Aug. 18, 1942. E. C. MORCK 2,293,302

BRUSH

Filed Jan. 21, 1941

Fig. 1.

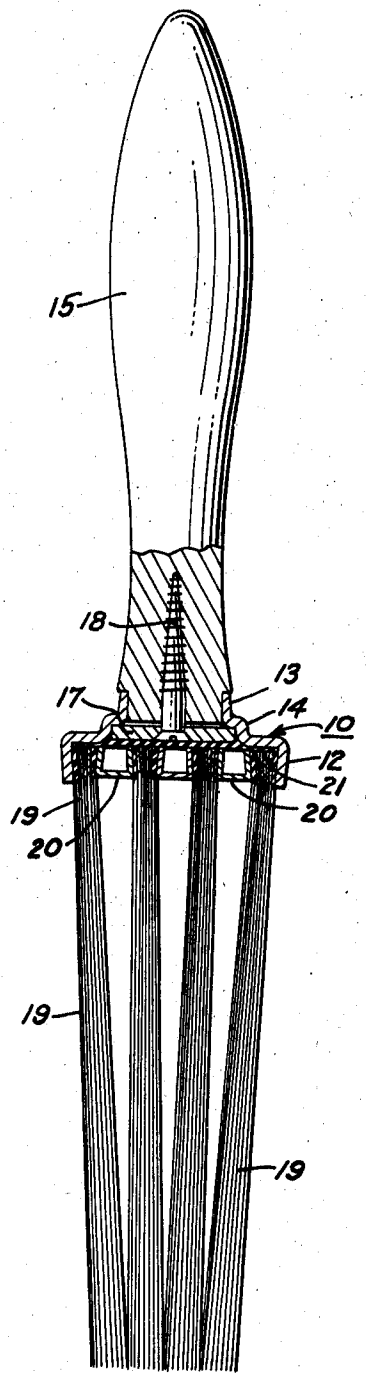



Fig. 2.

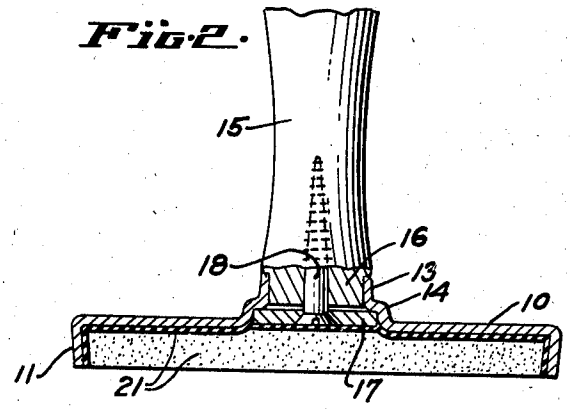



Fig. 3.

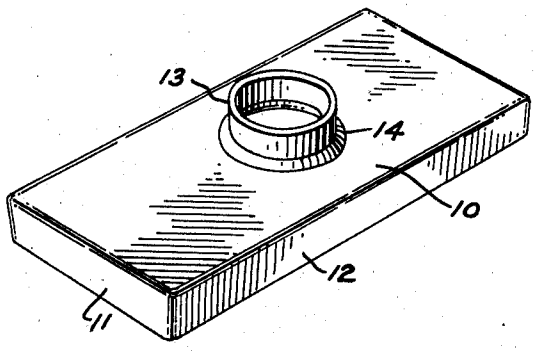
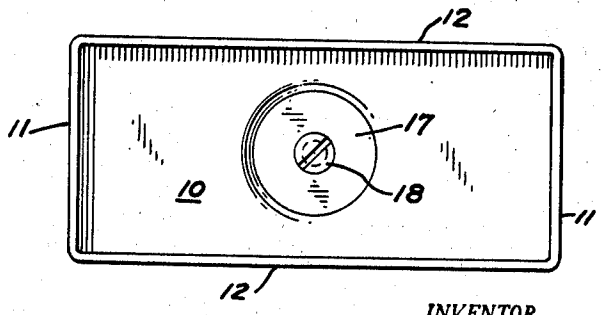



Fig. 4.




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## BRUSH

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Application January 21, 1941, Serial No. 375,123

3 Claims. (Cl. 15—192)

This invention relates to brushes of the type used extensively in the application of calcimines, stucco and like finishes.

One of the problems of this art has been to produce a brush for the purposes specified which will stand up under the hard usages to which they are subjected. A desirable characteristic of brushes of this type, and in fact any paint brush, is rigidity of construction. It is necessary and desirable that the handle, brush head holder and bristles remain as a solid, unitary structure so long as the bristles thereof are of a usable length.

It is, therefore, an object of this invention to provide a brush having the requisite rigidity, while at the same time having regard for comparative weight and costs of manufacture.

These, and other objects to become apparent as this specification proceeds, are attained through the provision of a brush having certain readily appreciable points of novelty of construction of the brush head holder and handle connection.

In the drawing forming a part hereof wherein a preferred form of the invention is shown for purposes of example,

Fig. 1 is a vertical transverse sectional view of a brush embodying my invention,

Fig. 2 is a longitudinal sectional view showing further the detail of brush head holder and handle connection,

Fig. 3 is a perspective view of the brush head holder alone, and

Fig. 4 is a bottom plan view of the brush head holder.

The brush head holder comprises an inverted cup-like rectangular shaped member 10 having end and side walls 11 and 12, respectively, inclined inwardly from the vertical (see Figs. 1 and 2) to define a restricted mouthed socket for the bristle ends and associated elements about to be described.

A protruding handle socket 13 is arranged medially on the otherwise flat side of the brush head holder 10 and a boss 14 is formed at the juncture of socket 13 and holder 10 to define an internal annular seat for a retainer disk or washer 17. As will be noted in Figs. 1 and 2 the handle 15 has the conventional reduced end 16 which is received by the socket 13. The retainer disk is then placed in its annular seat, defined by boss 14. The screw 18 is then inserted through the disk 17 and turned home in the end of the handle 15.

It will be obvious from the foregoing that my structure provides an extremely tight and rigid connection between the handle 15 and the brush head holder 10. It is a connection which even if not augmented in any way would reduce the likelihood of the handle becoming loose and wobbly to a desirable minimum. However, the joint thus described is supplemented by the means employed for securing the bristles 19 in brush head holder 10.

When the handle 15 and holder 10 have been assembled as thus described, I next cover disk 17 and the bottom and inner surfaces of the side and end walls 11 and 12, respectively, with a rubber or rubber composition coating 21. As will be noted from Figs. 1 and 2, a certain portion of this coating 21 enters such interstices as there are between the edge of disk 17 and its annular seat to firmly bind the two together, as will become more apparent.

Preferably while the coating 21 is in a plastic or semi-plastic state, the rows of bristles 19, the butt ends of which have been impregnated with a composition, are inserted in the cup of holder 10 and spaced apart by the substantially U-shaped wedges or spacers 20. When spacers 20 have been driven home the elements of the device are completely assembled and the device is then subjected to a vulcanizing process to harden or set, following which the brush is ready for use.

The brush of my invention has been found to possess superior lasting qualities and above all to be of a sufficiently rigid construction to meet the most exacting demands of the art.

The invention claimed is:

1. In combination, a brush head holder having a handle socket protruding therefrom, a boss at the juncture of the brush head holder and the handle socket defining an annular seat within the brush head holder about the socket, a retainer disk in the seat, a handle having an end in the socket, a screw through the retainer disk threadably engaging the handle end in the socket.

2. In combination, a brush head holder having a handle socket protruding therefrom, a boss at the juncture of the brush head holder and the handle socket defining an annular seat within the brush head holder about the socket, a retainer disk in the seat, a handle having an end in the socket, a screw through the retainer disk threadably engaging the handle end in the socket, and a vulcanized rubber composition coating over the face of the retainer disk, the

adjacent area of the inner surface of the brush head holder and the head of the screw.

3. In combination, a brush head holder having a handle socket protruding therefrom, a boss at the juncture of the brush head holder and the handle socket defining an annular seat within the brush head holder about the socket, a retainer disk in the seat, a handle having an end in the socket, a screw through the retainer disk threadably engaging the handle end in the socket, a plurality of tufts of bristles having their butt ends in the brush head holder, wedge-like spacer members disposed between the butt ends of the tufts of bristles in the said brush head holder, and a vulcanized rubber composition binding the retainer disk, the screw, the butt ends of the bristle tufts and the spacer members to the inner surface of the brush head holder.

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