Jan. 18, 1927. 1,614,968

A. RADO ET AL

DUST MOP CLEANER

Filed March 5. 1925

Fig. 1.

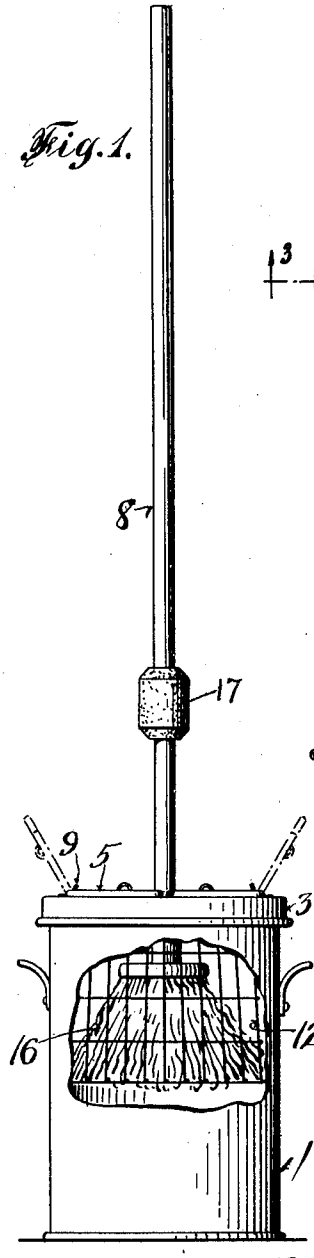
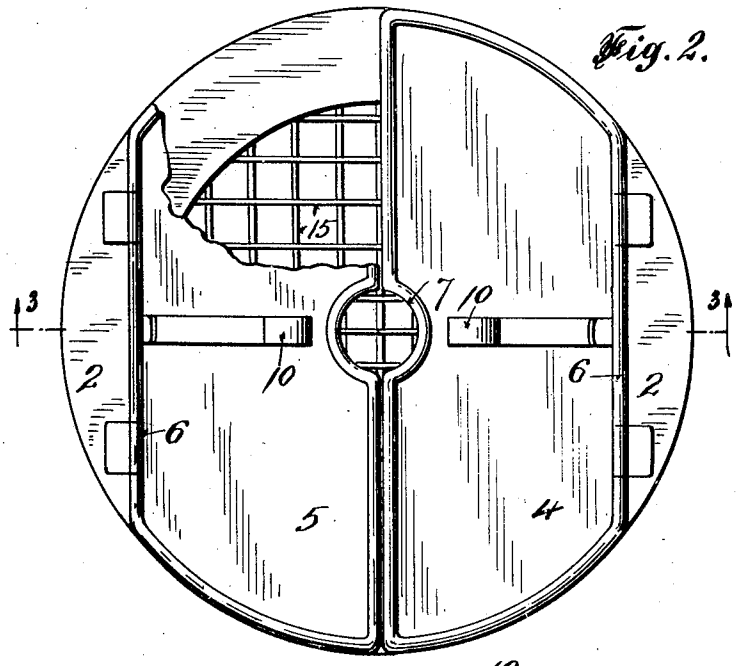



Fig. 2.



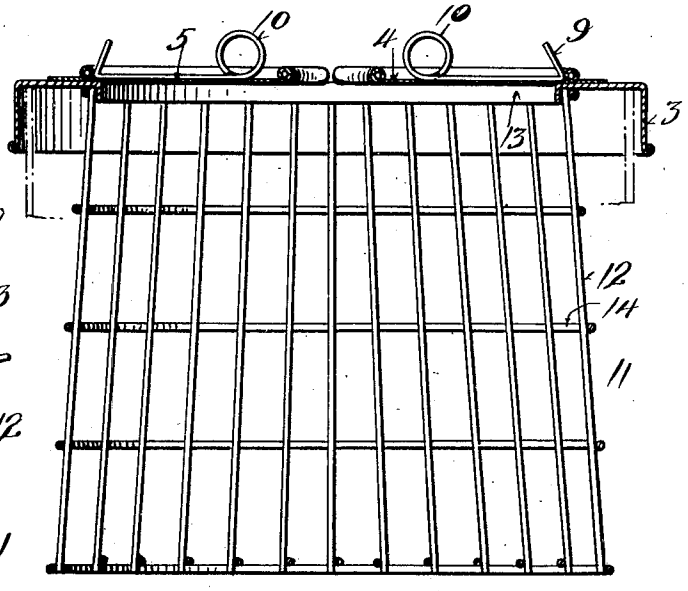




Fig. 3.

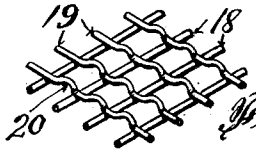



Fig. 4.

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# UNITED STATES PATENT OFFICE.

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## DUST-MOP CLEANER.

Application filed March 5, 1925. Serial No. 13,233.

Our invention relates to a device by means of which dust mops may be cleaned in such manner that the operation may be conducted in the house and without scattering the dust and lint. It is common practice to remove the dust and lint from floors by means of dust mops and to apply oil to floors with mops of this character; and when the mop has collected dust and lint from the floor it has been common to shake or beat the mop out of a window, if not indoors, to remove the dust and lint. This cleaning operation distributes the dust and lint in the air; and in apartment houses it is particularly annoying as the dust and lint is apt to be blown into the open window of an adjacent apartment. In most cases it is necessary for the user to go from one part of the house to another in order shake the dust and lint from the mop at a convenient place. Our invention consists of a container or pail into which the head of the mop may be inserted and turned and within the pail there is a device on which the mop head may strike for the purpose of dislodging the dust and lint therefrom. The pail is adapted to be closed while the mop head is inserted in it, except for the opening through which the handle of the mop projects, so that the dust and lint which is removed from the mop is held within the pail or receptacle. The present device is adapted to be readily carried from one part of the house to another, to wherever the dusting operation is to be carried on, so that in addition to the sanitary advantage of removing the dust and lint without scattering it, the device is adapted to save time. Further details of the construction and operation will be set forth in the following detailed description.

In the drawing forming part of this application,

Figure 1 is an elevation of our device, showing the same in use, a portion of the pail or container being broken away to show the interior,

Figure 2 is a plan view of the device with the mop removed, in which view a portion of the cover is broken away, and

Figure 3 is a sectional view taken on the line 3—3 of Figure 2, and

Fig. 4 is a detail view of a modified form of the bottom of cage 11.

In the drawing we have shown a receptacle 1 which is preferably cylindrical and which is preferably made in the form of a pail. In fact, this member may be made of metal or other material and by making it detachable from the other parts of the cleaning device the pail may be used for scrubbing purposes when not being used for a mop cleaner, in order that the same pail may be used for various household purposes. There is no particular requirement regarding the construction of this pail. We have shown a cover for the pail which is preferably detachable therefrom although it will be apparent that the same may be integrally attached to the pail if desired. The form of cover shown herein includes a top member 2 of annular shape, which rests on the top edge of the pail, and there is a depending flange 3 which fits down over the top of the pail. There are hinged cover members 4 and 5 connected with the stationary portion of the cover by means of the hinges 6 and these hinged covers preferably extend to the central line of the pail where their edges lie close together when the hinged members are in closed position. The hinged members 4, 5 are each provided with a semi-circular opening 7 and when the cover is in closed position these form a central circular opening slightly larger than the diameter of the handle of an ordinary floor dust mop, such as the handle 8 shown in Figure 1. We have shown stop members 9 on each hinged cover section which rest upon the stationary member 2 of the cover to support the hinged section in the dotted line positions shown in Figure 1, when the cover is open. The straps from which these stop members are made project partially across the members 4, 5 and are coiled to form handles 10 by which the cover members may be raised.

The cage for the head of the mop is preferably supported from the cover though it will be obvious that this arrangement may be varied. We have shown herein a cage 11 which may be made in various forms but which we have shown herein as constructed of vertical wires 12 arranged in circular order and secured to a downwardly extending flange 13 formed on the inner edge of the stationary cover member 2. The vertical wires 12 are connected by circumferential wires 14 at intervals so that an open or reticulated cage is formed; and the bottom of this cage is composed of wires 15 crossing each other and connected with the lower ends of the vertical wires 12. The cage is preferably permanently attached to the cover

device so that when the latter is placed over the open top end of the pail 1 the cage is suspended within the same so that the bottom of the cage is separated some distance from the bottom of the pail and the sides of the cage are also spaced from the sides of the pail.

In Figure 1 we have indicated an ordinary dry mop such as is commonly used for dusting floors and it consists of the head 16 which is the part which gathers the dust, and the handle 8 by which the mop is manipulated. For convenience we prefer to apply a rubber sleeve 17 which fits snugly over the mop handle. In using the device the movable cover sections 4, 5 are swung open and the head of the mop is inserted into the pail and into the cage; and then the cover sections are closed down so that the head of the mop is enclosed within the pail and cage, the mop handle projecting through the opening 7 in the cover. The operator may place the hands on opposite sides of the sleeve 17 and by moving the hands backwardly and forwardly in opposite directions so that the sleeve rolls between the hands, the mop may be rapidly revolved so that the material of which the head 16 is composed will strike the various wires of the cage; and this action will dislodge the dust and lint from the mop head so that it passes through the cage and settles within the pail. The rapid revolving motion will cause the material of the mop head to fly outwardly by centrifugal motion so that it will not only touch the wires at the bottom of the cage but also around the sides. When the mop has been revolved sufficiently to remove the dust and lint from it the mop may be lifted out of the pail and the cover members 4, 5 will swing back to the closed position and prevent the dust and lint from flying. It will be apparent that the device may be carried from one room to another according to where the mop is to be used, and this avoids the necessity of the user having to go from the place of dusting to a window or some other distant location to clean the mop each time it collects dust and lint. With the present device the cleaner is carried from one room to another and used wherever the mop is used and afterwards the cleaner may be emptied by simply removing the cover and the cage and turning the accumulated dust and lint out of the pail. The mop may be cleaned much quicker with the present device than if the head of the mop were beaten against a wall or other body and with less wear and tear on the mop itself. As the mop is revolved, the tendency is for the material of the head to fly out or open up and at the same time strike the wires of the cage, and this action quickly removes the dust and lint throughout the head of the mop.

We have shown in Figure 4 a modified form of bottom construction for the cage. Herein, the cross wires 18 are straight, but the wires 19 which are arranged at right angles to the wires 18 are bent upwardly at 20 to form raised loops with which the inside of the head of the mop will engage. These loops form small obstructions against which the mop head strike to better dislodge the dust and lint from the mop.

Having described our invention, what we claim is:

1. A mop cleaning device comprising a receptacle having an open end, a cover for the open end of the receptacle comprising a stationary member adapted to fit the open end of the receptacle, hinged cover sections attached to said stationary section and having recesses whereby, when said cover sections are closed there will be a central aperture in the cover through which the mop handle may extend and a cage of reticulated construction attached to the stationary member of said cover and extending into the receptacle and spaced from the inner walls thereof for the purpose set forth.

2. A mop cleaning device comprising a receptacle having an open end, a stationary cover member having a flange to fit over the open end of said pail, said cover member being of annular form and having a flange at its inner edge, a cage formed of wires and connected with the inner flange of said cover member whereby said cage is suspended within and separated from the walls of said pail to receive a mop head therein for the purpose set forth, hinged cover members connected to said stationary cover member at opposite sides thereof, and meeting along the central line of said cage and receptacle, said hinged cover members having recesses whereby a central aperture is formed when the hinged cover members are closed, through which the mop handle may extend.

Signed at East Orange, in the county of Essex and State of New Jersey, this 22d day or January, 1925.

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ADELAIDE D. W. RADO.