Nov. 30, 1943. J. G. UTTERBACK 2,335,623

WALL CLEANING DEVICE

Filed March 10, 1942

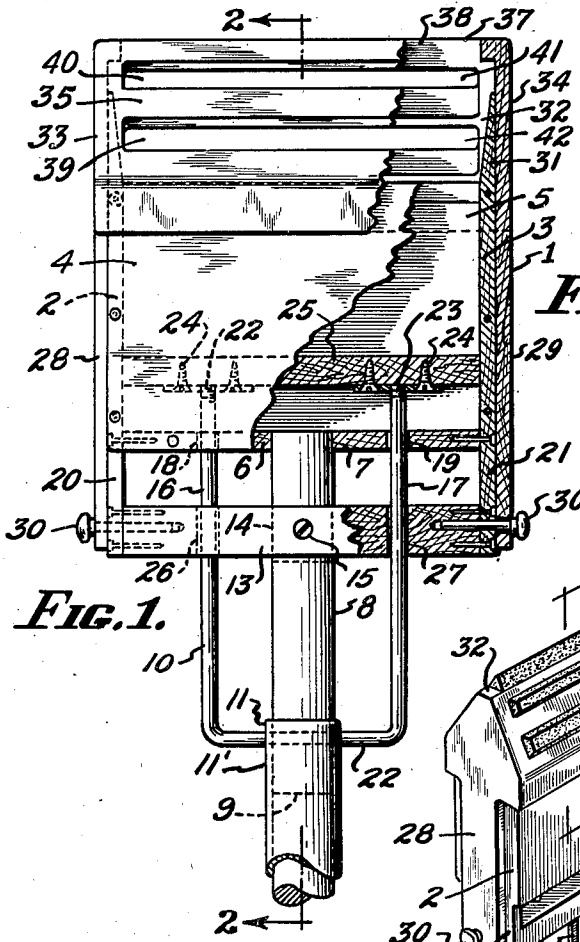


FIG. 1.

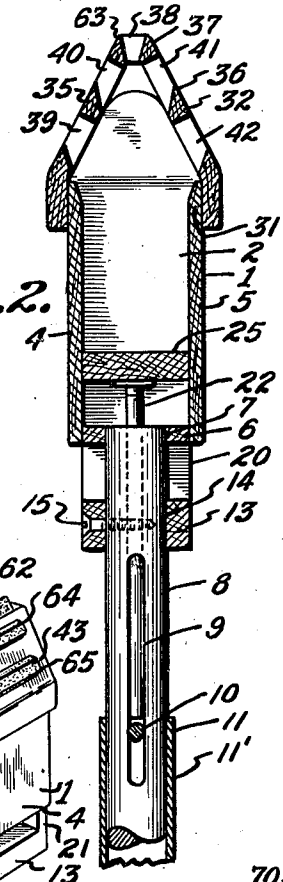


FIG. 2.

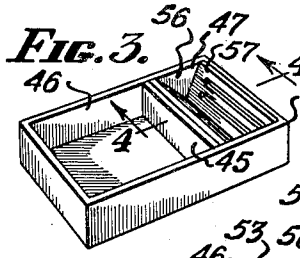


FIG. 3.

FIG. 4.

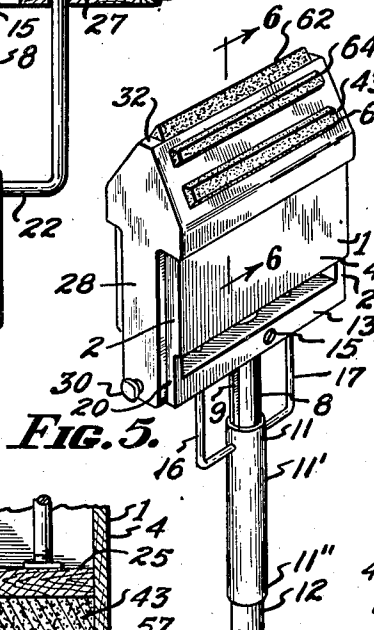


FIG. 5.

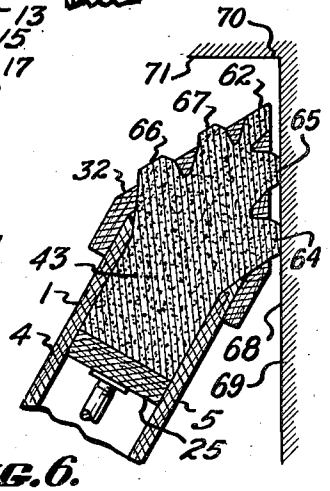


FIG. 6.

INVENTOR.
JAMES G. UTTERBACK.
BY
ATTORNEY.

Patented Nov. 30, 1943 2,335,623

UNITED STATES PATENT OFFICE

2,335,623

WALL CLEANING DEVICE

James G. Utterback, Fairfax, Ohio

Application March 10, 1942, Serial No. 434,099

1 Claim. (Cl. 15—219)

The invention relates to a manually operative device particularly, although not exclusively, adapted for utilization of a paste or plastic cleaning compound for cleaning wall paper.

Heretofore considerable difficulty, inconvenience and trouble has been experienced by persons who desire to use a paste or plastic cleaning compound for removing dirt, grit, dust and other foreign matter from wall paper. This is so because considerable experience and practice is required by the average person before he or she can successfully and satisfactorily utilize the usual and standard plastic wall cleaning compound. Unless the pressure and directional movements exerted by the user on the cleaning compound and in contact with the wall paper, is uniform, and by experience proper and correct, the ultimate result is streaks, uneven cleaning, spots and blotches on the wall paper.

If the user fails to knead the compound after a predetermined quantity of dirt, grit, dust, and other foreign substances are caused to adhere to it, or if utilization of the used surface of the compound is continued after a predetermined quantity of dirt, grit, dust, and other foreign substances adhere to it, the wall paper is caused to be soiled, streaked, blurred, or blotched. This is true because normally the user of plastic wall paper cleaning compound holds a quantity of the compound, in the form of a ball or lump, in his or her hand whereby a relatively small area of the surface of the compound simultaneously contacts the wall paper. Consequently, this small area of surface quickly absorbs or becomes saturated with dirt, grit, dust and other substances whereby further frictional contact of the small area of surface with the wall paper effects disposition of a portion of the previously removed dirt, grit, dust and other foreign substances on the portion of the wall paper being frictionally engaged.

The objects of the invention are to provide a simple, efficient and practical manually operative device adapted to receive and retain a paste or plastic wall cleaning compound and with a portion of the compound protruding from the device for contacting the wall paper; to provide efficient and dependable means, in part comprising a plunger, whereby said compound may be conveniently fed from said device; to provide means through which said compound protrudes for contacting said wall paper when said device is manually operated; and to provide means to regulate the quantity of said compound adapted to be fed during a single operation.

The invention consists in the arrangement of the parts, combination of the elements, and in the details of the construction, as hereinafter claimed.

In the drawing:

Fig. 1 is a front elevation of the invention with parts broken away and showing certain parts in section;

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1;

Fig. 3 is a perspective view, on reduced scale, showing a device employed in conjunction with the cleaning device shown in Figs. 1 and 2;

Fig. 4 is an enlarged fragmentary section taken along line 4—4 of Fig. 3, and also showing the device of Figs. 1 and 2 as employed in conjunction therewith;

Fig. 5 is a perspective view of the cleaning device as it appears after loading and when ready for use; and

Fig. 6 is a section taken on line 6—6 of Fig. 5 and illustrates manual use of the device.

In the preferred construction of the invention, I provide the container 1 comprising the end walls 2 and 3 and the side walls 4 and 5, and the bottom 6 having the hole 7 therein in which is secured an end of the tubular staff 8 having the slot 9 therein. Slidably received in the slot 9 is the U-shaped bar 10 fixed to the end 11 of the tube 11' having fixed in its end 11'' the inner end of the manually operative handle 12.

The guide or support 13 has a hole 14 therein in which is fixed the staff 8 as by the screw 15. The spaced apart legs 16 and 17 of the bar 10 have their inner ends slidably received in the holes 18 and 19 of the bottom 6 of the container.

The side walls 2 and 3 extend downwardly and form the legs 20 and 21 to which the ends of the support 13 is suitably connected.

Fixed to the inner ends 22 and 23, of the legs 16 and 17, as by the screws 24 is the plunger 25 slidably mounted in the container 1. The end edges and the side edges of the plunger 25 fit relatively close to the end walls 2 and 3 and the side walls 4 and 5 of the container 1. The legs 16 and 17, of the bar 10, are slidable in the holes 26 and 27 in the support 13.

Slidably received in contact with the outer surfaces of the side walls 2 and 3 and the legs 20 and 21, are the plates 28 and 29 having their lower ends fixed in contact with the lower ends of the legs 20 and 21, as by the pins 30 which are received in holes in the plates 28 and 29, the legs 20 and 21 and the support 13.

Fixed to the outer or top end 31 of the container 1 is the V-shape nozzle 32 comprising the parallel end walls 33 and 34, and the side walls 35 and 36 which are inclined outwardly and upwardly, and inwardly thereby forming the tip 37 on the outer end of the nozzle. In the tip is the slot 38 having its side walls extending longitudinally of the side walls 35 and 36. In the side walls 35 and 36, respectively, are the spaced apart slots 39 and 40, and 41 and 42 whose side walls extend longitudinally of the walls 35 and 36.

Integrally connected with the lower ends of the end walls 33 and 34 are the top ends of the plates 28 and 29, whereby removal of the pins 30 from the holes in the plates 28 and 29, legs 20 and 21 and the support 13 permits the user to remove the nozzle 32 from contact with the container 1.

In the container 1 is the usual paste or plastic wall paper cleaning compound 43. Normally the compound 43 protrudes from the slots 38, 39, 40, 41 and 42, as shown in Figs. 5 and 6, for purposes hereinafter explained.

In Figs. 3 and 4 is shown the box 44 having an open top and having the partition 45 which forms the compartments 46 and 47. In the compartment 47 is fixed the V-shaped support 48 having the walls or legs 49 and 50 inclined inwardly and downwardly, whereby the bottoms 51 and 52 of the walls are relatively closely spaced and the tops 53 and 54 of the walls are in contact with the partition 45 and the end wall 55, of the box 44. In contact with the upper surface of the walls 49 and 50 are the plates 56 and 57 having formed therein the slots 58 and 59, and 60 and 61.

The operation of the device is as follows:

The handle 12 is manually moved outwardly for the purpose of sliding the legs 16 and 17 of the bar 10 in the holes 18—19 and 26—27, of the bottom 6 and the support 13, whereby the plunger 25 forced downwardly and in contact with the bottom 6 of the container 1. Then the pins 30 are removed from the holes in the legs 20 and 21, plates 28 and 29, and the support 13, whereby the nozzle 32 is manually removed from contact with the top end 31 of the container 1. Then the plastic or paste wall cleaning compound 43 is manually inserted inside the container 1 for the purpose of filling the container therewith. Afterwards the nozzle 32 is replaced onto the top end 31 of the container 1 and the pins 30 are inserted to their proper positions, as shown in Figs. 1 and 5 for the purpose of retaining the plates 28 and 29 in contact with the end walls 2 and 3 of the container. Then the nozzle 32 is inserted in contact with the plates 56 and 57, as shown in Fig. 4. Then the handle 12 is forced inwardly thereby causing the plunger 25 to force the paste or plastic cleaning compound 43 through the slots 39, 40, 38, 41 and 42, in the nozzle 32 and into the slots 58, 59, 58' and 59' of the plates 56 and 57. The plastic 43 is forced through the slot 38 and in contact with the lower inside surfaces of the plates 56 and 57 thereby forming a V-shaped protrusion 62 from the tip 37 and at the extreme end of the top or outer end 63 of the nozzle 32. Also the protrusions 64 and 65 and 66 and 67 are formed after which the nozzle 32 is removed from the box 44 and the device is ready for use in cleaning wall paper.

The cleaning operation is illustrated in Fig. 6 whereby the protrusions 64 and 65 of the compound 43 are shown in contact with the wall paper 68 on the wall 69.

The cleaning operation comprises a manual movement of the handle 12 so that the protrusions 64 and 65 or 66 and 67 frictionally engage the wall paper thereby removing from the paper dirt, grit and other foreign substances which are absorbed by the protrusions of the compound. When it is desired to clean the corner 70, shown in Fig. 6 of the ceiling 71 and wall 69, the protrusion 62 is forced into the corner and the container is manually moved longitudinally for the purpose of causing the protrusion 62 to frictionally engage the wall paper in the corner 70.

After the protrusions 62, 64, 65, 66 and 67 have absorbed dirt, grit and other foreign substances from the wall paper the protrusions may be sliced off by means of a knife whereby the outer surfaces of the compound are in alignment with the outer surfaces of the nozzle 32. Afterward the nozzle 32 is again inserted in contact with the plates 56 and 57 and the handle 12 is manually forced inwardly or upwardly whereby the plunger 25 forces the compound 43 therein through the slots in the plates 56 and 57, as shown in Fig. 4, thereby forming the protrusions shown in Figs. 5 and 6.

An advantage of the invention is that any ordinary house man or house woman may quickly and conveniently clean wall paper simply by manually pushing the container with the protrusions of the compound in frictional contact with wall paper. The protrusions contact the wall paper thereby absorbing dirt, grit, dust and other foreign substances. The fact that the protrusions of the wall paper cleaning compound 43 uniformly contact the wall paper prevents streaks, spots and blotches being left on the wall paper by contact therewith with the cleaning compound, as is customary when a novice or inexperienced person attempts to clean wall paper by use of a handful of wall paper cleaning compound rubbed in frictional contact with the wall paper.

Another advantage of the invention is that after contacting portions or protrusions, of the compound are absorbed with dirt, grit and other foreign substances, removed from the wall paper, the used portion of the compound may be separated from the remaining compound which being fresh and clean may be quickly and conveniently placed in proper position in the form of new protrusions for convenient utilization.

While I believe that the form of the invention illustrated in the drawing and referred to in the above description, as the preferred embodiment, is efficient and practicable, yet realizing that the conditions concurrent with the adoption of the device will necessarily vary, I desire to emphasize the fact that changes in the details may be resorted to, when required, without sacrificing any of the advantages of the invention, as defined in the claim.

In other words, it is understood that changes and modifications in the embodiment of the invention, such as its size, the materials used and the like, as disclosed herein, can be made within the scope of what is claimed without departing from the spirit of the invention, as other expedients may readily suggest themselves to persons familiar in the art to which the invention appertains.

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

In a device of the class described and comprising a container having a bottom having holes therein, a staff fixed in one of said holes, U-shape means slidable with respect to said staff and having spaced apart legs slidable in the other said holes, a plunger slidable in said container and being fixed to said legs, a manually operative handle connected with said means for sliding the plunger in said container, a V-shape nozzle fixed to the upper end of said container and having an outer tip, said nozzle having parallel endwalls and upwardly and inwardly inclined sidewalls and having slots in said side walls and having a slot in said tip.

JAMES G. UTTERBACK.