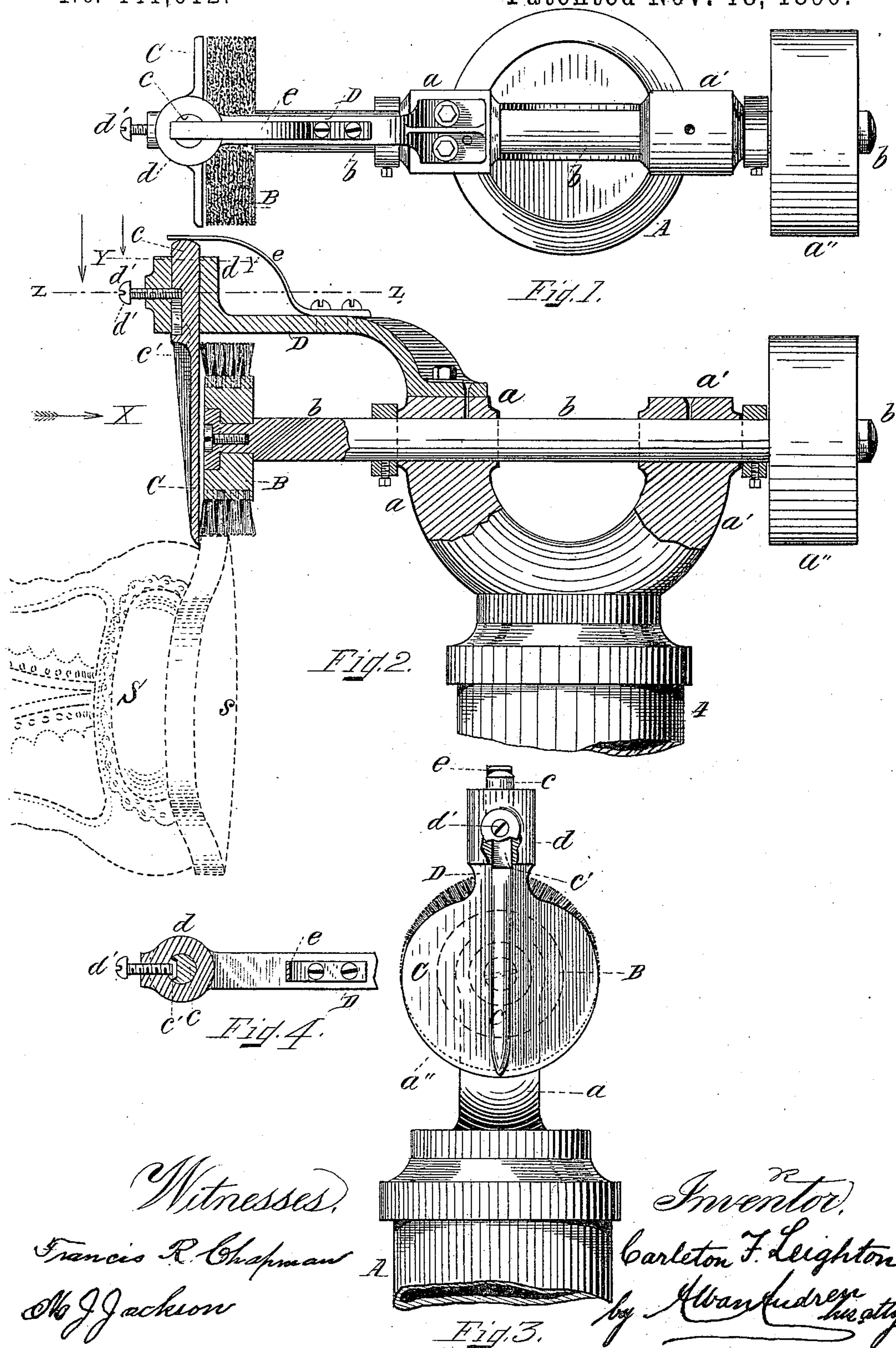


(No Model.)

C. F. LEIGHTON.
EDGE BLACKING MACHINE.

No. 441,012.

Patented Nov. 18, 1890.



Witnesses,
Francis R. Chapman
Wm J Jackson

Inventor,
Carleton F. Leighton
by Alvan Andrew *att'y*

UNITED STATES PATENT OFFICE.

CARLETON F. LEIGHTON, OF BEVERLY, ASSIGNOR TO THE EDGE AND HEEL
BLACKING MACHINE COMPANY, OF LYNN, MASSACHUSETTS.

EDGE-BLACKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 441,012, dated November 18, 1890.

Application filed April 24, 1890. Serial No. 349,281. (No model.)

To all whom it may concern:

Be it known that I CARLETON F. LEIGHTON, a citizen of the United States, and a resident of Beverly, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Heel and Sole Edge Blacking Machines, of which the following, taken in connection with the accompanying drawings, is a specification.

10 This invention relates to improvements in heel and sole edge blacking machines; and it is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a plan view of the improved machine. Fig. 2 represents a longitudinal section on the line X X, shown in Fig. 1, parts being shown in elevation. Fig. 3 represents an end view seen from Y in Fig 2 and showing the bearing for the rand-guide and upper-guard in section; and Fig. 4 represents a cross-section on the line Z Z, shown in Fig. 2.

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

25 In the drawings, A is a suitable head or standard provided with bearings $a a'$, in which is journaled the brush-shaft b , which is set in a rotary motion by means of belt-power applied to its pulley a'' . To the forward end of the shaft b is secured in a suitable manner the circular brush B, as shown in the drawings. Outside of said rotary brush is arranged the vertically-yielding and oscillating rand-guide and upper guard C, having a preferably cylindrical shank or spindle c in its upper end, which is guided in a stationary bearing-sleeve d , forming a part of a bracket D, secured in a suitable manner to the bearing a or other stationary part of the machine. The rand-guide and upper-guard C is pressed downward with a yielding pressure, preferably by means of a spring e , secured in one end to the bracket D or other stationary part of the machine, and having its free end pressing downward on the upper part of the shank or spindle c of the rand-guide and upper-guard C. For the purpose of preventing the spindle c from dropping out of the guide or bearing d , I make on one side of said spindle c a vertical recess c' , into which projects loosely the inner end of a

pin, screw, or projection d' , secured to the sleeve or bearing d , as shown.

In a machine of this kind it is essential that the rand-guide and upper-guard should be capable of an oscillating motion in its bearing, so as to permit its lower edge while inserted at the junction of the shoe-upper S and its sole s to automatically adjust itself and follow the curvature of the sole from the toe to the heel portion thereof during the blacking operation, and for this purpose I prefer to make the recess c' in the side of the shank c a little wider than the pin, screw, or projection d' , as shown in Figs. 3 and 4, thus allowing the said shank and its rand-guide and upper-guard to swivel or oscillate axially, for the purpose above mentioned.

I desire to state that I do not wish to confine myself to the precise mechanism as shown for hanging and swiveling said rand-guide and upper-guard, as this may be done by equivalent means without departing from the essence of my invention.

In using the machine the rotary brush is kept charged or saturated with a suitable liquid or semi-liquid blacking, which may be done by any suitable device or mechanism, which is, however, not shown in the drawings, as it does not form a part of my present invention.

The vertically-yielding and axially-oscillating plate C serves as a rand-guide for properly guiding the sole or heel of the shoe to the blacking-brush B, and it also serves as a guard to prevent the shoe-upper from being blacked or soiled during the operation of blacking the sole or heel edges.

In operating the machine for the purpose of blacking sole or heel edges the brush B is rotated and kept charged with the blacking, as usual. The operator then takes the boot or shoe and guides its sole or heel edge to the action of the brush by placing the lower edge of the rand-guide and upper-guard C at the junction of the shoe-upper and its heel or sole, and during such operation the rand-guide and upper-guard is allowed to yield upward relative to inequalities of the heel or sole edges beyond the rand-guide for the purpose of bringing all parts of such sole or heel edges in

contact with the rotating blacking-brush and to swivel or oscillate automatically relative to the curvature of the heel or sole of the boot or shoe, by which the sole or heel edges are
5 caused to be uniformly and properly blacked without soiling or injuring the upper.

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

10 In a heel and sole edge blacking-machine, the combination, with a main frame and a rotary shaft journaled thereon and carrying a circular brush for applying the blacking, of a bearing secured to the main frame, overhang-
15 ing the brush and having a socket in its outer end, and a vertically-movable rand-guide and upper-guard having a shank ex-

tending into and loosely supported by the socket in the overhanging bearing, said rand-guide and upper-guard extending beside the
20 brush to the periphery thereof and adapted to move laterally and to yield upwardly in a line approximately parallel with the side of the brush during the blacking operation, substantially as described.

25 In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 21st day of April, A. D. 1890.

CARLETON F. LEIGHTON.

Witnesses:

ALBAN ANDRÉN,
WM. S. ROGERS.