

Feb. 14, 1933.

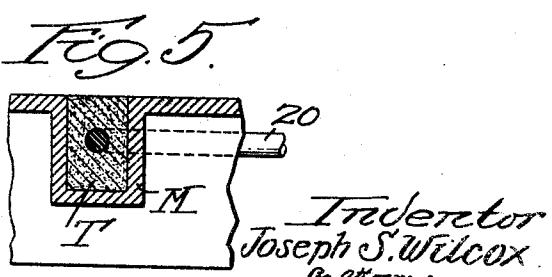
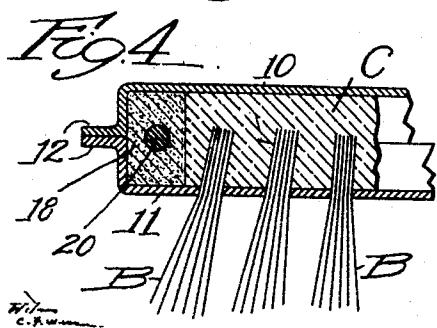
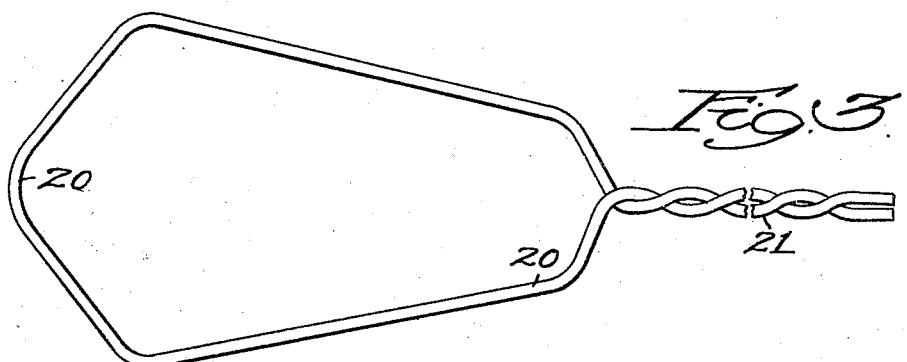
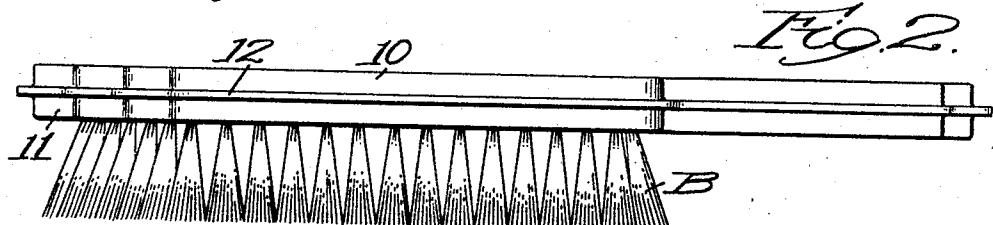
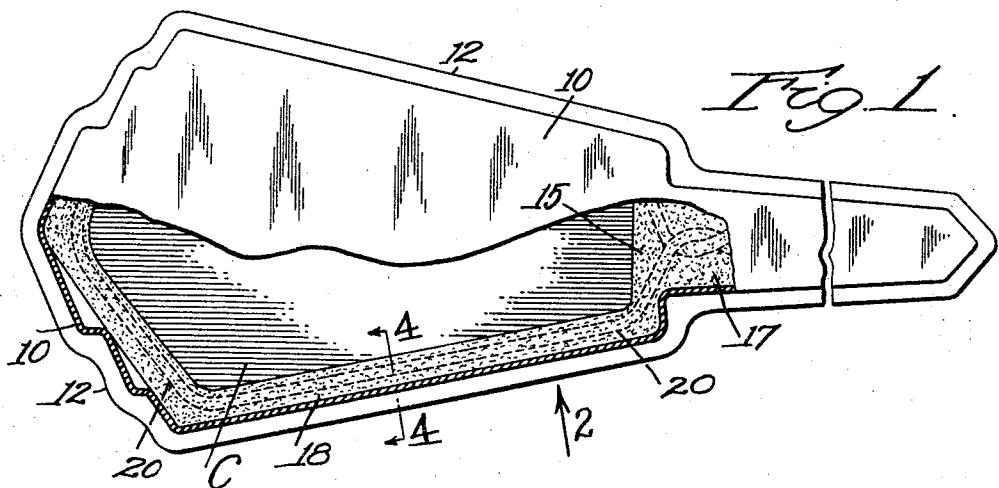
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REINFORCING FRAME MEMBER FOR TOILET ARTICLES

Filed Dec. 29, 1931

2 Sheets-Sheet 1



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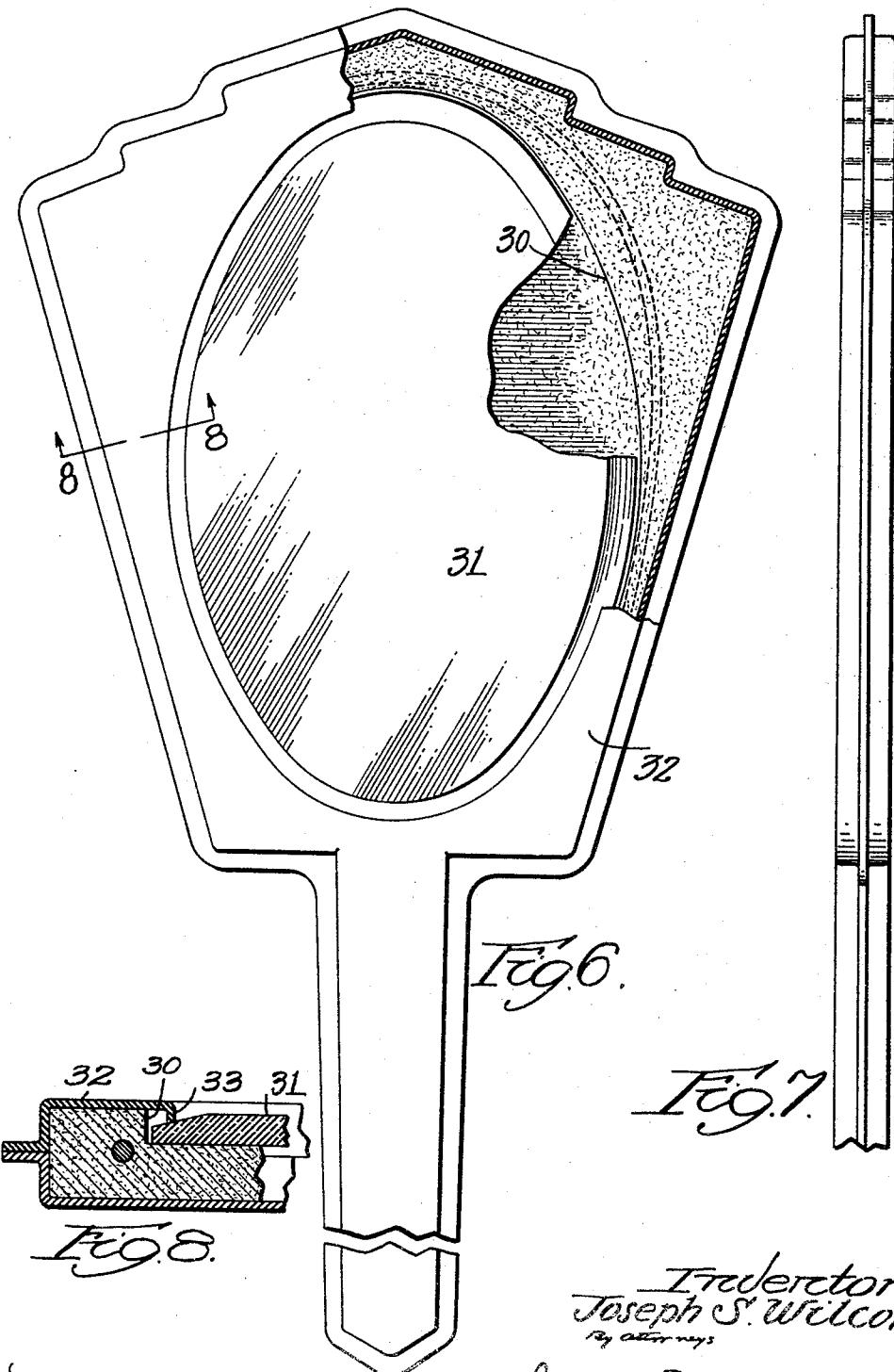
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REINFORCING FRAME MEMBER FOR TOILET ARTICLES

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UNITED STATES PATENT OFFICE

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REINFORCING FRAME MEMBER FOR TOILET ARTICLES

Application filed December 29, 1931. Serial No. 583,765.

This invention relates to toilet articles, such as hair-brushes or mirrors, in which an extended body portion is provided, with an integral handle portion at one end thereof. 5 The frame structure of such toilet articles is commonly enclosed and concealed within a casing of sheet celluloid or other suitable material.

In my prior Patent No. 1,730,702 issued 10 October 9, 1929, I have shown a hair-brush having a reinforcing frame member formed from a single piece of wood, with the central portion cut away to provide a recess for the bristle-holding cement. The use of this reinforcing frame member constituted a 15 marked improvement over the prior practice of filling a closed celluloid casing with liquid cement, but was found somewhat expensive, and it was also found that the light wood frames were rather easily broken.

It is the general object of my present invention to improve the construction shown in my prior patent by providing a reinforcing frame member which may be easily 20 formed, but which is of a more rigid construction than that shown in my prior patent and which is much less subject to breakage during assembly or use.

While my invention possesses special advantages in connection with the manufacture 25 of hair-brushes, it may also be used to advantage in the manufacture of toilet mirrors and other similar toilet articles.

My invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claims.

Two applications of the invention are shown in the drawings, in which 30 Fig. 1 is a plan view, partly in section, of a hair-brush embodying my improvements;

Fig. 2 is a side elevation thereof;

Fig. 3 is a plan view of a reinforcing wire frame;

Fig. 4 is a detail sectional view, taken along the line 4—4 in Fig. 1;

Fig. 5 is a detail sectional view showing the preferred method of holding my improved 50 reinforcing frame member;

Fig. 6 is a plan view, partly in section, of a toilet mirror embodying my improvements;

Fig. 7 is a side elevation thereof, and

Fig. 8 is a detail sectional view, taken along 55 the line 8—8 in Fig. 6.

Referring particularly to Figs. 1 to 5, I have shown a hair-brush having upper and lower casing members 10 and 11, preferably formed from sheet celluloid or other similar 60 material, and molded into any desired or ornamental form. These casing members are commonly provided with outwardly projecting flange portions 12, which are cemented together after the brush is assembled.

A reinforcing frame member 15 is provided within the outer casing, which reinforcing member may comprise a handle portion 17 and a body portion 18 having an open center to receive the inner ends of bristles B (Fig. 4) and also to receive a mass of cement C by which the bristles B are retained in place. The reinforcing frame 15 is preferably formed of some hard-setting plastic material, such as plaster-of-Paris, and is provided with a wire reinforcement 20 embedded therein. This reinforcement 20 preferably consists of a single piece of heavy wire, shaped roughly to the outline of the body portion of the brush, and having the handle portion 21 formed by twisting the wires together, as indicated in Fig. 3.

The reinforcing member 15 may be easily constructed by placing the wire reinforcement 20 in a suitable mold M (Fig. 5) and then filling the mold with a mass of plastic material T. After the plaster is firmly set, the complete reinforcing frame member is removed from the mold and may be placed within a lower casing member 11 of corresponding outline.

The bristles B may then be inserted in the usual manner, and the open central space within the reinforcing member 15 may be filled with any suitable cement C by which the bristles are securely retained. The thickness of the member 15 is preferably substantially equal to the depth of the space between the casing members.

The upper casing member 10 is applied 100

after the cement C has been inserted, and the cementing together of the flanges 12 then completes the construction of the brush.

5 The wire reenforcement 20, being continuous throughout and of substantial cross section, affords a strong and rigid foundation for my improved reenforcing frame member 15, and the plastic material T provides the necessary thickness and body for the reenforcing member and is shaped by the mold M to fit accurately within corresponding casing members 10 and 11.

10 The invention may be readily adapted to different designs by providing a suitable mold M for each desired outline. The wire reenforcement may be readily bent to fit within any selected mold M.

15 In Figs. 6 to 8 I have shown my invention embodied in the structure of a small toilet or hand mirror. In this case, the same wire reenforcement and the same plastic material are used, but the open center is replaced by a recess 30 of the right shape and depth to receive a mirror glass 31.

20 Furthermore, the upper casing member 32 is provided with an open center portion and with an offset inner flange 33 positioned to engage the beveled edge portion of the glass 31 and to firmly retain the glass in position.

25 Otherwise the construction shown in Figs. 6, 7 and 8 is substantially similar to that shown in Figs. 1 to 5 and possesses corresponding advantages.

30 I have provided a reenforcing frame member which is easily constructed in any desired outline, and which is of great rigidity and not liable to breakage, either before or after embodiment in a finished article. The invention is of diminished but substantial value in articles in which the handle portions are omitted.

35 Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:—

40 1. In a toilet article having a casing, a reenforcing frame member separate from but mounted within said casing and having a central recess, said frame member being formed of substantially rigid hardened material and having a wire reenforcement embedded therein and extending continuously around said central recess.

45 2. In a toilet article having a casing with a handle portion, a reenforcing frame member separate from but mounted within said casing and extending into said handle and having a central recess, said frame member being formed of substantially rigid hardened material and having a wire reenforcement embedded therein and extending continuously around said central recess and into said handle portion.

50 3. In a toilet article having a casing with

a handle portion, a reenforcing frame member separate from but mounted within said casing and extending into said handle and having a central recess, said frame member fitting closely adjacent the side walls of said casing and being formed of substantially rigid hardened material, and said frame member having a wire reenforcement embedded therein and extending continuously around said central recess, with the ends of said wire reenforcement extending into and stiffening said handle portion.

55 4. In a toilet article having a casing with a handle portion, a reenforcing frame member mounted within said casing and having a central recess, said frame member being separate from but fitting closely adjacent the side walls of said casing and being formed of substantially rigid hardened material, and said frame member having a wire reenforcement embedded therein and extending continuously around said frame, with the ends of said reenforcing member and said wire extending into and stiffening said handle portion, and the ends of said wire being twisted together in said handle portion.

60 5. In a toilet article having a casing with a handle portion, a reenforcing frame member mounted within said casing and formed of substantially rigid hardened material, said frame member being separate from but having a wire reenforcement embedded therein and extending continuously around said frame member, said frame member and said wire extending into and stiffening said handle portion, and the middle portion of said frame member being open to receive bristle ends and bristle-holding cement within said casing.

65 In testimony whereof I have hereunto affixed my signature.

JOSEPH S. WILCOX.

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