

(No Model.)

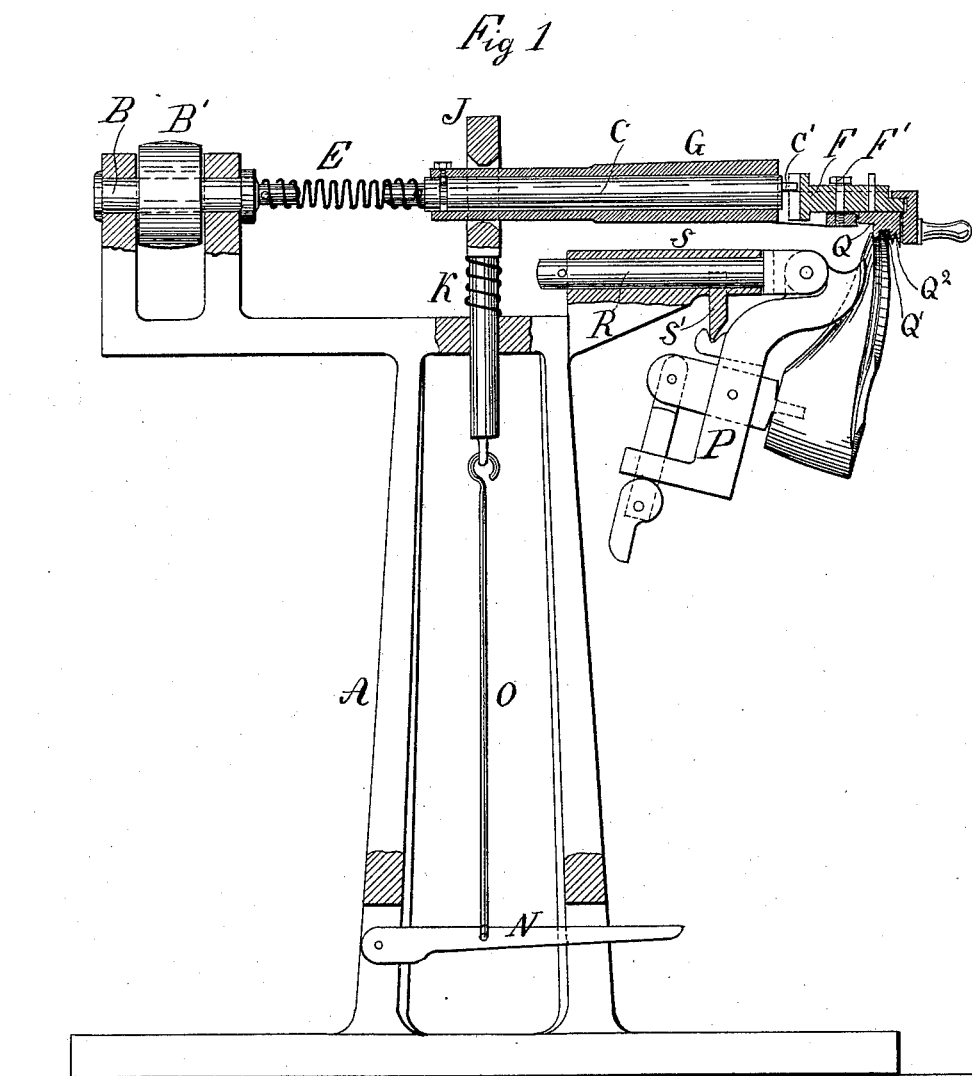
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C. H. HELMS.

BURNISHING MACHINE FOR BOOTS OR SHOES.

No. 302,335.

Patented July 22, 1884.



WITNESSES:

William Miller
Chas. Wickers.

INVENTOR

Charles H. Helms

BY

Van Santvoord & Hauff

ATTORNEYS

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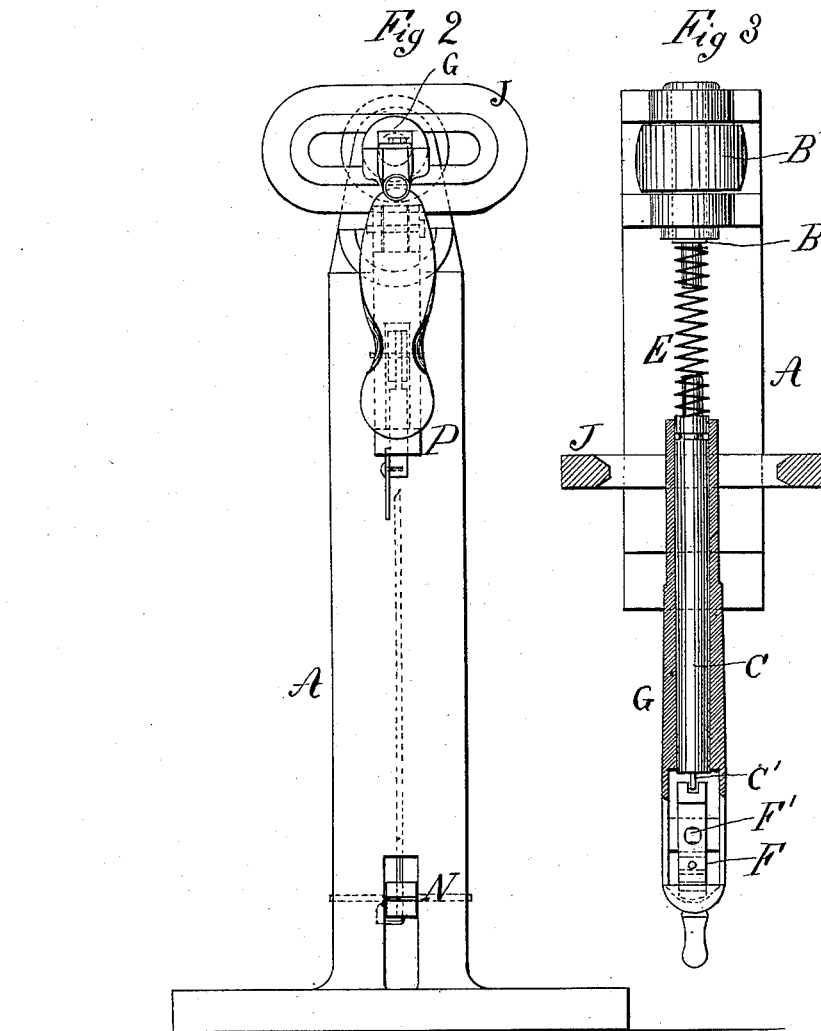
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UNITED STATES PATENT OFFICE.

CHARLES H. HELMS, OF POUGHKEEPSIE, NEW YORK.

BURNISHING-MACHINE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 302,335, dated July 22, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. HELMS, a citizen of the United States, residing at Poughkeepsie, in the county of Dutchess and State of New York, have invented new and useful Improvements in Boot and Shoe Sole Edge Burnishing Machines, of which the following is a specification.

This invention relates to improvements in machines for burnishing the sole-edges of boots and shoes; and it consists in the construction and combination of devices hereinafter described and claimed, reference being had to the accompanying drawings, illustrating my invention, in which—

Figure 1 is a side elevation, partly in section. Fig. 2 is an end elevation. Fig. 3 is a plan or top view, partly in section.

Similar letters indicate corresponding parts.

The letter A designates the machine-frame, supporting a driving-shaft, B, which is provided with a pulley, B', for connecting it with a suitable power medium.

C indicates a crank-shaft arranged substantially in the horizontal plane of the driving-shaft, and E a flexible shaft connecting one end of this crank-shaft to the driving-shaft, so that a revolving motion imparted to the driving-shaft is transmitted to the crank-shaft. At the end opposite to the flexible shaft E the crank-shaft C is provided with an eccentric pin, C', which constitutes its crank, and which engages a tool-stock, F, for imparting to the latter an oscillating motion, this stock being mounted on a pivot, F', and being bifurcated at one end to receive the crank. Both the crank-shaft C and the tool-stock F are supported in a carriage, G, which is capable of a reciprocating motion lengthwise to the shaft, it resting in a guide, J, which is adapted to permit the carriage also to swivel, this guide being composed of an eye the diameter of which is substantially equal in one direction, but greater in the opposite direction, to that portion of the carriage passing through it. The swivel-eye J is supported on a spring, K, and is connected with a treadle, N, through the medium of a rod, O, for depressing the eye, together with the carriage G and its concomitants, against the action of the spring.

In applying the machine to use the boot or shoe is properly mounted in the jack P, and a burnishing-tool, Q, is united to the tool-stock. A revolving motion is then imparted to the driving-shaft B, and in the ensuing motion of the tool, together with its stock, the burnishing of the sole-edge may be speedily accomplished, due to the variety of positions which the tool is capable of taking—that is to say, by the reciprocating motion of the carriage G the tool can be readily adjusted to the location of the sole-edge while, by the swivel-eye J or treadle N, (either or both,) the tool can be readily adjusted to the depth of such edge, the crank-shaft C at the same time remaining in gear with the driving-shaft, so that the motion of the tool continues in any of its positions.

The burnishing-tool Q shown in the drawings is provided with two faces, Q' Q'', one of which is single and serves to act on the forward portion of the sole, while the other is double and serves to act on the shank portion, at which point the sole has two edges to be burnished, and it is evident that by this construction the utility of the tool is materially increased.

In order to decrease the area of motion of the burnishing-tool, the jack P is rendered movable in a circular plane by means of a rotating spindle, R, by which the jack is supported in a fixed bearing, S, the latter being constructed with a concentric guide, S', for the jack to steady it in its adjustment to the tool.

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

1. The combination of the driving-shaft, the reciprocating carriage carrying the pivoted oscillating tool-stock, the crank-shaft revolving in and reciprocating with the carriage, and having its crank engaging one end of the tool-stock, and a flexible shaft connecting the driving and the crank shafts, substantially as described.

2. The combination, substantially as hereinbefore described, of the driving-shaft, the crank-shaft, the flexible shaft connecting the crank-shaft to the driving-shaft, the oscillating tool-stock engaging with the crank of the crank-shaft, the reciprocating carriage sup-

porting the crank-shaft and tool-stock, and the guide for the carriage, adapted to permit the latter to swivel.

3. The combination, substantially as herein-
5 before set forth, of the driving-shaft, the crank-shaft, the flexible shaft connecting the crank-shaft to the driving-shaft, the oscillating tool-stock engaging with the crank of the crank-shaft, the reciprocating carriage supporting
10 the crank-shaft and tool-stock, the swivel-eye

forming a guide for the carriage, the spring supporting the eye, and the treadle connecting with the eye.

In testimony whereof I have hereunto set my hand and seal in the presence of two sub- 15
scribing witnesses.

CHARLES H. HELMS. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.