No. 641,344. Patented Jan. 16, 1900.

R. J. STIRLING.

BOOT BRUSHING AND POLISHING MACHINE.

(Application filed Nov. 16, 1897.)

(No Model.) 2 Sheets—Sheet 1.

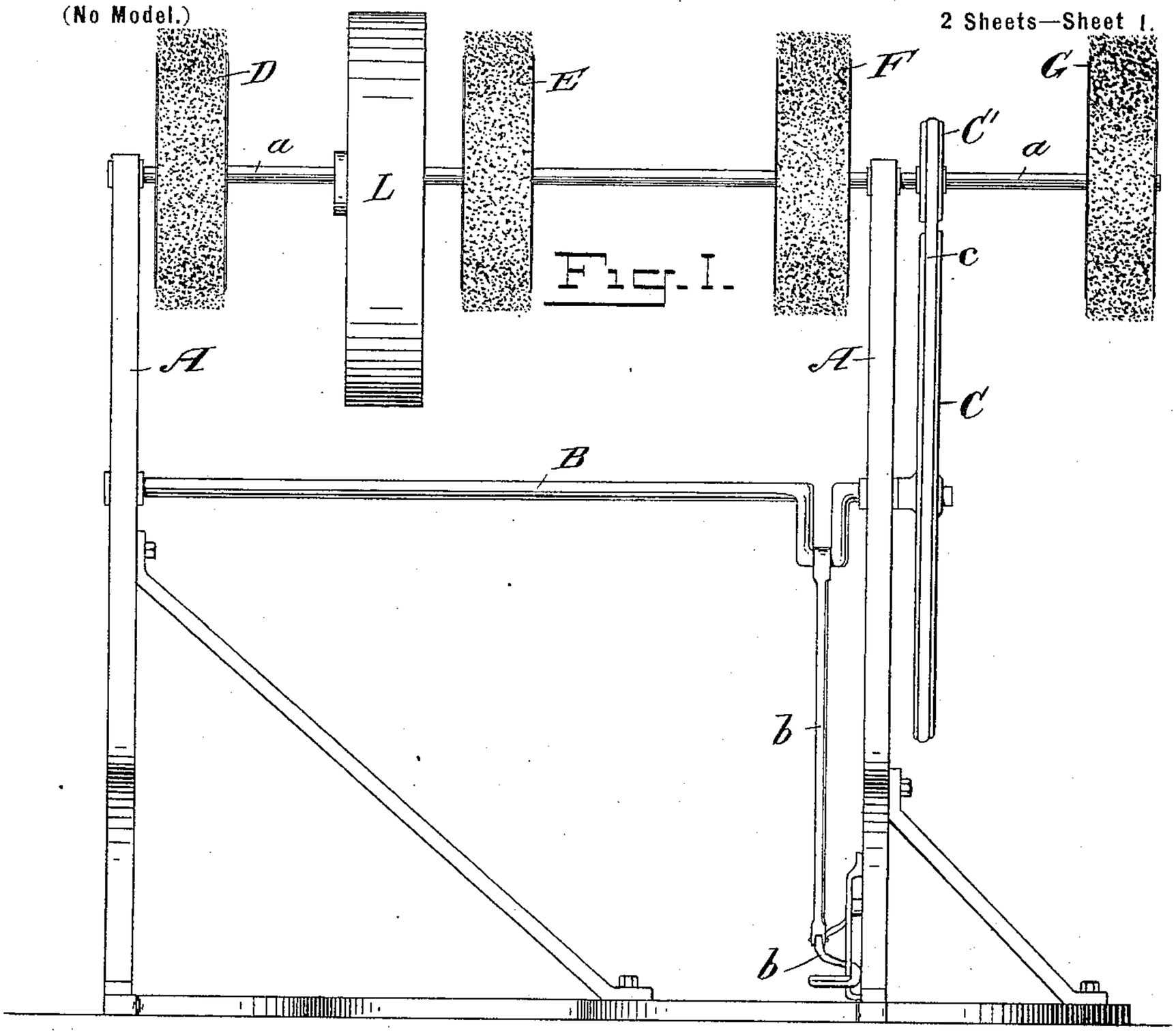


Fig. I.

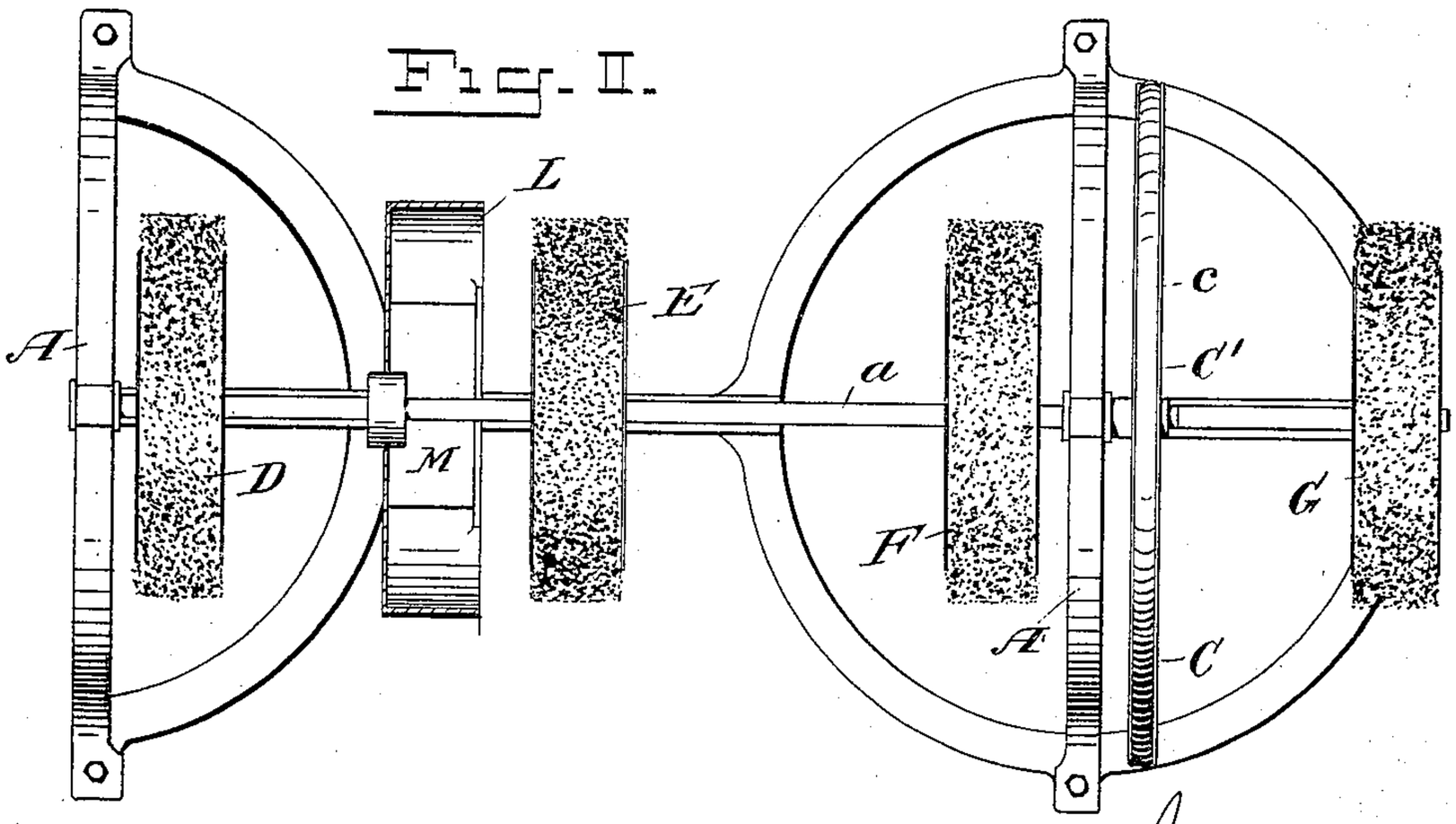


Fig. II.

Witnesses
E. V. Bridgood
H. C. Hazlewood.

Inventor
Robert Johnstone Stirling
By Harry E. Knight Atty

No. 641,344. Patented Jan. 16, 1900.

R. J. STIRLING.

BOOT BRUSHING AND POLISHING MACHINE.

(Application filed Nov. 16, 1897.)

(No Model.) 2 Sheets—Sheet 2.

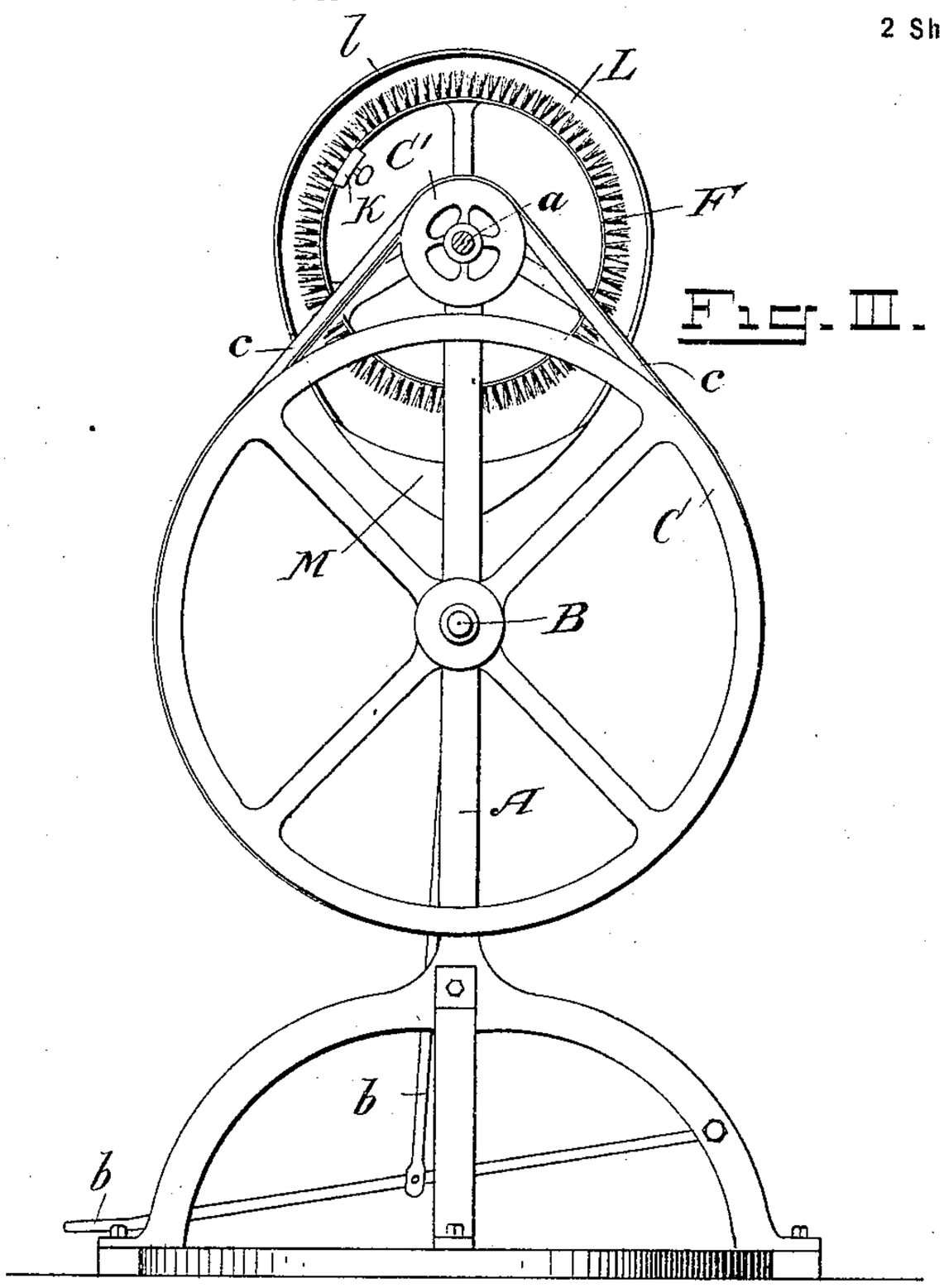
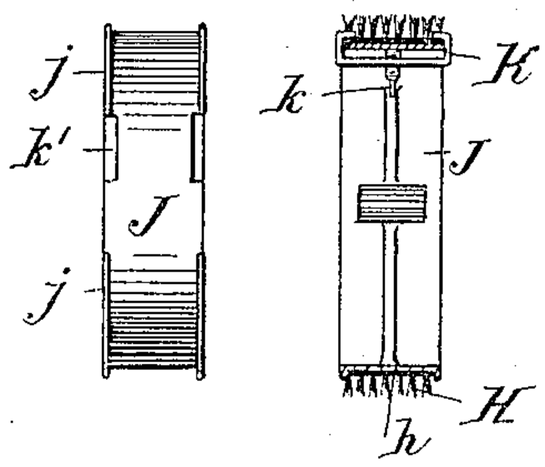


Fig. III.

Fig. IV. Fig. V.



Witnesses
H. V. Bidgood
H. P. Hammond

Inventor
Robert Johnstone Stirling
By Harry E. Knight & Co
Attys.

UNITED STATES PATENT OFFICE.

ROBERT JOHNSTONE STIRLING, OF ERMELO, SOUTH AFRICAN REPUBLIC.

BOOT BRUSHING AND POLISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 641,344, dated January 16, 1900.

Application filed November 16, 1897. Serial No. 658,771. (No model.)

To all whom it may concern:

Be it known that I, ROBERT JOHNSTONE STIRLING, surgeon, a subject of the Queen of the United Kingdom of Great Britain and Ireland, residing at Ermelo, South African Republic, have invented a new and Improved Boot Brushing and Polishing Machine, of which the following is a specification.

This invention relates to a boot brushing and polishing machine for use in hotels and other places, and has for its object to enable boots to be more rapidly and easily polished than hitherto.

In the drawings, Figure 1 is an elevation, Fig. 2 a plan, and Fig. 3 an end view, of my said machine. Fig. 4 is an elevation of one of the drums with the brush removed, and Fig. 5 a section showing the method of securing the brush upon the drum.

As shown in the said drawings, the machine consists of a frame having upright standards A, between which is a horizontal shaft *a*, carrying rotary brushes. Below the brush-shaft is a cranked shaft B, operated by a treadle *b*, so as to constitute a foot-operated machine. The machine, however, may also be operated by any other suitable power. Upon the one end of the cranked shaft B is a driving-wheel C, with a leather strap or band *c* to go around, which communicates motion to a smaller wheel C′, keyed on the brush-shaft *a*. I prefer to have four brushes—D for removing mud or dust, E for applying the blacking, F for polishing, and G for finishing, respectively. These brushes may be arranged at suitable intervals on the revolving shaft. A compact machine may have the first three brushes D, E, and F mounted between the two standards A of the machine, with the fourth or finishing brush G keyed onto the one end of the shaft which extends out from the end of the machine—that is to say, at the outside of the one standard. The bristles H, constituting the brushes, may be attached to a strip of leather or flexible metal *h*, so that they can be passed around drums J, which drums are in the form of spoked wheels keyed upon the revolving shaft. The ends of the bristle-strip *h* may be secured together tightly upon the drums, as shown more particularly in Figs. 4 and 5, by a suitable clamp K, the screw *k* of which is operated from the inner side of the drums. To engage and disengage the said clamp with the drum, a small portion of the periphery is removed at either side, as shown at K′, a portion of the rim *j* being also removed to allow the clamp to lie flat upon the surface when in position, or the bristles may be formed upon a metal or wooden ring, which ring is made in two parts, and the two halves or parts are clamped together upon the drum. Between the revolving brushes D E is a dust-shield L, which may be made in the form of a disk with a wide flange or periphery. The said disk is not keyed upon the shaft, so that it is free to be moved along it. When the dust-brush D is being used, the shield is slid along so as to protect the blacking-brush.

I utilize the sliding shield on the revolving shaft by making it of a pear shape in side view, so that the lower or larger portion of the shield may form a well M for blacking, and also to hold a small brush for applying the blacking to the rotating blacking-brush.

I claim—

1. In a boot brushing and polishing machine, the combination of a rotary shaft, brushes rigidly mounted upon said shaft, and a shield L loosely mounted upon the shaft between said brushes and movable longitudinally upon the shaft toward either brush, substantially as set forth.

2. In a boot brushing and polishing machine, the combination of a rotary shaft, two or more brushes rigidly mounted upon said shaft, and a shield L loosely mounted upon said shaft between said brushes so as to move longitudinally upon said shaft, said shield comprising a disk having a wide flange or periphery which is adapted to inclose one of the brushes when shifted into position adjacent to said brush, substantially as set forth.

3. In a boot brushing and polishing machine, the combination of a rotary shaft carrying rigidly-mounted rotary brushes, a shield loosely mounted upon the shaft between said brushes and adapted to be shifted toward either brush, and a receptacle or well M within the shield adapted to contain blacking, substantially as set forth.

4. In a boot brushing and polishing machine, the combination of a rotary shaft, with a brush rigidly mounted upon said shaft and comprising a flanged pulley having cut-out portions in its flanges, a flexible band carrying bristles, and a clamp K engaging the periphery of the pulley adjacent to the cut-out portions of the flanges and securing the flexible bristle-band to the pulley, substantially as set forth.

ROBERT JOHNSTONE STIRLING.

Witnesses:
JAMES STONE,
HERBERT NOAKES JENNER.