In the side pieces, A B, are fitted in succession the holding-bar E, trimming-knives F F, holding-bar E', plane G, holding-bar E², saw H, and holding-bar E³.

The bed-plate C is reciprocated through the machine, in this instance, by the rack K and pinion L, secured upon the shaft L' and meshing with the rack, as shown clearly in Figs. 1, 2, and 8.

The knives F F are circular, and their axis is placed slightly above the upper edge of the plate D, so that when the edges of the said plate are drawn in contact with the edges of the knives they will be automatically revolved, thus causing the edges of the plate to be

trimmed by a shear cut, produced without positive motion being applied to the knives. The plate is carried forward with the bed-plate C by means of a shoulder, a, at the rear end of the bed-plate, as shown clearly in Figs. 1 and 3.

The plane G is a broad knife held to the blocks or fixed cross-pieces G', and it serves to plane off the bottom of the stereotype-plate D as said plate is carried along under the knife.

The saw H is attached to an inclined shaft, H', held in a bracket, H², attached to the side piece, A, and is provided with a pulley, H³, over which a belt may pass for revolving the shaft and saw, so that it will cut the central kerf, d, in the stereotype-plate, as illustrated in Fig. 7.

The holding-bars E E' E² E³ are arranged to have a slight vertical movement in mortises M, and they are held pressed down by coiled springs N N, adjustable as to pressure by screws N', and the under surfaces of the said holding-bars are formed with projections or ribs c c, (shown clearly in Figs. 4 and 5,) and the edges of said ribs are beveled, as shown at c', (see Fig. 5,) so that they fit into the depressions at the bottom of the stereotype-plate. The object of this is to align the plate with the center of the machine and hold it in straight position while being carried in contact with the knives and saw. The bar E³ is of considerable width, so that there will be no danger of lateral movement of the plate after its rear end has passed the bar E². The bars E E' E² alternate with the trimming-knives F and plane G, and are placed so near together that each one acts upon the plate before it leaves contact with the preceding bar.

A straight edge or flange, O, is attached to the side piece, A, of the frame to assist in placing the stereotype-plate upon the bed-plate C, as will be understood from Fig. 4.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The machine herein shown and described, consisting of a suitable frame and a reciprocating bed-plate, C, in combination with edge-trimming knives, plane, diagonally-set saw,

and the holding-bars, all arranged substantially as and for the purposes set forth.

2. The combination, with the reciprocating bed-plate, of the holding-bars formed at their
5 under surfaces with beveled ribs or projections *c*, substantially as and for the purposes set forth.

3. The combination, with the reciprocating bed-plate *C*, of the circular trimming-knives
10 *F*, the axes of which stand slightly above the

bed-plate, whereby the movement of the stereotype-plate in contact with the knives will cause them to revolve, substantially as described.

LUCIUS GOSS.
SAMUEL W. TREW.

Witnesses:

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H. A. WEST.