

S. KEEN.
Heel-Trimming Machines.

No. 151,493.

Patented June 2, 1874.

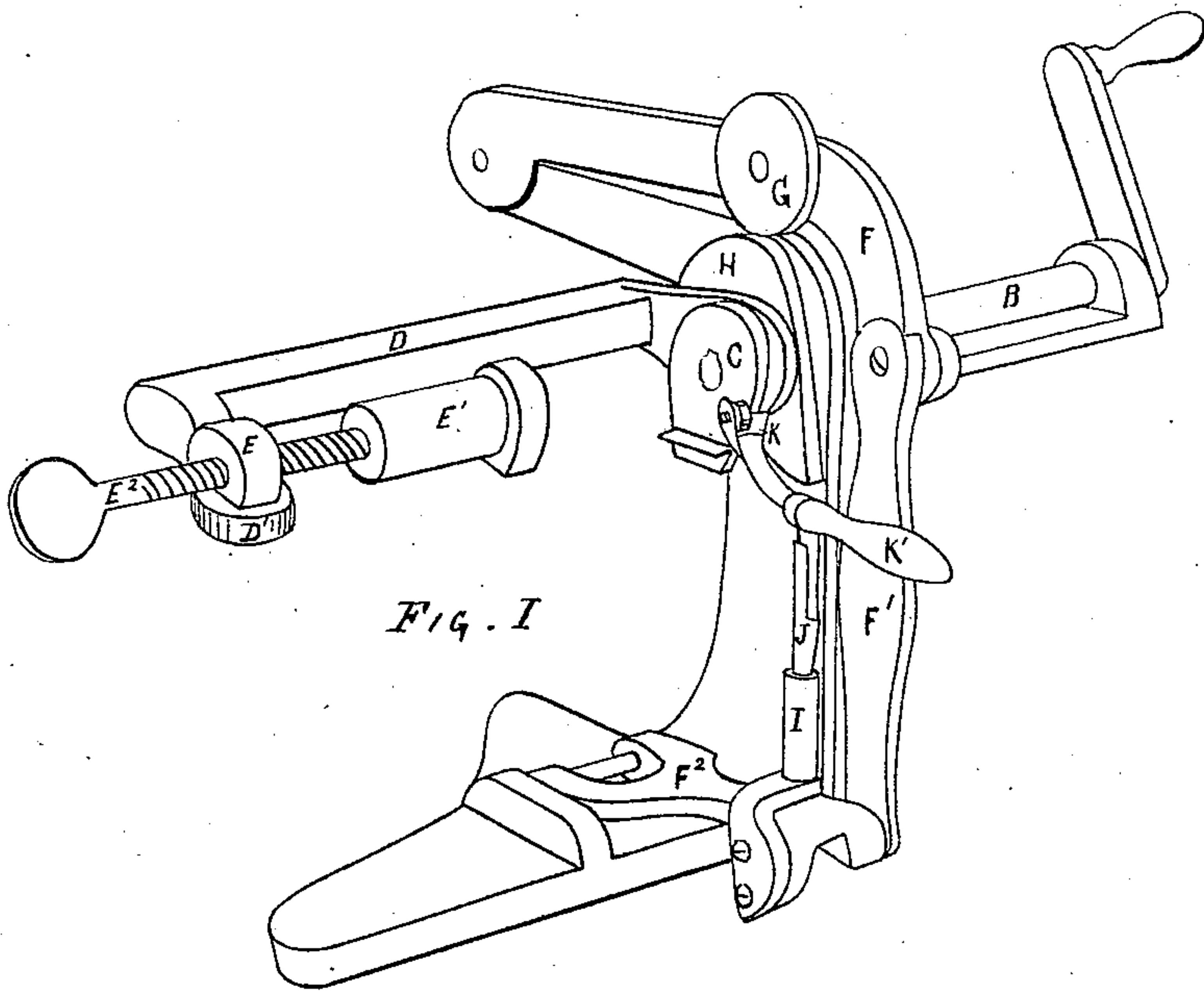


Fig. 1

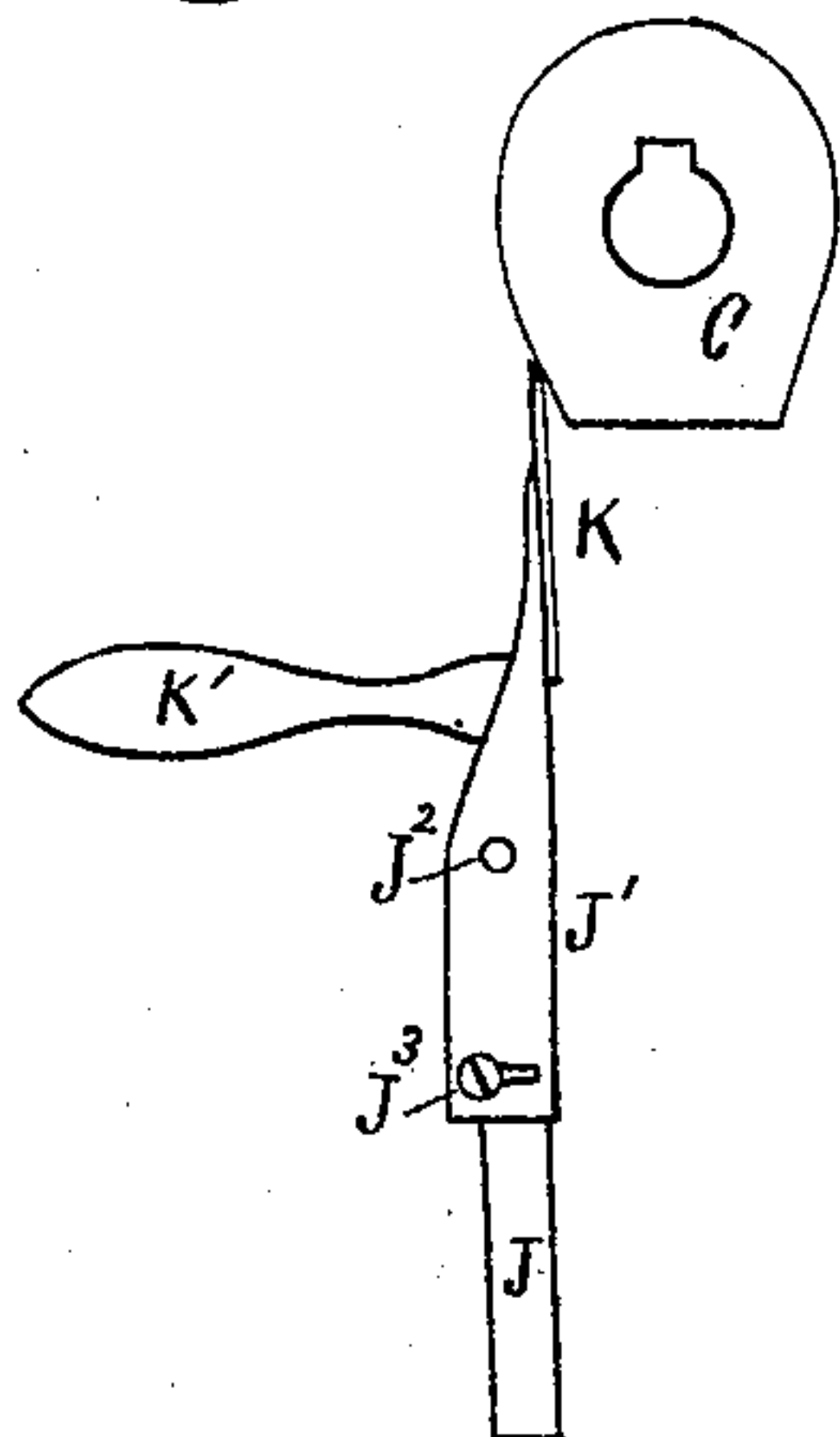


Fig. 2

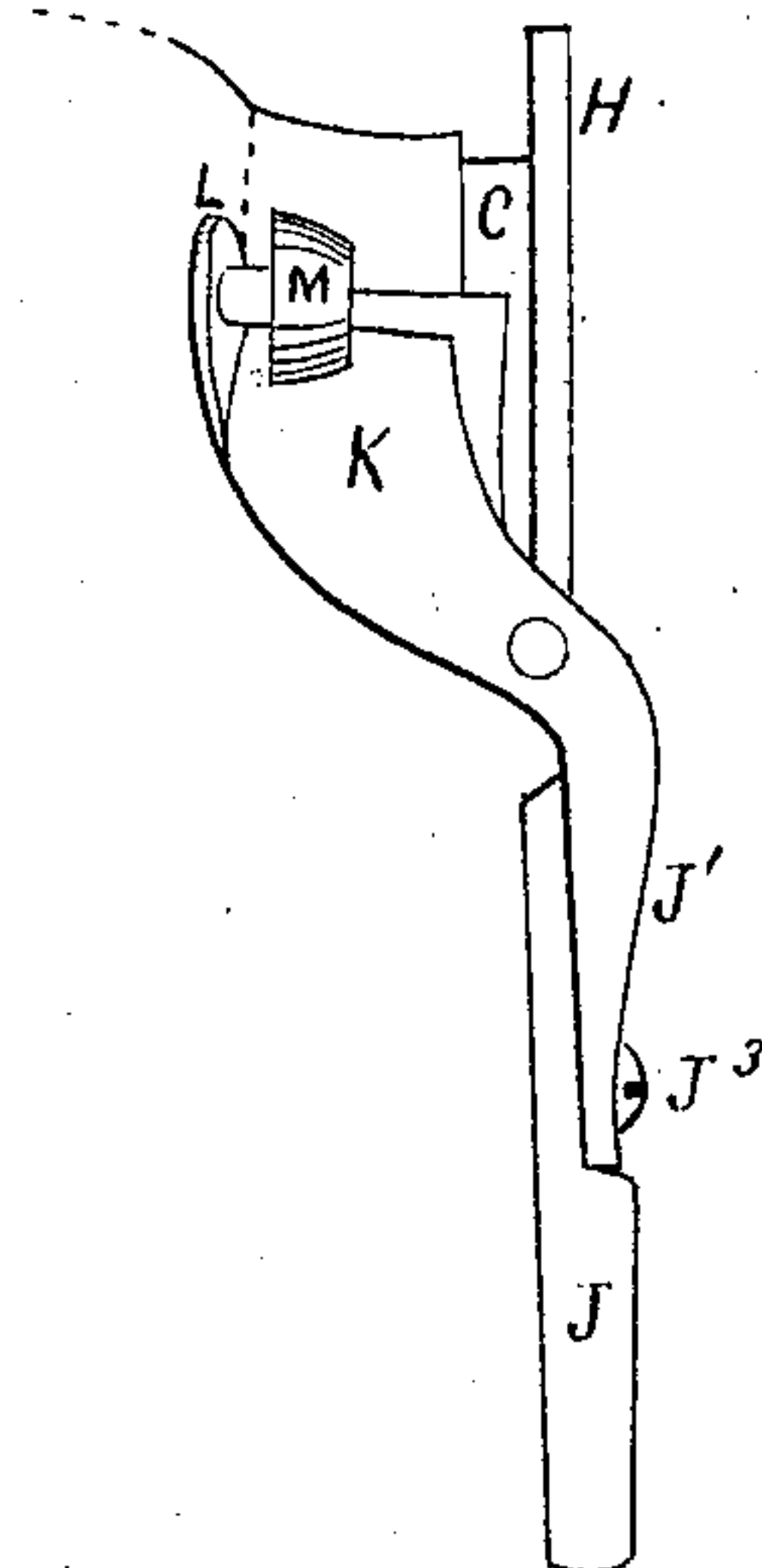


Fig. 3

Witnesses.

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SAMUEL KEEN, OF EAST BRIDGEWATER, MASSACHUSETTS.

IMPROVEMENT IN HEEL-TRIMMING MACHINES.

Specification forming part of Letters Patent No. **151,493**, dated June 2, 1874; application filed April 27, 1874.

To all whom it may concern:

Be it known that I, SAMUEL KEEN, of East Bridgewater, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Heel-Trimming Machines, of which the following is a specification:

My invention relates to improvements on an invention described in Letters Patent granted to me October 26, 1869, entitled "Heel-Cutting Machines," and numbered 96,120; and consists, first, in combining, with the lever that gives motion to the knife, a wheel which runs on the periphery of the cam that moves said lever; second, in combining with the knife a compound guard, consisting of a fixed guard, to run in the rand, and a wheel-guard to run on the edge of the sole or lift, or partly on both; third, in a screw-and-slot adjustment for the knife; also, in some minor details, which may be best understood from the specification and drawing.

Figure 1 is a perspective view of my machine. Fig. 2 is an elevation of the knife and heel-pattern, taken at right angles to the shaft. Fig. 3 is an elevation showing the knife-guard.

As the general parts of this machine, viz., the base A, shaft B, cam H, lever F, link F¹, lever F², and knife device I J K, Fig. 1, are all fully described in my former patent, above referred to, I omit further reference to them. G, Fig. 1, is a wheel or disk attached to the lever F, and arranged to run on the periphery of the cam H, so that the cam H can act, through this wheel G, on the lever F with but little friction. J¹, Fig. 2, is an adjustable shank for the knife K. This adjustability is obtained by pivoting the shank at J², and fastening the lower end, by the screw and slot, at J³, Fig. 2, so that the adjustment may be effected by simply loosening the screw shown at J³. This

will allow the shank to swing on the pivot J² until the right position is obtained; then the screw may be tightened, which action will confine the knife to the shank, as desired. My compound guide for the knife is shown in Fig. 3, and consists of a rand-guide, I, and an edge-guide, M, which is a wheel, hung as shown, and arranged to run on the edge of the sole or the heel-lift, or partly on both. This compound guide is intended to be used on shoes having pressed heels, which are trimmed after the shoes have been taken off from the last, and which do not require shaping, but simply smoothing off. E¹, Fig. 1, is an arm attached to the screw E², and acts as a part of the jacking device—that is, it may be forced by the screw E against the inner sole of the shoe, and thus press the shoe hard against the heel-plate C, so as to confine it while being acted upon by the knife. The screw E² passes through a small swiveling nut, E, Fig. 1, so that when the part E¹ is slightly withdrawn, by loosening the screw, the whole may be swung around, as indicated by the dotted lines, and the shoe removed.

I claim as my invention—

1. The combination of the wheel G with the lever F and cam H, all arranged to operate substantially as described, and for the purpose set forth.

2. The combination of the knife K, adjustable shank J¹, screw and slot J³, and the shank J, substantially as described, and for the purpose set forth.

3. The combination of the knife K and the guards L and M, operating substantially as described, and for the purpose set forth.

SAMUEL KEEN.

Witnesses:

FRANK G. PARKER,
J. S. CURRANT.