

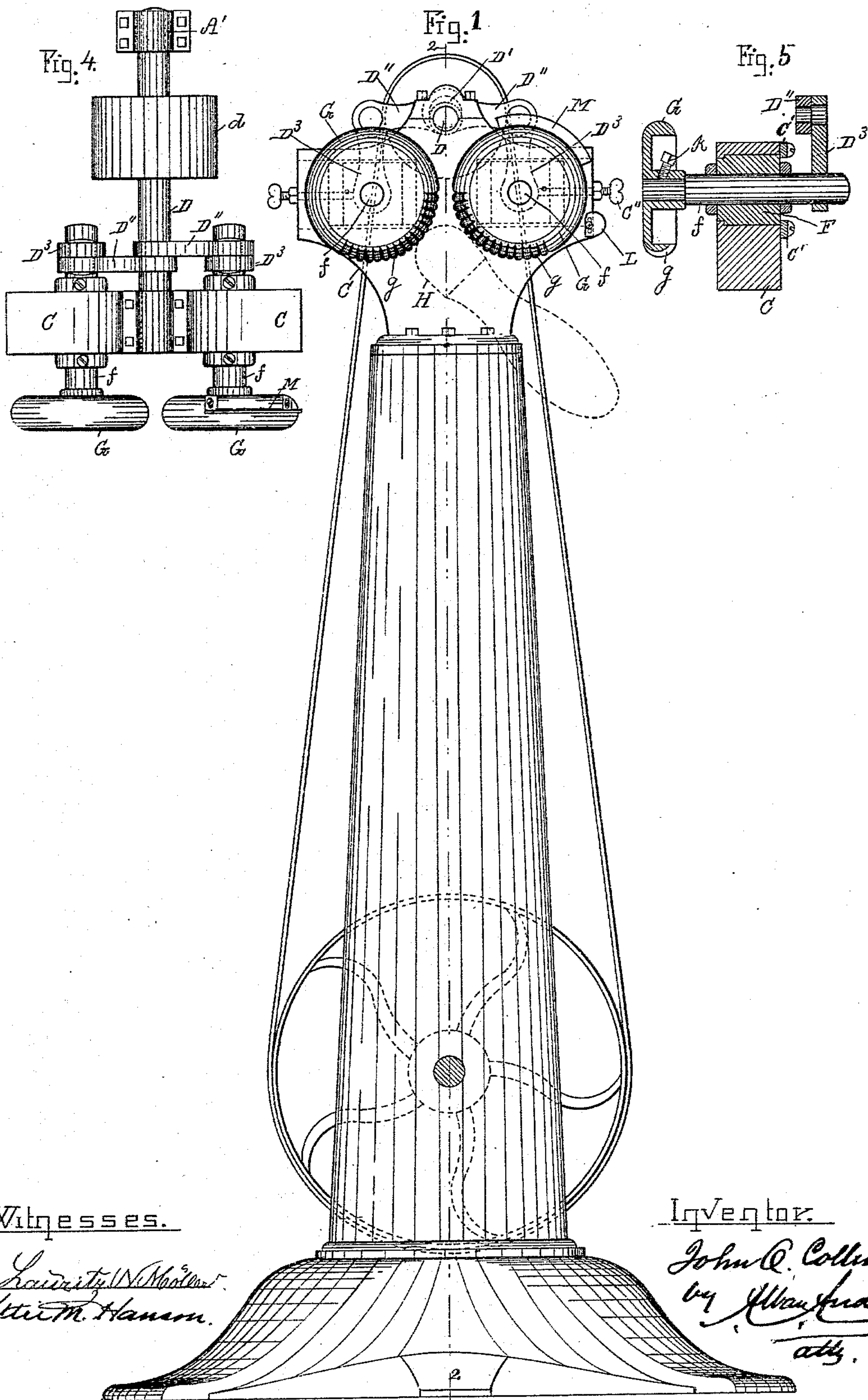
(No Model.)

2 Sheets—Sheet 1.

J. O. COLLINS.
WAX HEEL BURNISHING MACHINE.

No. 515,653.

Patented Feb. 27, 1894.



Witnesses.

David W. Moore
Edw. M. Hanson

Inventor.

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by *Wm. J. Hudson*
att.

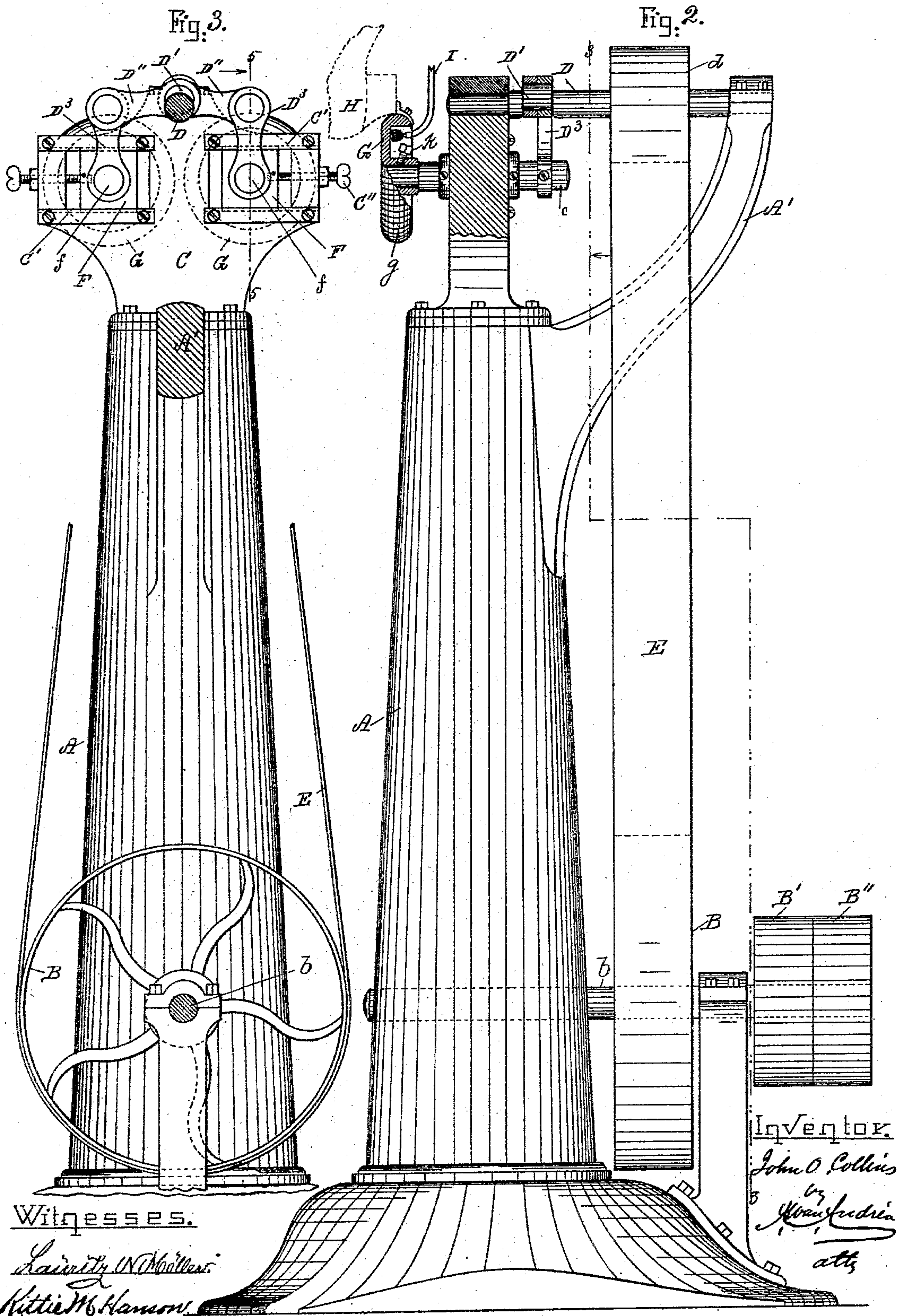
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UNITED STATES PATENT OFFICE.

JOHN O. COLLINS, OF MARBLEHEAD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO GEORGE E. BUTTERFIELD, OF SAME PLACE.

WAX HEEL-BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 515,653, dated February 27, 1894.

Application filed October 11, 1893. Serial No. 487,796. (No model.)

To all whom it may concern:

Be it known that I, JOHN O. COLLINS, a citizen of the United States, and a resident of Marblehead, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Wax Heel-Burnishing Machines, of which the following, taken in connection with the accompanying drawings, is a specification.

10 This invention relates to improvements in wax heel burnishing machines and it has for its object to quickly and efficiently burnish boot or shoe heels by power in a manner similar to the usual hand work and it is carried
15 out as follows reference being had to the accompanying drawings, wherein—

Figure 1, represents a front elevation of the improved heel burnishing machine. Fig. 2, represents a side elevation of the same partly
20 shown in section. Fig. 3, represents a vertical section on the line 3—3 shown in Fig. 2. Fig. 4, represents a top plan view of the head of the machine; and Fig. 5, represents a cross section on the line 5—5 shown in Fig. 3.

25 Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A, represents the post or standard of the machine in the lower portion of which is preferably journaled a driving shaft *b*, to which is
30 attached a belt pulley B, which is set in a rotary motion by belt power applied to the pulley B' fast on the shaft *b*.

35 B'' is a loose pulley on said shaft *b*, onto which the driving belt is shipped in stopping the machine as is usual in machines of this kind.

40 C, is the head of the machine in a bearing in which is journaled a shaft D, the rear end of which is preferably journaled and supported in a bracket A' secured to or forming a part of the standard A, as shown in Fig. 2.

To the shaft D, is secured a pulley *d*, to which a quick rotary motion is imparted by means of a belt E, leading from the pulley B, as shown in Figs. 1, 2 and 3. The shaft D, has a crank eccentric or cam D' to which are loosely connected a pair of eccentric rods or
45 links D'' D'' pivoted in their outer ends to the levers D³ D³ which are secured to the respective rock shafts *f*, *f*, located and journaled

in slidable bearing blocks F, F, which are adjustable to and from each other in guides C' C' in the head C, as shown in the drawings.

C'' C'' are regulating screws by means of
55 which the positions of the blocks F, F, are adjusted and by means of which said blocks are secured after being adjusted as fully shown in the drawings.

G, G, are the disk burnishers secured to the
60 respective rock shafts *f*, *f*, and it will thus be seen that by the mechanism hereinabove described a quick rocking or oscillatory motion is imparted to the said burnishing disks from the shaft D. Each of the burnishing
65 disks has on its periphery a corrugated or undulatory segmental portion *g*, *g*, against which the boot or shoe heel is held by the operator during the burnishing operation as shown by dotted lines H, in Fig. 1. Each of the burnishing disks is heated by means of a gas jet
70 from a pipe I, or other equivalent heating device as is common in burnishing machines. Each burnishing disk G, is adjustably secured to its shaft *f*, by means of a set screw
75 *k*, shown in Fig. 2, so as to enable the operator to adjust such disk and its corrugated portion on said shaft to suit the requirements of the work. For smaller heels the disks G, G, are brought nearer together by means of
80 the regulating screws C'' C'' and for larger heels said disks are moved correspondingly farther apart and their bearing blocks secured in such adjusted positions to suit the operator. The wax is applied to the heated
85 burnishing disks in the usual manner. During the burnishing operation the disks G, G, are set in a quick reciprocating or rocking motion as described, heated and the wax applied to them as stated. The operator takes
90 hold of the boot or shoe and guides the curved heel surface thereon with proper pressure against the corrugated segmental portions *g*, *g*, and rocks the heel as well as moves it forward and back so as to cause the burnishing
95 disks to come in contact and properly burnish every part of the curved portion of the heel. By this arrangement all the advantage of the old hand burnishing process is obtained in a very superior, rapid and finished
100 manner.

For the purpose of preventing the edge of

the top lift from being turned over I make on the head C, adjacent to one of the burnishing disks G, a rest L, against which the top lift of the heel is held previous to burnishing the main portion of the heel, and to one of the disks I attach a segmental flange M, which during the time the top lift is held against the rest L, is caused to come in contact with the under side of the top lift (as shown in dotted lines in Fig. 2) thus preventing the lower edge of such top lift from being bent or turned over while said top lift portion is being burnished by holding it in contact with one of the burnishing disks and supporting it on the rest L.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. In a burnishing machine, the combination with a supporting frame, of boxes F adjustable to and from each other, rock-shafts journaled respectively in the boxes and provided with burnishing disks, a rotary-shaft D having a cam or eccentric, and connections between the cam or eccentric and the rock-shafts, substantially as described.

2. In a burnishing machine, the combination with a frame, of slidable boxes F, devices for sliding the boxes to and from each other, rock-shafts journaled respectively in the sliding boxes, a drive-shaft D having a cam or eccentric D', links D'' engaged at one end with the cam or eccentric, and levers D³ secured to the said rock-shafts and pivoted to the said links, whereby the rock-shafts are simultaneously rocked by a single shaft, substantially as described.

3. In a burnishing machine, the combination with a standard having a head, of a pair of movable boxes arranged upon the head, devices for adjusting the boxes to and from each other, rock-shafts journaled respectively in the boxes and provided with burnishing disks, a drive-shaft D having a cam D', and devices connecting the cam with the rock-shafts for simultaneously rocking the latter by the action of a single shaft, substantially as described.

4. In a burnishing machine, the combination with a standard having a head, of sliding boxes F, independent screws C'' engaging said head for adjusting the boxes to and from each other, rock-shafts f journaled respectively in the boxes, a shaft D having a cam D', links D'' engaged at one end with the cam, and levers D³ secured to the said rock-shafts and pivotally connected with said links for simultaneously rocking the rock-shafts by the action of a single shaft, substantially as described.

5. In combination with a rocking burnishing disk having a partial corrugated and non-corrugated surface, a top lift guard M, secured to the non corrugated part of the disk, and a stationary top lift rest L, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 6th day of October, A. D. 1893.

JOHN O. COLLINS.

Witnesses:

ALBAN ANDRÉN,
KITTIE M. HANSON.