

(No Model.)

M. L. KEITH.

MACHINE FOR MAKING WELTS FOR BOOTS OR SHOES.

No. 376,310.

Patented Jan. 10, 1888.

Fig. 1.

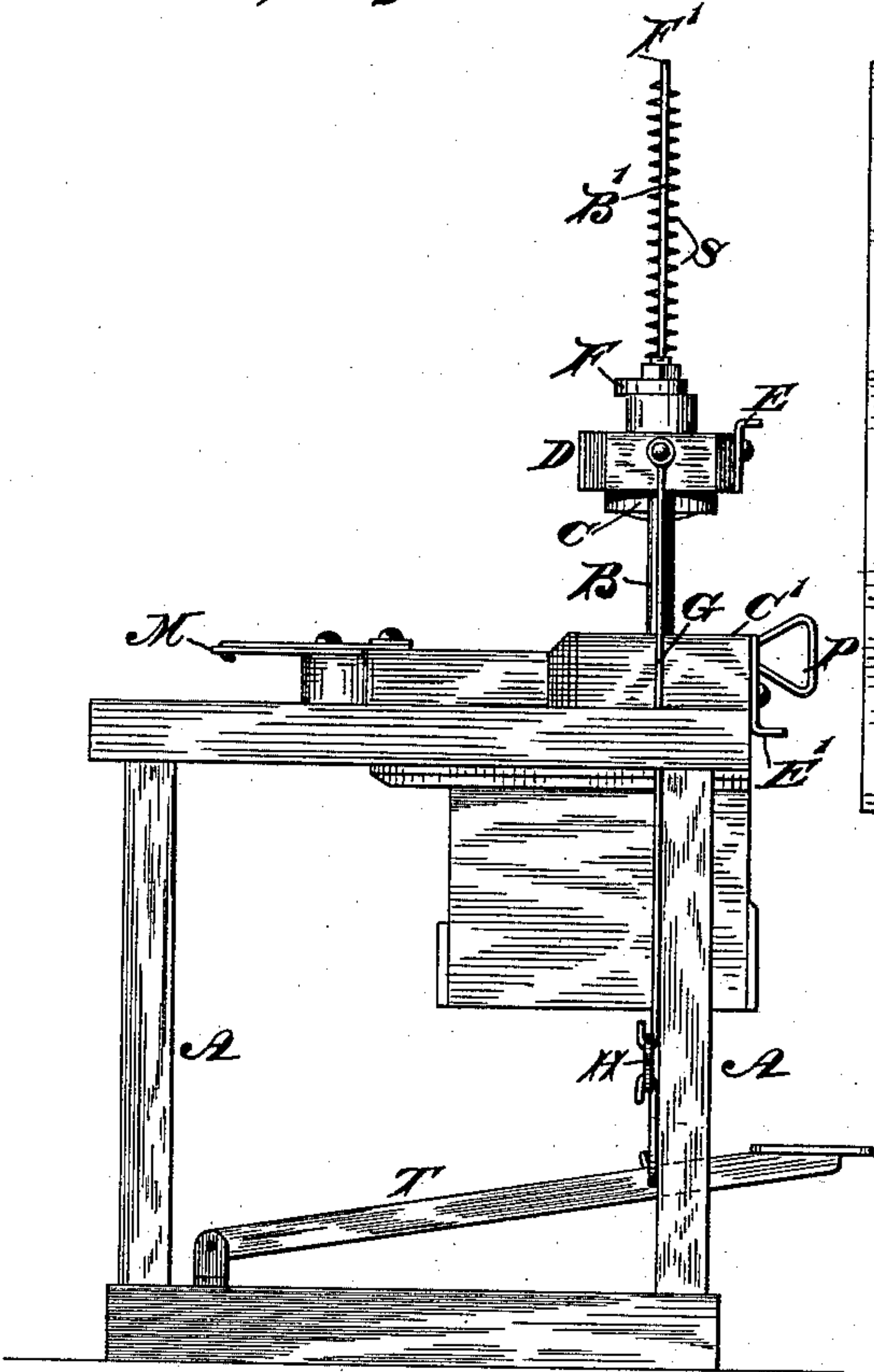


Fig. 2.

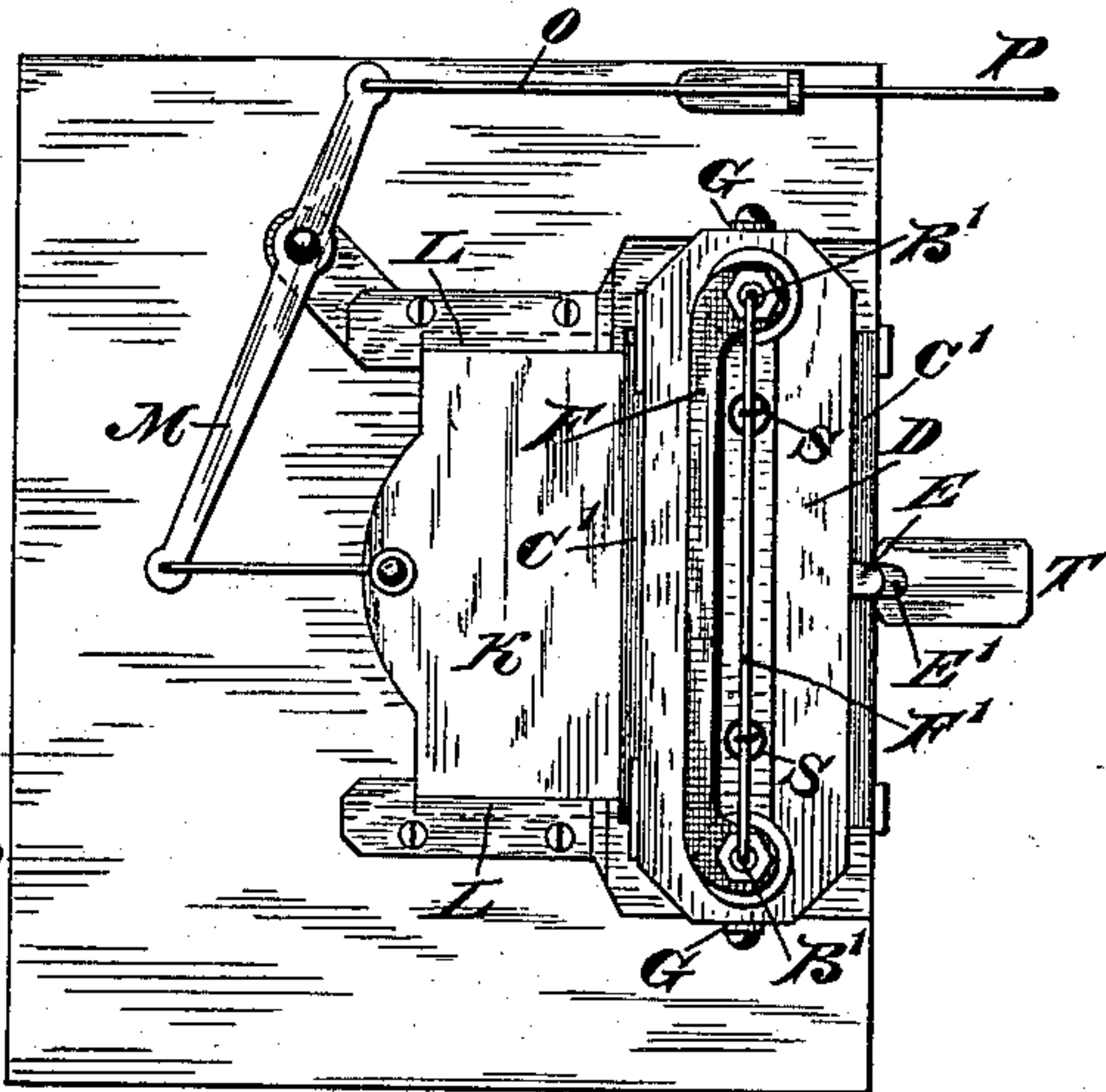


Fig. 3.

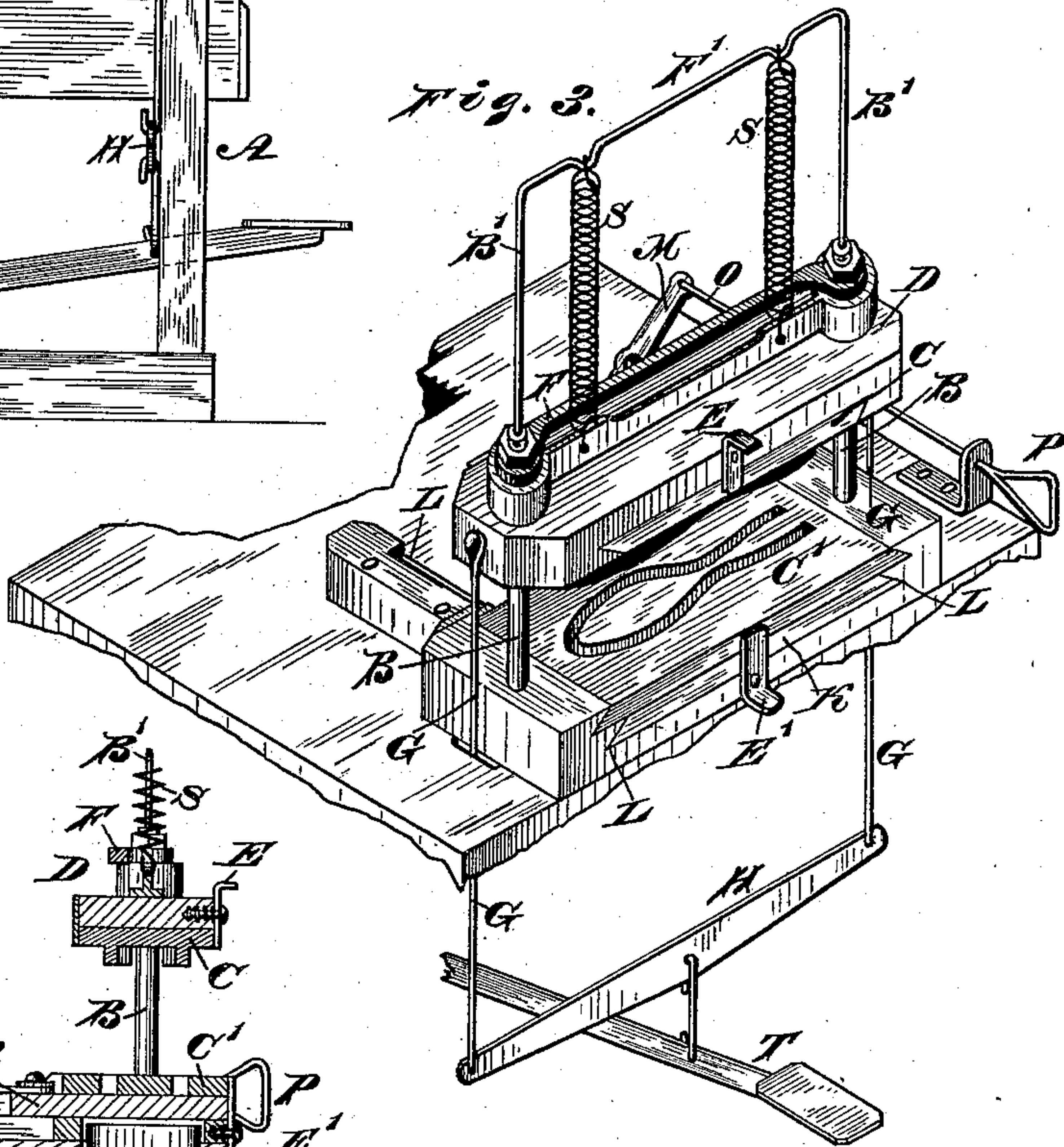


Fig. 5.

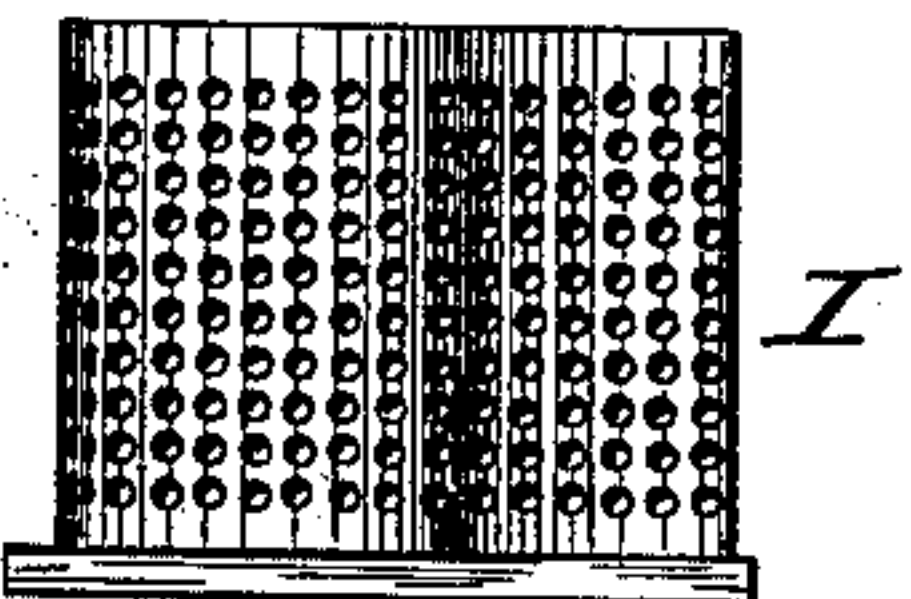
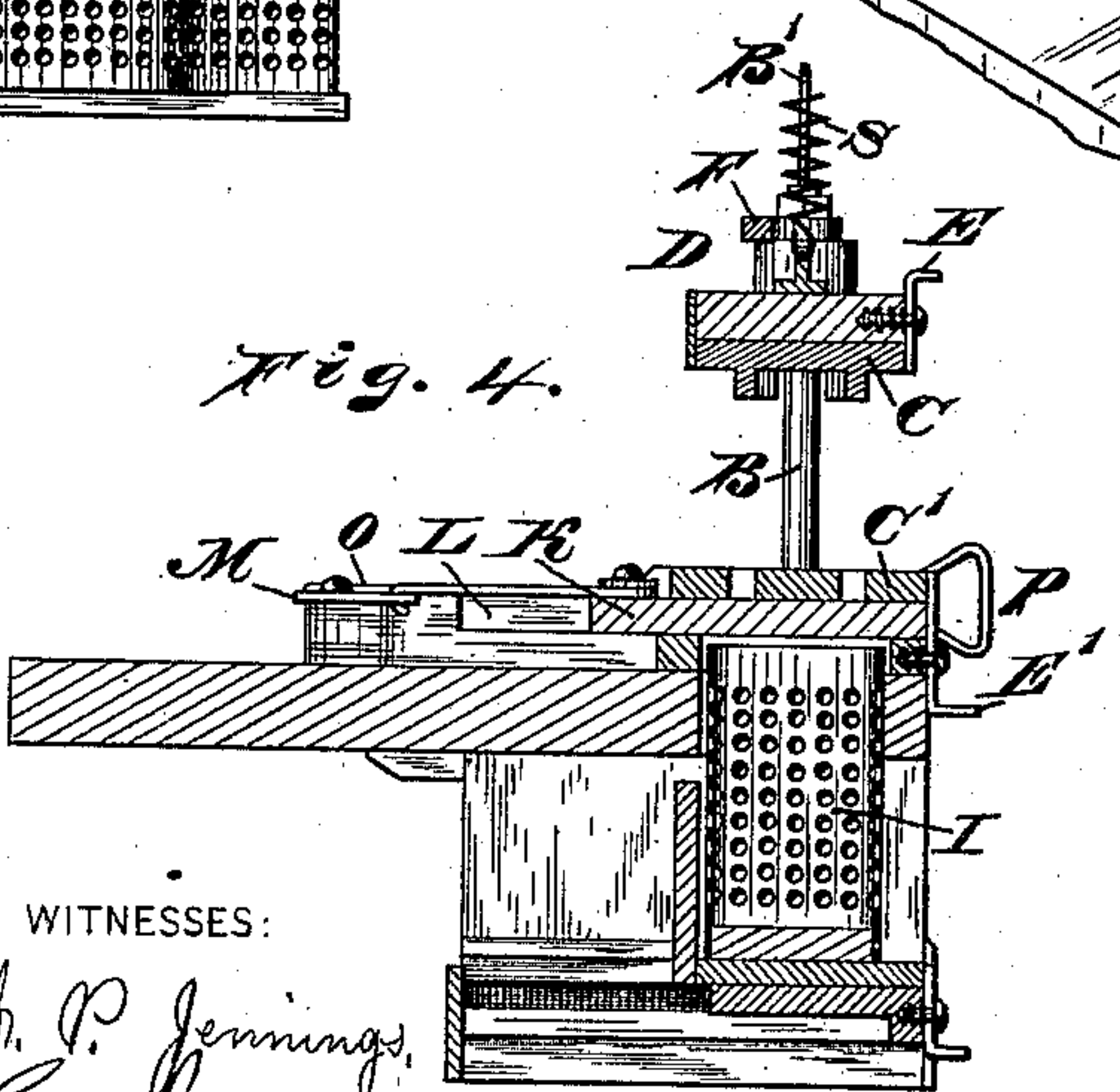


Fig. 4.



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MACHINE FOR MAKING WELTS FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 376,310, dated January 10, 1888.

Application filed July 21, 1887. Serial No. 244,856. (No model.)

To all whom it may concern:

Be it known that I, MYRON L. KEITH, a citizen of the United States, residing at Campello, Brockton, Plymouth county, State of Massachusetts, have invented a new and useful Improvement in Apparatus for Making Welts for Boots or Shoes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in machines for making welts for shoes; and it consists in the combination and arrangement of parts, as hereinafter set forth and claimed.

In an application for a patent filed by me in the United States Patent Office on July 2, 1887, and bearing Serial No. 243,207, I have described and claimed a novel form of boot or shoe welt, and the present application is designed to cover the mechanism for making such a welt.

Figure 1 is a side elevation of my improved machine for making welts. Fig. 2 is a top plan view thereof. Fig. 3 is a detail perspective view of the welt mold or former, consisting of two parts, one fixed and the other movable. Fig. 4 is a vertical section through a portion of the entire machine. Fig. 5 is a detail view of the perforated welt-box.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A A are standards (four in number) constituting the frame of the machine and fixed to the top and bottom parts, as shown.

B B are fixed upright guide-rods, on which the welt-former C is adapted to slide, said former being removable from a carrying-head, D, as shown, so that a different-sized former may be inserted to make different-sized welts. The lower or mold part of the former, C', is also removable from the table of the machine for a similar purpose, said formers being used in pairs. Catches E E' are arranged to hold the formers or molds in place in their slides. The upper former is movable up and down on the rods B B, which guide the carrying-head D in vertical motion.

To the top of the guide-rods B B is attached a cross-bar, F, adapted to hold them in place, and extensions B' B' of the guide-rods carry a parallel top cross-bar, F', to which is attached two spiral springs, S S, having their lower ends

fixed to the carrying-head D. Attached to the opposite end of the carrying-head D are two rods, G G, which extend down through the top of the frame of the machine and are connected to a cross-rod, H, below the body thereof. To the center of this cross-rod H is affixed a treadle, T, having one end pivoted to the base of the machine. Just beneath the lower former or mold, C', is situated a perforated welt-retaining box, I, for receiving the welts as fast as they are made in moist condition. This box is removable, as shown, and is perforated, so as to permit a free circulation of air, and thus dry the welts.

In the rear of and below the lower former is a removable shutter or slide, K, sliding in grooves L L, and having at its rear a link-connection with a lever, M, pivoted to it, while to its outer end is fixed a hand-rod, O, for manipulation, as will be described, the handle P of said rod being of easy access to the operator, who stands while working the machine, so as to work it or the treadle T at will.

The method or mode of operating this machine is as follows: Strips of leather of proper thickness and width and length for welts are cut out and soaked in water to render them pliable. The shutter or slide K is placed in its forward position, so as to make a bottom for the lower mold or former, C'. Then one of the welt-strips is placed in the mold, after which the operator forces the upper former, C, down by using the treadle, and causes it to compress the welt into the lower former, and thus shape it. Now the treadle is released and allowed to return to its normal position under stress of the springs S S. The operator then takes hold of the handle P of rod O and forces the shutter back from under the lower former, thus opening a pathway to the welt-box below. On depressing the treadle once more, the formed welt is forced into the welt-box I, where it is allowed to remain, and the operation continues in this manner until the box is full.

It will be understood that any-sized welt can be made by substituting for the former C C' the desired size of former, and that after the welts have dried they can be stored away and used as wanted.

If desired, the movable shutter might be fixed and the welts removed one at a time

from above. The use of such a machine would be within the limits of my invention.

I am aware that it is not new to construct a device for forming welts wherein the holding
5 or supporting arm of the upper die is made so as to swing upon the base; but I am not aware that any device of the character named has ever been constructed as herein set forth, wherein a shutter is located beneath the lower
10 die, so that by the action of the upper die the lower mold may be cleared and the molded article automatically forced into a receptacle, where it is dried without being handled after being molded and previous to drying. Neither
15 am I aware that such devices have been constructed having guiding-bars upon which a carrying-head is adapted to slide, as herein set forth, whereby the same may be readily operated, as herein described.

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

25 1. A machine for forming welts for boots or shoes, having two formers for shaping the welt, a plunger for forcing the upper former into the lower, and a shutter constituting a bottom for the lower former, substantially as described.

2. A machine of the character named having two formers, a plunger for forcing the upper former into the lower, a shutter beneath said lower former, and a drying-receptacle beneath said shutter, substantially as and for the purpose set forth.

3. In a machine for forming welts for boots or shoes, the frame A, with upright guide-rods B B, and mold C', in combination with carrying-head having mold C, the extension-rods B' B', with cross-bar F', the springs S S, secured to said cross-bar F', and head D, and
40 mechanism, substantially as described, for operating said head D, substantially as and for the purpose set forth.

4. In a machine for forming welts for boots or shoes, the frame A, with uprights B B, having extensions B' B', and cross-bar F', the carrying-head D, with mold C, the lower mold, C', the shutter K, operating in grooves L and below said mold C', and mechanism, substantially as described, for operating said shutter
50 K, substantially as and for the purpose set forth.

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Witnesses:

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