

A. Mc Keachnie,
Boot Cleaner.

No 20,359.

Patented May 25, 1858.

Fig: 1.

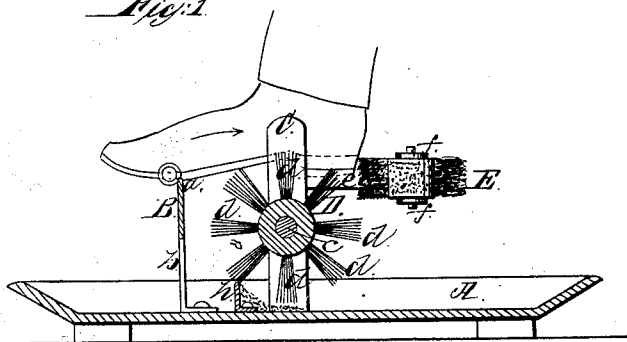
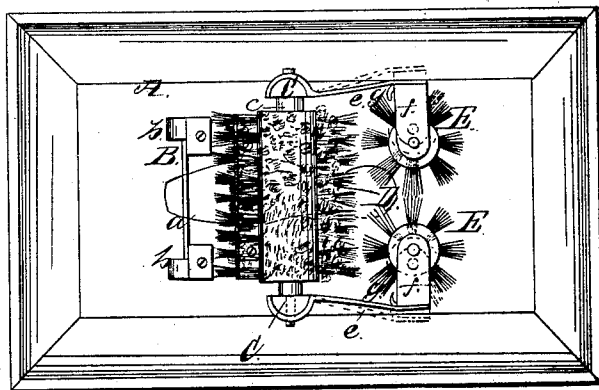


Fig: 2.



UNITED STATES PATENT OFFICE.

A. McKEACHNIE, OF NEW YORK, N. Y.

FOOT-CLEANER.

Specification of Letters Patent No. 20,359, dated May 25, 1858.

To all whom it may concern:

Be it known that I, ALLAN McKEACHNIE, of the city, county, and State of New York, have invented a new and Improved Foot-Cleaner to be Placed at the Doorways and Entrances of Buildings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional elevation of my improvement, the plane of section passing through the center. Fig. 2, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in the employment or use of a scraper, rotary brushes and brush cleaners, placed within a suitable shell or basin and arranged as hereinafter fully shown and described, whereby the feet may be perfectly cleaned from mud and dirt by simply drawing the sole of the boot or shoe over the scraper in the usual way, the sides of the boot or shoe being cleaned as well as the sole.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a shell or basin which may be of cast iron of any proper dimensions and form and B, is a foot scraper which is secured within the shell or basin A. The scraper may be constructed in the usual way, a vertical blade of metal *a*, being attached to uprights *b, b*.

C, C, are two uprights which are secured in the shell or basin A, just behind the scraper B, and the shaft *e*, of a rotary brush D, has its bearings in these uprights. The brush D, may be constructed in the same way as those used for machinery and known as cylindrical or rotary machine brushes, the bristles *d*, being of a requisite degree of stiffness, to insure durability.

To the upper end of each upright C, a horizontal spring *e*, is attached, and to the outer end of each spring two parallel plates *f, f*, are attached, the plates being at right angles with the springs. Between the plates *f, f*, of each spring *e*, a horizontal rotary brush E, is placed, the axes of the brushes passing through their respective plates *f, f*.

The upper surfaces of the brushes E, E, are about on a level with the upper surface of the brush D, and the upper surface of

the brush D, is a trifle above the upper edge of the scraper B.

The springs *e, e*, have a tendency to keep the brushes E E pressed toward each other.

At the outer end of each pair of plates *f, f*, a cleaner *g*, is attached. The cleaners are merely metal plates attached vertically to the back parts of the plates *f*, and having hooked or curved ends against which the edges of the brushes E, E, bear.

To the bottom of the shell or basin A, a plate *h*, is attached, said plate being underneath the brush D, and extending its whole length. The edge or periphery of the brush D, bears against the upper edge of the plate *h*, which serves the office of a cleaner.

The operation will be readily seen. By drawing the sole of the boot or shoe (shown in red Fig. 1.) across the scraper B, in the direction indicated by the arrow, the mud and dirt will be scraped off the sole, and the sole cleanly wiped by the brush D, which rotates as the sole passes over it, and the heel of the boot or shoe as it passes between the brushes E, E, distends them, the brushes pressing against the sides of the boot or shoe and perfectly cleaning the sides.

The brushes D, E, E, as they are rotated, have the mud and dirt which they receive from the boot or shoe, scraped from them by their respective cleaners *h, f, f*, said cleaners also serving to prevent a too free rotation of the brushes so that the latter may act in the most efficient manner.

I am aware that brushes have been previously combined with scrapers for the purpose of cleaning the feet, but so far as I am aware stationary brushes have been only used, and arranged in a very inefficient manner. I therefore do not claim broadly a scraper combined with brushes irrespective of the construction and arrangement herein shown and described, but,

I claim as new and desire to secure by Letters Patent,

The scraper B, in combination with the rotary brushes D, and elastic rotary brushes E, E, with or without the cleaners *h, f, f*, the above parts being placed within a suitable shell or basin A, and arranged as and for the purpose set forth.

A. McKEACHNIE.

Witnesses:

J. W. COOMBS,

W. TUSCH.