C. J. ADDY & E. S. ABBOTT.

Shoe-Edge Trimming-Machine.

No. 167,816. Patented Sept. 21, 1875.

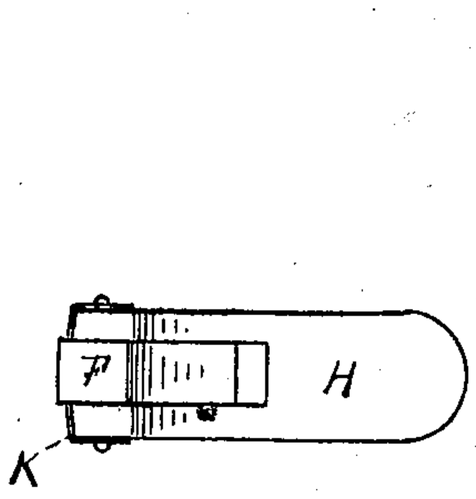

Fig. 4.

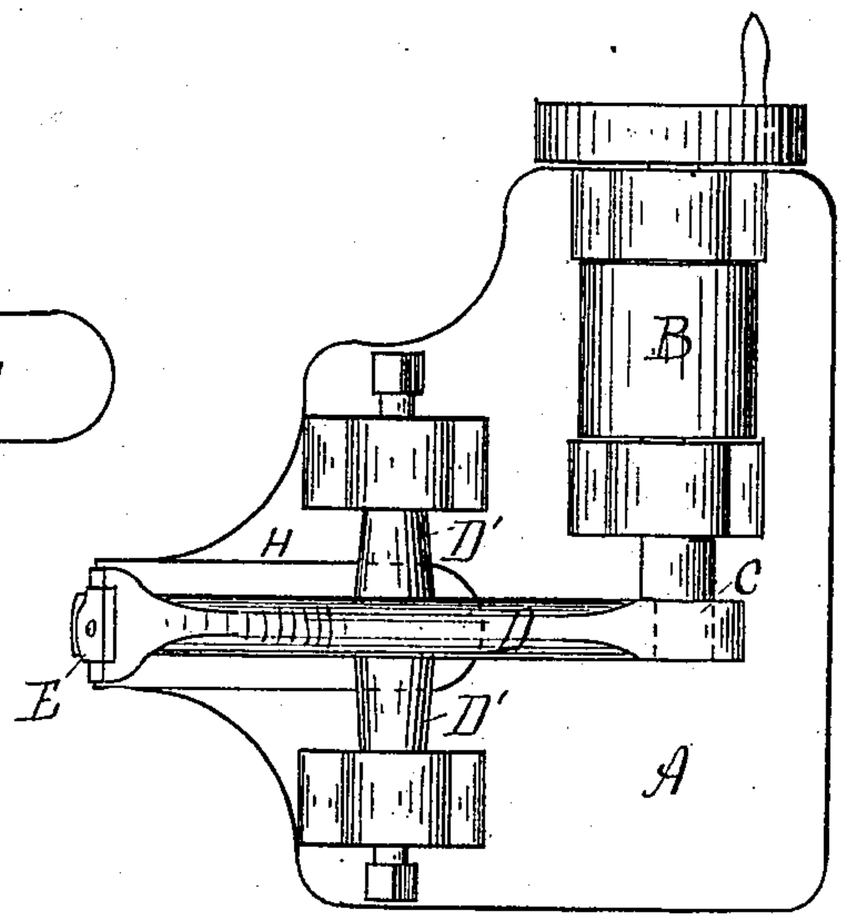

Fig. 1.

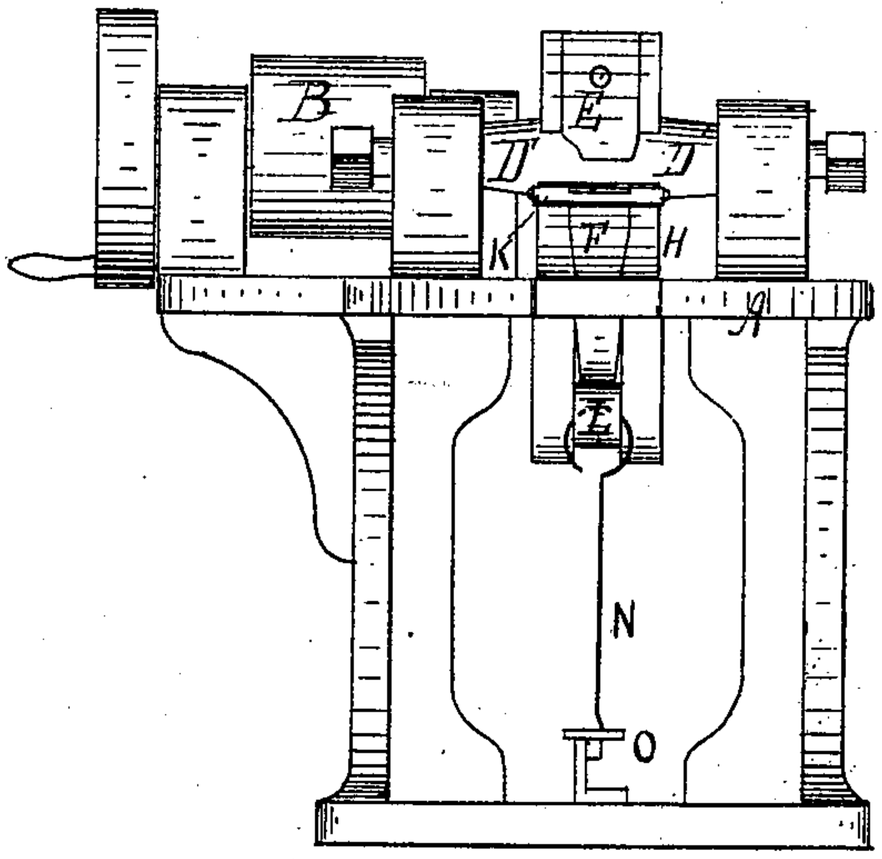

Fig. 2

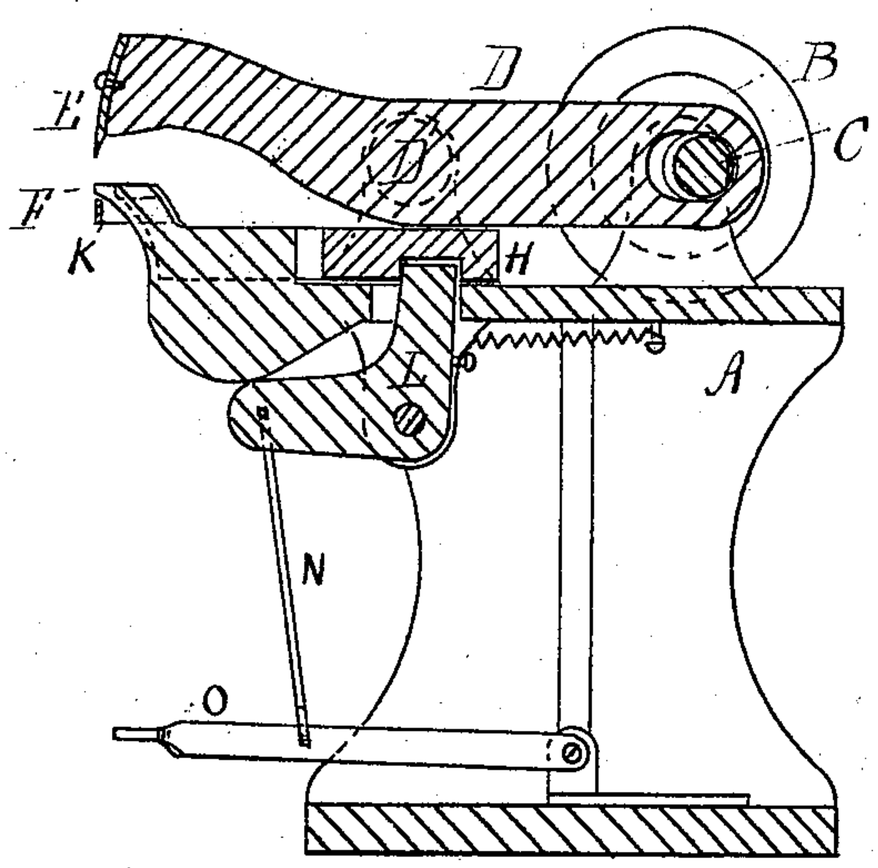

Fig. 3.

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CHARLES J. ADDY AND ESSEX S. ABBOTT, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SHOE-EDGE-TRIMMING MACHINES.

Specification forming part of Letters Patent No. **167,816**, dated September 21, 1875; application filed July 10, 1875.

To all whom it may concern:

Be it known that we, CHARLES J. ADDY and ESSEX S. ABBOTT, both of Boston, county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in a Sole-Edge-Trimming Machine, of which the following is a specification:

The nature of our invention consists in combining, with a suitable step or cutting block and guide, a vibrating cutter, said cutter vibrating nearly in a plane at right angles to the face of the step or cutting-block.

The exact nature of our invention may be best understood by reference to the accompanying drawings and specification.

Figure 1 is a plan of our invention. Fig. 2 is a front elevation of the same. Fig. 3 is a vertical section of the same. Fig. 4 shows the guide and cutting-block in plan.

Let A represent the frame or table, to which the working parts are attached. B is the driving-pulley, which has attached to the end of its shaft a crank-pin, C, Figs. 1 and 3. D is a vibrating arm, pivoted on the trunnions D′, as shown at Figs. 1 and 2. This arm D is made to vibrate by the crank-pin C, which acts in an oblong hole in the arm, as shown at Fig. 3. E is a cutting-knife, attached to the vibrating arm D. This knife E cuts against the step or cutting-block F, Figs. 3 and 4. The cutting-block or step F is made stationary, and has a thin edge, which runs in the rand, and serves to steady the boot or shoe. H, Figs. 1, 3, and 4, is a movable guide, made forked shape, as shown in Fig. 4, and having a band or plate of metal, K, at its front end. This plate K is made very smooth, and serves to form a guard to rest against the upper or vamp of the boot or shoe, and as this is movable, by means of the bent lever L, the rod N, and the foot-lever O, (see Fig. 3,) it can be adjusted by the action of the foot on the lever L, so that it may be brought into any desired position in relation to the step or cutting-block F. Thus the edge of the sole may be trimmed close to the vamp, or at any desired projection from it.

To use our machine we proceed as follows: The machine is started, and the guide K set at the desired point; then the boot or shoe is held so that the step or cutting-block F is in the rand, and the boot or shoe is moved along so as to present all parts of the sole-edge to the action of the knife E. As the knife E moves with great rapidity, it gives a smooth and true edge to the sole.

Having thus described our invention, what we claim is as follows:

1. In a sole-edge-trimming machine, the combination of the vibrating cutter E, with cutting-block and rand-guide F, acting together, substantially as described, and for the purpose set forth.

2. The combination of the knife E, the cutting-block and rand-guide F, and the movable guide H K, all operating together, substantially as described, and for the purpose set forth.

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