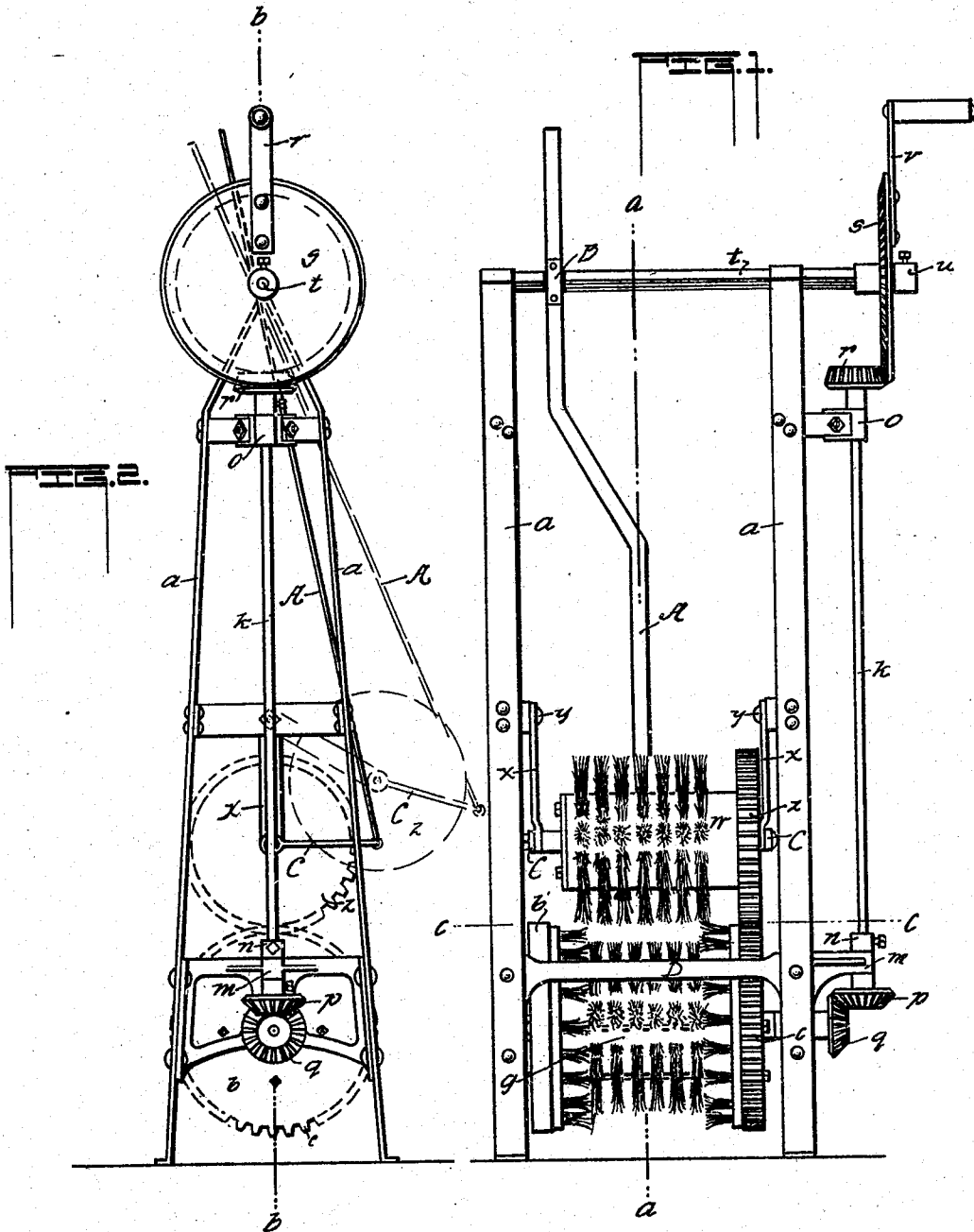


W. H. E. PREDMORE & J. ESTELL.
 BOOT AND SHOE CLEANER.
 APPLICATION FILED AUG. 21, 1908.

936,662.

Patented Oct. 12, 1909.
 2 SHEETS—SHEET 1.



Witnesses:
 Miss Fuller
 Mary E. Conroy.

Inventors
 John Estell
 W. H. E. Predmore
 By V. V. Lefft Atty.

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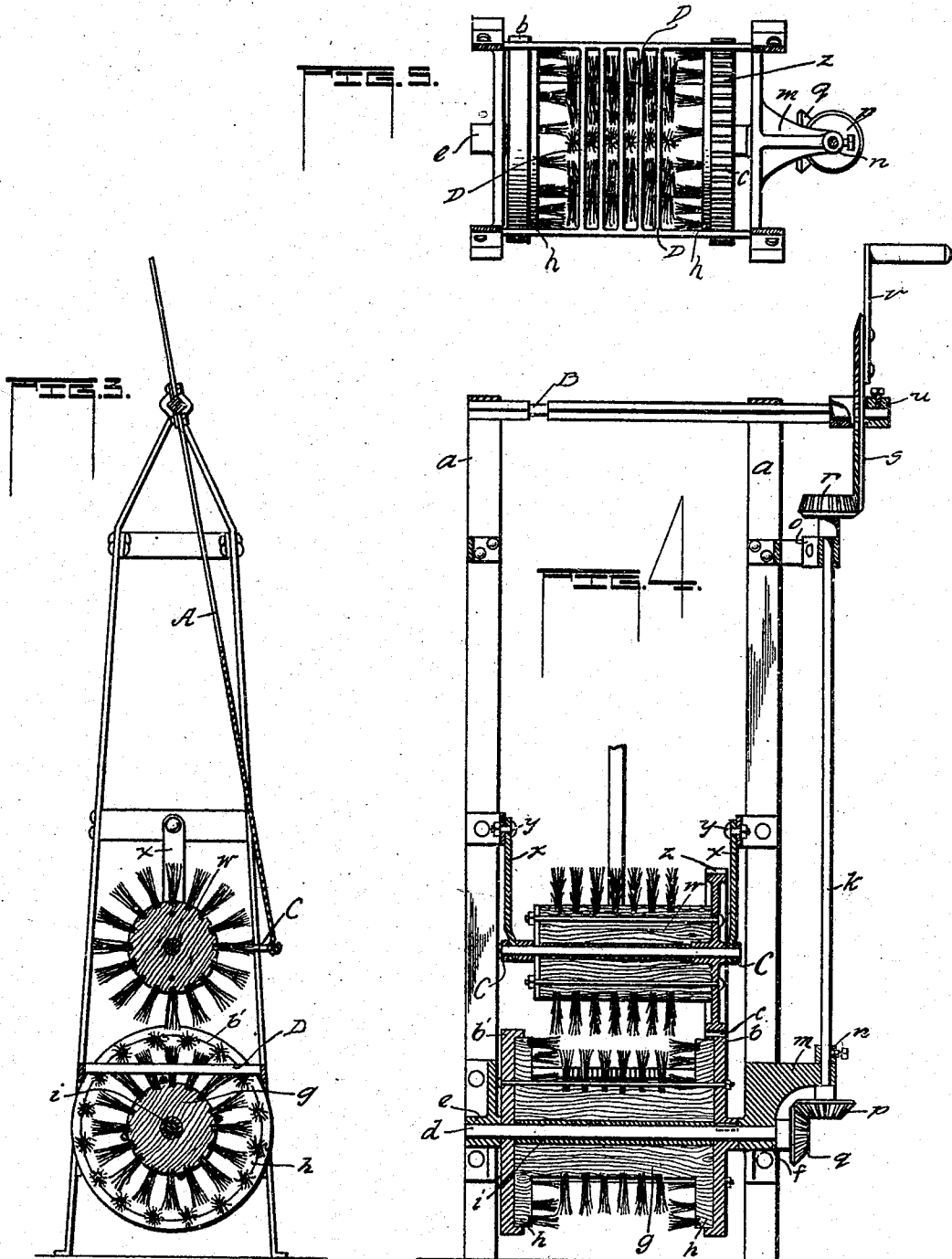
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UNITED STATES PATENT OFFICE.

WILLIAM H. E. PREDMORE, OF PRINCEVILLE, AND JOHN ESTELL, OF SPEER, ILLINOIS.

BOOT AND SHOE CLEANER.

936,662.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed August 21, 1908. Serial No. 449,629.

To all whom it may concern:

Be it known that we, WILLIAM H. E. PREDMORE and JOHN ESTELL, citizens of the United States, the former residing at Princeville, Peoria county, and the latter at Speer, in the county of Stark and State of Illinois, have invented certain new and useful Improvements in Boot and Shoe Cleaners; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to new and useful improvements in boot and shoe cleaning apparatus, by means of which a very simple and useful device is provided for the purpose, and so embodied that the cost of producing the machine would be small.

More particularly our invention relates to a boot and shoe cleaner adapted to be operated by hand power and comprising a stationary and an adjustable brush, connected parts to cause them to be operated together, and a detail mechanism essential to the practical embodiment of our invention.

That our invention may be more fully understood, reference is had to the accompanying drawings, in which—

Figure 1 is a front elevation of the device; Fig. 2 is a side elevation of the same; Fig. 3 is a sectional view through the line *a-a* of Fig. 1; Fig. 4 is a sectional view on the line *b-b* of Fig. 2, and Fig. 5 is a sectional view on the line *c-c* of Fig. 1.

In the drawings, *a*, *a*, represents a framework comprising four uprights suitably connected together and properly spaced apart and adapted to support the working parts of the device, the lower ends of said framework parts being turned out to form foot pieces and may in practice be provided with perforations accommodating the insertion of means for securing the said frame firmly to a platform or rest.

b and *b'* are flanged disks, the disk *b'* being provided with cogs as *c*, both of the said disks *b* and *b'* being fixed upon the shaft *d*, the said shaft being journaled in the boxings *e* and *f* fixed to the frame at either side of the machine.

g represents the body of a brush which is preferably made of wood as shown and is in substantially spool form, there being provided on the central circumferential body brush fiber as shown, and brush fiber is also

provided upon the inner faces of the rims *h*, *h* as shown.

i is a metal core for the brush body which is adapted to be sleeved upon the shaft *d* to facilitate providing a proper bearing.

The brush *g* is adapted to be revolved, and for that purpose we have provided means connected with hand power to accomplish the same, comprising the shaft *k* which is carried at its lower end within the opening in the bracket *m* which is suitably connected with the framework of the machine and is held in proper position thereon by means of the collar *n* securely fastened to said shaft. The upper end is carried within a journal bearing within bracket *o*, and *p* is a beveled cog wheel fixed upon the lower end of shaft *k* and meshes with the beveled cog wheel *q* fixed upon the end of shaft *d*. *r* is also a beveled cog wheel fixed upon the upper end of shaft *k*, and *s* is also a beveled cog wheel carried loose upon a cross bar *t* at the upper part of the framework, this beveled wheel being held in position thereon by means of the collar *u* fixed to said bar.

v is a crank fixed to beveled wheel *s*.

Our invention further comprises a companion brush adjustable with relation to the stationary brush just before described, and this brush or the core thereof we have designated as *w* and it is provided upon its circumferential face with tufts adapted to be arranged thereon and properly spaced so that when the adjustable brush is in position to operate in conjunction with the stationary brush, the tufts will bear over the central circumferentially placed tufts in the fixed brush. The brush *w* is provided with a metal core similar to that shown in the stationary brush and is supported by hangers *x*, *x*, to the pivot bolts *y*, *y*, as best shown in Figs. 1 and 4. Upon one end of brush *w*, there is provided a cog wheel *z* which is adapted to mesh with cog wheel *b* when the brushes are in position to be operated together, this said cog wheel being bolted onto the brush body in the manner shown in Fig. 4.

In applying our invention practically, it is desirable that one of the brushes be made adjustable so that the foot may be inserted and then the movable brush thrown into position immediately above the stationary brush so that not only the bottom portion of the boot or shoe but also the top portion thereof may be readily cleaned. To accom-

plish this adjustment, we have provided the bar A which is adapted to be pivotally supported at the point B on the cross bar *t* as best shown in Figs. 1 and 4, the bar being
5 free on its end to be grasped by the operator to make the shift, and at its lower end it has a loose connection with the arms C best shown in Fig. 2, which extend out from the ends of the brush *w* and meet in the front
10 of the same, at which point the connection with bar A is made. By this means, a ready adjustment of brush *w* may be had. D represents a foot support which comprises an ordinary grating connected at either side
15 to the framework of the machine, the bars of the grating being between the tufts of the lower stationary brush.

In the operation of the device, the adjustable brush *w* is first thrown rearwardly
20 so that the cogs of the respective brush parts are disengaged, thus leaving space for the insertion of the foot. After the foot has been inserted and rests upon the grate bars, the adjustable brush is moved so that the
25 cogged parts of the respective brushes engage each other, then power is applied through crank *v*, causing both brushes to be revolved simultaneously, which of course accomplishes the cleaning of the boot or
30 shoe. As soon as the cleaning is effected, the movable brush may be raised so that the foot may be withdrawn.

We have shown a preferred embodiment of our boot and shoe cleaner, but desire to
35 reserve the right to modify the construction of detail parts as we find the same may be desirable or more convenient.

What I claim is:

1. In a device of the class described, the
40 combination with a supporting frame, of a pair of brushes supported therein, one fixed and the other adjustable relatively, both being provided with a cog wheel upon one end adapted to mesh with each other, means
45 for moving the adjustable brush away from the fixed brush, comprising a bar suitably connected with the brush and with the supporting frame, which may be moved by hand, and means for operating the fixed
50 and adjustable brush conjointly when the

cog parts are in engagement, comprising suitable cog and shaft connection with the hand wheel, and a foot support comprising a grating suitably connected with the framework, with the bars of the grating bearing
55 between the rows of tufts of the fixed brush.

2. In a device of the class described, the combination of a main supporting frame, a brush supported therein formed with a
60 round central body and provided with peripheral flanges at each end, the faces thereof bearing at right angles with the main body, the surface of the central body and the inner faces of the flanges being provided with tufts, a second brush supported
65 in a swingable frame connected with the main framework, a cog wheel upon one end of each brush adapted to mesh with each other as the movable brush is moved in close relation with the first named brush, means
70 for revolving the brushes conjointly or the first named brush alone, a foot support having longitudinal slots therein adapted to bear with relation to the first named brush in such a manner that as it is revolved, rows
75 of tufts thereon will protrude through the slots, substantially as described.

3. In a device of the class described, the combination of a stationary and a movable frame, a brush in the stationary frame, a
80 foot rest provided with longitudinal slots supported above the brush in the stationary frame in such position that as the brush is revolved, the rows of tufts will bear through and extend above the upper face of the foot
85 rest, a brush supported in the movable frame, a cog wheel upon the end of each brush, means for moving the movable frame so that the cogs upon the respective brushes may be brought into mesh and means for
90 revolving the brushes conjointly or the brush of the stationary frame independently, substantially as described.

In testimony whereof we have affixed our signatures, in presence of two witnesses.

W. H. E. PREDMORE.
JOHN ESTELL.

Witnesses:

WM. NICKERSON,
O. B. DEITZ.