No. 662,237. Patented Nov. 20, 1900.

G. L. LAMB.

BOOT CLEANER.

(Application filed Jan. 19, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

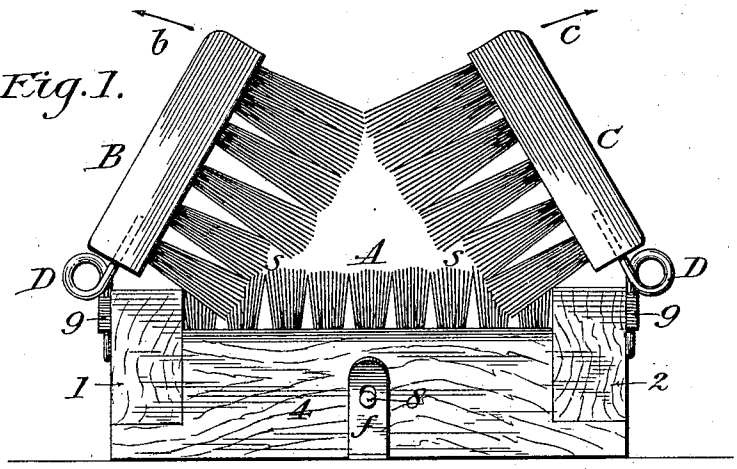


Fig. 2.

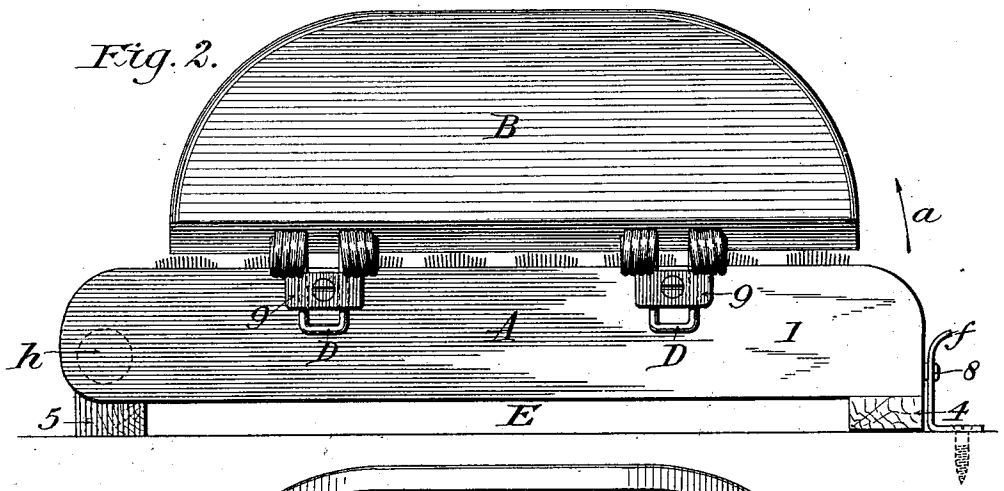
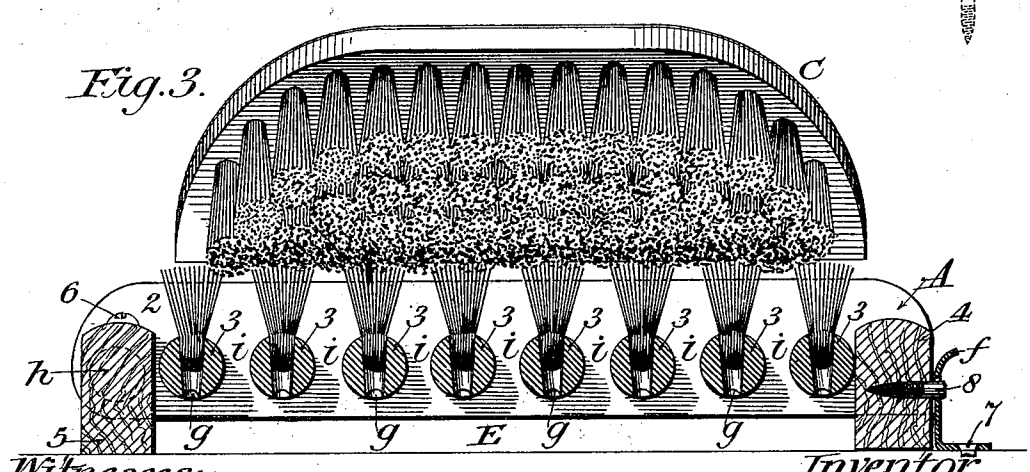


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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Fig. 4.

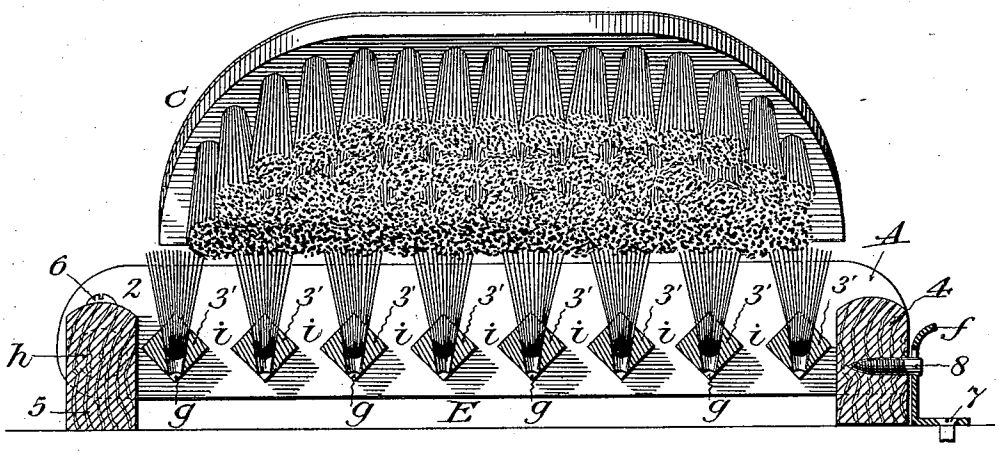
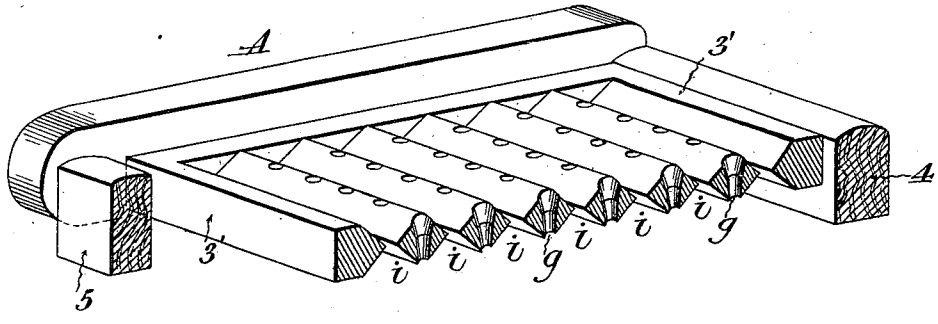


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE L. LAMB, OF NAPPANEE, INDIANA.

BOOT-CLEANER.

SPECIFICATION forming part of Letters Patent No. 662,237, dated November 20, 1900.

Application filed January 19, 1900. Serial No. 2,028. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. LAMB, a citizen of the United States of America, and a resident of Nappanee, in the State of Indiana, have invented a new and useful Improvement in Foot-Cleaning Brushes, of which the following is a specification.

This invention relates to means for removing dirt from boots or shoes without taking them off the feet and to those forms of such devices in which brushes attached to a floor are used.

The present invention consists in an improved foot-cleaning brush adapted to simultaneously remove the dirt from the bottom and edges of the sole and from the top of the boot or shoe, also, in an improved construction of the sole-cleaning brush whereby any accumulation of dirt therein is prevented and cleaning out the dirt from beneath it is facilitated.

Two sheets of drawings accompany this specification as part thereof.

Figure 1 of the drawings is a front elevation of the improved brush. Fig. 2 is a side view thereof. Fig. 3 is a vertical longitudinal section. Fig. 4 is a vertical longitudinal section illustrating a modification, and Fig. 5 is a fragmentary perspective view showing another modification.

Like letters and numbers refer to like parts in all the figures.

The improved brush comprises a sole-cleaning brush A and a pair of side brushes B and C, said side brushes being flexibly attached at their lower edges to said sole-cleaning brush by spring-hinges D. The sole-cleaning brush is composed of side bars 1 and 2, rigidly connected with each other by transverse brush-section bars 3 and a front bar 4 and connected with a parallel frame-piece 5 at the rear end of the brush by blind-hinges *h*, formed by trunnions on the ends of the frame-piece 5 and sockets in the inner sides of the side bars 1 and 2. The brush-section bars 3 are preferably and conveniently round in cross-section, each being provided with a single row of tufts of bristles. These tufts have been drawn into vertical holes in the bar by a fastening-wire that is accommodated by a groove *g*, Fig. 3, in the bottom of the bar. The interspaces *i*, Fig. 3, between the brush-sections permit the dirt to pass freely through to a space E beneath the brush, and such shape of the bars 3 prevents the dirt from resting on the bars and renders the interspaces *i* flaring both at top and bottom, so as to facilitate the admission and escape of the dirt. The frame-piece 5 and a fastening *f* for holding down the front end of the brush are fixedly attached to the floor of a porch or vestibule by wood-screws 6 and 7, Fig. 3. Access to the space E for cleaning out the dirt is had by turning the movable part of the brush backward on the hinges *h*, as represented by the arrow *a* in Fig. 2. The fastening *f* may be and conveniently is, as shown, an L-shaped piece of spring metal suitably bent and perforated to engage with the screw 7 and with a catch-pin 8, screwed into the front bar 4 of the brush A.

When the brush is fastened down, as in the drawings, it is ready for use, and it is employed by thrusting the foot between the bristles toe first or heel first, the side brushes B and C yielding laterally to admit the foot, as represented by the arrows *b* and *c*, Fig. 1. For the most effective contact of the side brushes with the top of the foot, as well as with the edges of the sole, two rows of bristles at the hinge edge of each of these brushes are preferably shortened, as represented at *s* in Fig. 1, and thus stiffened to clean the sole edges, the other rows being as long as may be required to reach the top of the foot. The spring-hinges D permit said movements of the side brushes B and C, press the same against the foot sufficiently throughout the cleaning operation, and restore them to normal position when the foot is withdrawn. Each hinge of the kind represented is composed of a single wire bent to form a pair of spring-coils and attaching or holding portions, one of the latter serving to unite the two coils and engaged by a keeper 9, through which a central wood-screw passes, as in Fig. 2, into the side bar 1 or 2, to which the hinge is attached.

Other forms of hinges and fastenings may be employed. The brush-section bars 3 may be made of square material, if preferred, as shown in Fig. 4, or may be formed in effect by means of slots *i* between the rows of bristles in the brush A, as shown in Fig. 5,

where 3′ represents a brush-back so slotted, and other like modifications will suggest themselves to those skilled in the art.

Having thus described said improvement, I claim as my invention and desire to patent under this specification—

1. An improved foot-cleaning brush composed of a sole-cleaning brush having side bars, a front bar and transverse brush-section bars, with interspaces between said brush-section bars that are flaring both at top and at bottom and a space beneath, side brushes flexibly attached at their lower edges to said sole-cleaning brush by spring-hinges, a frame-piece to which said sole-cleaning brush is hinged at its rear end, and a fastening which coacts with said front bar.

2. A sole-cleaning brush having side bars and transverse brush-section bars with interspaces between said brush-section bars and a space beneath to receive the dirt, hinges attaching the brush to a floor at one edge, and a fastening which holds it down for use and releases it for cleaning out said space beneath the brush, substantially as hereinbefore specified.

GEORGE L. LAMB.

Witnesses:
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OTIS L. FULLER.