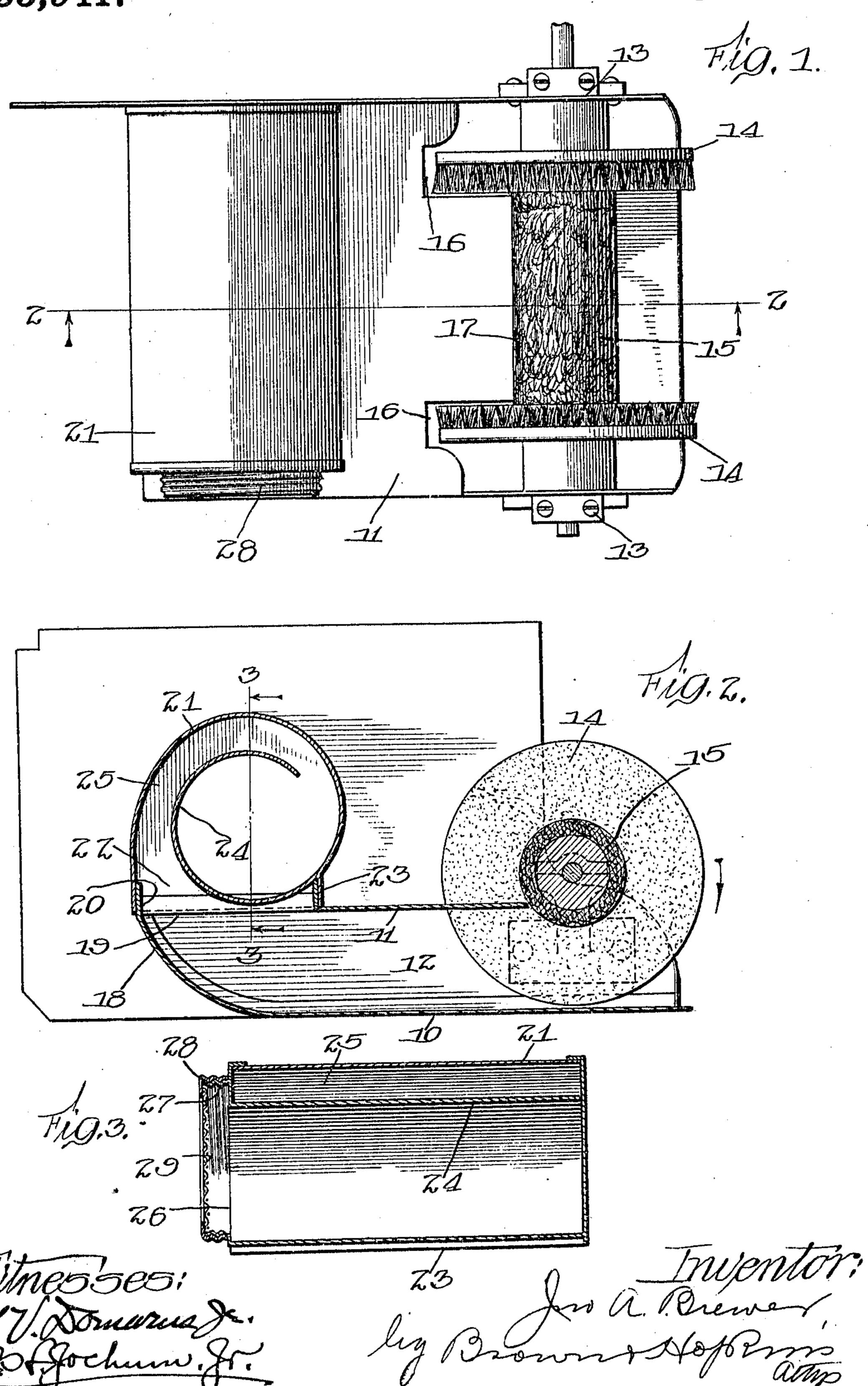
J. A. BREWER.

SHOE BRUSHING AND POLISHING MACHINE.

APPLICATION FILED SEPT. 13, 1907.

955,941.

Patented Apr. 26, 1910.



UNITED STATES PATENT OFFICE.

JOHN A. BREWER, OF JACKSON, MICHIGAN, ASSIGNOR TO THE ELECTRIC SHOE POL-ISHER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ARIZONA TERRITORY.

SHOE BRUSHING AND POLISHING MACHINE.

955,941.

Specification of Letters Patent. Patented Apr. 26, 1910.

Application filed September 13, 1907. Serial No. 392,617.

To all whom it may concern:

Be it known that I, John A. Brewer, a citizen of the United States, residing at Jackson, in the county of Jackson and State 5 of Michigan, have invented certain new and useful Improvements in Shoe Brushing and Polishing Machines, of which the following

is a specification.

This invention relates to improvements in 10 shoe brushing and polishing machines, embodying a rotary buffer or polishing member, and a dust collector, and the primary object of the same is to provide an improved device of this character in which the buffer 15 or polisher serves to direct the dust into the collector.

A further object is to provide an improved device of this character in which the buffer or polisher will serve as a blower to force 20 the dust into the collector after removing it

from the shoes.

A further object is to provide an improved device of this character containing a detachable receptacle whereby the receptacle may

25 be readily removed for cleaning.

A further object is to provide an improved device of this character for collecting the dust, which may be directed therein by the air currents generated by the rotary buffer 30 or brush, and improved means for permitting the escape of the air.

A further object is to provide an improved device of this character which will be simple, cheap and durable in construction and effect-

35 ive and efficient in operation.

To the attainment of these ends and the accomplishment of other new and useful objects, as will appear, the invention consists in the features of novelty in the construc-40 tion, combination and arrangement of the several parts hereinafter more fully described and claimed and shown in the accompanying drawing, illustrating an exemplification of the invention, and in which:

Figure 1 is a top plan view of an improved device of this character constructed in accordance with the principles of this invention. Fig. 2 is a longitudinal sectional view on line 2-2 of Fig. 1. Fig. 3 is a de-50 tail sectional view on line 3—3 of Fig. 2.

In the present exemplification of this invention there is provided an air chamber or channel having a base 10, a top 11, and side walls 12. The forward extremity of the 55 base 10 projects for some distance beyond

the forward extremity of the top 11, and rotatably supported in suitable bearings 13 is a buffer or polishing brush comprising end brushes 14 and an intermediate buffer 15, the diameter of the buffer being somewhat 60 smaller than the diameter of the end brushes 14. The specific construction of the buffer brush, however, forms no part of the present invention.

The top 11 is preferably cut away, as at 65 16, to form a projecting extremity 17, and said extremity 17 is adapted to stand in close proximity to the periphery of the buffer 15, preferably at a point below the diametric center thereof, as shown more clearly 70 in Fig. 2 of the drawing. The extremity 17 is preferably of a width substantially equal to the length of the buffer 15, and is adapted to stand between the end brushes 14, the brushes 14 being of such a diameter that a 75 portion thereof will project into the cut away portions 16 of the top 11. The buffer is preferably located at the inlet end of the air channel, and is adapted to receive a rotary motion from any suitable source of 80 power, (not shown) and is adapted to be rotated in the direction indicated by the arrow in Fig. 2.

The base 10 is preferably curved upwardly at the rear end thereof, as at 18, and the 85 channel is provided with an outlet 19, preferably extending through the top 11 thereof, and surrounding the outlet 19 is a circumferential flange 20 which projects a slight distance above the top 11.

The dust collecting chamber is designated generally by the reference numeral 21, and is provided with an inlet 22, surrounding which is a peripheral flange 23 which is adapted to receive the projecting flange 20 95 of the air channel, and the flanges 20, 23, are of such a length as to form a tight joint and also support the dust collecting chamber 21. The chamber 21 is provided with a wall 24, preferably curved as shown, to form a 100 curved inlet passage 25 leading from the inlet 22 of the dust collecting chamber and discharging into the top thereof, so that the dust which is forced through the passage 25 will be discharged into the chamber to- 105 ward the bottom thereof and the wall 24 will prevent the dust from being blown out again. This chamber 21 is of any desired size and preferably of a length to extend substantially across the air channel, and said 110 chamber is provided with an air outlet 26 having a flange 27 surrounding the outlet, which is preferably provided with peripheral screw threads. A cap 28 is provided with a reticulated portion 29, and said cap is provided with screw threads adapted to engage the screw threads on the flange 27 by means of which the chamber 21 may be closed and at the same time form an outlet for the air.

In use, the foot is held in a position between the side brushes 14 and against the buffer 15 in such a position that the buffer or brushes will engage the shoe. Motion being imparted to the buffer to rotate the same in the direction indicated by the arrow in Fig. 2, the buffer will remove the dust and dirt from the shoe, and the air currents created by the rotary motion of the buffer will direct the dust into the air channel and the said air currents will convey the dust

through the channel and into the chamber 21 through the inlet 22 and the passage 25, where the dust will accumulate, the air passing out through the reticulated portion 29 of the cover 28.

With this improved construction it will be seen that the dust after being removed from the shoe will be conveyed away from the buffer and will be collected in the dust 30 collecting chamber 21, which latter may be readily detached from the air channel or removed. The dust and dirt which has accumulated in the chamber may be then removed through the air outlet 26 after the 35 cover 28 has been detached. It will also be noted that the projecting extremity 17 of the top 11 being located in close proximity to the periphery of the buffer, the dust will not follow the buffer, but coming in contact 40 with the lower face of the extension, will be directed into the air channel.

In order that the invention might be fully understood by those skilled in the art, the details of the foregoing embodiment thereof have been thus specifically described, but

What I claim as new and desire to secure by Letters Patent, is:—

1. In a shoe buffing machine the combination of a dust collecting chamber having an inlet opening and a rotary polishing brush arranged adjacent the inlet, said brush being supported above the bottom of the inlet to permit the foot to be placed under the brush, the air currents generated by the brush serving to convey the dust into the chamber.

2. In a shoe buffing machine the combina-

tion of a dust collecting chamber having an inlet opening, and a rotary buffer adjacent the inlet and supported above the bottom thereof to permit the foot to be placed under 60 the buffer, said inlet opening into the chamber near the top thereof and discharging toward the bottom of the chamber, the air currents generated by the motion of the buffer being adapted to force dust into the 65 chamber, said chamber being provided with an outlet for the air.

3. In a shoe buffing machine, the combination of a dust conduit, a rotary buffer adjacent one end of the conduit and supported 70 above the bottom thereof to permit the foot to be placed under the buffer, and a chamber communicating with and detachable from the conduit and adapted to receive the dust conveyed through the conduit by air currents generated by the motion of the buffer, the chamber having an inlet opening in the form of a curved passage extending from said conduit and opening downwardly into said chamber, said chamber being provided 80 with an air outlet.

4. In a shoe buffing machine the combination of a dust conduit, a rotary buffer adjacent one end of the conduit, and supported above the bottom thereof to permit the foot 85 to be placed under the buffer and a chamber communicating with and detachable from the conduit and adapted to receive the dust directed through the conduit by air currents generated by the motion of the buffer.

5. In a shoe buffing machine the combination of a dust conduit, the top of the conduit adjacent the inlet terminating short of the extremity of the bottom, a rotary buffer journaled at the inlet and above the bottom 95 thereof to permit the foot to be placed under the buffer, the extremity of the top standing in close proximity to a portion of the periphery of the buffer, and a dust collecting chamber removably supported by and 100 communicating with the conduit, and adapted to receive the dust conveyed through the conduit by air currents generated by the motion of the buffer.

In testimony whereof I have signed my 105 name to this specification, in the presence of two subscribing witnesses, on this 20th day of August A. D. 1907.

JOHN A. BREWER.

Witnesses:
NATHAN E. BAILEY,
JOHN GEORGE, Jr.