To all whom it may concern:

Be it known that I, Wladyslaw Reginia, a citizen of Poland, residing at Ludington, county of Mason, and State of Michigan, have invented certain new and useful Improvements in Shoe-Cleaning Machines, of which the following is a specification.

This invention has for its object the provision of a machine adapted to receive and operate upon a shoe whereby dust and other accumulations are removed from the surface and sole simultaneously.

A further object is to provide a shoe cleaning machine comprised of few and simple parts which are easily operated, and effective in their purpose.

These and other like objects are attained by the novel construction and combination of parts hereinafter described and shown in the accompanying drawings, forming a material part of this disclosure, and in which—

Figure 1 is a top plan view showing a shoe cleaning machine made in accordance with the invention.

Fig. 2 is a transverse sectional view taken on line 2—2 of Fig. 1.
Fig. 3 is a longitudinal sectional view taken on line 3—3 of Figs. 1 and 2, and
Fig. 4 is a fragmentary sectional view taken on line 4—4 of Fig. 1.

Referring to the drawings in detail, the numerals 10 and 11 respectively designate the side and end walls of a hollow rectangular frame, while 12 is a longitudinally disposed bar supplementary to the main frame and spaced therefrom by the passage 13.

Extending longitudinally between the end elements 11, adjacent to the respective side walls, are a pair of fixed rails 14 forming supports for the outer ends of a plurality of spindles 15 on which are rotatably mounted small flat faced rollers 16 which support the superstructure.

Carried by the rollers 16 are a pair of horizontal bars 17, joined at their ends by cross bars 18, these bars continuing laterally outward and forming supports for rack bars respectively 19 and 20.

Raised from the cross bars 18 are blocks 21, secured by the screws 22, the same being so located as to receive a shoe placed therebetween by which the upper frame may be moved on the rollers longitudinally of the machine, the shoes resting upon a plurality of rails 23 extending longitudinally in the upper frame, forming in effect a grating.

Mounted to rotate in each of the side walls 10, midway in their length, are vertical spindles 24 to which are affixed, at their upper ends, spools 25, in which are set bristles forming conical brushes 26 so that the same are rotated in parallel vertical planes and at such distance apart as to permit a shoe to be entered therebetween, the shape of the brushes being such as to substantially cover the sides and upper portions of the shoe.

Secured upon the vertical spindles 24, are spur gears 27, one of the gears meshing with the rack 19, the teeth of which are disposed upon its inner lateral surface, while the other pinion is engaged with the similarly positioned teeth of the rack 20, so that as the upper frame of the superstructure is moved longitudinally of the lower frame, the brushes are caused to rotate in an obvious manner.

The rack 20 is also provided with downward extending teeth 28, the same meshing with a pair of spur gears 29, rotatably mounted upon the stub shafts 30, these gears conveying rotary motion to other gears 31, secured in the space 13 upon horizontal spindles 32, journaled in the side frames 10, and having secured upon them drums 33, carrying the cylindrical brushes 34, thus providing means whereby the bottom of the shoe is brushed and cleansed at the same time the upper portion of the shoe is cleaned.

In operation, the foot of the user, engaged in the shoe to be cleaned, is placed upon the rails 23, between the projections 21, and moved vigorously back and forth, whereupon the racks are reciprocated conveying rotary motion to the upper and lower brushes simultaneously and cleaning the shoe in an obvious manner.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is—

1. In a shoe cleaning machine the combination with a hollow rectangular frame, and a pair of cylindrical brushes mounted to rotate in a horizontal plane in said frame, of a plurality of rollers in said frame near its lateral edges, a second frame moveable on said rollers, a pair of conical brushes vertically mounted in the sides of said first named frame, extending upward above the
second named frame, racks carried by said second frame, and pinions combined with all of said brushes whereby they are rotated when motion is communicated to said upper frame.

2. In a shoe cleaning machine, the combination with a hollow rectangular frame, a pair of cylindrical brushes mounted on horizontal axes in said frame, a pair of conical brushes mounted in a vertical axis on said frame, a second frame movable longitudinally on the first named frame, means on said second frame for supporting the foot whereby it may be moved longitudinally, and racks carried by said second frame, said racks being operatively engaged with all of said brushes whereby they are caused to rotate simultaneously.

3. In a shoe cleaning machine, the combination with a hollow base, and rollers carried thereby, of spindles vertically mounted in said base, other spindles mounted on horizontal axes in said frame, gears on all of said spindles, a second frame movable on said rollers, racks carried by said second frame engaged with said gears simultaneously, and means on said second frame for supporting a foot.

In testimony whereof I have affixed my signature.

WLADYSLOW RAGINIA.