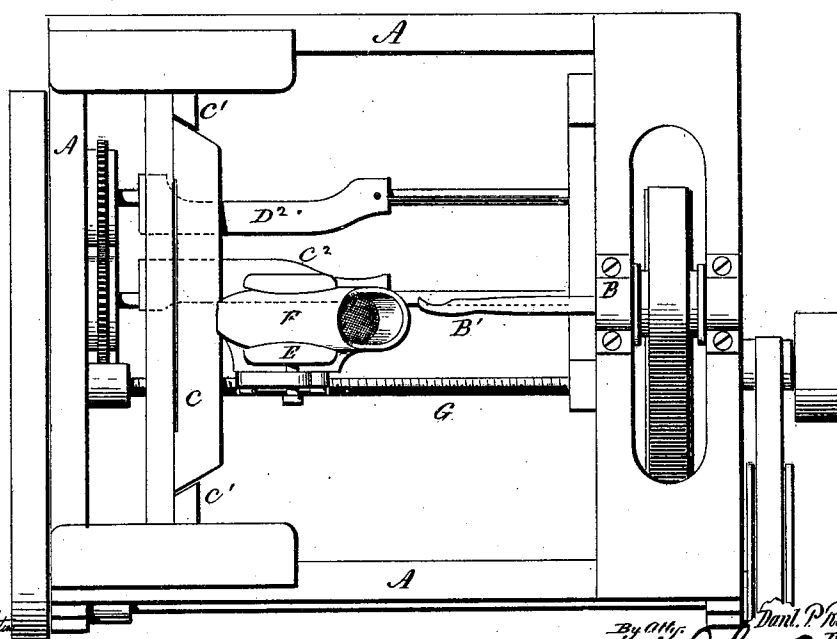
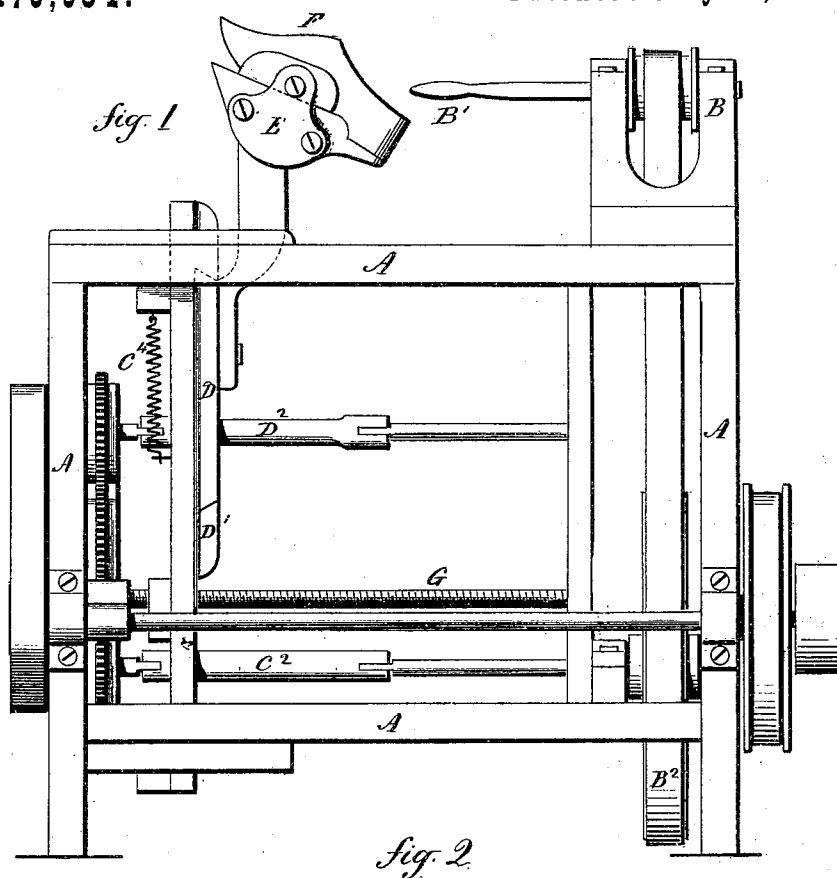


D. P. RAMSDELL.

MACHINES FOR MAKING WOOD SHOES.

No. 179,954.

Patented July 18, 1876.



Witnesses.

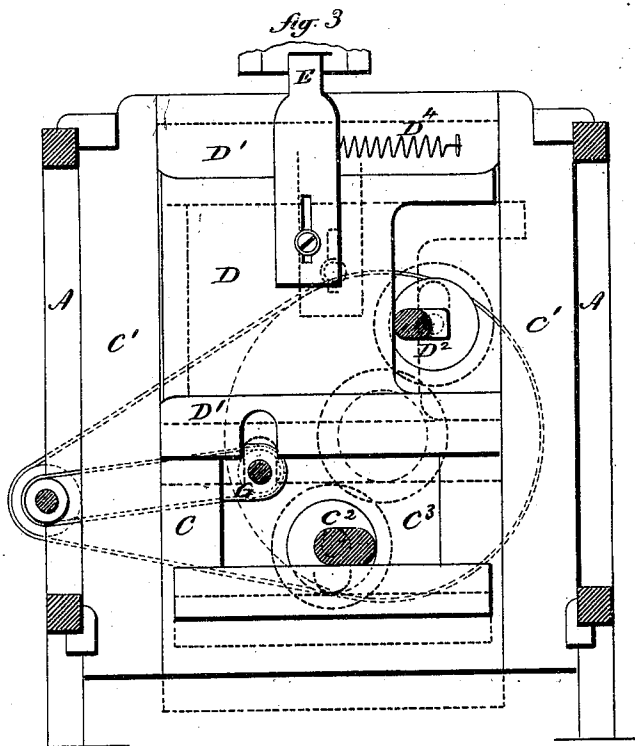
M. Humway
Clara Broughton

By Atty.

Danl. P. Ramsdell

Carl

D. P. RAMSDELL.
MACHINES FOR MAKING WOOD SHOES.
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Witnesses.
J. H. Conway
Clara Broughton.

Danl. P. Ramsdell
By Atty. Inventor
J. H. Earle

UNITED STATES PATENT OFFICE.

DANIEL P. RAMSDELL, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO CORNELIUS B. PAYNE, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN MACHINES FOR MAKING WOOD SHOES.

Specification forming part of Letters Patent No. **179,954**, dated July 18, 1876; application filed June 5, 1876.

To all whom it may concern:

Be it known that I, DANIEL P. RAMSDELL, of New Haven, in the county of New Haven and State of Connecticut, have invented an Improvement in Machines for Making Wood Shoes; and I do hereby declare the following, when taken in connection with the accompanying drawings and letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute a part of this specification, and represent, in—

Figure 1, a front view; Fig. 2, top or plan view, and in Fig. 3 a sectional view, looking toward the blank-holder.

This invention relates to an improvement in machines for the manufacture of wood shoes, designed specially for dressing or cutting out the inside of the shoe; and it consists in the combination of mechanism, as hereinafter described, and recited in the claim, whereby this interior shaping and finishing are made automatic.

A is the frame of the machine, on which rests a head-stock, B, carrying the cutter B¹, which is made to revolve rapidly by power applied thereto through the driving-pulley B². In the opposite end of the machine a vertical slide, C, is arranged between vertical guides C¹, and to this slide a vertical reciprocating movement is imparted by a cam or former, C², working in a slot, C³, in the said vertical slide. This cam serves to force the slide down, and a spring, C⁴, serves to raise it; but the cam may do both, if desired. On this vertical slide is a second slide, D, arranged transversely between guides D¹. This slide has a transverse reciprocating movement, imparted to it by a cam or former, D². The two cams or formers C² and D² are connected together by a chain of gearing, as represented, so that the movement of the two corresponds. The cam D² moves the slide D in one direction, and a spring, D⁴, moves it in the opposite direction. On this transverse slide D the holder E is arranged, and this holder is constructed so as to grasp and firmly hold the blank F. The slide C has also a longitudinal movement—that is, a movement toward or from the cutter, imparted to it by a leading-screw, G, which is connected to the slide C,

in the usual manner, for feeding by a leading-screw.

The blank-holder is made adjustable, so as to present the shoe in either position for dressing the heel or toe portion. It is here represented in position for dressing the toe.

The combined form or movement of the cams corresponds to the internal shape required for the shoe, so that when the machine is in operation the holder will be moved by the respective cams both up and down, and to the right and left, the path of movement of the blank being that of the transverse section of the interior of the shoe on the line in which the cutter is working, this form varying, of course, as the blank is moved nearer to the cutter; and being thus gradually moved by the leading-screw to the cutter, the cutter will dress the interior of the shoe-blank to the form of the combined operation of the two cams.

For different sizes or kinds of shoes, it will be understood, corresponding cams are to be introduced.

While I have represented the holder as attached to the transverse slide, it will be readily understood that the relative position of the two slides may be changed, so that the holder could be attached to the vertical slide, and the same combined vertical and transverse movement imparted to the blank.

I therefore do not confine myself to the attachment of the holder to the transverse slide.

Having thus fully described my invention, and its mode of operation, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the vertical and transverse slides, the shoe-blank holder, arranged upon one of the said slides, and a revolving former-cam, actuating each slide independent of the other, whereby a combined vertical and transverse movement is imparted to the said holder, and a longitudinal feeding device for the said two slides, with the revolving cutter, all constructed and arranged substantially as specified.

DANIEL P. RAMSDELL.

Witnesses:

JOHN E. EARLE,
CLARA BROUGHTON.