

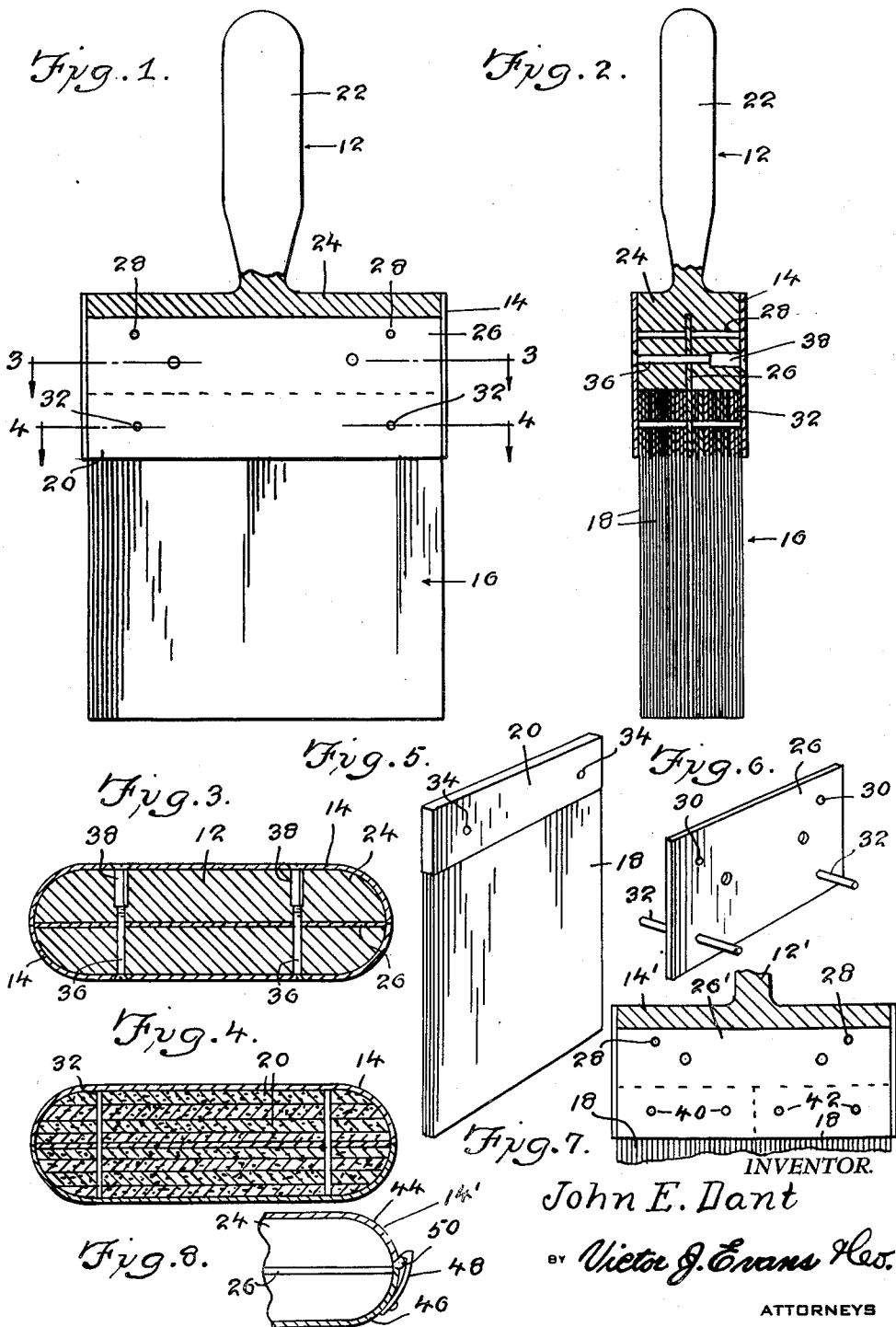
July 5, 1960

J. E. DANT

2,943,341

PAINT BRUSH

Filed March 20, 1958



John E. Dant

BY Victor J. Evans & Co.

ATTORNEYS

1

2,943,341

PAINT BRUSH

John E. Dant, Dant, Ky.

Filed Mar. 20, 1958, Ser. No. 722,709

4 Claims. (Cl. 15—202)

This invention relates to a paint brush and more particularly to a paint brush provided with a plurality of removable bristle units.

Prior art attempts at producing a paint brush with removable bristle carrying units have failed to produce a satisfactory brush for various reasons. A major disadvantage of the prior art is the failure to produce a satisfactory means for retaining the removable bristle carrying units in association with a handle member. Most such prior art attempts have failed to provide a sufficiently positive bristle retaining means without unduly complicating the device and unduly raising the cost thereof. With extended use of most prior art devices, the connection between the bristle sections and the handle member tends to be weakened, with an ensuing possibility that bristle carrying units may fall from the handle member while in use.

It is an object of this invention to provide a sectional paint brush having a bristle carrying unit adapted to be used either alone or in combination with other such units to form various size brushes.

Another object of this invention is to provide a removable and/or replaceable bristle carrying unit for a paint brush thereby expediting either the cleaning of paint brush bristles after use, or the replacement thereof should the original bristles become worn.

Still another object of the invention is to provide a paint brush having a permanent handle and ferrule portion and replaceable bristle sections, wherein said bristle carrying units may be used in various sizes of handle holders, thereby effecting a more economical use of the various brush elements.

An additional object of this invention is to provide a paint brush having a permanent handle and ferrule combination and removable bristle carrying units, with means whereby said brush may be varied as to thickness and/or width.

Other objects and advantages of the invention relate to various features of construction and arrangement of parts which will be apparent from a consideration of the following specification and accompanying drawing, wherein:

Figure 1 is an elevational view, partially in section of one embodiment of this invention;

Figure 2 is a profile view, partially in section of the structure shown in Figure 1;

Figure 3 is a sectional view taken on line 3—3 of Figure 1;

Figure 4 is a sectional view taken on line 4—4 of Figure 1;

Figure 5 is a perspective view of one of the bristle units utilized in the instant invention;

Figure 6 is a perspective view of a bristle unit supporting plate;

Figure 7 is an elevational view, partially in section, and partially broken away of a further embodiment of the instant invention; and

Figure 8 is a partial sectional, plan view of a further

2

embodiment of paint brush ferrule adapted for use with the instant invention.

Referring now to the drawing wherein like or corresponding parts are designated with the same reference numerals, there is shown in Figure 1 a brush comprising a handle 12 including a removable clamp or ferrule 14, a brush section 16 which is composed of a plurality of bristle carrying units 18 each of which is composed of a rubber head portion 20 having a plurality of bristles embedded therein.

The handle 12 comprises a hand engaging portion 22, and a widened portion 24. A bristle unit supporting plate 26, preferably though not necessarily, made of metal, is anchored within a slot formed in the widened portion 24 by means of rivet-like pins 28 anchored in said widened portion 24 and extending through holes 30 formed in said support plate 26.

The support plate 26 is in turn provided with a pair of bristle unit carrying fingers 32 anchored thereto and extending laterally therefrom from both faces thereof. The fingers 32 carry the head portion 20 of each bristle carrying unit 18 by passage through a pair of holes 34 formed in each of said head portions.

In accordance with the embodiment shown in Figures 1 to 6, the bristle units 18 are held on the fingers 32 by means of the removable ferrule 14 which surrounds the widened handle portion 24 and said units 18. The ferrule 14 is removably held on the handle 12 by means of one or more sets of headed, cooperating screw members 36 and 38. The threaded male and female members extend through suitably sized holes in the ferrule 14, the widened handle portion 24 and the supporting plate 26 respectively.

In order to remove the bristle units 18 from the handle 12, the cooperating screw members 36 and 38 are disconnected from one another with a screw driver or the like, removed from the assembly and then the ferrule 14 is then slid either up or down until the bristle units are free therefrom.

In Figure 7 there is shown another embodiment of the instant invention. This embodiment makes it possible to use a plurality of bristle units either by themselves in a brush no wider than each unit, or in a brush having twice the width of each unit, thereby rendering a given size bristle unit applicable to various size brushes. In accordance with this embodiment, a modified bristle unit supporting plate 26' is fixedly anchored in the widened handle portion 24 by the pins 28 in the same manner as in the embodiment shown in Figures 1 through 6. However the modified plate 26' is provided with two pairs of bristle unit supporting fingers 40 and 42 analogous to the single pair of fingers 32 on the plate 26.

An individual bristle unit 18 is mounted on the respective pairs of fingers 40 and 42, whereby the width of the brush is made up of two bristle units instead of one, as is the case in the aforescribed embodiment. Thus with the embodiment shown in Figure 7 it is possible to use a particular bristle unit in conjunction with either the handle 12', as shown, or in conjunction with a handle of half the width. Accordingly, a given set of bristle units has utility in different size brushes.

Figure 8 discloses a modified ferrule 14' adapted for use with the modification shown in either Figures 1 through 6 or Figure 7. The ferrule 14' consists of a pair of strips of metal or the like 44 and 46 shaped so as to cooperate with the widened handle portion 24. The strips 44 and 46 are held together by a suitable latch means, consisting for example, of a hook 48 and a cooperating detent 50 located at the opposite ends of the ferrule.

It is pointed out that the ferrule 14' may be formed

3

as a single split ring having only one latch, instead of a pair of strips 44 and 46, and a pair of latches.

In accordance with the instant invention there is provided a brush having detachable and/or interchangeable bristle units which may be readily removed from a handle for purposes of cleaning. After removal from a handle the instant bristle units may be completely immersed in a solvent for cleaning purposes.

While I have shown and described certain embodiments of my improvements for the purposes of illustration, it will be apparent that various changes can be made therein without departing from the spirit of the invention.

What is claimed is:

1. A brush comprising a handle portion, a widened portion of oblong formation having curved ends integral with one end of said handle portion and a longitudinally extending slot centrally of the bottom surface thereof, a plate anchored in the slot and extending from said widened portion in vertical relation thereto, a plurality of pins fixedly mounted on said plate and extending laterally therefrom, a brush section comprising a plurality of bristle units, each of said units comprising a number of bristles anchored in a rigid head member, that is of a length equal to the length of said widened portion and having curved ends conforming to the curved ends of said widened portion, said head member having a plurality of holes formed therein and extending therethrough, said

4

pins extending through said holes whereby said bristle units are removably mounted on said plate, and means attached to said widened portion for preventing removal of said bristle units from said pins.

2. A brush as set forth in claim 1, wherein said last means consists of a ferrule removably attached to said widened portion and extending beyond the bottom surface thereof in overlapping relation with the head portion of said bristle units.

3. A brush as set forth in claim 2 wherein said ferrule is held on said widened portion by a screw extending through the ferrule and the widened portion.

4. A brush as set forth in claim 2 wherein said ferrule is provided with separable end portions, and means retaining said end portions connected together.

References Cited in the file of this patent

UNITED STATES PATENTS

1,358,369	Forester	Nov. 9, 1920
2,246,773	Adams	June 24, 1941
2,384,029	Hawkins	Sept. 4, 1945
2,490,159	Ricchiuti	Dec. 6, 1949
2,785,427	Bury	Mar. 19, 1957
2,787,016	Carpenter	Apr. 2, 1957

FOREIGN PATENTS

2,552	Great Britain	Aug. 25, 1910
391,287	Great Britain	Apr. 27, 1933