No. 728,664. PATENTED MAY 19, 1903.

M. C. BLISS.

FLOOR SCRUBBING DEVICE.

APPLICATION FILED DEC. 30, 1902.

NO MODEL.

Fig. 1.

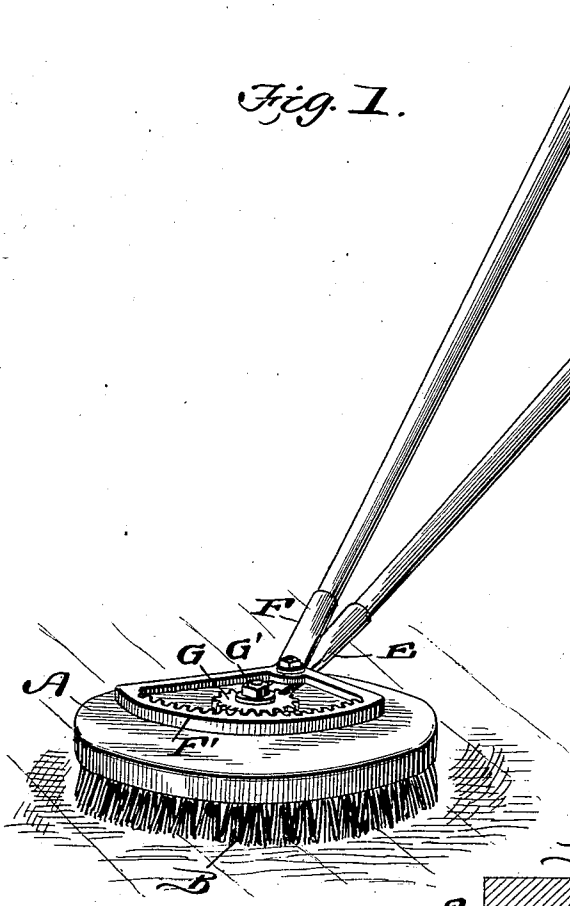


Fig. 4.

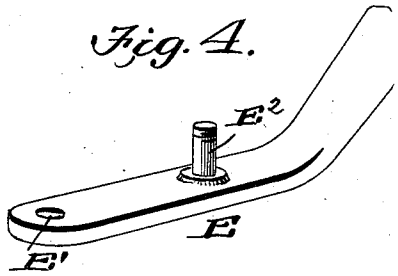


Fig. 2.

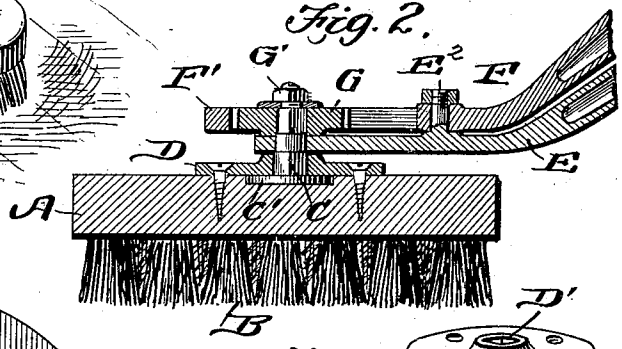


Fig. 3.

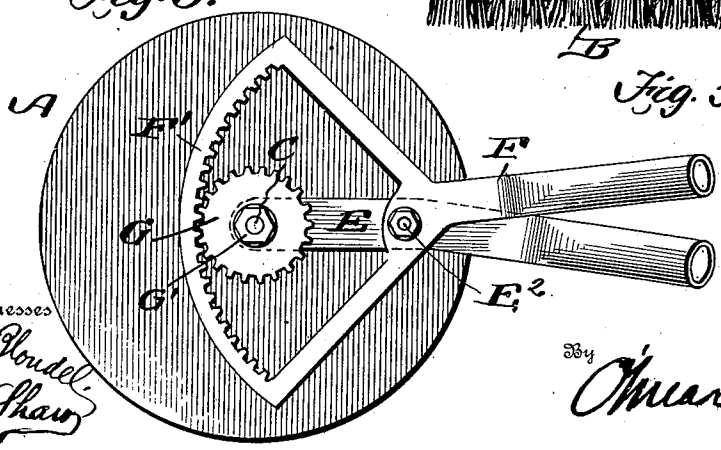
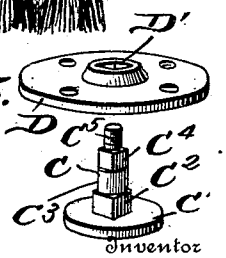


Fig. 5.



Witnesses
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No. 728,664. Patented May 19, 1903.

UNITED STATES PATENT OFFICE.

MILTON C. BLISS, OF NEW WHATCOM, WASHINGTON.

FLOOR-SCRUBBING DEVICE.

SPECIFICATION forming part of Letters Patent No. 728,664, dated May 19, 1903.

Application filed December 30, 1902. Serial No. 137,182. (No model.)

To all whom it may concern:

Be it known that I, MILTON C. BLISS, a citizen of the United States, residing at New Whatcom, in the county of Whatcom and State of Washington, have invented a new and useful Floor-Scrubbing Device, of which the following is a specification.

This invention relates generally to brushes or scrubbing devices, and more particularly to one intended for scrubbing floors of large buildings. At the present time the operation is very laborious, and it is with the idea of producing a labor-saving device that I have devised my present construction of brush, which will thoroughly scrub or cleanse the floor and at the same time permit the operator to stand upright.

Another object of my invention is to provide a device which can be pushed back and forth over the floor the same as brushes now constructed and at the same time have a rotary motion, thereby more thoroughly scrubbing the floor over which the brush is pushed back and forth.

With these objects in view the invention consists, essentially, in providing a brush-head with a post, to which is pivoted one handle, said handle having a second handle pivotally connected thereto and carrying a toothed segment or rack, which engages a pinion rigidly mounted upon the upper end of the post carried by the brush-head, so that as the handles are moved toward and away from each other the segmental rack will impart an intermittent rotary motion to the pinion, and consequently to the brush.

The invention consists also in certain details of construction hereinafter referred to, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view of a scrubbing device constructed in accordance with my invention. Fig. 2 is a central longitudinal cross-section, the handles being placed one vertically above the other. Fig. 3 is a top plan view. Fig. 4 is a detail perspective view of the lower end of the handle which is pivoted to the post, and Fig. 5 is a detail perspective view of the post and the plate for securing the same to the brush-head.

In making a scrubbing device in accordance with my invention I employ a brush-head A, which is preferably circular in form and provided with any suitable construction or arrangement of brush-fibers B. The brush-head A has a post C arranged centrally upon the upper side thereof, said post having a flat base C′, which fits into a recess produced in the upper face of the brush-head, and this post is secured by means of a plate D, which has a square opening D′ fitting upon the squared portion C^2 of the post C. Directly above this squared portion C^2 the post is rounded, as shown at C^3, and above the round portion is a second squared portion C^4, while the end is reduced and threaded, as shown at C^5. A handle-section E, having a circular opening E′ adjacent to the end, fits upon the post C, the round portion C^3 resting in the circular opening E′, thus permitting the said handle-section to be turned freely upon the said post. The handle-section also has a stud E^2, upon which is pivoted a second handle-section F, said second handle-section having a segmental-shaped rack F′ integral therewith, said segmental rack being adapted to engage a pinion G, mounted upon the squared portion C^4 of the post C, said pinion being held in place by a nut G′, screwed upon the reduced threaded end C^5. The handle-sections have wooden handles of suitable length fitted thereto, and the said handle-sections are curved upwardly at their outer ends, so that the operator can stand in an upright position while grasping the ends of the wooden handles. It is obvious that by working the handles to and from each other the brush will be intermittently operated in opposite directions, and while these rotary movements are being had the brush can also be pushed back and forth similar to the manner of operating an ordinary scrubbing-brush, thus obtaining the advantages of both the reciprocating and rotary movements.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the kind described comprising a brush-head, a vertical post centrally secured thereon, a handle loosely secured to said post, a pinion rigidly secured to the post, a second handle arranged above and pivotally secured adjacent the brush-head to the first-

mentioned handle, and a rack-segment carried by the second handle and adapted to engage the pinion.

2. A brush having a post secured thereto, the upper and lower portions of said post being polygonal in cross-section, and the central portion thereof circular in cross-section, a plate having a polygonal-shaped opening, said plate being adapted to be secured to the brush-head and hold the post to the said head, a handle-section pivotally connected to the post and having a stud, a second handle-section pivotally mounted upon the said stud, a segmental rack integral with the second handle-section, and a pinion arranged upon the upper polygonal-shaped portion of the post and adapted to engage the segmental rack, as set forth.

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