

No. 647,396.

Patented Apr. 10, 1900.

R. W. FURNAS.
HAND STREET CLEANING MACHINE.

(Application filed July 24, 1899.)

(No Model.)

Fig. 1.

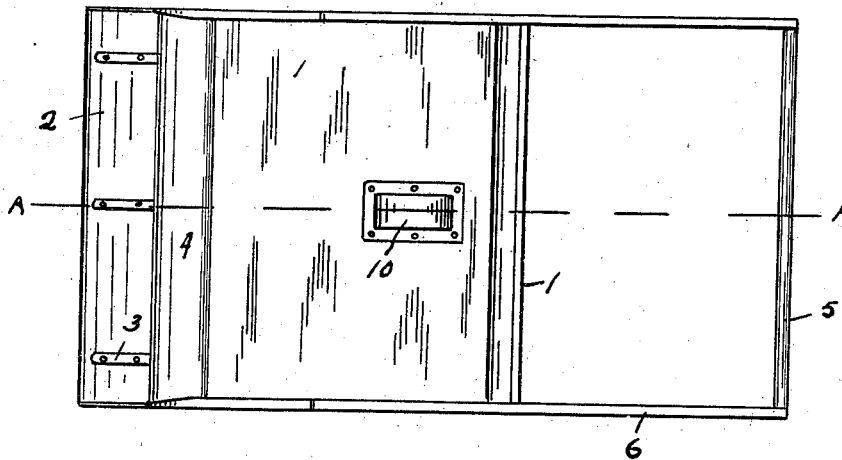
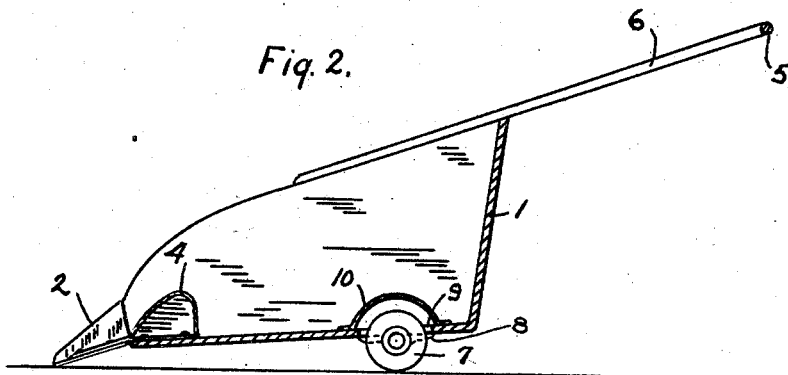


Fig. 2.



WITNESSES:

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ROBERT W. FURNAS, OF INDIANAPOLIS, INDIANA.

HAND STREET-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 647,396, dated April 10, 1900.

Application filed July 24, 1899. Serial No. 724,926. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. FURNAS, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Hand Street-Cleaning Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

10 This invention relates to a street-cleaning machine adapted to be pushed in its operation.

It consists in the combination of a scraper and a box immediately behind the scraper 15 with a rib or small partition between the two, having the side next to the scraper inclined, so that the scrapings can be withdrawn by a hand-brush from the scraper over the rib or partition into the box to the rear, 20 where it is carried until the box needs to be dumped. The main feature of this invention, however, consists in mounting a hand-machine on one wheel. By placing such wheel under the middle of the machine, the device 25 is rendered easily operative. When not in operation, it needs only to be slightly tilted, and then the whole weight is sustained by said one wheel, and the machine is held in its supported position by the operator by means 30 of the handle. The virtue of this invention, aside from its cheapness and simplicity, lies mostly in the fact that it enables the scraping edge to conform to the inclinations of the surface of the street, which is not the case 35 when the device is supported on two wheels. In the latter case the position of the scraping edge is determined by the surface upon which the two wheels rest. If that be level, the scraper will be level, although at the scraping-point the street's surface may be quite inclined. It is quite common for the surface 40 of the street to vary in a distance no greater than that from the scraping edge to the point where the two wheels would be located. With my invention the operator merely pushes the machine. Whether it be level or not is determined by the surface of the street with which the scraping-point is engaging. The scraping-point can conform to the surface of the 45 street regardless of the nature of the street's surface where the wheel is located. Fur-

thermore, the device can readily be dumped to one side, which is not practical with two wheels.

The various features of my invention will 55 be more fully understood from the accompanying drawings and the description following of one form of device embodying said invention.

In the drawings, Figure 1 is a plan of the 60 machine. Fig. 2 is a section on the line A A of Fig. 1.

In detail the device herein shown as embodying my invention contains a body portion 1, constructed to form a box or receptacle 65 for the material scraped up. It consists of two sides, a bottom, and a back. Along the front edge of the bottom a scraper 2 is placed. This may be made in any desired way, but is preferably secured by means of 70 the straps 3, which enables the scraper to be replaced with a new one when it wears out. Along the front edge of the box or receptacle and immediately in the rear of the scraper a rib 4 is placed, with an inclined front surface 75 that renders it easy with the hand-brush to withdraw the scrapings from the scraper over the rib 4 into the box or receptacle behind it. The hand-brush may be of any suitable form and is carried by the workman while pushing 80 the machine. A handle 5 with side bars 6 is secured to the box, as shown.

The machine is supported by the wheel 7, whose axle or spindle is mounted in the bearing-pieces 8, that are secured to the under 85 side of the box. It is preferably located halfway between the sides of the box at a point immediately to the rear of the center of gravity of the machine, so that the machine will rest when not in use with the scraper thereof on 90 the surface of the ground. The wheel 7 may be attached in any suitable manner; but that shown is preferable, inasmuch as it permits the box or receptacle to be kept at its lowest convenient position. In such case the bottom 95 of the box can be slightly inclined downward toward the front to the rib 4 and the scraper need not be greatly inclined. In this construction I slot the box at 9 to permit the upper part of the wheel 7 to extend through 100 the bottom nearly half its diameter. Over the wheel I place a guard or cover 10.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A hand-operated street-cleaning machine including a dirt-box, a single wheel for supporting the same, a scraper on one end of said box, and a handle at the opposite end thereof.
2. A hand-operated street-cleaning machine including a dirt-box, a single wheel so located that the machine can be balanced thereon, a scraper at one end of said box, a handle at the opposite end thereof, and a rib between the box and scraper.
3. A hand-operated street-cleaning machine including a box or receptacle, a scraper at one edge thereof, a rib or partition between the scraper and the box inclined from the scraper, a handle connected with the box, and

a wheel so supporting the box that it may be balanced thereon.

4. A hand-operated street-cleaning machine including a box or receptacle, a scraper at one edge thereof, a rib or partition between the scraper and box inclined from the scraper, a handle extending from the other end of the box, a wheel mounted in bearings on the under side of the box so that it extends up through the bottom of the box, and a cover over said wheel.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

ROBERT W. FURNAS.

Witnesses:

M. C. BUCK,
V. H. LOCKWOOD.