Sept. 3, 1968 E. W. STOTT 3,399,463

PAINT BRUSH CLEANING APPARATUS

Filed May 26, 1967

FIG. 1.

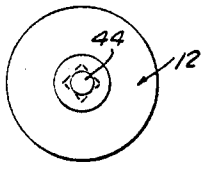


FIG. 2.

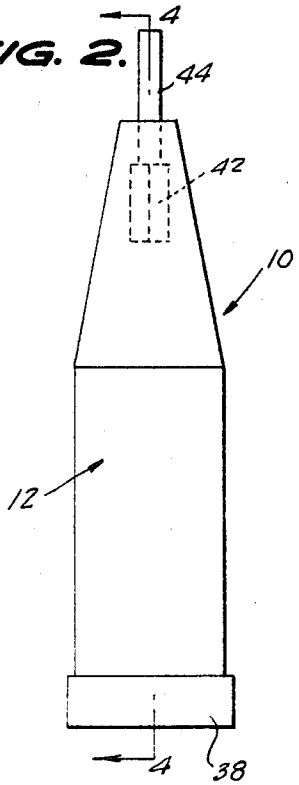


FIG. 3.

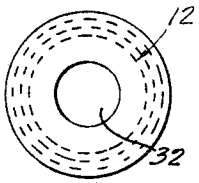


FIG. 4.

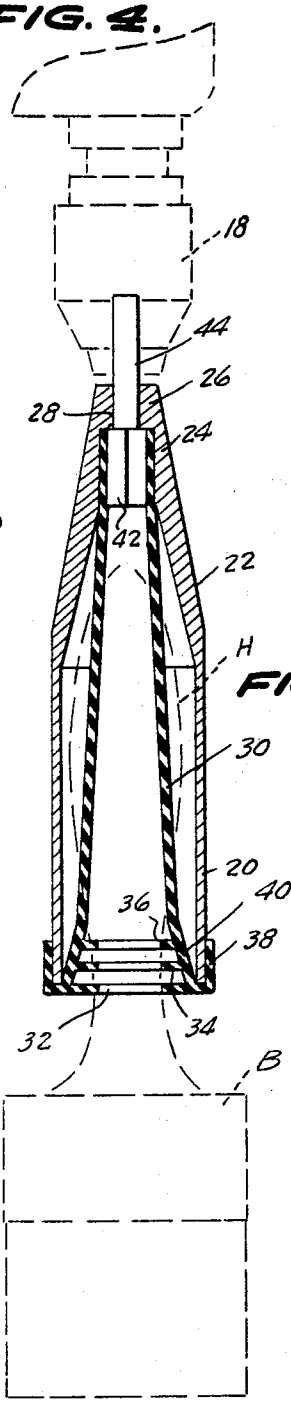
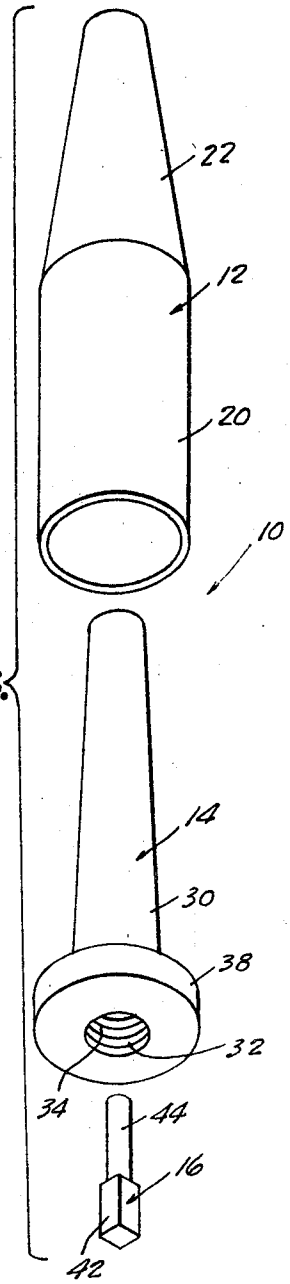


FIG. 5.



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United States Patent Office 3,399,463 Patented Sept. 3, 1968

3,399,463

PAINT BRUSH CLEANING APPARATUS

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Filed May 26, 1967, Ser. No. 641,561
5 Claims. (Cl. 34—58)

ABSTRACT OF THE DISCLOSURE

An assembly for holding a paint brush while it is rotated and cleaned by centrifugal force. The assembly consists of a relatively rigid outer casing housing a flexible inner casing provided with gripping ridges for engagement with the handle of a paint brush. A shaft is secured to the assembly for attachment to a power tool for rotating it.

This invention relates to an aid for use in cleaning a paint brush, and more particularly, to a device for holding a paint brush while it is rotated by a power tool to clean it by centrifugal force.

The usual manner of cleaning a paint brush is to soak it in a solvent to dissolve the excess paint retained by the brush bristles. This is a time consuming and sloppy chore, necessitating the use of another brush when it is desired to paint a different color immediately.

It has been discovered that the disadvantages inherent in this cleaning method can be obviated by rotating the brush at high speeds, thereby freeing the brush bristles of excess paint in a matter of minutes by centrifugal force. Heretofore, attachments for connecting the paint brush to a rotating power tool for this purpose have been expensive and dangerous to use, presenting a myriad of elements having sharp corners.

Accordingly, it is an object of this invention to provide a holder for a paint brush of the character indicated, consisting of a minimum number of parts having no rough edges lending itself to economical mass production, and safety in use.

Another object of this invention is to provide a holder of the character indicated which can universally hold different size paint brushes for cleaning.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawing, wherein:

FIGURE 1 is a top plan view of the paint brush holder of the present invention;

FIGURE 2 is a side view in elevation thereof;

FIGURE 3 is a bottom plan view thereof;

FIGURE 4 is a cross-sectional view thereof taken substantially along the plane indicated by line 4—4 in FIGURE 2, and illustrating in phantom lines the manner in which a paint brush is retained therein and connected to a rotary power tool; and

FIGURE 5 is an exploded perspective view of the paint brush holder.

Referring now to the drawing, wherein like numerals indicate like elements throughout the several views, the paint brush holder of the present invention is generally indicated by the numeral **10**.

As illustrated, paint brush holder **10** comprises three elements; an outer casing **12**, an inner casing **14**, and a shaft **16** for connecting holder **10** to a conventional rotating power tool **18** (shown in phantom lines in FIGURE 4).

The outer casing **12** is made from a hard sturdy substance, such as metal or plastic, and includes a cylindrical bottom portion **20** integrally connected to a frusto-conical portion **22**. At the top end of portion **22**, the wall of casing **12** is thickened, as shown at **24**, to increase its strength and prevent vibration and cracking when rotated by power tool **18**. The outer surface of casing **12** is smooth to the touch so that it may be readily handled without injury to the hand.

The top of frusto-conical portion **22** of outer casing **12** is solid, as shown at **26**, and has an axial bore **28** formed therethrough for a purpose described hereinafter.

Inner casing **14** is constructed of flexible material, such as rubber, and has a main body portion **30**, substantially of frusto-conical shape, terminated in a flared end **40**. Main body portion **30** is adapted to receive and be distended by the handle H of a paint brush B, and to frictionally grip it. The handle H is inserted within main body portion **30** through an opening **32** in the bottom surface of flared end **40**.

Adjacent opening **32**, the flared end **40** of inner casing **14** is provided with a series of integral, vertically spaced, annular ribs **34**, **36** which aid in frictionally gripping handle H, when inserted through opening **32**. An integral, annular lip **38** connected to the flared end **40** completes the construction of the inner casing **14**.

The outer casing **12** is secured to the inner casing **14** by sliding the outer casing **12** over the main body portion **30** of the inner casing **14**, and wedging the lower end of casing **12** between annular lip **38** and the flared end **40** of main body portion **30**. Shaft **16** having a square end **42** and a cylindrical stem **44** is then inserted into the interior of inner casing **14** through opening **32**. Stem **44** is placed through axial bore **28** in the top of casing **12** and the square end **42** of shaft **16** frictionally clamps the top of the main body portion **30** of inner casing **14** to the outer casing.

Stem **44** can then be connected to rotating power tool **18** and handle H of brush B inserted within the interior of main body portion **30**. The power tool can then be activated to rotate the brush B to remove excess paint therefrom by centifugal force.

Because the shaft end **42** is square-shaped in cross-section, it will not rotate relative to inner casing **14** or cause the casing to twist. Also, since main body portion **30** is distensible, as is the material of casing **14** surrounding opening **32**, a variety of different size brushes B can be held by holder **10**.

While a specific embodiment of my invention has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

I claim:

1. Paint brush cleaning apparatus comprising an elongated tubular outer casing, an elongated tubular inner casing disposed within said outer casing and having an opening at the lower end thereof to receive the handle of a paint brush, said inner casing being formed of flexible distensible material, and means projecting from the top end of said outer casing for connecting said casing to a rotating power tool.

2. Paint brush cleaning apparatus in accordance with claim **1** including flexible means within the interior of said inner casing adjacent said opening for frictionally gripping the handle of a paint brush.

3. Paint brush cleaning apparatus in accordance with claim **2** wherein said friction gripping means includes at least one integral annular rib projecting radially inwardly from the interior wall of said inner casing adjacent said opening therein.

4. Paint brush cleaning apparatus in accordance with claim **3** wherein said inner casing includes an integral exterior, annular lip at the lower end thereof, the lower end of said outer casing being received between said

annular lip and said inner casing, and said projection means comprising a shaft projecting from the top end of said outer casing and having a square-shaped end in cross-section, the square end of said shaft being disposed within the interior of the inner casing and frictionally clamping the top end of said inner casing to the interior of said outer casing.

5. Paint brush cleaning apparatus in accordance with claim 4 wherein he walls of said outer casing adjacent the top end thereof are thickened.

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