2 Sheets—Sheet 1.

J. G. GRIFFITH.

Machine for Pressing Seams.

No. 209,339. Patented Oct. 29, 1878.

Fig. 1.

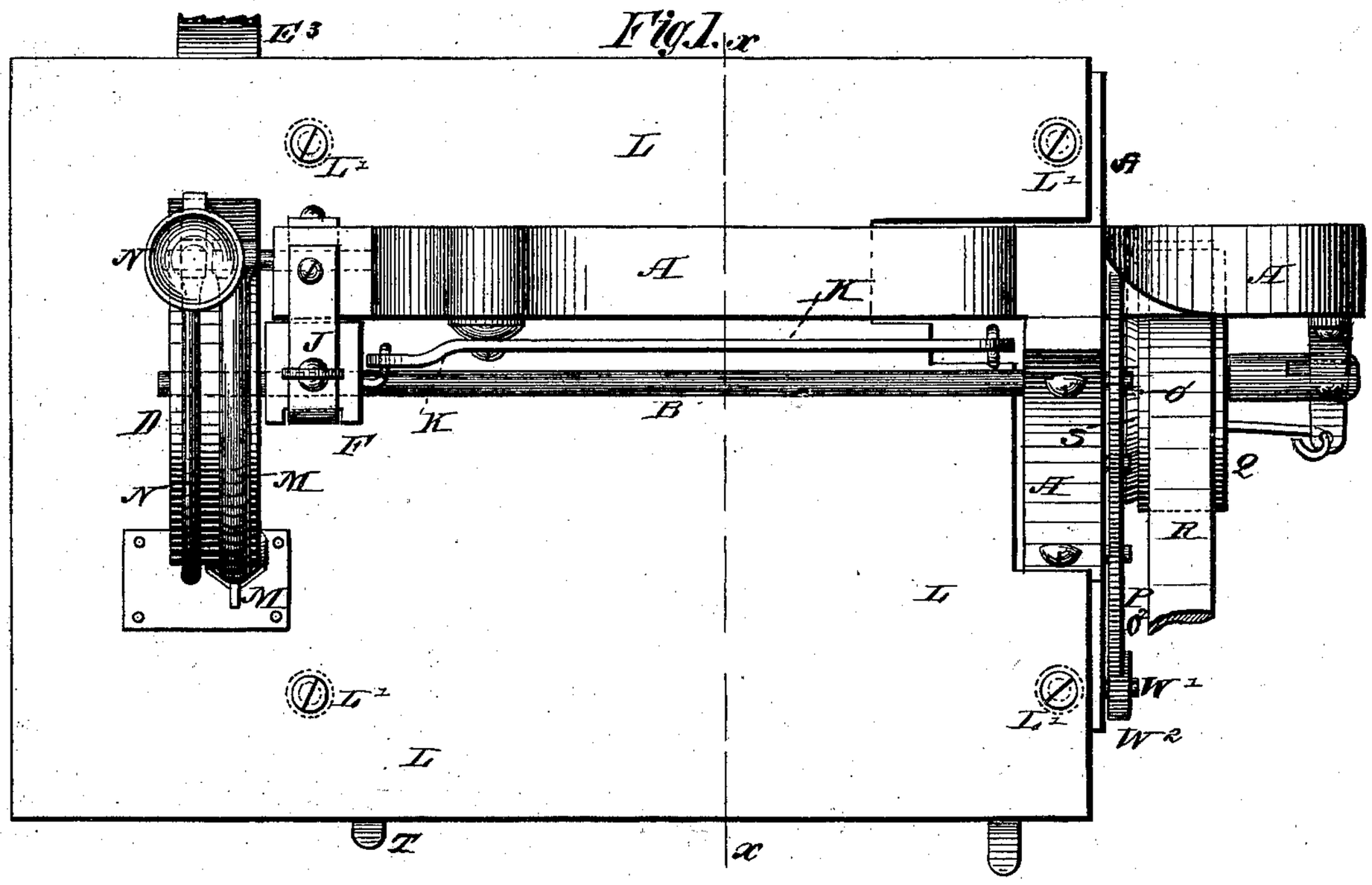
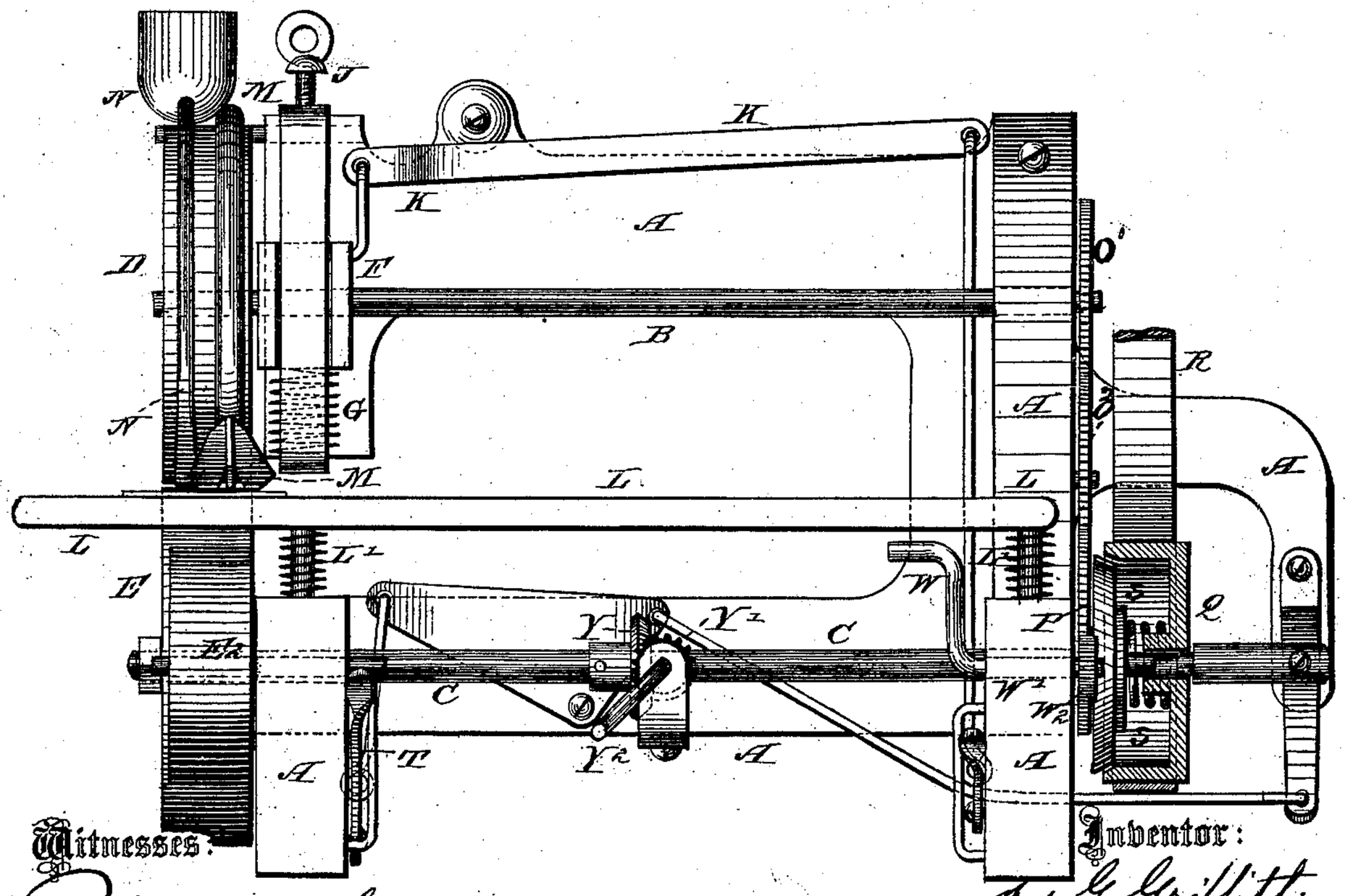


Fig. 2.



Witnesses:

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2 Sheets—Sheet 2.

J. G. GRIFFITH.

Machine for Pressing Seams.

No. 209,339. Patented Oct. 29, 1878.

Fig. 3.

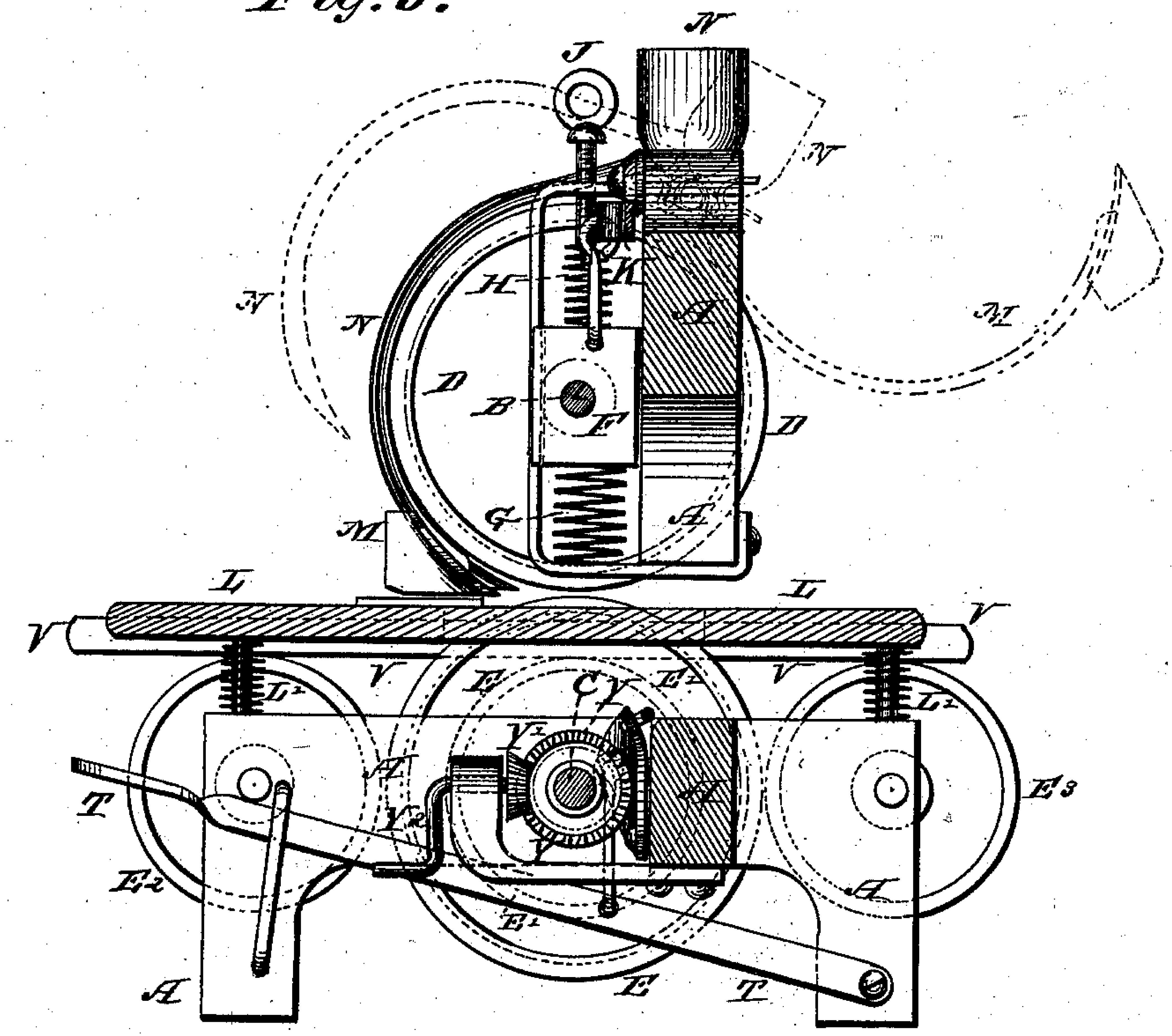


Fig. 4.

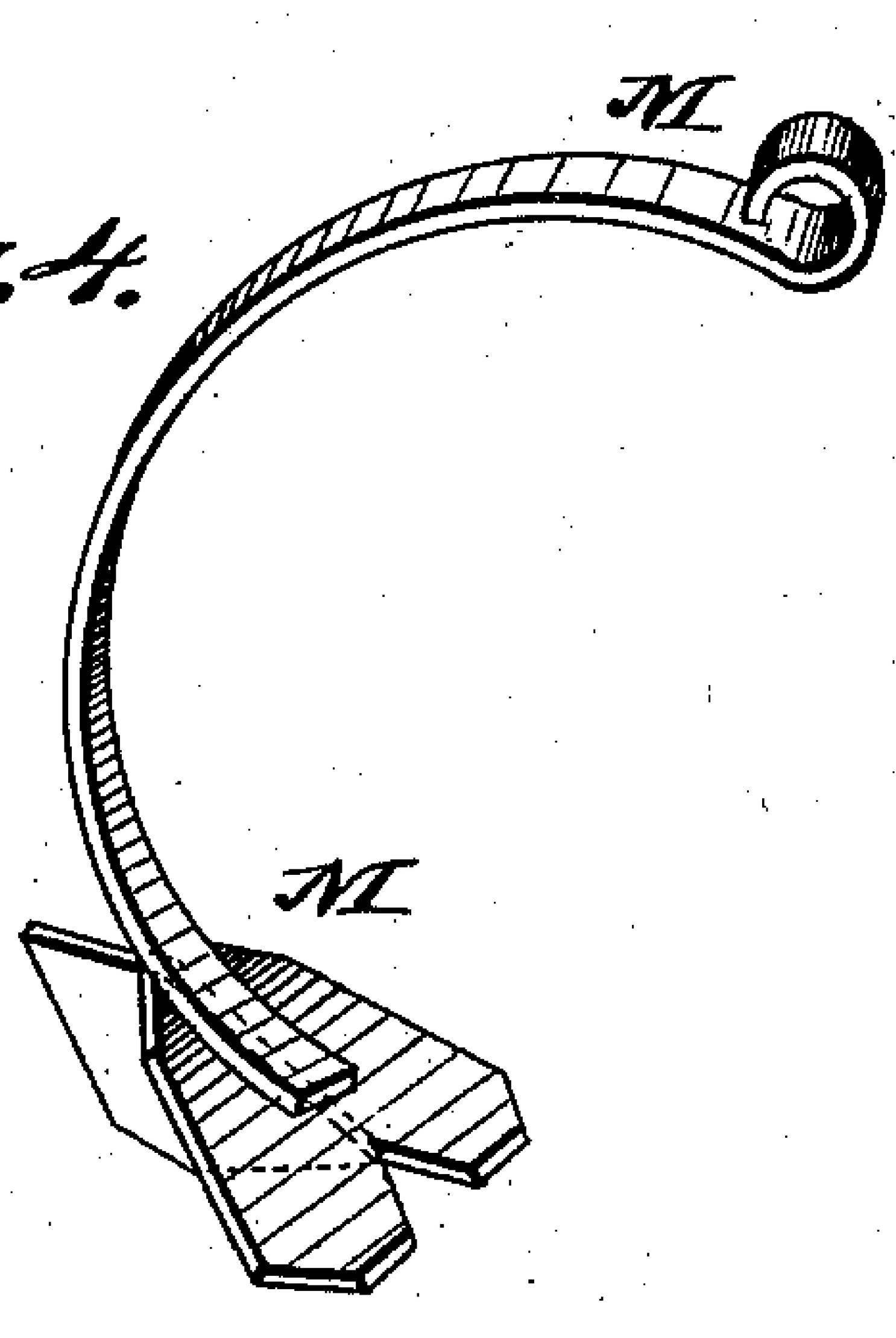
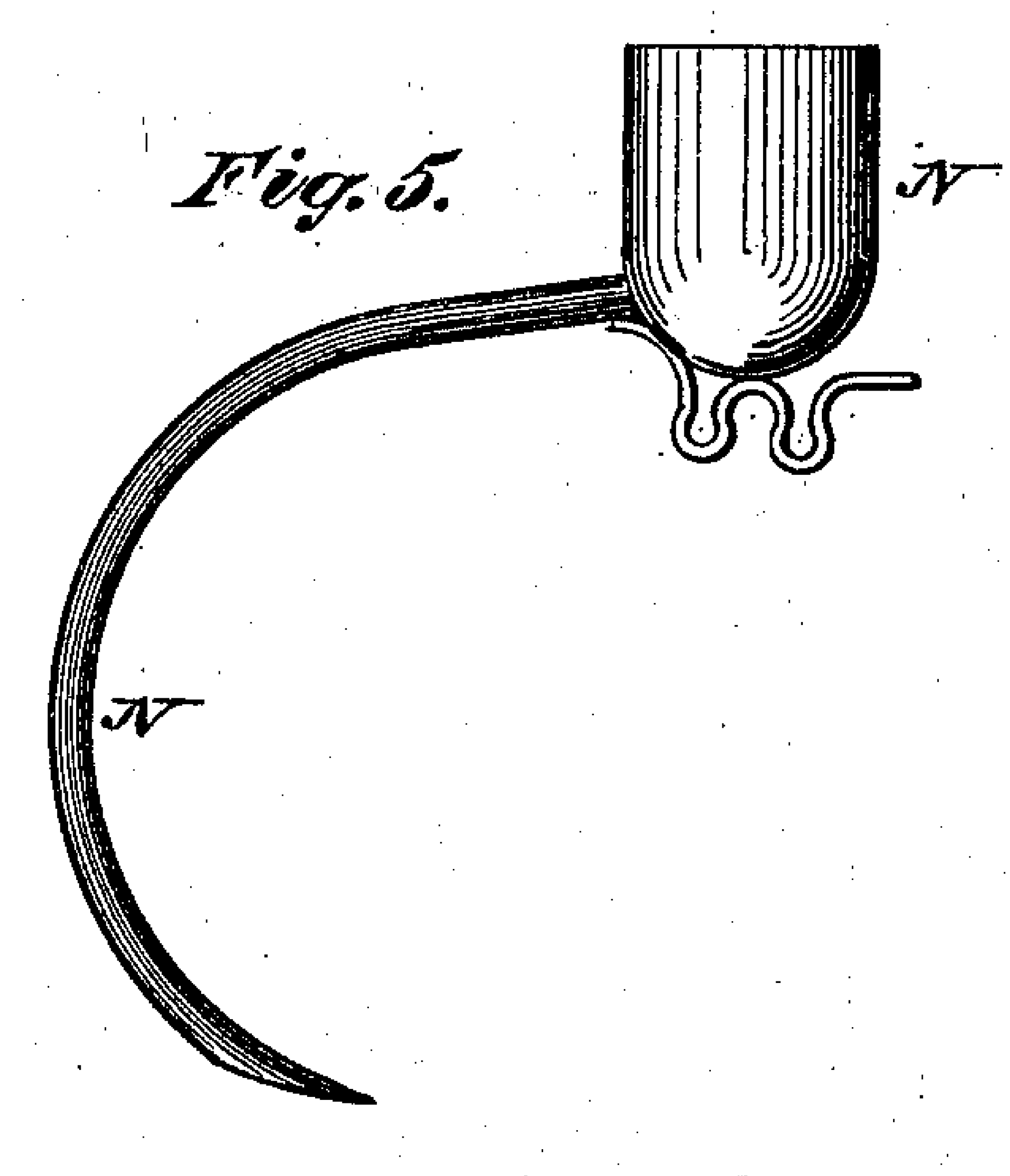


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOSEPH G. GRIFFITH, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR PRESSING SEAMS.

Specification forming part of Letters Patent No. **209,339,** dated October 29, 1878; application filed October 15, 1877.

To all whom it may concern:

Be it known that I, JOSEPH G. GRIFFITH, of the city, county, and State of New York, have invented a certain new and useful machine to be used in the manufacture of clothing for the purpose of opening and pressing the seams by which the parts are united, and said machine is also applicable to pressing the folds of cloth in giving the form or set to collars, cuffs, and other folded portions of clothing; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable persons skilled in the art to make and use the said invention, referring in this description to the drawing annexed and the letters of reference marked thereon.

The several Figures 1, 2, and 3, respectively, show a plan, a side elevation, and a vertical section in the plane indicated by the dotted line X X in Fig. 1. The remaining figures show detached views of details of the invention and a modified form of parts.

The nature of my invention consists, first, in a sponging or moistening device, by which the parts of the seams to be pressed are moistened before passing into the space between the rollers; second, in an arrangement by which the opening and sponging devices may be quickly removed from or returned to proximity to the rollers, so as to readily adapt the machine to press either seams or flat surfaces.

A represents the frame of the machine, bearing two shafts, B and C. Upon the ends of the shafts B and C, at the open side of the frame, are two rollers, D and E, made preferably of metal, which are hollow, and may be heated either by steam or by gas jets, or by a lamp-flame, or slugs previously heated, as calender-rollers are commonly heated.

The upper shaft, B, is provided with a box, F, fitted so as to rise and fall in the frame A, and springs G and H are placed, respectively, under and on top of the box F. The under spring, G, which is the weaker, raises the shaft B and separates the rollers D and E when the pressure of the upper spring, H, is relieved. The upper spring, H, is pressed down by a screw, J, and may be raised and its pressure relieved by a lever, K.

A table, L, serves to support the work, and has an aperture, through which the lower roller, E, is adapted to rise.

A plow, M, fastened to the upper part of the frame A, reaches downward and parts the cloth forming the reverse side of the seam, and spreads the cloth in a horizontal position as it passes to the rollers. A detached view of the plow M is shown in Fig. 4.

A tube, N, having a sponge, wick, or other similar capillary termination, serves to moisten the cloth as it passes to the rollers. This tube N is shown in a detached view in Fig. 5, and is attached to the frame A.

Both the plow M and moistening device N are hinged or jointed, so that they may be raised to the position shown in dotted lines in Fig. 3 when the machine is to be used for pressing flat surfaces, and be returned to their former position without loss of adjustment when used for seam-pressing.

The shafts B and C are connected, so as to rotate together, by toothed wheels O^1, O^2, and P, and are driven by a pulley, Q, and band R. The pulley can be instantly engaged or disengaged by a suitable friction-clutch, S, controlled by a lever, T, worked by the operator.

When work is made of such material that the surface would be impaired by a metallic roller, I substitute a cushioned or soft roller, and rely upon heating one roller, which is applied to the reverse side.

To use my invention for pressing seams, I enter the seams with the reverse side upward, and press them upon the tongue of the plow until they reach the space between the rollers. They are then carried through by the rotary motion of the rollers, and the opening, moistening, and pressing of the seams continues, the work being guided by hand to the plow.

When it is desired to press for a greater length of time upon any one point in the seam, as at the intersection of seams, I unclutch the driving pulley and let the part desired to be so pressed rest between the rollers.

When articles such as the sleeves or legs of garments are to be pressed, they are put on a sleeve-board, V. The table L and lower roller, E, are removed and a smaller roller, E^2, substituted, as shown in dotted lines, Fig. 2; or the board V may be supported by rollers E^2 and E^3. The seam of the sleeve or similar

part being presented to the plow M passes under the roller D and is pressed against the board V.

The rollers E^1, E^2, and E^3 should be covered with some soft substance, such as cloth, gum, or felt, when sleeves are pressed which are made from material liable to be marked or defaced by the pressure of the rollers E^1, E^2, and E^3 against the cloth on the under side of the sleeve-board V.

To facilitate the use of the machine on small articles, or when steam or other propelling power is not at command, I use a crank, W, shaft W^1, and pinion W^2, gearing into the cog-wheel P. The same may be effected by a bevel-wheel, Y, and pinion Y^1 and crank Y^2. (Shown in Fig. 3.) The table L is adjustable in height by screws L^2.

When I wish to withdraw a piece of work without pressing the seam to its termination, I raise the upper roller. To press flat surfaces, I turn the tube N and plow M up out of the reach of the work, and then operate the machine as an ordinary hot calender.

I am aware that heated rollers, both with and without adjusting mechanisms, have been employed for pressing or ironing clothing, and these, therefore, I do not claim as a part of my invention; neither do I broadly claim the driving mechanism for propelling them; but,

Having described my invention and the mode of operating the same, what I claim as new and useful, and as my original and first invention, is—

1. In combination, the rollers D and E, plow M, and moistening-tube N, as and for the purpose set forth.

2. The plow M, hinged to the frame A, as and for the purpose set forth.

3. The moistening device N, hinged to the frame A, as and for the purpose set forth.

JOSEPH G. GRIFFITH.

Witnesses:
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