

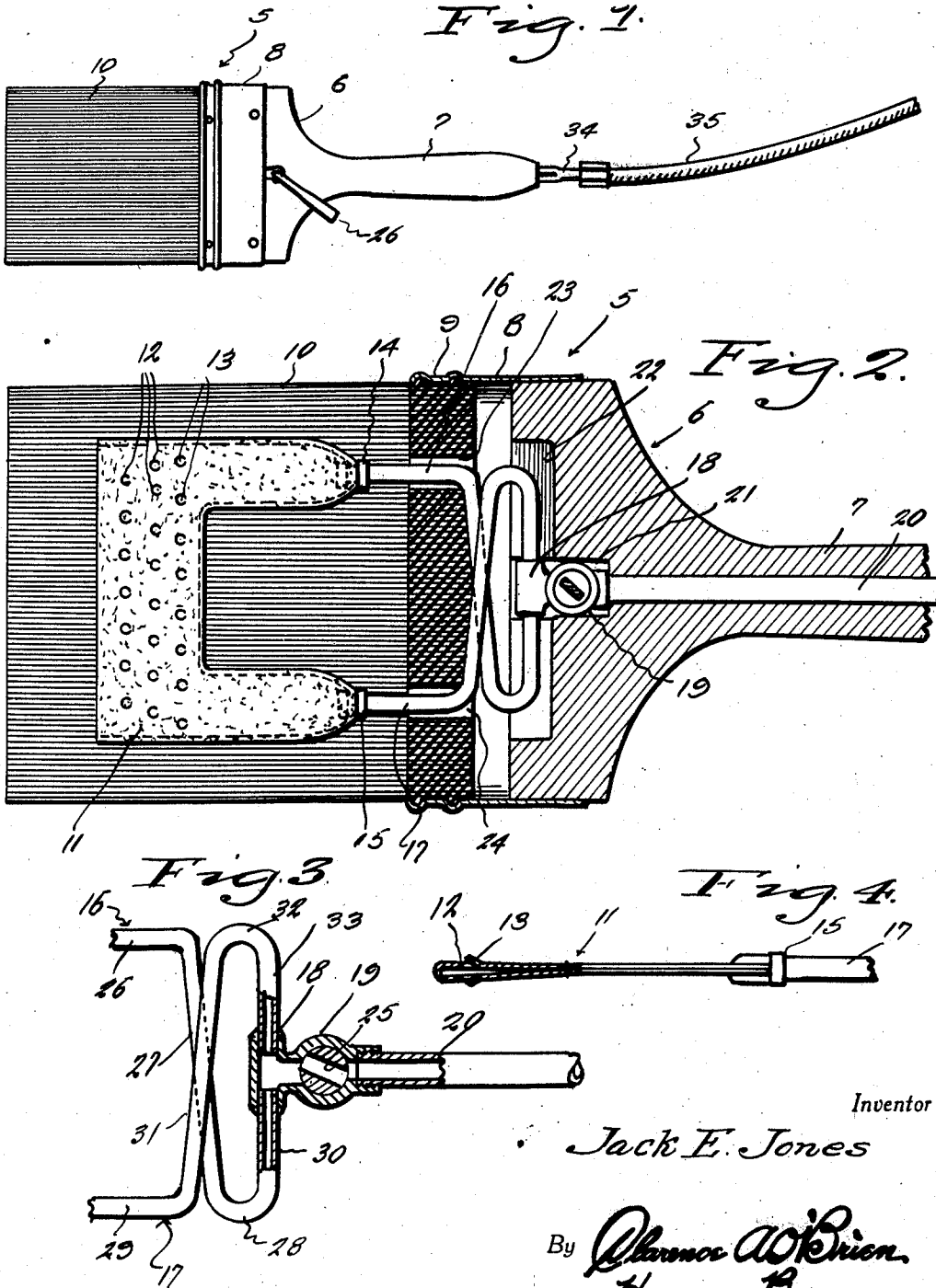
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SELF-FEEDING BRUSH

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UNITED STATES PATENT OFFICE

2,190,599

SELF-FEEDING BRUSH

Jack E. Jones, High Point, N. C., assignor, by direct and mesne assignments, of twenty per cent to Charles H. Doggett, Greensboro, N. C., twenty per cent to J. R. Curry, twenty per cent to Arnold Betts, and twenty per cent to J. K. Brown, all of High Point, N. C.

Application February 24, 1937, Serial No. 127,469

Renewed July 13, 1939

1 Claim. (Cl. 15—128)

My invention relates generally to a self-feeding brush, and particularly to a brush of this character in which the feed of fluid is equalized with respect to the upper and lower extremities thereof, and an important object of my invention is to provide a simple, inexpensive, and practical arrangement of this character.

Other important objects of my invention will be apparent from a reading of the following description taken in connection with the drawing, wherein for purposes of illustration I have shown a preferred embodiment of my invention. In the drawing:

Figure 1 is a general side elevational view of an embodiment of the invention adapted for painting vertical walls.

Figure 2 is a longitudinal vertical sectional view taken through Figure 1 and enlarged.

Figure 3 is a longitudinal sectional view taken through the valve mechanism.

Figure 4 is a horizontal sectional view taken through the feed sac.

The subject matter of this application is a continuation in part of my application Serial No. 112,469, filed November 24, 1936, for "Self-feeding brush", which has become abandoned.

Referring in detail to the drawing, the numeral 5 generally designates the brush in accordance with the present invention which comprises a generally conventional form including the solid handled body 6 which has the handle portion 7, the body 6 being vertically elongated and having telescoped thereon the ferrule 8 which holds the bristle base 9 in which the brush bristles 10 are embedded and anchored.

As shown in Figure 2 of the drawing a U-shaped fluid feeding sac 11 made of leather or other suitable flexible material is arranged within the bristles 10 with the legs thereof pointing toward the body of the brush and equally spaced from the top and bottom edges of the bristles 10. The bight portion of the sac 11 is provided with a multiplicity of spaced openings 12 which are formed by partially cutting out tabs 13, to control and effect even distribution of the fluid to the bristles.

The terminals of the legs of the sac have secured in communication therewith as indicated by the respective numerals 14 and 15 the outer ends of crossed tubes 16, 17 which are severally connected by the T 18 to the valve 19 which is interposed between the T 18 and the supply tube 20 which passes longitudinally through the handle portion 7.

The valve 19 is located in a recess 21 in the body 6 which opens into the elongated recess 22. The tubes 16 and 17 pass through openings 23, 24, respectively, in the bristle base 9.

The valve 19 has a valve plug 25 which is manually operable by means of a handle 26 which extends at one side of the handle body as indicated in Figure 1 of the drawing, this handle 26 extending through an extension of the recess 21 which opens through the side of the body.

The feed tube 16 comprises a generally horizontal portion 26 which extends through the opening in the bristle base and where it joins a sharply declining portion 27 which terminates at its lower end as indicated by the numeral 28 in an up-bend which is approximately on a level with the horizontal portion 29 of the feed tube 17. A straight vertical portion 30 leads upwardly from the bend 28 and into the lower arm of the T 18.

The feed tube 17 has the horizontal portion 29 already mentioned which terminates in the straight sharply inclined portion 31 which rises to a level with the portion 26 of the feed tube 16 where it has a down-bend 32 which terminates in a straight portion 33 similar to the straight portion 30 and which is connected with the upper arm of the T 18. It will be observed that by this arrangement the feed tubes are crossed and reversed with respect to each other and with respect to the usual arrangement of the tubes in self-feeding brushes of this general character.

As indicated in Figure 1 of the drawing, the supply tube 20 has outward of the terminal of the handle portion 7 a suitable adapter 34 enabling connection thereto of a supply pipe 35 which brings paint or the like under pressure to the supply tube 34 for operating the brush.

As the paint under pressure comes through the supply tube 20 and reaches the valve 19 the handle 26 is operated to permit the wanted amount of paint to pass the valve and into the T 18 where a portion of the paint falls gravitationally through the portions 30 and 28 of the pipe 16 and rises to a certain height in the portion 27, whereupon paint will be forced up through the portion 33 of the pipe 17 and eventually over the bend 32 whence it travels gravitationally to the straight portion 29, in an arrangement such that the paint is passed through the tubes 16 and 17 to the arms of the distributing sac by which paint is brought

to the upper part of the brush in substantially the same amount as the paint is brought to the lower part of the brush due to the slow egress through openings 12. This distribution of the paint distinguishes from present self-feeding brushes wherein gravity tends to feed a greater amount of paint through the lower feed tube than through the upper feed tube, so that the lower part of the bristles contains too much paint while the upper part of the bristles are starved. It must be borne in mind that the brush is used with paint or material which has a considerable amount of body and I find that under a pressure of from 10 to 20 pounds the paint will have a substantially even flow from both tubes 16 and 17 into the sac, regardless of what position the brush is held in.

Although I have shown and described herein

a preferred embodiment of my invention, it is to be definitely understood that I do not desire to limit the application of the invention thereto, and any change or changes may be made in the materials and in the structure and arrangement of the parts, within the spirit of the invention and the scope of the subjoined claim.

What is claimed as new is:

A brush of the class described comprising a handle part and a bristle part, a substantially U-shaped sac located in the bristle part with its legs extending toward the handle part, said sac having perforations therein, a supply tube carried by the handle part, a tube connecting the supply tube with one leg of the sac, and a second tube connecting the other leg of the sac with the supply tube.

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