

G. F. READ.

MACHINERY FOR POLISHING AND SETTING THE SOLE EDGES
OF BOOTS AND SHOES.

No. 193,347.

Patented July 24, 1877.

Fig. 1.

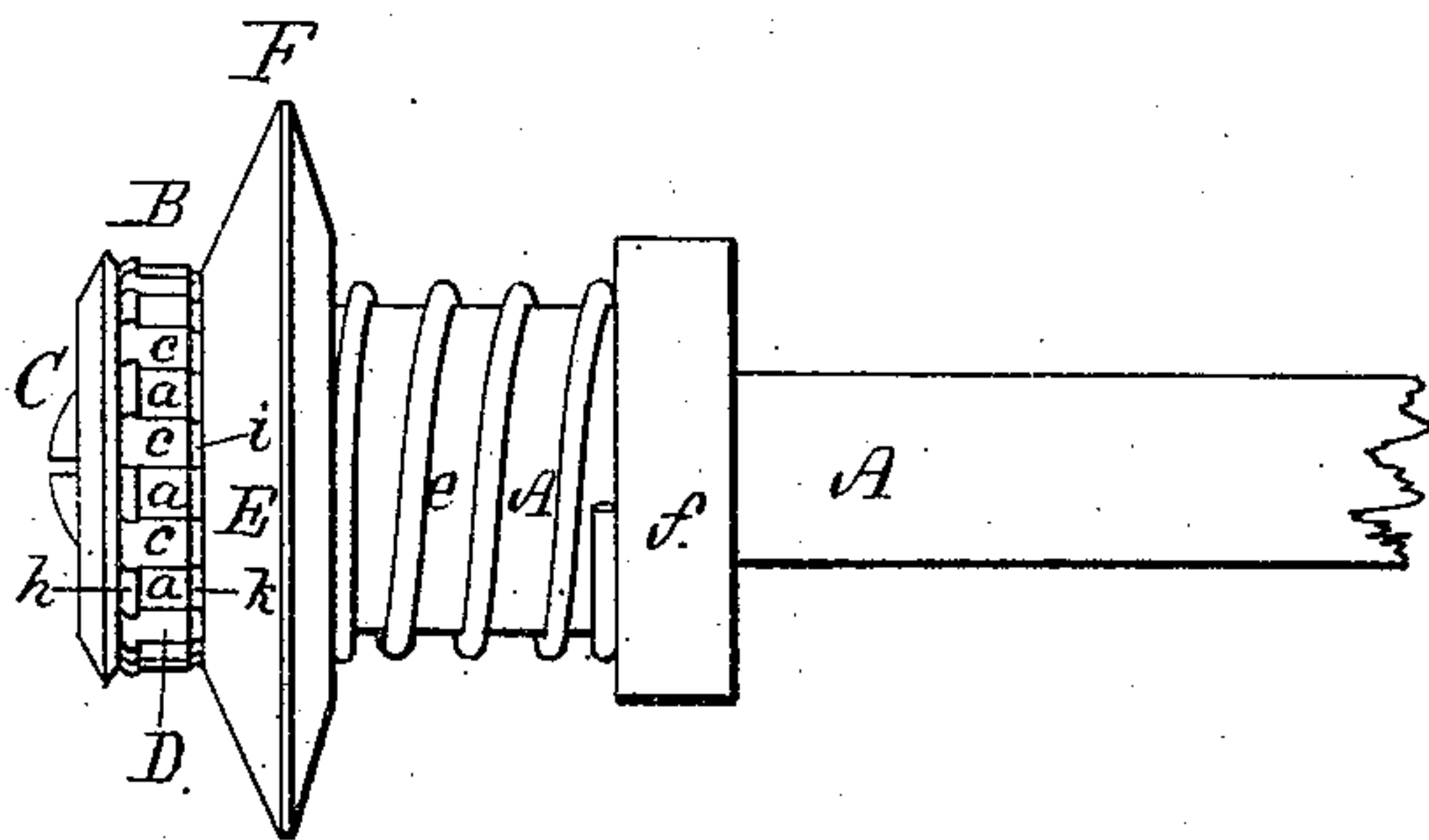


Fig. 2.

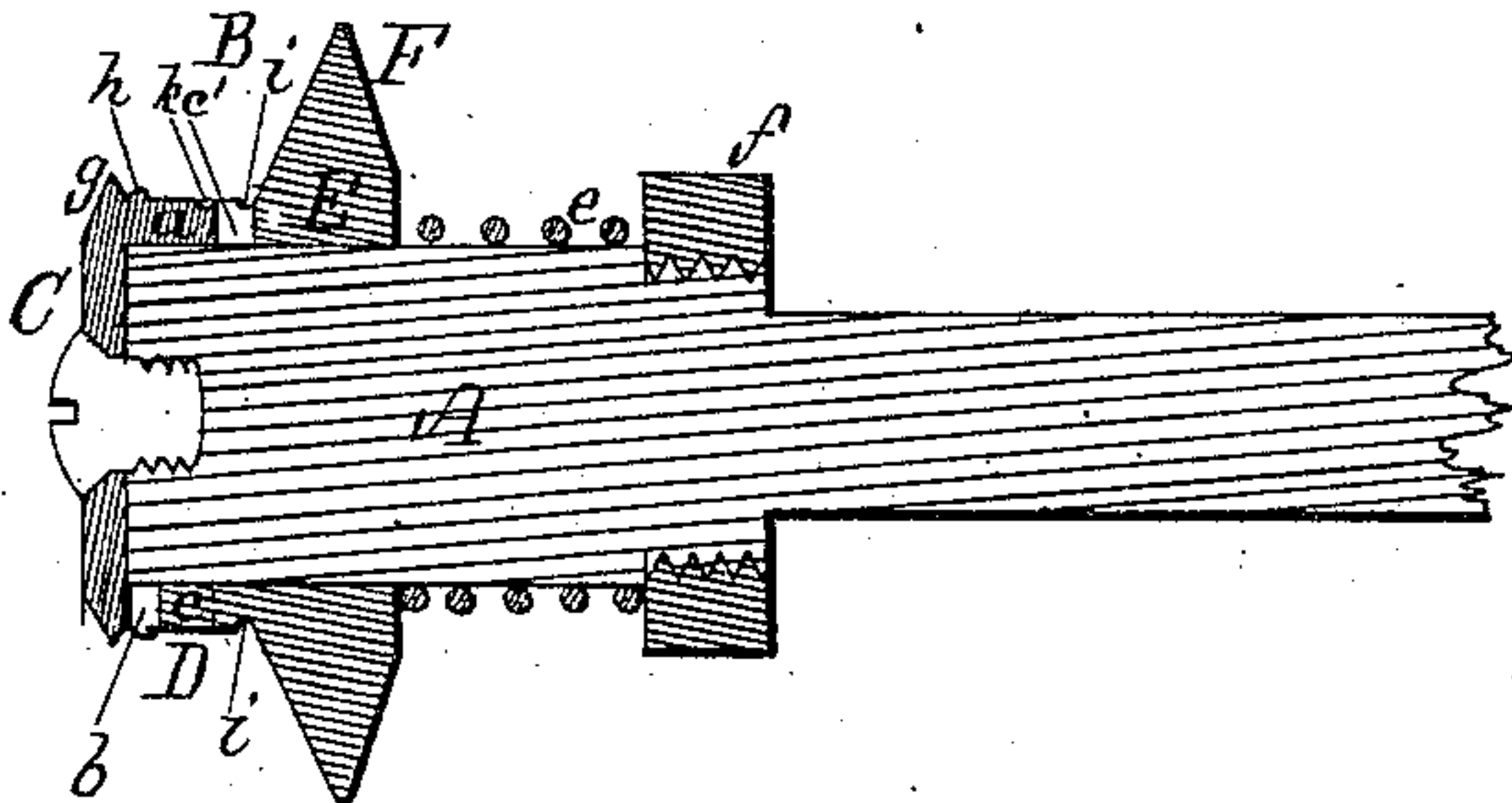
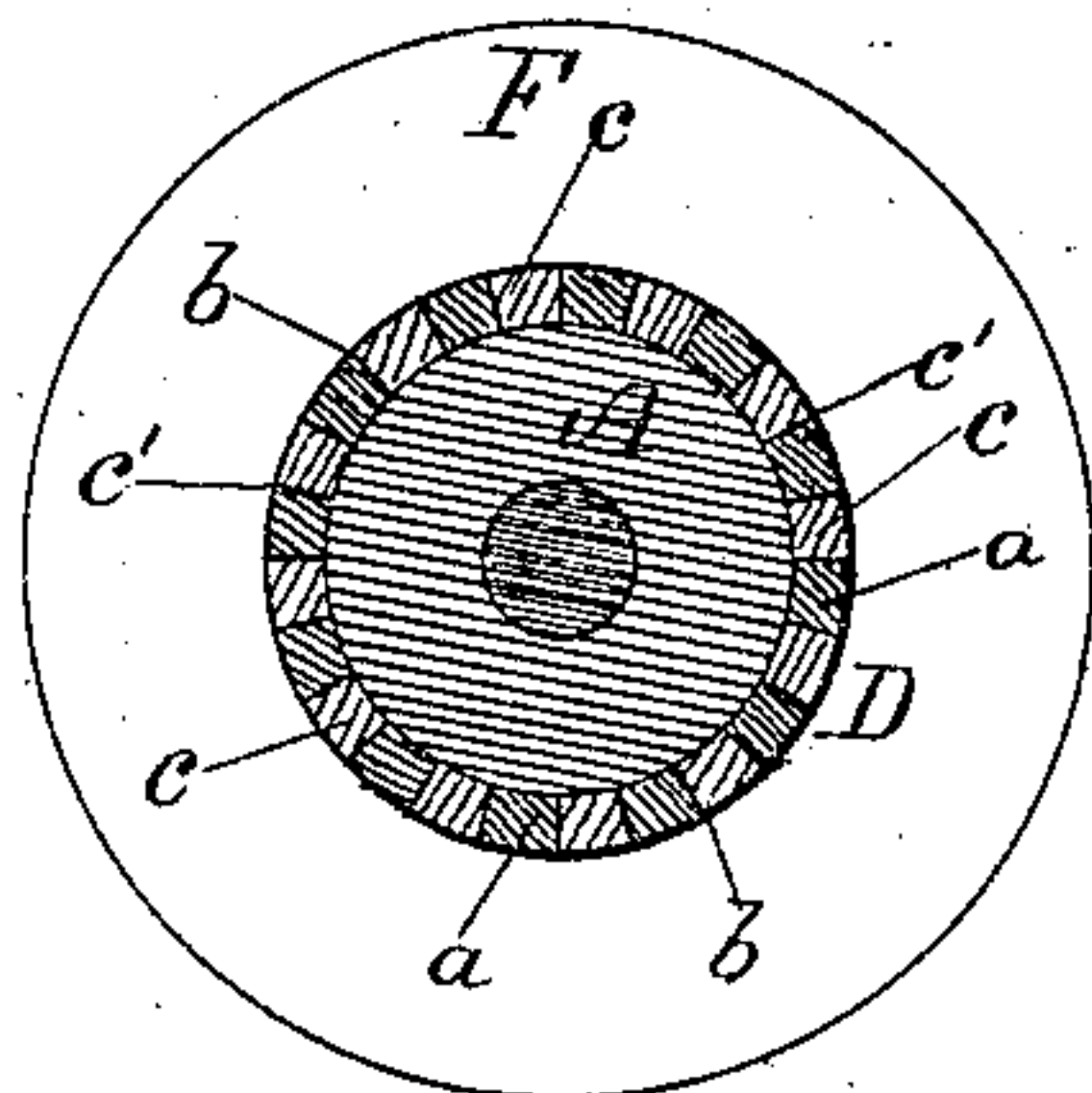


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE F. READ, OF NEW ENGLAND VILLAGE, MASSACHUSETTS.

IMPROVEMENT IN MACHINERY FOR POLISHING AND SETTING THE SOLE-EDGES OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. 193,347, dated July 24, 1877; application filed April 6, 1877.

To all whom it may concern:

Be it known that I, GEORGE F. READ, formerly of Lynn, Essex county, Massachusetts, now residing at New England Village, Grafton, Worcester county, Massachusetts, have invented certain Improvements in Rotary Edge-Keys for Polishing Boots and Shoes, of which the following is a specification:

This improvement relates to a class of machines for polishing or "setting" the edges of boot and shoe soles in which the polishing device is a rotary disk or wheel, which revolves in contact with the sole-edge.

The drawings accompanying this specification represent, in Figure 1, a side elevation, in Fig. 2 a longitudinal section, and in Fig. 3 a cross-section, of an edge burnishing or setting tool embracing my improvement.

In these drawings, A represents an arbor or shaft, which constitutes the support of the burnishing-tool B, and forms part of an edge-setting machine.

To the front end of the arbor or shaft A, I affix a circular disk or hub, C, whose perimeter, D, is somewhat larger than that of such shaft, and is scored or indented to produce a series of teeth, *a a*, &c., and a corresponding series of intermediate spaces or notches, *b b*, &c., as shown in Figs. 1 and 3 of the drawings.

In rear of the hub C, I dispose upon the shaft A a concentric sleeve or tubular hub, E, the outer portion of which is formed with a series of teeth and notches, *c c* and *c' c'*, &c., corresponding in size and number with those of the hub C, in order to interlock or engage the latter, while the inner portion F of the said sleeve E constitutes a triangular or V-shaped flange, to bear against the outer surface or tread of the sole, and constitute a guide to give proper direction to the tool as it travels about the sole-edge.

To crowd the sleeve E toward the hub C, I employ a coiled spring, *e*, which encompasses

the shaft A, and exerts its stress between the said sleeve and a collar, *f*, formed upon, or secured to, the shaft, as shown in Figs. 1 and 2 of the drawings.

It will be observed that the hub C bears upon its outer edge or corner a lip, *g*, and at the junction of the base of this lip with the cylindrical or notched portion of the hub a small bead, *h*, and again at the junction of the base of the flange F and the notched portion of the sleeve E a small groove, *i*, and upon the extreme inner edge of the teeth of the hub C a like groove, *k*, which, by the rapid revolution of the tool, becomes a continuous groove, *i k*.

The lip *g* enters and travels in the seam between the boot-sole and upper, and constitutes a guide to properly direct the inner portion of the setting-tool, while the bead *h* produces a finishing score or mark upon the sole-edge.

In like manner the channel *i k* creates, when the tool is contracted or shut, a finishing bead upon the sole-edge, and when the tool is expanded the channel *i* performs a like office, the channel *k* under this latter condition having no effect.

It will be seen that, while I am enabled to increase or diminish at will the working-surface of the setting-tool, I do not lose the bead *h* and groove *i*.

What I claim, and desire to secure by Letters Patent, is—

The combination of the interlocking hubs or sleeves C E, the one movable to and from the other, as described, when the same are provided with the bead *h* and grooves *i k*, arranged substantially as and for the purposes set forth.

GEORGE F. READ.

Witnesses:

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