April 12, 1966 S. M. CLAUSEN 3,245,739

DISPENSER

Filed June 15, 1964 2 Sheets-Sheet 1

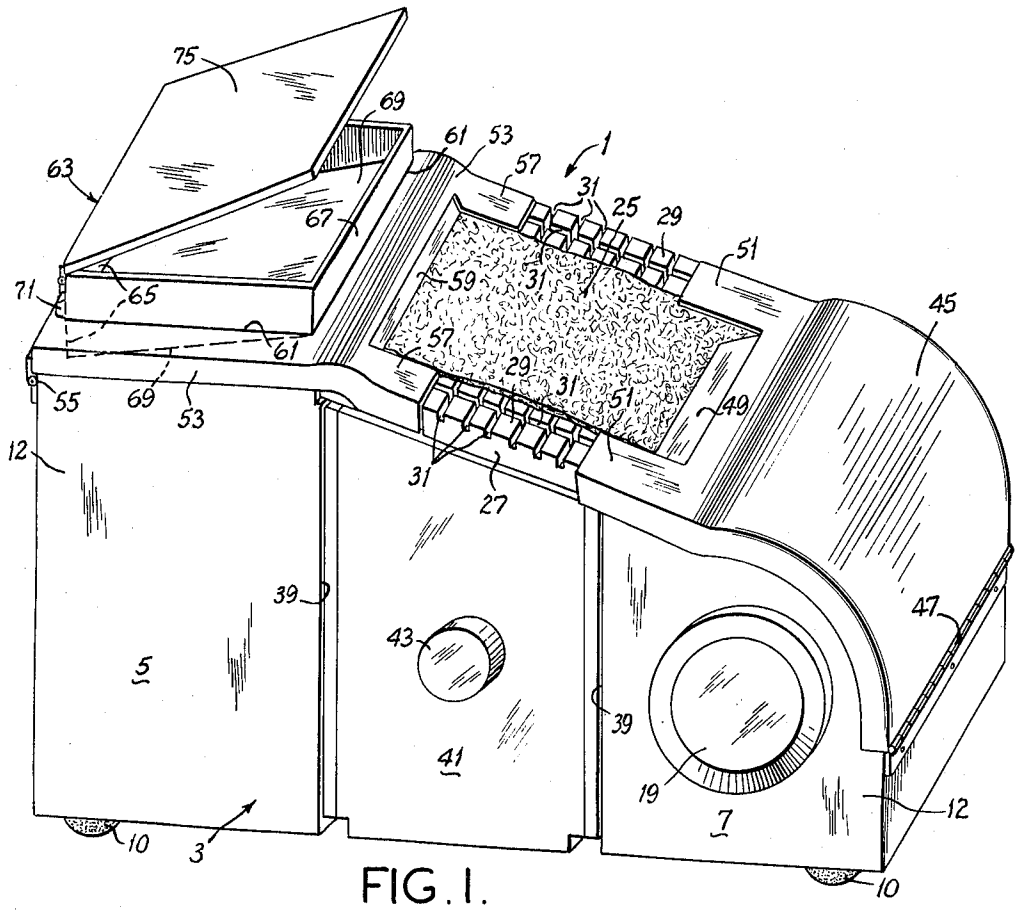

FIG. 1.

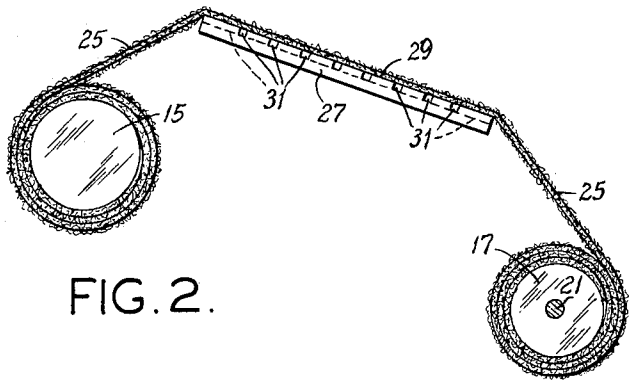

FIG. 2.

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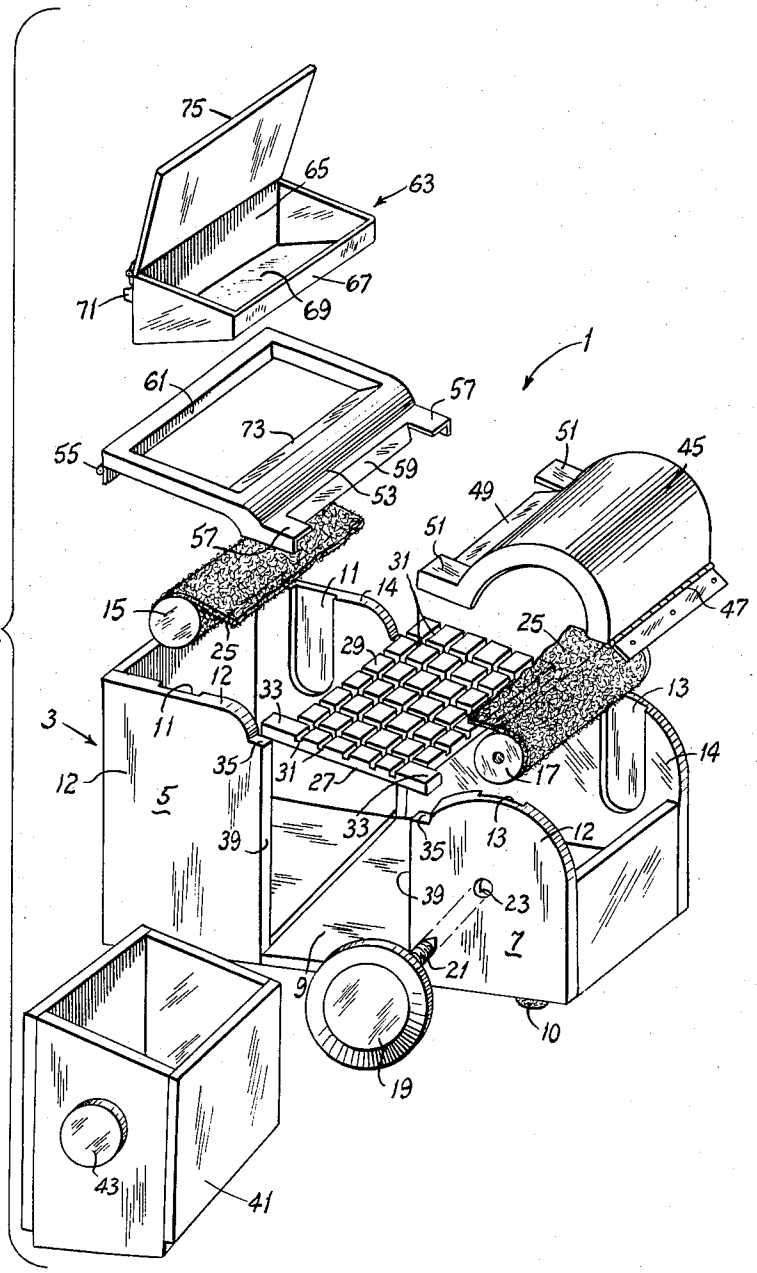
April 12, 1966 S. M. CLAUSEN 3,245,739

DISPENSER

Filed June 15, 1964 2 Sheets-Sheet 2

FIG. 3.



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DISPENSER

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4 Claims. (Cl. 312—38)

This invention relates to a dispenser and more particularly to a dispenser useful for cleaning and drying the fingers or the like.

Among the several objects of this invention may be noted the provision of a dispenser for dispensing absorbent material for use by office workers; the provision of a dispenser of the type described wherein the hands and especially the fingers can be cleaned and dried; the provision of a dispenser or device for cleaning the fingers which is compact and light weight and therefore suitable for placement on an office desk; the provision of a dispenser for dispensing absorbent material or the like by means of which a supply of absorbent material may be on hand at all times; and the provision of a device for cleaning the fingers which has relatively few parts and can be manufactured economically. Other objects and features will be in part apparent and in part pointed out hereinafter.

The invention accordingly comprises the constructions hereinafter described, the scope of the invention being indicated in the following claims.

In the accompanying drawings in which one of various possible embodiments of the invention is illustrated,

FIG. 1 is a perspective view of a dispenser of this invention;

FIG. 2 is a diagrammatic view illustrating the absorbent material on the reels; and

FIG. 3 is an exploded view of the dispenser of FIG. 1.

Corresponding reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings, a dispenser of this invention for cleaning the hands and especially the fingers is indicated in its entirety at 1 and includes an elongated housing shown generally at 3. The housing 3 includes end portions 5 and 7 which are connected by a portion of the floor 9. The housing is supported by feet 10 of rubber, plastic or the like.

The end portion 5 of the housing 3 has a pair of elongated grooves 11 (FIG. 3) in the inner surface of sides 12 and 14 of the housing. The pair of grooves 11 are in mirror image relation and end at the top edge of the housing. A pair of grooves 13 in the end portion 7 of the housing are similar in construction to the grooves 11. A supply reel 15 is provided having end portions rotatable in the grooves 11, the reel 15 being supported by engagement with the lower end of the grooves. In a similar manner, a take-up reel 17 is located in the grooves 13. The axes of the reels 15 and 17 are generally parallel to each other and the reel 15 is preferably located above the reel 17 is indicated in FIG. 2.

At 19 is indicated a knob having a screw 21 projecting from one surface. The screw 21 passes through a hole or opening 23 in the wall 12 of the housing and is threaded into the take-up reel 17 so that the reel 17 may be turned by knob 19. A supply of terry cloth or other suitable absorbent material 25 is wound on supply reel 15 and connected to the take-up reel 17 so that rotation of the reel 17 by knob 19 transfers the absorbent material from the supply reel to the take-up reel.

In housing 3 between reels 15 and 17 is a backing plate 27. The terry cloth 25 passes over the upper surface 29 of the plate 27 and the plate forms a solid backing against which the terry cloth 25 may be pressed by the hands or fingers. The surface 29 of the backing plate 27 is roughened or otherwise provided with a suitable friction surface for engagement by the terry cloth so

that the terry cloth will not slide on the plate. The surface 29 as shown in the drawings is roughened by a plurality of grooves 31 which extend longitudinally and transversely across the surface 29.

The backing plate 27 has fingers 33 which project from one side of the plate and engage upper edges 35 of the wall 12 of the housing end portions 5 and 7. The other edge or side of the plate 27 is supported by pins (not shown) projecting inwardly from wall 14. The plate 27 is inclined relative to the surface supporting the housing. Preferably the plate 27 is located in a plane generally parallel to and spaced from a plane passing through the axes of the reels 15 and 17. With this location of the plate 27, the absorbent material 25 passes upwardly from reel 15, across the surface 29 and then downwardly to the take-up reel 17 (see FIG. 2), and the terry cloth 25 is held against the surface 29 by gravity.

The housing 3 has an opening 39 from the top to the bottom of wall 12 between the end portions 5 and 7 of the housing. A drawer 41 is located in the housing 3 between reels 15 and 17 and beneath the plate 27. The drawer 41 slides through the opening 39 out the side of the housing. Drawer 41 is adapted to store paper towels, napkins, etc. to dry the hands or fingers. Also, drawer 41 can be adapted to store a roll of clean or soiled terry cloth, or other items. Drawer 41 has a knob 43 for opening the drawer.

A cover 45 is connected to end portion 7 of housing 3 by a hinge 47. An end portion 49 of the cover 45 is bent inwardly or downwardly as viewed in FIGS. 1 and 3 and is positioned adjacent to the absorbent material 25 as it passes across the lower or trailing edge of the plate 27. The cover 45 has angle-shaped arms 51 which overlie one of the fingers 33 of the plate and the upper edge of wall 14, thus preventing upward and lateral movement of the plate 27. The absorbent material 25 passes between the arms 51 as shown in FIG. 1.

A cover 53 is connected to end portion 5 of the housing 3 by a hinge 55. The cover 53 has angle-shaped arms 57 similar to arms 51, one of the arms 57 covering the finger 33 of the plate 27 to prevent movement of the plate 27 and the other arm 57 overlying the upper edge of wall 14. Cover 53 has an end portion 59 which is positioned adjacent and may engage the absorbent material 25 as it passes across the upper edge of the plate 27.

The cover 53 has a rectangular hole 61 therethrough. Received in hole 61 is a container 63 adapted to receive and hold water or other liquid cleaning materials. The rear 65 of the container 63 is preferably deeper than the front 67 as illustrated in FIGS. 1 and 3. The rear end 65 is positioned adjacent the end of the housing 3 with the lower margin thereof being substantially above and to the rear of the supply reel 15. The bottom 69 of the container 63 overlies and generally conforms to the portion of the material 25 between the reel 15 and the upper edge of the plate 27. This particular shape of the container 63 permits a maximum amount of water to be held in the container. Also, a large portion of the container 63 can be received within the housing 3 and this reduces the possibility of water being spilled from the container.

The container 63 is held in the cover 53 by one or more mounting members 71 which project from the back 65 of the container and by a flange 73 on cover 53 which projects into the hole 61 from the front edge of the hole. The front wall 67 of container 63 engages the flange 73 and mounting member 71 engages the rear portion of the cover 53. The container is removed by lifting it out of the hole or opening 61 in the cover 53. A hinged lid 75 on the container 63 prevents spilling of water from the container.

Operation of the dispenser is as follows:

With the covers 45 and 53 swung to open positions, a supply of terry cloth or other absorbent material 25 is rolled onto reel 15 and the ends of reel 15 are dropped into grooves 11 in the end portion 5 of the housing. A portion of the absorbent material 25 is unrolled from reel 15 and passed over the surface 29 of the plate 27 and connected to the take-up reel 17 which is then dropped into the grooves 13. The screw 21 on knob 19 is then screwed into the take-up reel 17. The covers 45 and 53 are swung back into place on the housing 3, and the container 63 filled with water is placed in the opening 61 of the cover 53.

The dispenser is normally kept on the desk of a secretary or others who have occasion to clean their hands frequently. When the hands become dirty, the fingers are dipped into the water (to which detergent or liquid cleaner may be added) in the container 63 and are then pressed against the terry cloth or absorbent material 25, pressing the material against the roughened surface 29 of plate 27 to dry the fingers. The pressure of the cloth 25 against the plate and friction therebetween prevents the cloth from moving relative to the plate, thereby facilitating drying of the hands. When the portion of the terry cloth overlying the plate 27 becomes damp or soiled, the knob 19 is turned to rotate the take-up reel 17 and advance another portion of the terry cloth to a position over the plate 27 for subsequent use in drying of the hands. When all of the absorbent material 25 has been used, a new supply may be placed on reel 15.

A detergent or other cleaning agent may be provided in the absorbent material 25. Then the finger tips are dipped in the fluid in container 63 and rubbed against the terry cloth to form a lather and clean the fingers. Towels or napkins in drawer 41 may be used to dry the fingers.

The dispenser may be used for other purposes by changing the material 25. For example, emery cloth can be provided for polishing, or sandpaper for sanding. Other materials can be used for special purposes. The plate 27 can be inverted to provide a flat work surface when desired. Paper can be provided on reels 15, 17 for making notes by pressing the paper against the smooth back surface of plate 27.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As various changes could be made in the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings, shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A dispenser comprising an elongate housing having one end portion thereof adapted to receive a supply of unused absorbent cloth material, means in the other end portion of the housing for reeling up used absorbent material, a backing plate carried by the housing, the backing plate having an upper friction surface, a web of absorbent material suitable for drying the fingers or the hand, the web extending from the one end portion of the housing to the other end portion of the housing with

an upper reach of the material being out of the housing and engaging said friction surface of the backing plate whereby wet fingers or hands can be dried by wiping them against the absorbent cloth material with the friction surface of the backing plate preventing inadvertent movement of the absorbent material during drying of the fingers or hands, a container for water or other cleaning materials, the container being mounted in the upper portion of the housing adjacent one edge of the backing plate and extending substantially entirely across the housing, the container being sufficiently wide to receive at least the fingers of a hand for applying water or other cleaning materials to the fingers before they are wiped against the upper reach of the absorbent material, the container being removably mounted in said upper portion of said housing and having a lower portion projecting into said one end portion of said housing.

2. A dispenser as set forth in claim 1 wherein said plate is inclined in said housing and the friction surface is formed by a series of longitudinal and transverse grooves.

3. A dispenser as set forth in claim 1 having a drawer between said end portions of said housing, said drawer being slidable in said housing from a side of the housing.

4. A device for cleaning the hands comprising an elongate housing having two pair of spaced grooves on the inner walls of the housing with the grooves of each pair being in facing relation, a supply reel positioned in one of said pair of grooves and resting on the bottom thereof, a take-up reel positioned in the other pair of grooves and resting on the bottom thereof with the take-up reel being nearer the bottom of said housing than the supply reel, a knob outside of said housing having a pin extending through said housing and into said take-up reel inside the housing so that rotation of said knob turns said take-up reel, a backing plate positioned between said reels in a plane substantially parallel to a plane passing through the axes of said reels and above said last mentioned plane, the upper surface of the backing plate being roughened to provide a friction surface for engagement with absorbent material, a length of absorbent cloth material suitable for drying the fingers or the hand extending from the supply reel to the take-up reel across the friction surface, said housing having a hinged cover at one end thereof, said cover having a hole therethrough above said supply reel, and a container for water or the like positioned in said hole in said cover and removable therefrom.

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