March 10, 1931. W. H. WEIL 1,795,416

MOP CLEANING DEVICE

Filed Jan. 8, 1930

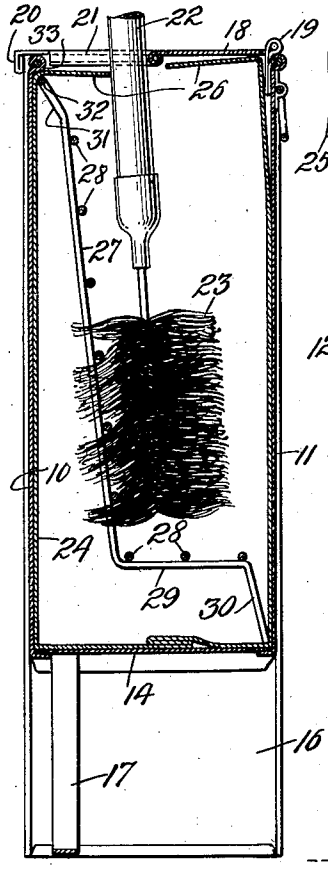


Fig. 1.

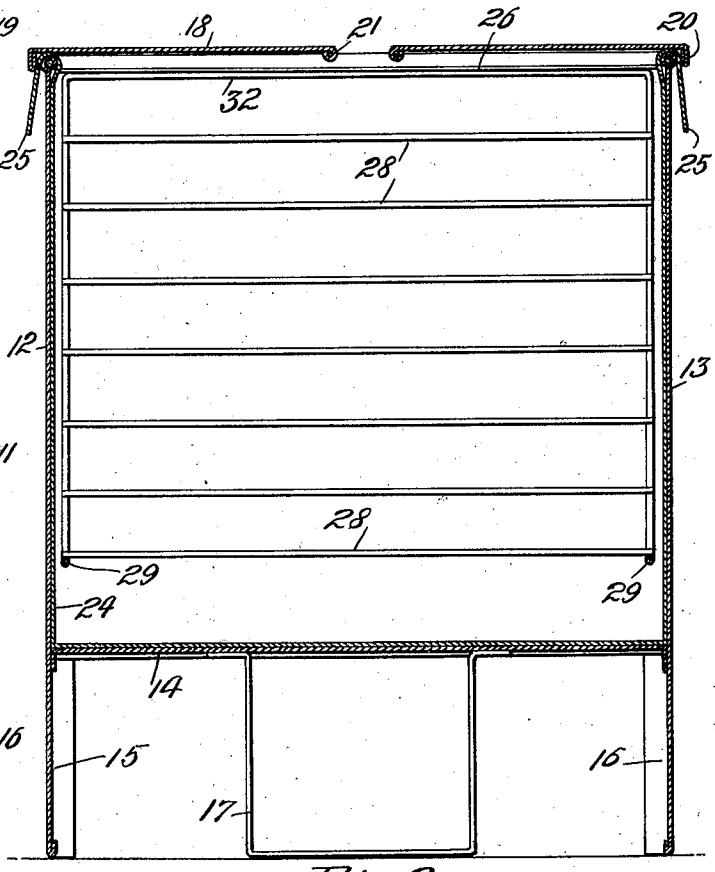


Fig. 2.

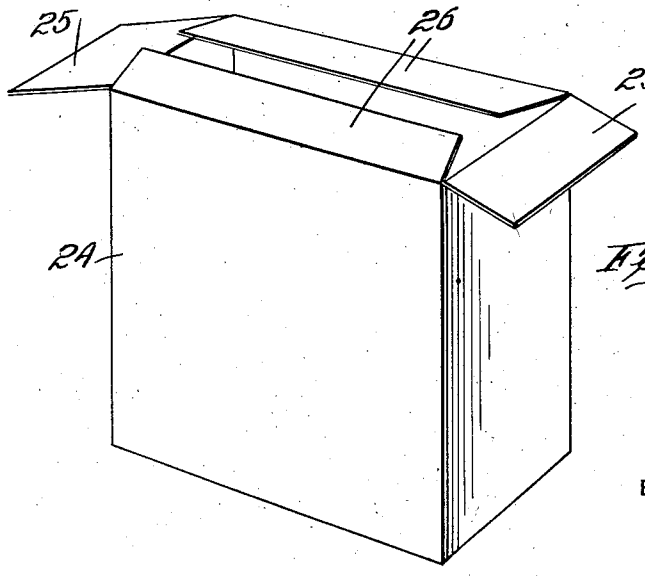


Fig. 3.

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Patented Mar. 10, 1931 1,795,416

UNITED STATES PATENT OFFICE

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MOP-CLEANING DEVICE

Application filed January 8, 1930. Serial No. 419,219.

In mop cleaners it is customary to dump the collected dirt and dust directly out of the casing. This is unsanitary, allows the dust to fly about in the air when dumped and presents other objections.

One of the objects of the present invention is to overcome these defects by the provision of a bag which is removable from the casing. The bag may be inserted in the casing so as to constitute a lining therefor, a cleaning means being located in and preferably fitted into the bag. The dust and dirt then collected in the bag may be removed with less danger of scattering, or the mouth of the bag may be closed and the bag thrown away with its contents, with the exception, of course, that the cleaning means if used are first removed from the bag before throwing it away.

Other objects of the invention are to provide a sanitary mop cleaning device wherein the top of the casing is practically sealed. except for a small opening left for the protrusion of the handle of the mop.

With these and other objects in view, the invention consists of certain features of construction and combinations of parts to be hereinafter described and then claimed with reference to the accompanying drawings illustrating one embodiment of the invention, in which:

Figure 1 is a vertical sectional view of the complete device, showing the head of a mop inserted therein;

Fig. 2 is a vertical transverse section of the device at right angles to Fig. 1; and

Fig. 3 is a perspective view of the preferred removable bag.

The casing of the device may be of any suitable construction and as shown comprises side walls 10, 11, 12 and 13 preferably of sheet metal and which are arranged so as to provide a four-sided casing with rectangular corners. The top of the casing is left open and the other end is preferably closed by the bottom plate 14. The lower ends of the narrower side walls 12, 13 are extended downwardly below the bottom 14 of the casing so as to provide supports 15, 16, for thereby supporting the casing at some distance above the floor. A foot rest 17 is provided to enable the user of the device to hold it against movement upon the floor while the mop is being cleaned.

The top opening of the casing is closed by a cover 18 connected by a hinge 19 with the casing. Preferably the cover 18 is provided with a flange 20 so that when the cover is closed the flange will fit onto the rim of the casing. Beyond the hinge 19 the cover is provided with a transverse slot or notch 21 forming an opening which may be long enough to extend approximately half way across the cover, and through the said opening the handle 22 of the mop extends when in use, while the mop head 23 is located within the casing.

A bag 24 is provided, such for example as shown in Fig. 3, and when distended it is preferably but slightly smaller than the interior of the casing so as to fit fairly snugly within the casing and to form a lining for it. When the bag is distended it is formed into rectangular corners which fit in the rectangular corners of the casing. This bag may be of any suitable material, but is preferably made of paper, although it may be made of more durable and permanent material, such for example as dust proof or waterproof fabric, so that a bag of flexible material is provided which may be fitted fairly snugly within the casing. As shown, the bag 24 is provided with narrow flaps 25 at its mouth, and between these flaps the adjacent side walls of the bag carry wider flaps 26. In use the flaps 25 extend outwardly and the flaps 26 inwardly.

The bag is first fitted into the casing so that its mouth will lie at the opening of the casing, and the flaps 25 are turned outwardly and the flaps 26 inwardly as shown in Figs. 2 and 1, respectively. To insert the mop the cover 18 is raised and then closed after insertion, so that the mop handle will extend through the transverse opening 21 in the cover. When the cover is closed the flange 20 thereof will engage the outward flaps 25 and turn them into the position shown in Fig. 2, thereby partly sealing the joint between the cover and the casing and serving

as means for sustaining the bag within the casing. The flaps 26 assist in preventing dust from coming out through the joint between the cover and the casing, while one of the flaps 26 extends under and partially closes the opening 21 so that little, if any, dust is apt to rise through the small hole which is left between that flap and the closed end of the notch or opening 21.

Within the bag there is inserted a cleaning device which preferably has more or less of a snug fit within the bag. Such cleaning means preferably comprise two side wires 27, 27 which are connected by horizontal wires 28 so as to form a grille or open work cleaner. The wires 27 are preferably bent intermediately of their lengths so as to form laterally directed portions 29 which provide abutments through the medium of some of the wires 28 which connect said laterally bent portions. At their outer ends each of the wire-portions 29 may be bent downwardly as shown at 30, Fig. 1, so as to provide supporting legs for the grille or the like within the casing and lining-bag. It will be seen that as the mop is reciprocated the dirt and dust will collect within the bag, below the laterally deflected portions 29, and the lower end of the leg 30 being in engagement indirectly with the adjacent lower corner of the casing, that is with the stop provided by the bottom 14, the connecting portions 29 form abutments against a further downward movement of the mop head. The upper end of each wire 27 is bent outwardly as at 31 and the two wires connected by a cross-bar or member 32, the preferred proportions between the inserted cleaning device and the bag being preferably such that when the lower end of the device is in engagement with the corresponding lower corner of the bag, the cross-wire 32 may be engaged just below an inward shoulder 33 which is formed at the upper end of the corresponding side wall 10 of the casing.

The inserted cleaning device being preferably composed of spring wire, or at least so constructed that the device has some resiliency, it will be seen that when the parts are properly adjusted within the casing, the cross-wire or member 32 may be caused to engage under the shoulder 33 and to thereby clinch the corresponding side wall of the bag 24. In this way the bag is sustained from one wall, while the adjacent, opposite, walls of the bag are held between the cover 18 and the top of the casing.

As the bag is made of any suitable flexible material, it could even be made of waterproof or dust proof fabric, which will enable the bag to be used over and over again and would last longer than if the bag were merely made of paper. However, paper is preferred for the material of the bag, and even paper bags of the required tough quality may be used over and over again. If the bag is of a cheap quality of paper it can be thrown away together with its contents, after having first removed the grille or cleaning device from the bag. After the bag has been emptied the grille or cleaning device, if it has been removed, may be again fitted therein and the bag inserted in the casing. Of course the use of a bag in the manner shown and described keeps the outer casing practically clean on the inside, so that the trouble of cleaning it out is removed.

It is clear that various modifications can be made without departing from the invention, and it will be obvious that the casing does not necessarily require a bottom such as 14, for all that is probably necessary is a suitable simple stop at the lower end of the casing for the engagement of the leg or legs 30, the cleaning device being sprung in position and held between the stop at the lower end of the casing and the shoulder which is located on the other side wall of the casing, at the top opening of the casing.

What I claim as new is,—

1. In a mop cleaning device, the combination of a casing having an opening for receiving the head of a mop, a shoulder below the opening, a removable liner in the form of a bag having a portion extending to the shoulder, and a cleaning device inserted in the bag and having a member cooperating with the shoulder to sustain the bag from its extended portion.

2. In a mop cleaning device, the combination of a casing having an opening for receiving the head of a mop, a shoulder below the opening, a removable liner in the form of a bag having a portion extending to the shoulder, and a cleaning device inserted in the bag and having a springy member for clinching the extended portion against the shoulder.

3. In a mop cleaning device, the combination of a casing having a top opening for receiving the head of the mop, a removable liner in the form of a bag, the mouth of which bag is within the opening, means within the bag for cleaning the mop, means for sustaining the bag from its mouth portion, including flaps extending outwardly from the sides of the top of the bag and beyond the top opening and covering means at the top opening for engaging the flaps.

4. In a mop cleaning device, the combination of a casing having an opening for receiving the head of a mop, a removable liner in the form of a bag having its mouth at the opening, means fitted in the bag for cleaning the mop, means for sustaining the bag from its mouth portion, a cover for the opening having an opening for the handle of the mop, and inward flaps at the mouth of the bag and directly underneath the cover, one

of the flaps partially closing the opening in the cover.

5. In a device of the character described, the combination of a casing having a top opening, a removable bag fitting in the casing and having outward flaps to extend over the top edge of the casing, and a flanged cover to close the opening and fit upon the top edge to bind the flaps in place between the cover and the casing, the cover having an opening for a handle and the bag having inward flaps at its mouth located directly underneath the cover, one of said flaps extending across and partially closing the opening in said cover.

6. In a mop cleaning device, the combination of a casing having a top opening for receiving the head of the mop, a removable liner consisting of a bag of flexible material, the mouth of which bag is at and within the top opening, and the bottom of which is at the lower end of the casing, mechanical mop cleaning means inserted within the bag, means for holding the cleaning means against movement in the bag, and a cover for the casing, in engagement with the mouth portion of the bag and suspending the bag in the casing.

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