

M. B. SEAMAN & G. COHEN.
SHOE CLEANING DEVICE.
APPLICATION FILED MAY 29, 1909.

972,474.

Patented Oct. 11, 1910.
2 SHEETS—SHEET 1.

Fig. 1.

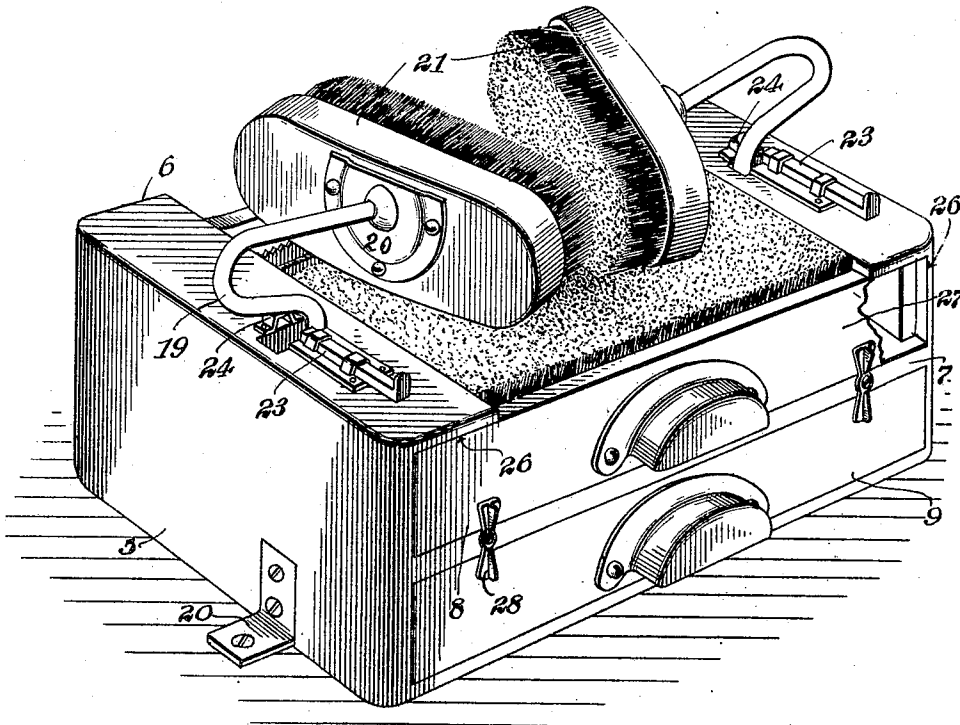
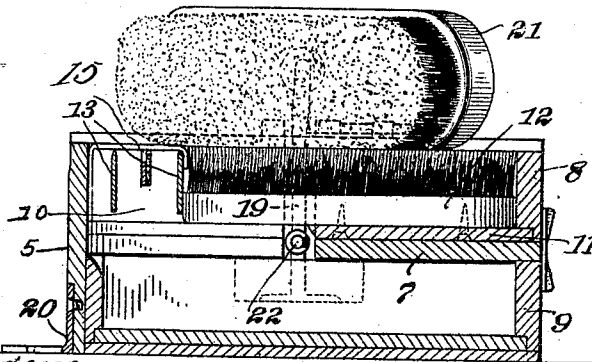


Fig. 2.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 3.

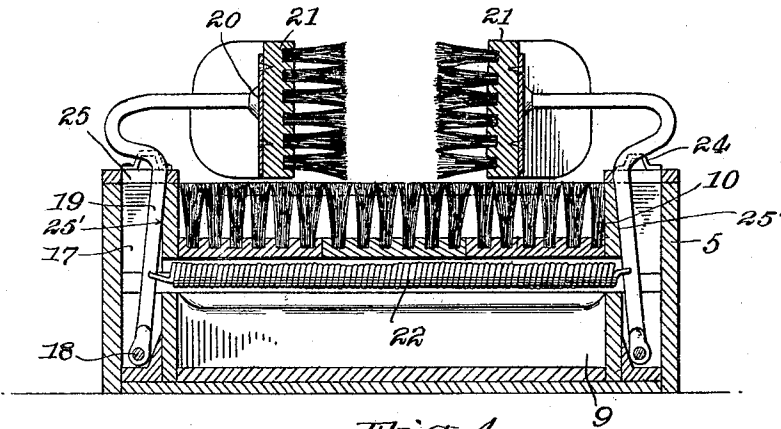


Fig. 4.

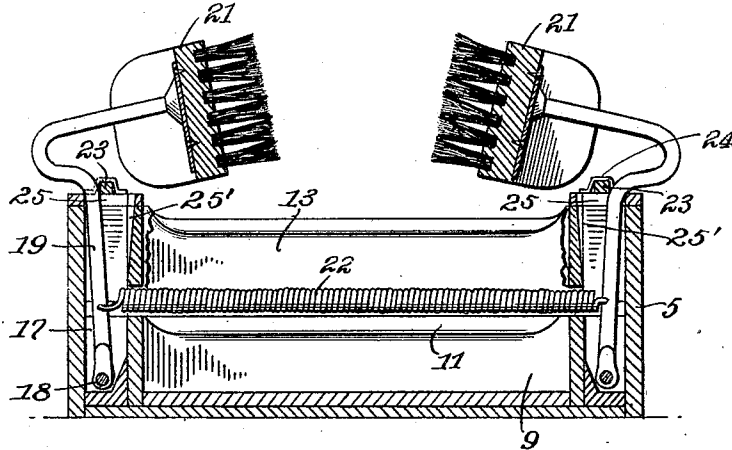
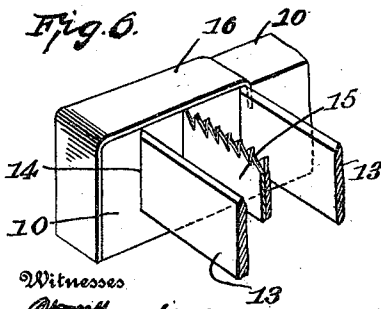


Fig. 6.

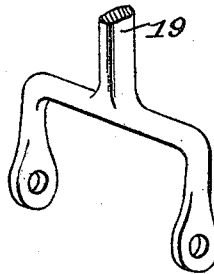


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Fig. 5.



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UNITED STATES PATENT OFFICE.

MORRIS B. SEAMAN AND GEORGE COHEN, OF MERIDEN, CONNECTICUT.

SHOE-CLEANING DEVICE.

972,474.

Specification of Letters Patent.

Patented Oct. 11, 1910.

Application filed May 29, 1909. Serial No. 499,077.

To all whom it may concern:

Be it known that we, MORRIS B. SEAMAN and GEORGE COHEN, citizens of the United States, both residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Shoe-Cleaning Devices, of which the following is a specification.

This invention relates to shoe cleaners and has for its object the provision of a thoroughly practical and efficient device of this character adapted to take the place of an ordinary door mat.

A further object of the invention is to provide a shoe cleaner including a stand or casing having a horizontal cleaning surface and provided with oppositely disposed yieldably supported side brushes overhanging said cleaning surface so that by inserting the foot between said side brushes both the sole and vamp of the shoe may be cleaned at the same time.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability, and efficiency.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a shoe cleaning device constructed in accordance with my invention, Fig. 2 is a transverse sectional view of the same, Fig. 3 is a longitudinal sectional view showing the pivoted brush supporting arms in engagement with the upper tray, Fig. 4 is a similar view showing the brush supporting arms locked in inoperative position, so as to permit the removal of the upper tray, Fig. 5 is a detail perspective view of the lower end of one of the pivoted brush supporting arms, and Fig. 6 is a detail perspective view of a portion of the upper tray.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings, by the same reference characters.

The improved shoe cleaner comprises a stand or casing 5, preferably rectangular in shape as shown, having its upper portion open and its end walls provided with overhanging flanges 6.

The casing is provided with an inter-

mediate transverse partition 7 defining upper and lower compartments, one of which is adapted to receive a tray 8, carrying a cleaning or brushing surface, the other compartment being adapted to receive a tray 9, for the purpose of catching and retaining dust, dirt, and other foreign matter removed from the shoes during the cleaning operation.

The upper tray 8 includes spaced bars 10 connected by a bottom plate 11 and to which are secured one or more brushes 12, constituting the cleaning surface, the bristles of said brushes being so arranged that when the tray 8 is positioned in the upper compartment of the casing the brushes will present a horizontal surface as before stated. Interposed between the side bars 10 of the upper tray and preferably disposed at the rear of the brushes 12 are spaced longitudinally disposed bars 13 having their opposite ends seated in suitable recesses or kerfs 14 formed in the bars 10 and their upper edges inclined or beveled to present a scraping surface as shown. Interposed between the scrapers 13 and also seated in suitable grooves in the side bars 10 of the upper tray, are parallel metallic strips 15 having their upper edges serrated to present a roughened surface for engagement with the sole of the shoe. The serrations of the strips 15 being inclined in opposite directions with the terminals of the teeth formed by said serrations disposed in staggered relation, facilitates the removal of caked mud, dirt or other foreign matter on the sole of the shoe. The scraping blades 13 and serrated blades 15 are retained in position on the upper tray 8 by means of metallic strips 16, one end of each of which is secured to the rear end of the adjacent side bar 10, while the other end thereof is bent downwardly and seated within the groove with one of the scraping blades 13.

Formed in the opposite end walls 5 of the stand or casing 5 are vertically disposed recesses 17 in which are pivotally mounted at 18 upright brush supporting arms 19, the free ends of which are bent laterally and then extended over the brushing surface and provided with enlarged heads 20 for attachment to the side brushes 21. The side brushes 21 are preferably disposed at an angle to each other and are normally and yieldably supported in position over the brushing or cleaning surface of the upper

tray 8, by means of a coiled spring 22, the opposite ends of which are secured to the arms 19 at points above their pivots as shown. The spring 22 is entirely housed within the stand or casing and is preferably disposed at the rear, longitudinal edge of the partition, 7, so as not to form any obstruction to the passage of the upper tray 8 when inserting or removing the latter.

Attention is here called to the fact that the intermediate portions of the brush supporting arms 19 normally and yieldably engage suitable depressions or recesses 25' formed in the adjacent faces of the bars 10 of the upper tray, thereby to lock the upper tray within the casing.

As a means for locking the brush supporting arms 19 within the recesses 17 so as to permit the removal of the upper tray when it is desired to clean the brushes 12 there are provided suitable bolts 23, the latter being secured to the flanges 6 of the casing for engagement with corresponding keepers 24, there being transverse slots 25 formed in the flanges 6 and communicating with the adjacent recesses 17 to permit a limited lateral movement of the brush supporting arms 19, as shown. Thus it will be seen that when the bolts are moved to retracted position the arms 19 will be forced inwardly by the tension of the spring 22 so as to normally and yieldably retain the side brushes 21 above the brushing surface and that when the arms 19 are moved laterally within the slots 25 and the bolts moved into their keepers said arms will be held in the recesses 17 so as to permit the ready removal of the upper tray 8.

The front of the casing is provided with seating recesses 26 adapted to receive the extended ends 27 of the upper and lower trays, the recesses 26 permitting the front walls of the trays to be disposed flush with the front of the casing when said trays are arranged in the latter. Suitable turn buttons 28 are pivotally mounted on the forward edge of the partition 7 for engagement with both trays or drawers to assist in locking the latter in closed position, said trays being also provided with handles to facilitate the insertion and withdrawal of said trays. Lugs 30 are secured to the opposite ends of the casing for the reception of bolts or similar fastening devices by means of which the stand or casing may be rigidly secured to the floor. Thus it will be seen that when the foot is inserted between the side brushes 21 and moved in a forward direction said brushes will clean the adjacent sides of the shoe while the brushes 12 will remove any deposit of mud or dirt on the sole of the shoe, the scraping blades 13 and roughened face of the members 15 serving to assist in removing any mud that may be caked on the sole of the

shoe prior to subjecting the same to the action of the brushes constituting the cleaning surface. It will here be noted that by arranging the side brushes at an angle of inclination to each other the shoe may be readily inserted between the same and the sides as well as the point of the shoe subjected to the action of the brushes, said brushes yielding laterally so as to accommodate shoes of different sizes.

Having thus described the invention, what is claimed as new is:

1. A shoe cleaner comprising a casing, a tray slidably mounted in the casing and provided with a cleaning surface, and yieldable brush supporting arms adapted to engage said tray for retaining the same within the casing.

2. A shoe cleaner comprising a casing, a tray slidably mounted in the casing and provided with a brushing surface, yieldable brush-supporting arms pivotally mounted in the casing and adapted to normally and yieldably engage the tray for holding the latter within the casing and means for supporting the arms out of engagement with the tray thereby to permit the removal of the latter from the casing.

3. A shoe cleaner comprising a casing, a tray slidably mounted in the casing, and provided with a brushing surface and yieldable arms pivotally mounted on the casing and provided with terminal brushes disposed at an angle to each other and overhanging the brushing surface, said arms being supported in contact with the tray for retaining the latter within the casing.

4. A shoe cleaner comprising a casing having vertical recesses formed therein, a tray slidably mounted within the casing and provided with a brushing surface, overhanging brush supporting arms pivotally mounted in the recesses in the casing and normally bearing against the tray, a spring forming a yieldable connection between said arms and means for supporting the arms out of engagement with said tray, thereby to permit the removal of the latter.

5. A shoe cleaner comprising a casing, having overhanging plates and provided with vertically disposed recesses, there being slots formed in the plates and communicating with the recesses, a tray slidably mounted in the casing and provided with a brushing surface, yieldable brush supporting arms pivotally mounted in the recesses and having their upper ends extended through the slots in the plates, means for normally and yieldably maintaining the arms in position over the brushing surface, and fastening devices adapted to engage said arms when the arms are moved laterally in the slots.

6. A shoe cleaner comprising a casing having a compartment and provided with over-

hanging slotted plates, there being recesses formed in the end walls of the casing and communicating with the slots in the plates, a tray slidably mounted in the compartment and provided with a cleaning surface, arms pivotally mounted in the recesses and having their upper ends extended through the slots in the plates, side brushes secured to the free ends of the arms and over-hanging the surface brushes, a spring forming a yieldable connection between the brush supporting arms, and locking devices adapted to extend across the slots in the plates and hold the brush supporting arms at the outer ends of said slots.

7. A shoe cleaner comprising a casing having over-hanging slotted plates and provided with a partition defining a compartment, arms pivotally mounted in the casing and having their upper ends extended through the slots in the plates, a tray slidably mounted in the compartment and provided with a brushing surface, brushes secured to the free ends of the arms and over-hanging the brushing surface, and a spring forming a yieldable connection be-

tween the arms and disposed in horizontal alinement with the rear end of the partition.

8. In a shoe cleaner, a tray, spaced scraping blades carried by the tray, and longitudinal strips interposed between the scraping blades and having their upper edges serrated, the serrations on said blades being disposed in opposite directions.

9. In a shoe cleaner, a tray having spaced kerfs formed in the side walls thereof, scraping blades seated in some of the kerfs, mating strips seated in other of the said kerfs and having their upper longitudinal edges provided with serrations which are inclined in opposite directions, and metallic strips extending over the adjacent scraping blades and serrated strips, the terminals of said metallic strips being seated in the adjacent kerfs.

In testimony whereof we affix our signatures in presence of two witnesses.

MORRIS B. SEAMAN. [L. S.]

GEORGE COHEN. [L. S.]

Witnesses:

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