This invention relates to a brush protector and more particularly to a paint brush protector and shaper which will accommodate a brush after use and preserve the brush structure, shape and pliancy.

It is conventional in the painting trade to clean thoroughly a brush once used to prevent oxidation of the exposed paint lest the bristles become hard from the oxidized paint which intimately associates with the bristles. Whether an animal bristle or synthetic bristle brush is used, preservation of the individual bristles for the life of the brush is always desirable. Many master painters, dissatisfied with the devices devised thus far, have drilled a hole through the handle or ferrule and suspend the used brushes with the bristles projecting into a paint solvent or even suspend the bristles of the brush into the paint which will be used on the following day so that the bristles remain pliable. However, merely suspending the unprotected bristles in solvent permits the bristles to spread and ultimately injures the brush setting. To prevent this bristle deterioration and the inevitable loss of brush shape, some painters have found that wrapping the bristles with paper and dipping the wrapped brush into a liquid such as linseed oil enables the bristles to be preserved for a limited time.

Therefore, it is an object of this invention to provide a device which will confine a brush within a chamber of selected brush contour to preserve the bristle shape.

Another object is to provide a brush container which will accommodate a paint brush and a suitable liquid, solvent or paint to keep the brush bristles pliant.

A further object of this invention is to provide a brush protector which is compact, collapsible, and has a stand which will support the protector with liquid therein in an upright position.

Another object of this invention is to provide a brush protector with a collapsible stand which may serve to seal liquid chambers of the protector and thereby facilitate brush storage for extended periods.

A further object of this invention is to provide a brush protector which is simple in operation, easy and inexpensive to manufacture with a minimum of component parts, and durable.

Other objects and advantages of the present invention will become apparent to those skilled in the art from a consideration of the following general and detailed description of one embodiment of the present invention had in conjunction with the accompanying drawings in which the same indicia refer to the same or corresponding parts and wherein:

Fig. 1 is a perspective view illustrating the present invention in an upright position and showing a brush in position;

Fig. 2 is a side view, partially in section, and slightly enlarged of the brush protector with a paint brush in situ;

Fig. 3 is a top view of the brush protector illustrated in Fig. 1 and showing the details of the side pockets and the orientation of the brush in the central chamber;

Fig. 4 is an enlarged partial detailed view of the collapsible side pocket and chamber side wall.

Referring to the accompanying figures of the drawing and more particularly to Fig. 1 wherein there is illustrated a device constructed in accordance with the present invention and broadly described as comprising a central brush receiving chamber 10 with appending collapsible covered liquid-containing side pockets 12 and 14 which are pivotally connected to the chamber 10, and a pivotable stand 16 to support the device in an upright position or which is adaptable to seal the side pockets when the stand is pivoted to the alternate position as illustrated in the dot-dash lines in Fig. 2.

The central brush receiving chamber 10 is made with side walls 18 sufficiently wide to accommodate conventional brush widths. Each side wall 18 has a perforated portion 20 intermediate the ends of the side walls 18 to permit ready infiltration of the liquid 19 suitable for the desired action on the brush bristles forming part of brush 16. The receiving chamber 10 is substantially wedge shaped in cross section and at the apex of the wedge is a hinge 24 to permit the central chamber to be opened completely as illustrated in the dot-dash lines in Fig. 2.

To facilitate cleaning the chamber 10 after the brush has been removed chamber 10 may be opened on hinge 24, and such opening also permits the brush 22 to be placed flat against one side wall. In such operations the bristles 23 may be compressed as the side walls 18 are brought to the upright position as shown in Figs. 1 and 2. The end walls 26 are divided into two sections to facilitate separation and opening of the chamber 10 by permitting one section to slide and nest within the other section.

Disposed from each side wall 18 are side pockets 28 and 30 formed by side plates 32 and 34 which are pivotally connected to the side walls 18 by hinges 36. The hinged side plates 32 and 34 are securely located intermediate the ends of the side walls on the exterior part of the brush chamber and below the perforated section in the side wall 18. The volume of the triangular shaped side pockets 28 and 30 is limited by the prolongated side plates which have a projection 38 extending beyond the hinges 36 to buttress against the side walls 18. Integral with the side plates 32 and 34 are triangular end sections 40 and 42 which project into the brush chamber 10 through elongated apertures or slots 44 in the chamber side walls 18. The edges of the triangular end sections may be upset or a piece of flat stock welded thereon to form an enlarged 7 ribs 46, best illustrated in Fig. 4, to buttress against the internal portion of the side wall 18 as the side pockets are spaced to the open position to receive the solvent, paint or other liquid media suitable to preserve the brush bristles 23.

A flap or cover 48 pivotally affixed on each side pocket protects the cleaning solvent from evaporation and also, where paint is used, oxidation is appreciably retarded for extended periods. As an alternative for the liquid placed in the side pockets, any suitable absorbent material, such as cottonwaste, may be saturated with a solvent such as linseed oil and the wadding will prevent spilling and permit infiltration and absorption by the bristles 23 through the perforations in the side walls. The covers 48 are designed to be raised, as illustrated in the dot-dash line position of Fig. 2 when the device is opened for use. However, to provide compactness in storage the covers 48 may be made to fold into a side pocket 28 or 30 by slightly springing the respective side plate outwardly and then depressing the cover so that the cover lip 50 will clear the side wall and will lie flat against the side wall 18, as shown in Fig. 4. The cover hinge 52 has a prolonged hinge pin 54 which is offset intermediate the ends of the cover 48 and free to rotate in the recess 55 in side wall 18. The hinge pin 54 is bent at the ends to
form hook-like members 57 which pass transversely across the brush chamber to releasably engage with the eyelets 56 on the opposite side walls from the hinge position.

The hook-like members 57 may be modified to increase or decrease the opening in the chamber 10 to afford sufficient pressure of the side wall against the bristles 23.

Disposed intermediate the ends of the side walls 18 and laterally beyond the side plates of the side pockets are brackets 56 secured as by welding to the side walls 18 from pivotally a wire stand 60 which will permit the protector to stand in an upright position as the stand butresses against projecting pegs 62 secured to the side plate of the side pockets, as illustrated in Fig. 1. However, the stand 60 will serve another purpose when the stand on each side of the protector is rotated so that the cover 45 is engaged by the stand to lock securely the cover against the side pocket, thereby facilitating storage and portability without excessive spillage, as shown in the dot-dash line of Fig. 2. Slightly springing the wire stand 60 will permit rotation of the stand beyond the projecting pegs 62.

To assure that liquid seepage is kept to a minimum the entire assembly may be provided wherever necessary with liquid seals or gaskets at the junction of the various components. Chamber seal 64 at the apex of the wedge 14 will be compressed as the side walls are substantially vertical so the brush 22 may be provided with a ferrule, seal or gasket 65, or this seal may be affixed within the chamber 10 at the desired position. Side plate gasket 65 serves to prevent seepage between the side walls 18 and at the prolongation of the side plates 32 and 34. Edge gasket 70 on the T ribbed end sections of the side pockets within the chamber 10 assures against seepage through the elongated apertures 44 in the side walls 18. The split end walls 26 being divided into two sections 35 slide relative to one another are provided with gasket 72. The gasket material desirable may be either rubber, neoprene, nitrile, or similar material or combination thereof which will be impervious to liquid seepage.

Although the operation of the several parts of the paint brush protector has been described in detail above it is believed desirable to summarize the operation of the device in its entirety. After the brush has been used the excess paint may be removed and the protector opened to receive the brush by spreading the side walls 18, as in Fig. 2, in the dot-dash lines, and then placing the brush with the bristles 23 flat against the interior of the side walls 18 and then bringing the side walls together. By adjusting the hook-like members 54 to obtain suitable bristle compression and suitably placing the hooks into eyelets 56 the covers 40 will be pivoted out of the side pockets and the T ribs will be forced outwardly to form the side pockets. The stand may be placed in the upright position but, of course, this is optional with the operator. Suitable solvents, cleaners or paint may be poured into the side pockets and will then pass through the perforated side walls into the central chamber 10 to come into intimate contact with the brush bristles 23. By rotation of the stand the covers 40 may be securely retained to prevent undue liquid loss.

From the foregoing description it is readily apparent that the protector constructed in accordance with our invention is particularly well suited for the intended purposes, by reason of the convenience and facility with which it may be operated. Obviously, many modifications and variations of the present invention are possible in light of the above disclosure. It is therefore to be understood that within the scope of the appended claims the invention may be practiced otherwise than as specifically described.

What we desire to claim and secure by Letters Patent is:

1. A paint brush protector and shaper comprising a central brush receiving chamber substantially wedge shaped in cross section, said chamber having two opposite side walls with perforations and elongated slots therein, each side wall having end flanges sliding relative to opposite side wall end flanges to accommodate a paint brush, a hinge connection at the apex of the wedge shaped chamber to permit the chamber to be opened to the desired position, sealing means extending across the hinge connection to retain liquid in the brush chamber, collapsible side pockets in liquid communication with the central brush receiving chamber through said perforations in the side walls and respectively pivotally connected to the exterior of the respective chamber side walls, said collapsible side pockets having end walls slidable within the elongated slots in the side walls of said central chamber, a pivotable cover on each pocket, sealing means on the pocket end walls and engageable with the chamber side walls to prevent liquid seepage therebetween, a hinged clamp carried on each chamber side wall and cooperatively engaging each pocket cover and the central chamber side wall opposite to the engaged cover to lift and support the cover from out of the pocket and to define the wedge shaped chamber, and supporting stand members respectively pivotally connected to the respective central chamber side walls to support and engageable with the pockets when in their supporting position to serve as a stand for the protector, said supporting stand members adapted to be pivoted upwardly over the respective pocket cover to serve as a clamp to lock the pocket covers in place when the brush is to be transported.

2. A paint brush protector and shaper comprising a collapsible brush receiving chamber, said chamber having perforated side walls pivotally connected together, each side wall having elongated slots therein and end flanges which overlap and slide relative to each other, collapsible side pockets respectively hingedly connected to the respective side walls of said chamber and in liquid communication with the chamber through the perforated walls thereof to permit liquid seepage from said pockets to the chamber, said pockets having end portions slidable in the slots of said chamber side walls and sealing means engageable between the chamber side walls and between the pockets and the chamber side walls when the chamber side walls and the pockets are expanded whereby to prevent liquid drainage from the protector.

3. A paint brush protector and shaper as defined in claim 2, and collapsible support stand means pivotally connected to the central chamber side walls and engageable with the pockets to normally retain them in the expanded and sealed positions upon the chamber side walls when supporting the brush protector and shaper in its upright position.

4. A paint brush protector and shaper comprising a collapsible brush receiving chamber, said chamber having perforated side walls pivotally connected together with end flanges which overlap and slide relative to each other and adjust the size of the brush, collapsible side pockets respectively hingedly connected to the respective side walls of said chamber and in liquid communication with said chamber through the perforated side walls to permit liquid seepage from the pockets to the chamber, a pivotable cover on each side pocket to reduce the evaporation of the liquid from said pockets and sealing means extending across the bottoms and along the ends of the chamber and the pockets to prevent liquid drainage therefrom.

5. A paint brush protector and shaper comprising a collapsible central brush receiving chamber substantially wedge shaped in cross section, said chamber having a perforated side wall with elongated slots therein, a collapsible liquid retaining side pocket having end portions slidably retained in said elongated slots of the side wall, a cover for the pocket carried on the side wall adapted to extend over the pocket, when the pocket is in its expanded position, to retard liquid evaporation, sealing means extending across the bottoms and along the ends of the chamber and the pockets to prevent liquid seepage therefrom and collapsible means on the chamber for supporting the protector in an upright position.
6. A paint brush protector and shaper comprising a central brush receiving chamber substantially wedge shaped in cross section, said chamber having perforated side walls with elongated slots therein, collapsible liquid retaining side pockets hingedly connected to the perforated side walls of the chamber and in liquid communication therewith, collapsible covers for said side pockets hingedly connected to the chamber side walls and adapted to extend over the side pockets, when in their expanded positions to retard liquid evaporation, and sealing means extending between the pockets and the chamber side walls when the pockets are expanded to prevent liquid seepage from the pockets.

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