(No Model.)

L. K. STRANG.

HEEL BURNISHING MACHINE.

No. 421,988. Patented Feb. 25, 1890.

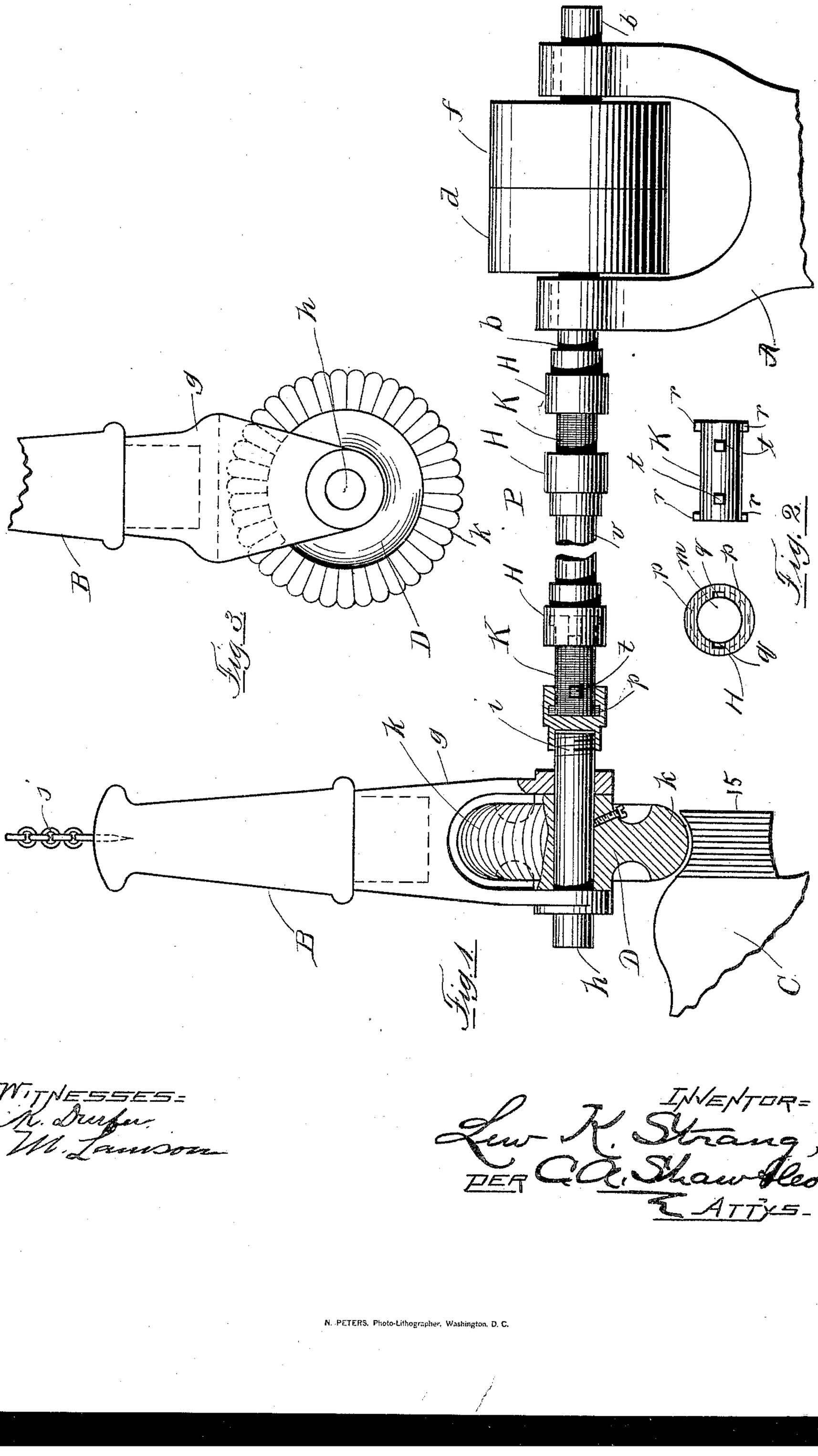

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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UNITED STATES PATENT OFFICE.

LEW K. STRANG, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF PART TO HARRY G. PRATT, GEORGE A. GORMAN, AND JOHN F. HOWARD, ALL OF SAME PLACE.

HEEL-BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 421,988, dated February 25, 1890.

Application filed October 3, 1889. Serial No. 325,873. (No model.)

To all whom it may concern:

Be it known that I, LEW K. STRANG, of Haverhill, in the county of Essex, State of Massachusetts, have invented certain new and useful Improvements in Heel-Burnishing Machines, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional elevation showing my improvement in use; Fig. 2, elevations showing details of construction; Fig. 3, an end elevation of the burnishing-roll and handle.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to a device for burnishing or finishing the heels of boots or shoes; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A represents a forked standard, in the arms of which a shaft *b* is journaled, said shaft bearing a fast pulley *d* and loose pulley *f*. A wooden handle B has a forked metallic tip *g* secured thereto, in the arms of which a shaft *h* is journaled, screw-threaded on one end at *i*. A chain *j* is secured in the opposite end of the handle, whereby it may be suspended in any convenient position. A burnishing-wheel D is secured on the shaft *h* between the arms of the tip *g*. Said wheel has a working-face *k*, curved or oval in cross-section, and of a shape to register with the curve of a heel 15 on the shoe C. The face *k* is corrugated laterally, enabling it to take better on the surface of the heel and polish it much more effectively than will a smooth surface. A coupling H has a threaded socket *l* in one end to receive the threaded end of the wheel-shaft *h*. The opposite end is provided with an annular chamber *m*, the inner end of which is enlarged at *p*. Longitudinal slots or grooves *q* (see Fig. 2) are formed in the walls of the chamber and extend into the enlarged portion. A flexible rod K, (see Fig. 2,) preferably composed of hard rubber, has two studs *r* formed on opposite sides of each end thereof and adapted to enter the grooves *q* and chamber *p* of the coupling. Similar studs *t* are formed on the rod at opposite sides thereof, also adapted to enter said grooves and prevent the rod from rotating in the coupling, the studs *r*, being inserted in the enlarged portion *p* of the chamber *m* and turned until they do not register with the grooves, preventing said rod from being withdrawn from said coupling. A section of metallic rod *v* is provided at each end with one of the couplings H, into one of which the opposite end of the flexible rod K is secured. A similar flexible rod K connects the opposite end of the rod *v* with a coupling H on one end of the shaft *b* in the standard A. These shafts and the elastic rods K form a flexible driving-shaft P for the burnishing-wheel.

In the use of my improvement the wheel D is heated by suspending it in a lamp-flame in the ordinary manner of heating burnishing-irons. Power being applied to the pulley *d* from any convenient source, the shaft P is rotated, rapidly revolving the wheel D. The operator, grasping the wooden handle B, is enabled to hold said wheel firmly in engagement with the edge of the heel 15, which is thereby polished in the usual manner. The flexible portions K of the shaft P permit the operator to adjust the wheel at any desired angle and the device to be moved laterally for heating the wheel or other purposes in a manner which will be readily understood without a more explicit description.

The rubber sections K of the shaft can easily be removed and replaced when worn by

withdrawing their studs *t* from the coupling-grooves and revolving said sections until their studs *r* register with said grooves.

Having thus explained my invention, what I claim is—

In a burnishing-machine, the handle B and shaft *h*, provided with the burnishing-wheel D, in combination with the standard A, the shaft *b*, journaled therein and bearing the pulley *d*, the rod *v*, the chambered couplings H, secured to said shafts and rod, and the flexible rods K, detachably disposed in said couplings, all being arranged to operate substantially as described.

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Witnesses:
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