Jan. 13, 1931. A. S. POWELL 1,788,844

MOP CLEANING DEVICE

Filed March 30, 1929

Fig. 1.

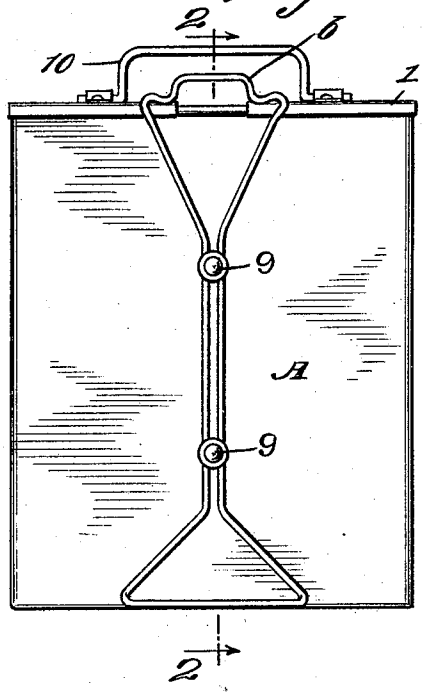


Fig. 2.

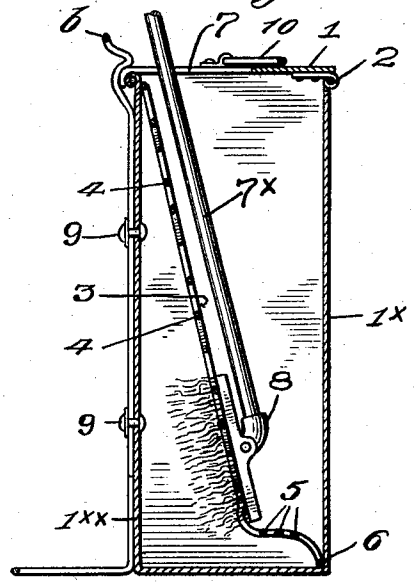


Fig. 3.

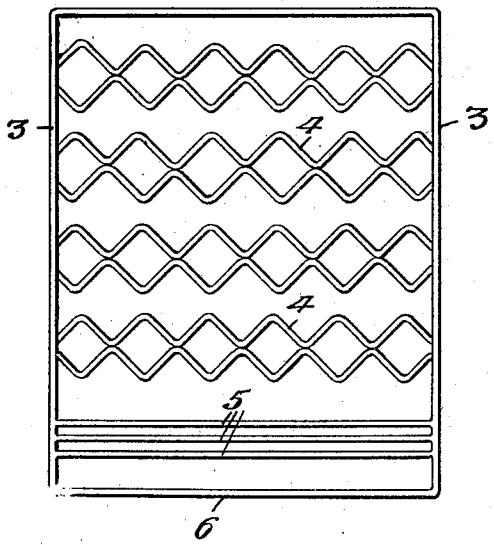
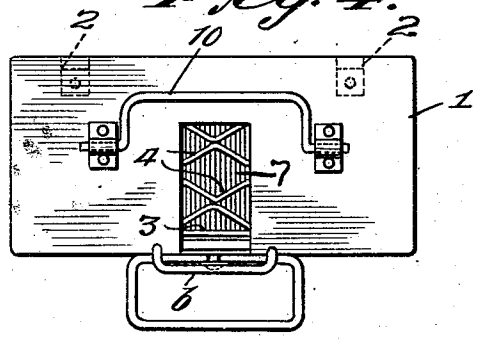


Fig. 4.



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UNITED STATES PATENT OFFICE

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MOP-CLEANING DEVICE

Application filed March 30, 1929. Serial No. 351,214.

In the use of mops for dry-mopping hard wood floors and the like, a distinct problem resides in the fact that the dust is in wool-like formation and adheres tenaciously to the strands of the mop. Vigorous shaking of the mop will not entirely free it from the matted dust particles. A common practice has been for the housewife to shake the mop out of the window and a further object of the invention is to render it unnecessary to use such an expedient and at the same time to thoroughly cleanse the mop by reciprocation in a closed chamber and to receive the dust particles in said chamber.

An object of the invention is to provide a casing with means for holding the mop so that the handle will extend upwardly, and with a series of members extending transversely of the casing and within the same, the series of members extending at an inclination, from side to side of the casing, so that the tendency of the mop is to rest somewhat on said members whereby when the mop is reciprocated up and down, the said members will engage with the mop strands, which engagement is facilitated and eased by reason of the tendency of the head of the mop to partially rest upon the said members. Other objects are to generally improve devices for cleaning mops so that they are efficient in service during an up and down reciprocation of the mop.

The invention will be described with reference to the accompanying drawings, in which—

Figure 1 is a front elevation of an embodiment of the invention, and

Figure 2 is a side elevation thereof in section;

Figure 3 is a view in elevation of the cleansing grille, and

Figure 4 is a plan view of the structure shown in Figs. 1 and 2.

Referring to the drawings it will be seen that the device comprises a casing A which is preferably made of metal. The casing is provided with a cover 1 hinged to the main body of the casing by the hinges 2.

Within the casing and preferably extending its full height at an angle from the upper portion of the front wall $1x$ to the lower portion of the rear wall $1xx$ is a removable cleansing grille, the grille being shown in detail in Fig. 3. The grille comprises side members 3 preferably formed of wire and a transverse series of spaced zig-zag wires 4 arranged in series each of two wires. Near their lower ends each wire 3 is bent outwardly and thence downwardly and at such bent portions the wires are connected by the straight wires 5 which afford a rest or stop for the mop and serve to hold it elevated above the dust which accumulates in the base of the casing A.

If desired the lower ends of wires 3 may be connected by a base horizontal wire 6. The grille is supported by the bottom of the casing.

Cover 1 is formed with a centrally disposed aperture 7 through which the handle of the mop may project, as shown in Fig. 2, the handle being indicated at $7x$ and the mop proper at 8. The aperture 7 is located in the cover at a place adjoining the side wall $1xx$.

The front wall of the casing A has secured thereto by the headed rivets 9 a spring catch for the cover. This catch, in the embodiment shown, comprises a spring wire member bent in the manner shown in Figs. 1 and 2 so that the upper portion of the catch provides an inwardly projecting holding member a for the cover and a cam member b extending above the member a. By grasping the member b and moving it outward the cover may be raised. Thereafter the cover may be closed by simple downward movement thereof. In such movement the front edge of the cover will engage the cam member b and force it outwardly until member a springs over the edge and latches the cover in position. When this is done handle 10 will become operative for lifting the device and carrying it from place to place.

In the present embodiment of the invention the catch device above described, made of wire, is formed at its base as a foot rest, as will be seen by reference to Figs. 1, 2 and 4 of the drawings.

While I have shown the cross wires 4 of the grille of zig-zag formation and arranged in series two wires with the meeting V-shaped

portions of the wires connected, as by welding, my device is operative when the wires 4 are made straight and similar to the wires 5, or are bent out of the straight in formations other than the zig-zag formation.

In the operation of the device the cover 1 is raised and the mop inserted within the casing so that the strands 8a will lie upon the grille. When the mop is reciprocated the strands will pass through the grille and will be alternately pressed together and spread apart by the zig-zag formation of the wires 4. When the grille is formed of straight wires, the reciprocating movement of the mop will cause the strands of the mop to be bent back and forth and there will be a further wiping action by the wires so that the mop will be freed from the dust including the matted particles, which dust will fall down to the bottom of the casing. I prefer, however, that the wires be arranged in the zig-zag formation since in addition to the back and forth movement in one direction and reverse thereto there will be a back and forth movement in a transverse direction and reverse.

The top aperture 7 is located above the upper end of the grille, this inclining away from the outer portion of the aperture towards the opposite wall of the casing. The result of this disposition of the aperture and the grille is that gravity naturally causes the head of the mop to rest, or tend to rest, on either one of the transverse wires of the grille, and this assists in easing the up and down movements of the mop in cleaning its strands or fibres from dust or the like.

It will be understood that various modifications may be made in the form and arrangement of the elements forming the embodiment illustrated in the drawings without departing from the spirit of the invention.

What I claim and desire to secure by Letters Patent is as folows:—

1. A device for cleaning mops comprising a casing adapted to receive the mop with its handle projected upwardly above the casing and cleaning members extending transversely of the casing and within the same, and forming a series of members one above the other and extending, as a series, at an inclination to the vertical, and adapted to engage the mop when the mop is reciprocated within the casing, for the removal of dust therefrom.

2. A device for cleaning mops, comprising a casing adapted to receive the mop with its handle extending upwardly, a grille extending upwardly in the casing, a stop located on the lower end of the grille and extending between the grille and an adjacent side wall of the casing, and means located to one side of and below the stop for abutment against said side wall.

3. A device for cleaning mops, comprising a casing adapted to receive the mop with its handle extending upwardly, a grille extending upwardly in the casing, and a stop located at the lower end of the grille and supported above the bottom of the casing and on which the mop may be rested, and means located below and to one side of the stop for supporting the grille from the bottom of the casing.

4. A device for cleaning mops, comprising a casing adapted to receive the mop, and a cleaning grille disposed within the casing from side to side thereof, and extending downwardly for the height of the casing, and at an angle relatively to the vertical, the grille being sufficiently open for the passage therethrough of the mop strands.

5. A device for cleaning mops, comprising a covered casing, a cleaning grille disposed within the casing and inclined upwardly from one side wall of the casing to the opposite side wall and having means to support the mop a distance above the base of the casing, the grille comprising spaced cleaning wires extending transversely of the casing and sufficiently spaced apart to support the mop with its strands extending through the grille, and the cover of the casing having an aperture which is disposed adjacent such opposite side wall, for receiving the mop handle.

In testimony whereof, I have signed my name to this specification.

ALFRED STEPHENSON POWELL.