W. A. PERKINS & E. BLANEY.

Machine for Shaping Shoe-Soles.

No. 130,150. Patented Aug. 6, 1872.

Fig 1

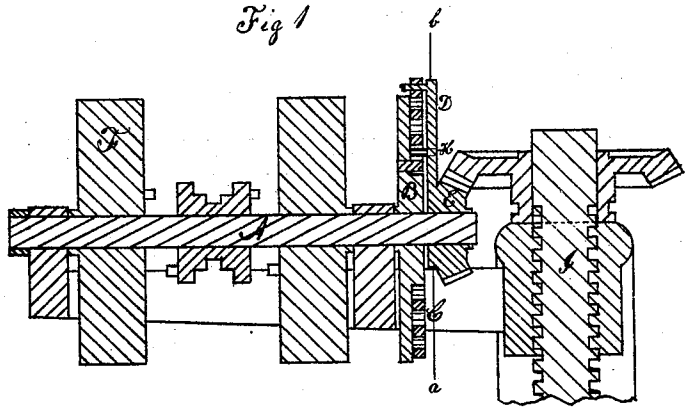
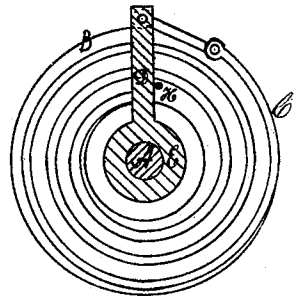


Fig 2



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UNITED STATES PATENT OFFICE.

WILLIAM A. PERKINS, OF SALEM, AND ELIAS BLANEY, OF MARBLEHEAD, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR SHAPING SHOE-SOLES.

Specification forming part of Letters Patent No. **130,150**, dated August 6, 1872.

Specification describing certain Improvements in Machines for Shaping the Soles of Shoes, invented by WILLIAM A. PERKINS, of Salem, in the county of Essex and State of Massachusetts, and ELIAS BLANEY, of Marblehead, in the same county and State.

This invention may be regarded as an improvement on the machine described in the Letters Patent granted to ELIAS BLANEY, of Marblehead, August 22, 1871, No. 118,185, and is designed to obviate a mechanical difficulty encountered in the practical working of said machine. Our invention consists in applying the power to the screw by which the sole is pressed through a compensating device, which allows more or less motion of the screw, according to the varying thickness of the sole to be pressed or shaped. When the requisite pressure is given to the sole the motion of the screw is stopped, and the driving-shaft continues to move through a portion or the whole of a revolution without operating the screw, allowing the driving-shaft sufficient motion to operate the shipping device to reverse the movement of the screw.

The drawing represents, in Figure 1, a partial vertical section of our machine. Fig. 2 represents a sectional view on line *a b* of Fig. 1.

Similar letters of reference indicate like parts in both figures.

On the driving-shaft A is placed the face-plate B, which is firmly attached to the shaft A. A spirally-coiled spring, C, is fastened at the inner end to the face-plate B. The outer end of the spring is attached to the arm D, which is attached to the driving-gear E. The gear E is fitted so as to turn loosely on the shaft A. The spring C is made of sufficient strength to give the requisite pressure, through the screw, to the shoe which is to be shaped.

The operation of this device is as follows: Power is applied to the shaft A through the pulley F, by which the screw I and former are forced down upon the shoe. When a pressure is given equal to the force of the spring C the motion of the screw ceases. The shaft A continues to revolve until the shipping device reverses the motion of the screw. When the motion is reversed the pin H strikes the arm D on the gear E, forming a rigid connection with the shaft A through the face-plate B, turning the screw upward by a positive motion.

In all other respects the machine is identically the same as the one described in the aforesaid BLANEY patent.

In the above-named machine it was found, in practical working, that it was difficult to arrange the shipping device to reverse the motion of the screw at the moment when the requisite pressure on the shoe had been attained. By the use of the compensating device here set forth the pressure is made adjustable, and the reverse motion of the screw is attained with certainty.

We claim as our invention—

A machine for shaping the soles of shoes, in which the power is applied through the intervention of a compensating spring, substantially as and for the purpose set forth.

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