O. SMITH.

SCRUBBER. No. 494,037. Patented Mar. 21, 1893. WITNESSES: /NVENTOR

ATTORNEYS.

## United States Patent Office.

OPHELIA SMITH, OF SHEPHERDSVILLE, KENTUCKY.

## SCRUBBER.

SPECIFICATION forming part of Letters Patent No. 494,037, dated March 21, 1893.

Application filed October 6, 1892. Serial No. 448,055. (No model.)

To all whom it may concern:

Be it known that I, OPHELIA SMITH, of Shepherdsville, in the county of Bullitt and State of Kentucky, have invented a new and Improved Scrubber, of which the following is a full, clear, and exact description.

My invention relates to improvements in scrubbers; and the object of my invention is to produce a simple device which is reversible, to having a scrubbing brush on one side and a mop on the other, so that the dirt on the floor or other place may be first loosened by the brush and the floor then washed clean by the mop.

A further object of my invention is to produce and attach to the scrubber, a wringer by means of which the mop may be thoroughly and easily wrung without touching it with the hands. By means of the scrubber therefor, a floor may be conveniently and thoroughly scrubbed and washed and the mop wrung dry when necessary with comparative ease, as the operator is not required to bend excessively to wring the mop.

To these ends my invention consists in a scrubber, the construction of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, so in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the scrubber embodying my invention. Fig. 2 is a broken plan view with parts in section; and Fig. 3 is a front and view of the samples.

35 a front end view of the scrubber. The scrubber is provided with a head 10 which has on the back side and at the center a ferrule 11 in which an elongated handle 12 of the usual kind is fastened. The head 10 40 is preferably made of an open casting so as to give it the necessary lightness, and on its upper side and near opposite edges are rearwardly extending parallel arms 13 which also project upward slightly, while on the lower 45 side are similar arms 14 which range downward; but when the mop is used, the arms 13 are on the under side and the arms 14 above. The arms 13 carry a sliding cross bar 15, the ends of which are held in boxes 16 which slide 50 in longitudinal recesses 17 in the inner sides of the arms 13, and the cross bar is pressed rear ends of the recesses. The ebject of the cross bar is to hold the mop tightly in place, as hereinafter described, and when the mop 55 is to be loosened and its position changed, the cross bar is pulled backward against the tension of the springs 18, and to facilitate this operation the cross bar is provided with a suitable handle 19.

The mop 20 may be made of any suitable material, and it is in the form of an endless belt and extends beneath the cross bar 15, which prevents it from slipping, and over the top of the head 10, thence through a trans- 65 verse slot 21 in the head, and the rear or upper end of the mop is held in a keeper 22 formed preferably of wire and having a split 23 therein which enables the mop to be inserted or removed when necessary. The 70 keeper 22 is made preferably of wire and it has a shank 24 arranged parallel with the handle 12 and held to turn in a hanger or support 25 which is firmly secured to the handle. The shank 24 has at its rear or upper end a 75 crank 26 by which it may be turned, and by turning the crank and shank, the keeper 22 is also turned and the mop 20 twisted so as to wring it and by turning sufficiently hard upon the crank the mop may be wrung dry. 80

The arms 14 have in their outer sides dove-tail recesses 27 in which a brush 28 is held, the brush having also beveled edges so that it may be slid endwise into the recesses 27 and the brush is prevented from being acci-85 dentally detached by set screws 29 which extend through the ends of the arms and impinge on the brush back.

The scrubber is used in the following way:—
The surface to be washed is wet and the brush 90
28 rubbed upon it until the dirt is thoroughly loosened, after which the scrubber is reversed and the mop 20 brought to bear on the surface to be washed, and the mop is rubbed back and forth in substantially the usual manner.

When it is necessary to wring the mop, it is done by simply turning the crank 26. It will be noticed that when either the brush 28 or mop 20 wears out, it may be easily renewed.

Having thus described my invention, I 100 claim as new and desire to secure by Letters Patent—

of the arms 13, and the cross bar is pressed | 1. The scrubber head 10, having at the ends forward by springs 18 which are held in the of one of its longitudinal edges a pair of in-

clined arms 14 provided on their outer faces with brush receiving recesses and at the ends of its opposite longitudinal edge with a pair of arms 13, 13 having recesses in their adjacent faces spring pressed bearings in said recesses and a cross bar carried by said bearings; the head being provided with a longitudinal slot 21, substantially as set forth.

2. The combination with the head having a slot 21 and a spring pressed cross bar 15 of the handle 12 having a bearing 25, a longitudinal crank shaft extending through said bearing and having a keeper 22 having a split or entering-opening 23, substantially as set forth.

3. A scrubber, comprising a head having a suitable handle and diverging arms arranged in pairs on opposite sides of the handle, a detachable brush held in one pair of arms, a mop

held between the other arms, and a revoluble keeper journaled on the scrubber handle and 20 arranged to carry one end of the mop, substantially as described

stantially as described.

4. The combination with the slotted scrubber head and handle, of an endless mop carried by the head, a hanger or support secured 25 to the handle, a revoluble keeper journaled in the hanger or support, a mop having one end secured to the head and the opposite end to the keeper, and a spring-pressed cross bar arranged to press upon the mop, substantially 30 as described.

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Witnesses:

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