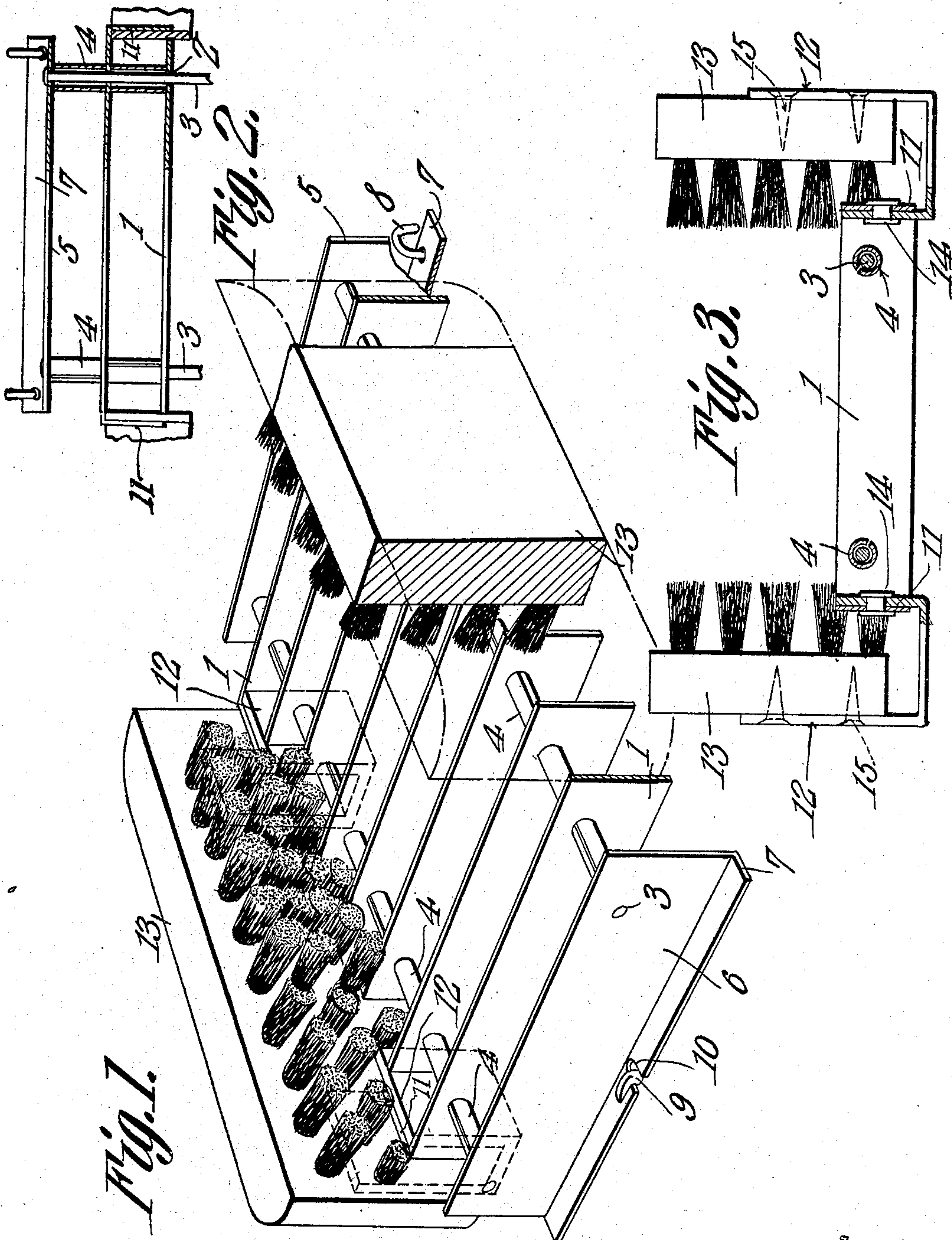


E. R. THIEL.
SHOE SCRAPER.

APPLICATION FILED JAN. 29, 1909.

932,514.

Patented Aug. 31, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

ERVIN R. THIEL, OF SHEBOYGAN, WISCONSIN.

SHOE-SCRAPER.

932,514.

Specification of Letters Patent. Patented Aug. 31, 1909.

Application filed January 29, 1909. Serial No. 474,962.

To all whom it may concern:

Be it known that I, ERVIN R. THIEL, a citizen of the United States, residing at Sheboygan, in the county of Sheboygan and State of Wisconsin, have invented a new and useful Shoe-Scraper, of which the following is a specification.

The objects of the invention are, generally, the provision, in a merchantable form, of a device of the above mentioned class which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of scraping plates assembled in a peculiar manner and of novel means for assembling shoe-brushing instrumentalities with the scraping plates; other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts, hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that divers changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 shows my invention in perspective; Fig. 2 is a top plan of one end of the device; and Fig. 3 is a transverse section thereof.

In carrying out my invention I provide, primarily, a plurality of scraping plates 1, the terminal plates 5 and 6 of the series being broader than the other plates in order to space these other plates from the surface upon which my device is mounted.

The several scraping plates of the series are provided with alined apertures 2 arranged to receive tie rods 3, the ends of which are rigidly mounted in the terminal plates 5 and 6 of the series. The rods 3 are embraced by sleeves 4 against which the plates abut, the said sleeves 4 serving to space one of the plates from another.

Each of the terminal plates 5 and 6 is outward to form a flange 7 upon which the device is supported. The terminal plate 5 is provided in its flange 7 with apertures designed to receive one leg of a staple 8, the

terminal plate 6 being provided with a slot in its flange portion 7, denoted by the numeral 10 to receive a simple locking device, which, in its preferred form, takes the shape of a pin 9, having a right angle bend to engage the flange 7.

The terminals of certain of the plates 1, preferably those of the plates adjacent to the terminal plates 5 and 6, are extended and flexed laterally, as denoted by the numeral 11. I further provide U-shaped clips 12, having their adjacent terminals rigidly attached, preferably by rivets 14, to the laterally flexed terminals 11. By referring to Fig. 1, it will be seen that the terminal of the U-shaped clip is firmly held between the extended terminal 11 of one of the scraping plates and the terminal of the plate adjacent to the one having its terminals flexed. The remote terminals of the U-shaped clip have apertures designed to receive screws 15, which, in their turn, are arranged to enter and engage the backs of brushes 13, which are disposed at right angles to the scraping plates 1, and arranged to upstand above the upper edges of the said scraping plates. The brushes 13 are preferably made to extend substantially the whole length of the device, and it will be seen that since these brushes are supported near their ends, they are rigidly assembled with the scraping plates and are not likely to change their positions relative to the said scraping plates when a broad boot is introduced into the device.

The scraping plates 1 are preferably fashioned from sheet metal and are made flat, in order that the device may scrape equally well when the foot is introduced into either end of the device. The dirt which is removed from the sole of the shoe by these scraping plates 1 or swept from its sides by the brushes 13, will fall between the said scraping plates 1 to the support upon which the device is mounted, and, since the lower edges of the scraping plates are spaced from this support, the plates are not likely to become clogged.

Should it be desired to gain access to the under surface of the device or to sweep beneath it, the member 9 is rotated so as to cause its head to clear the slot 10 in the end of the device. The scraper may then be upturned, pivoting upon the staples 8 in the opposite end.

My invention presents a durable and in-

expensive shoe-cleaner, and, in designing the same, I have so disposed and mounted the brushes 13 that the same may be removed readily from the device and replaced
5 by others when they become worn, the said brushes 13 being the only element in the device which is subject to noticeable wear.

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

1. In a device of the class described, a tie rod and a series of scraping plates spaced apart and transversely mounted upon the tie rod, the terminal plates of the series
15 being extended below the other plates and laterally flexed to form a support-engaging flange.

2. In a device of the class described, parallel scraping plates spaced apart, the terminals of certain of the plates being extended
20 beyond the other plates; shoe-cleaning means mounted upon the extended terminals of the plates and arranged to extend above and at an angle to the scraping plates.

25 3. In a device of the class described, parallel scraping plates spaced apart, the terminals of one of the plates being extended and

laterally flexed; U-shaped clips having their adjacent ends rigidly attached to the extended terminals of the plate; shoe-cleaning
30 means removably mounted upon the remote terminals of the U-shaped clips, the said shoe-cleaning means being disposed at right angles to the scraping plates and arranged to extend above the same. 35

4. In a device of the class described, parallel scraping plates spaced apart, the terminals of certain of the plates being extended and laterally flexed; U-shaped clips having
40 their adjacent ends rigidly attached to the extended terminals of the plates; shoe-cleaning means removably mounted upon the remote terminals of the clips, the said shoe-cleaning means being disposed at an angle to the scraping-plates, and being ar-
45 ranged to extend above the same.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ERVIN R. THIEL.

Witnesses:

ARTHUR QUIG,
WILLIAM WALWOOD.