

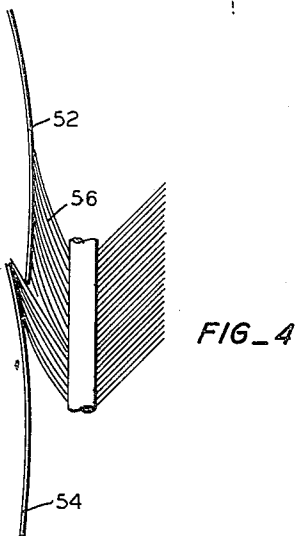
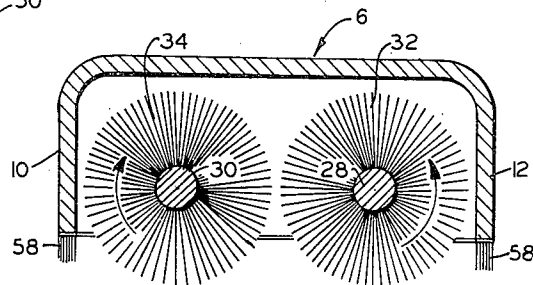
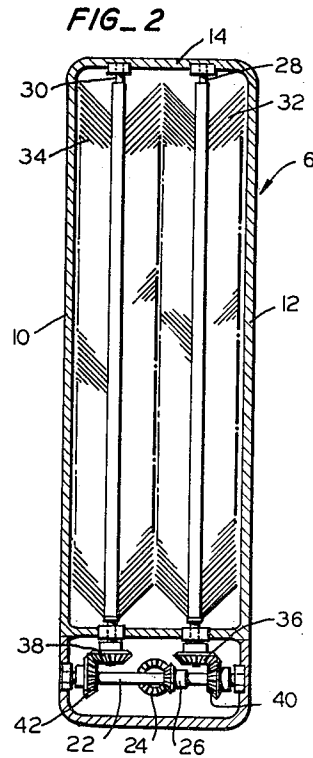
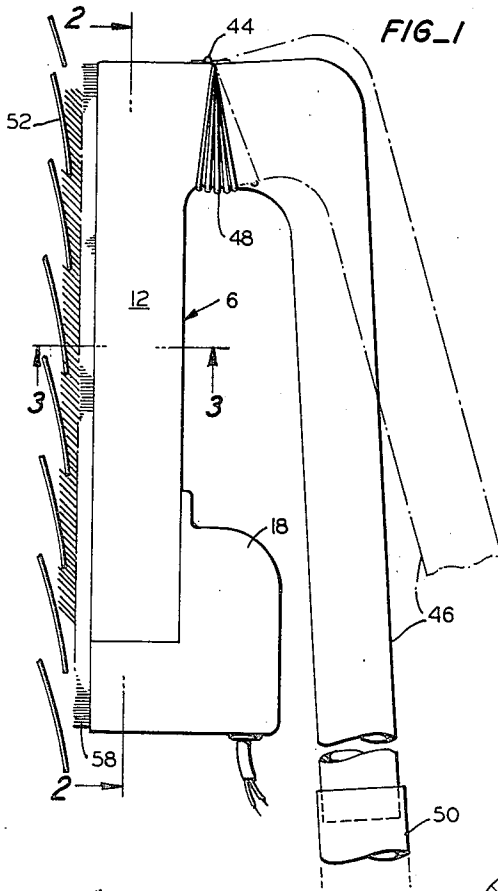
June 21, 1960

B. K. MILBOURNE
VENETIAN BLIND CLEANER

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2 Sheets-Sheet 1



INVENTOR
BENJAMIN K. MILBOURNE
ECKHOFF & SLICK
ATTORNEYS
BY *Robert G. Slick*
A MEMBER OF THE FIRM

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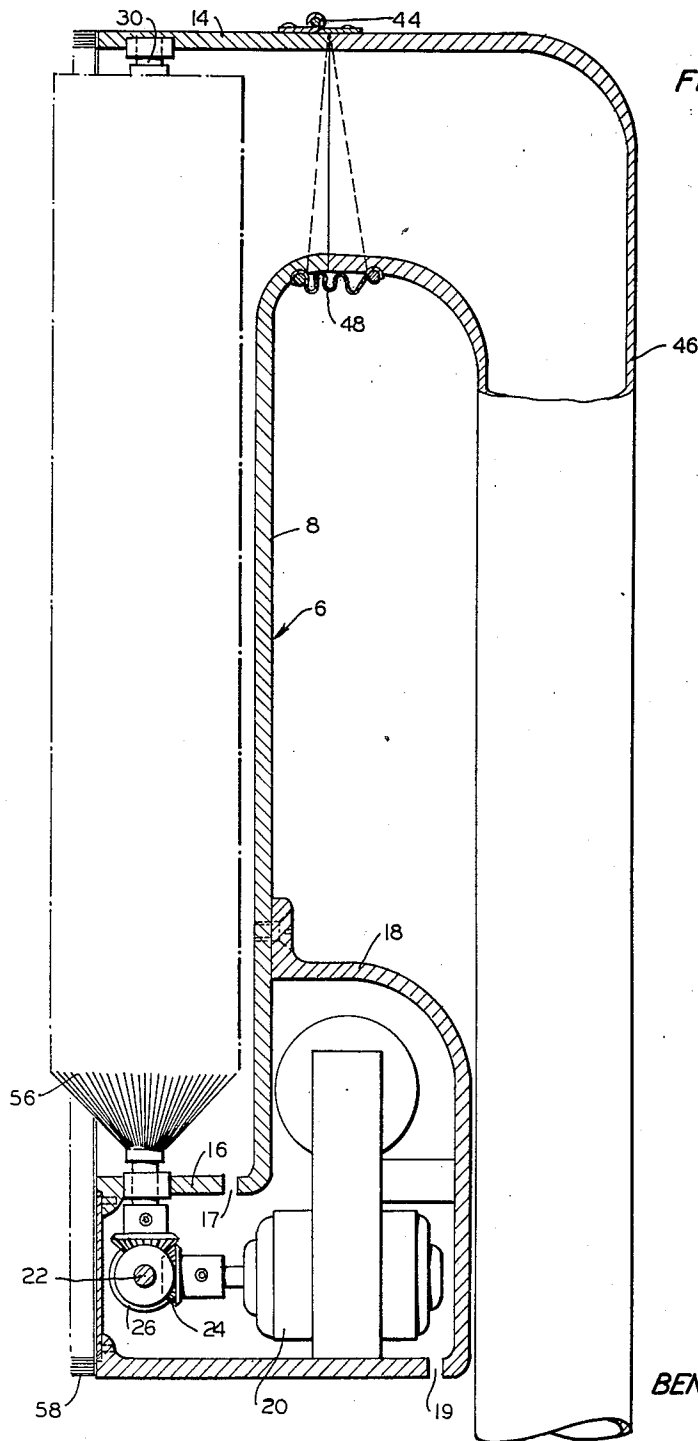


FIG. 5

INVENTOR
BENJAMIN K. MILBOURNE
ECKHOFF & SLICK
ATTORNEYS

BY *Robert H. Slick*
A MEMBER OF THE FIRM

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VENETIAN BLIND CLEANER

Benjamin K. Milbourne, San Jose, Calif., assignor of one-half to Willis S. Clayton, Jr., San Jose, Calif.

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2 Claims. (Cl. 15-377)

This invention relates to a cleaner for Venetian blinds and, more particularly, relates to a cleaner which is capable of vacuum cleaning a number of slats of a blind at the same time.

It is an object of the present invention to provide a cleaner for slats for a Venetian blind which is capable of cleaning a number of slats at the same time.

Another object of this invention is to provide a cleaner for the top surfaces of Venetian blinds which works while the blinds are substantially closed and wherein the brushes are arranged in such a manner that no part of the top surface of the blind is missed.

Another object of this invention is to provide a cleaner for Venetian blinds in which the entire surface of the blind is subjected to a mechanical brushing action.

Still another object of this invention is to provide a cleaner for Venetian blinds having its center of gravity so arranged that it is adapted to always remain in a vertical position regardless of the position of the handle.

Other objects will be apparent from the balance of the specification which follows.

In the drawings forming part of this application:

Figure 1 is a side elevation of the Venetian blind cleaner of the present invention, showing its position when cleaning a blind.

Figure 2 is a sectional view on the lines 2-2 of Figure 1.

Figure 3 is an enlarged sectional view on the lines 3-3 of Figure 1.

Figure 4 is an enlarged detail view, showing the manner in which the bristles of the brushes reach all parts of a blind slat.

Figure 5 is an enlarged side elevation of the blind cleaner, partly in section.

Referring now to the drawing by reference characters, there is shown a Venetian blind cleaner having a main housing, generally designated 6, having a back wall 8, sidewalls 10 and 12, and a top wall 14. The housing has a bottom wall 16 and, covering the bottom wall and a portion of the back wall, is a motor and gear housing 18. The housing 18 holds the motor 20 as well as the shaft 22 which is journaled for rotation between the sidewalls of the motor housing. A pinion 24 on the shaft of motor 20 acting on a pinion 26 on shaft 22 drives the shaft 22. Mounted vertically within the housing 6 and supported for rotation thereby are the shafts 28 and 30, which carry the brushes 32 and 34. At the bottom of shafts 28 and 30, pinions 36 and 38 are provided, which mesh with pinions 40 and 42, respectively, which are mounted on shaft 22. In this manner, the motor 20 drives the brushes 32 and 34 in opposite directions, as is shown in Figure 3. It will be noted that the exposed surface of each of the brushes is moved outwardly from the center of the device so that as the device is brought adjacent to a binding or to the end of a blind slat, there is no tendency for the brush to catch upon the strap or slat.

At the top rear of the housing 6, a pivot 44 is provided

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between the main housing 6 and the hollow handle member 46. A bellows 48 is also provided between the handle 46 and the housing 6, to provide a substantially air-tight connection between the two regardless of the position of the handle. A source of vacuum is applied through the tube 50, which draws air through the hollow handle portion 46 and through the casing 6. Thus, as the brushes revolve, they dislodge dirt from the slats, which is drawn through the handle 46 and the tube 50.

It will be noted that a large portion of the weight of the motor 20 extends to the right of the pivot 44 and that a portion of the motor housing 18 also extends to the right. By employing this structure, the center of gravity of the machine is directly below the pivot point 44. This means that within the limit of the bellows' travel, the housing 6 will remain vertical regardless of the position of the handle 46. Thus, the handle 46 can be made quite long so that one can stand back some distance from the blind and apply the cleaner of the present invention to the blind with the handle in various angling positions, yet the cleaner will stay substantially vertical and will do an effective cleaning job with the handle in any position.

It will be noted that the blind cleaner of the present invention is used when the blinds are in substantially closed position, as is more fully shown in Figures 1 and 4. When two Venetian blind slats, such as those shown at 52 and 54, are in a substantially closed position, there is a small amount of overlap and if a brushing action were applied directly to the face of the blind, a small portion of each slat would be protected by its neighbor and not subjected to the brushing action. However, by having the bristles 56 slant upwardly, as is shown in the drawing, this overlapped portion of the blind slat is cleaned, as well as the balance of the blind.

To avoid bumping the case against blinds as they are being cleaned, a resilient member 58, preferably of bristle construction, extends completely around the case. Further, the member 58 also serves to help confine the vacuum to the area being cleaned.

To prevent overheating of the motor 20, a hole or holes 17 can be provided in the wall 16 while corresponding openings 19 are provided in the housing 18; in this way, air is drawn over the motor and keeps it cool.

It will be noted that the cleaner of the present invention is adapted to clean the upper surfaces of the blind slats. It has been observed that substantially all of the soiling of the slats occurs on the upper surface and it is not necessary to clean the lower surface.

From the foregoing, it is believed apparent that I have invented a new and useful cleaner for Venetian blinds which can be used with handles of any length, which cleans the blinds while they are in a closed position, and which is easily adaptable for use on conventional vacuum cleaners or built-in vacuum systems.

I claim:

1. A cleaner for Venetian blinds comprising a hollow casing of generally vertical configuration having one open side, at least two parallel elongated cylindrical brushes mounted for rotation within said casing and partially projecting through said open side, means for revolving said brushes, a tubular handle pivotally connected at one end about a normal horizontal axis to the upper portion of said casing in air conducting communication therewith, the other end of said handle being adapted for connection to a suction hose, and the brush axes being substantially parallel to a line perpendicular to said handle pivot axis and passing through the center of gravity of the pendant casing and brush assembly portion of the cleaner, whereby the brush axes will seek vertical operational dispositions regardless of changes in the angle between the handle and casing.

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2. The cleaner of claim 1 wherein the brushes have bristles thereon which extend at an angle to the brush shaft.

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