

July 28, 1953

A. W. YENNE

2,646,808

PAINTBRUSH CONTAINER HAVING CLEANING FLUID THEREIN

Filed May 17, 1949

3 Sheets-Sheet 1

Fig. 1

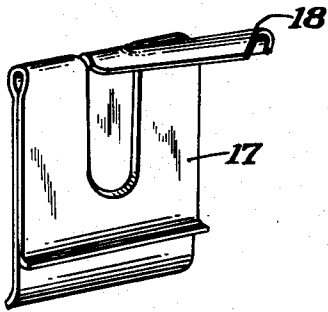
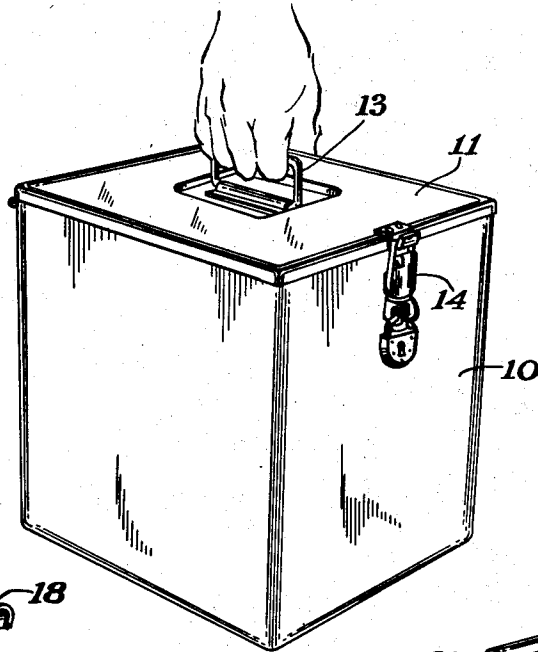


Fig. 8

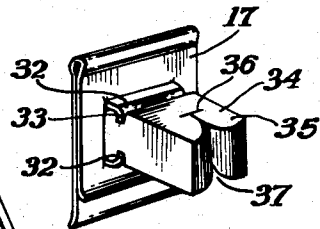
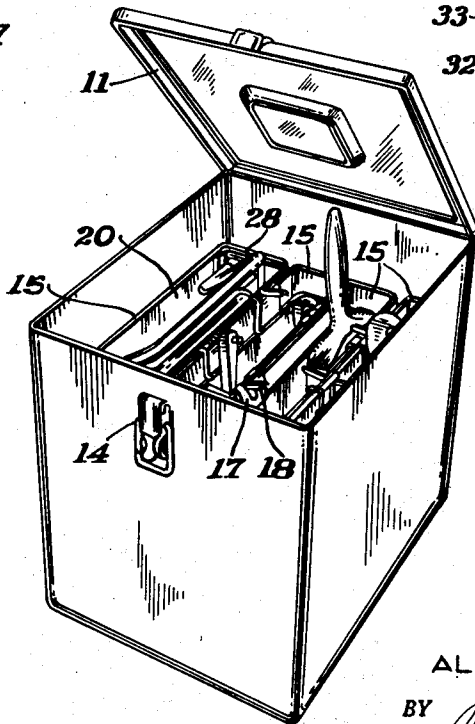


Fig. 13

Fig. 2



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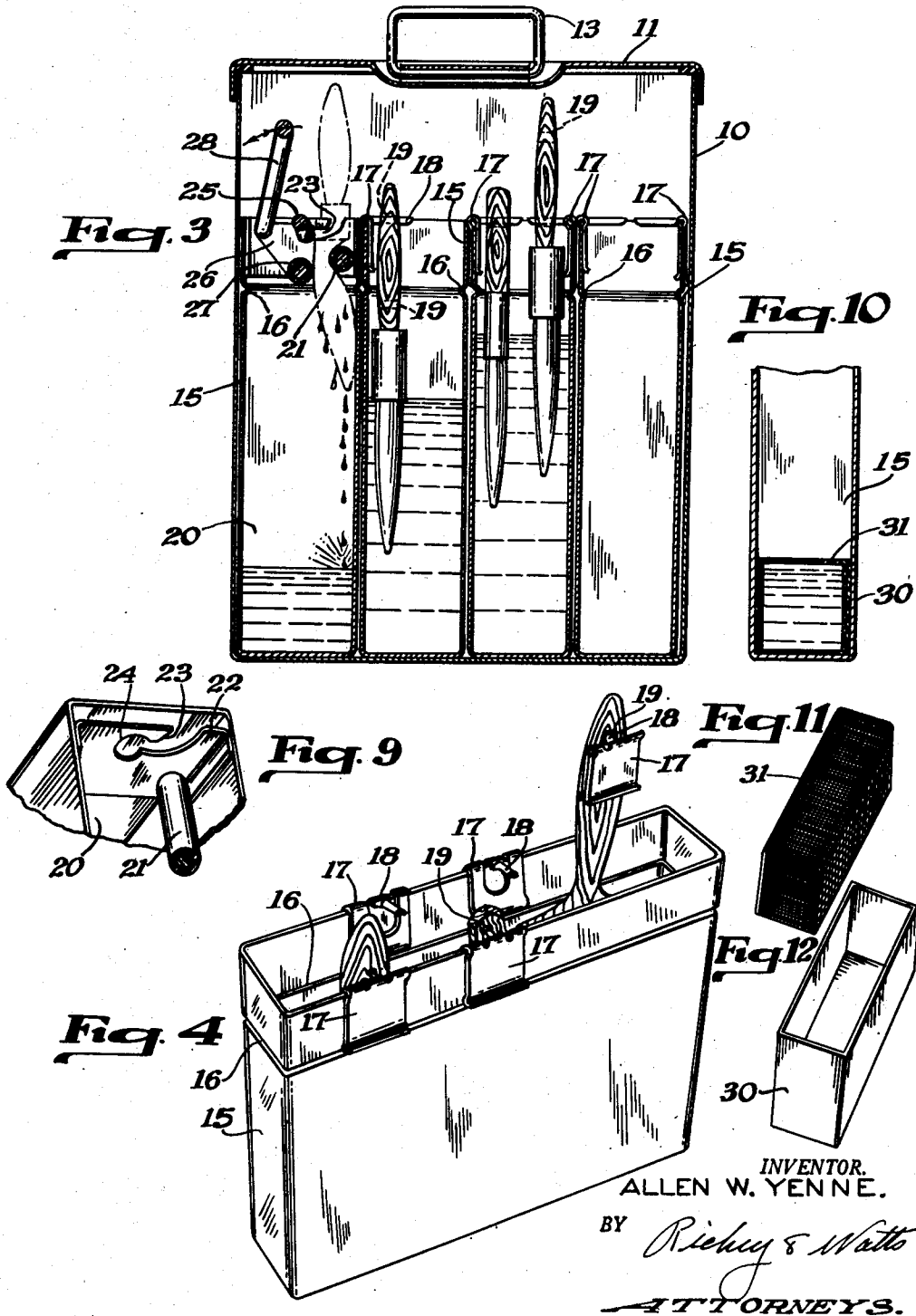
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Fig. 5

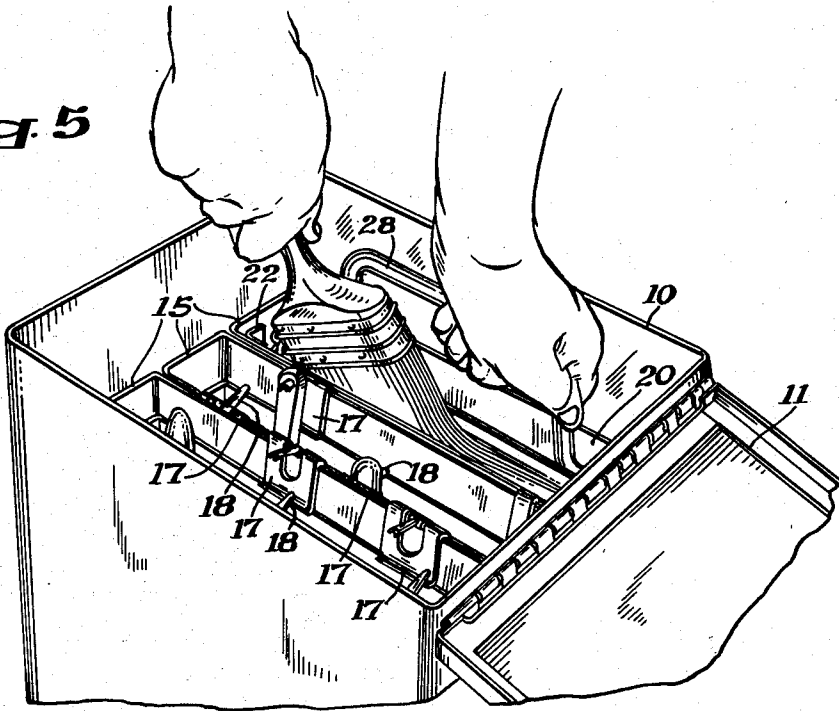


Fig. 6

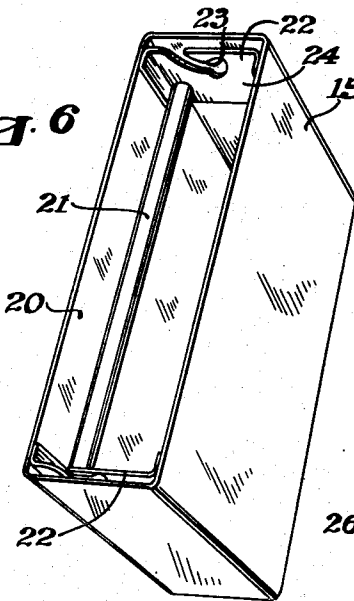
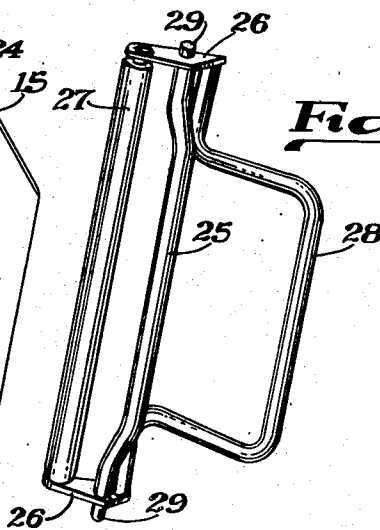


Fig. 7



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2,646,808

PAINTBRUSH CONTAINER HAVING CLEANING FLUID THEREIN

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Application May 17, 1949, Serial No. 93,723

3 Claims. (Cl. 134—92)

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This invention relates to containers for cleaning and storing used paint brushes and is directed more specifically to improvements in the structure of the apparatus disclosed in my prior patent, No. 2,043,643, dated June 3, 1936.

One of the objects of the invention is to provide a paint brush container embodying a plurality of similar tanks designed to accommodate the suspension of a number of used brushes in a fluidic paint solvent therein and further designed to facilitate the ready removal of the tanks from the container so that the paint-laden brushes of each color and the tank within which they are immersed may be carried to the location in which they are to be used.

Another object of the invention is to provide a brush-holding clip which is constructed for ready attachment to the tank or removal therefrom and adjustments compensatory of brushes of different size or shape.

Another object of the invention is to provide a brush-cleaning unit which comprises a tank for a fluidic paint solvent, a wringer embodying a fixed roller disposed to facilitate ready access to the tank, and a self-contained roller and crank assembly which is designed for removal from the tank with ease and dispatch.

Another object of the invention is to provide a cover for the container or tank carrier which is constructed with a fluid-tight sealing element therein.

Another object of the invention is to provide a structure which will accommodate the ready removal of the tanks from the container for the purpose of cleaning and to further the cleaning operation through the provision of expendable sediment cups in the tanks.

Another object of the invention is to provide a screen in the lower portion of each tank to maintain the separation of the fluid and sediment therein and also dampen the splashing action of the fluid.

Further objects of the invention reside in the provision of a portable brush-carrying and -cleaning device which is light in weight, sturdy of structure, economic of manufacture, and adapted to facilitate the agroupment of brushes in individual containers having the requisite type and volume of solvent, oil, or other material impermeable to air.

Other objects and advantages more or less ancillary to the foregoing, and the manner in which all the various objects are realized, will appear in the following description, which, considered in connection with the accompanying drawings, sets forth the preferred embodiment of the invention.

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Referring to the drawings:

Fig. 1 is a view in perspective of the improved carrying case or container;

Fig. 2 is a perspective of the case shown in Fig. 1 with the lid illustrated in an elevated position;

Fig. 3 is a vertical sectional view of the improved container;

Fig. 4 is a view in perspective of one of the solvent tanks;

Fig. 5 is a perspective of the container illustrating the brush-cleaning tank and the manner of operation of the wringer;

Fig. 6 is a view in perspective of the brush-cleaning tank;

Fig. 7 is a perspective of one of the wringer rollers and the operating lever therefor;

Fig. 8 is a perspective of one of the brush-supporting clips;

Fig. 9 is a perspective of a fragmentary portion of the brush-cleaning tank;

Fig. 10 is a vertical section through one of the tanks illustrating the position of the sediment cup;

Fig. 11 is a view in perspective of the screen for separating the sediment from the fluidic material in the tank;

Fig. 12 is a view in perspective of the cup; and

Fig. 13 is a view in perspective of a brush holder of a modified form.

Referring first to Fig. 1, the container comprises a prismatic sheet metal box 10 having a hinged lid 11 thereon which is formed with a pocket in the central portion thereof for the reception of a folding handle 13. The lid is provided with a deformable sealing strip, and a hasp or trunk lock 14 to facilitate the retention thereof.

Within the box or container 10 there is a plurality of removable tanks 15 disposed for sliding engagement with the side walls of the container and slightly separated from each other. The container is greater in height than the tanks in order to provide clearance for the handles of the larger brushes stored therein and the upper ends of the tanks are preferably formed with a bead 16 or folded end portion to assure rigidity.

The brushes are suspended in the tanks by clips, each comprising a sheet metal strap folded upon itself to form a spring clamp 17 adapted for frictional engagement with the top of the tank. One of the arms of the clamp is pierced and die-struck to form a pintle 18 preferably of arcuate transverse section and bent slightly upward from the line of the fold in the clamp (Fig. 8). The brush handles are drilled for en-

gagement with the pintles 18, the hole or holes 19 therein being disposed to effect the suspension of the brush with the bristles immersed in the turpentine, oil, or other fluid used to preserve the ductility of the fibers. As will be seen in Fig. 3, the clips may be mounted on both side walls of the tank, the number and spacing thereof depending upon the width of the brushes to be suspended in each of the respective tanks.

One of the tanks, such as the chamber 20, may be equipped with a wringer assembly and used as a brush-cleaning unit. As illustrated in Fig. 3, the chamber 20, which may be slightly wider than the other tanks, is provided with a roller 21 in the upper end thereof which is supported on cross bars 22 disposed in spaced relation with the respective end walls of the tank. The bars 22 are formed with slots 23 in the upper edge thereof which terminate in a circular opening 24 constituting journal bearings for a fulcrum rod 25 mounted in the wringer sub-assembly shown in Fig. 7. The sub-assembly includes a pair of plates or crank arms 26, a roller 27 journaled therein, the fulcrum rod 25, which is disposed in spaced relation with the roller, and a lever 28, which welded or otherwise affixed to the plates and spaced from the fulcrum 25 and roller 27. In operation the distended portions of the fulcrum rod or pintles 29 are dropped into the slots 23 and the wringer sub-assembly, then moved downward and laterally until the pintles are sealed in the openings 24. The lever 28 is next rocked inwardly until the center-to-center distance between the rollers 21 and 27 admits the entry of the brush being cleaned. The lever is next rocked in the opposite direction until the roller 27 engages the brush fibers; then, while continuing such movement under the desired application of pressure, withdrawing the brush (Fig. 5). The contemplated practice in this operation is to rinse the brush in an extraneous vessel of solvent and remove the excess fluid with the wringer catching the residue in the tank. If desired, however, the chamber 20 may be partially filled with the solvent and the cleaning operation carried out by repeated rinsing and wringing operations in the same tank.

The tanks 15 and the chamber 20 may be provided with cups 30 constructed for snug engagement with the side walls of the lower portion of the tanks and designed for the retention of the solid matter or sediment separated from the fluid. The cups are preferably made from paper or a similar inexpensive material that may be discarded when the tanks are cleaned. The cups are covered with wire mesh lids 31 formed for telescopic engagement with the paper cup and provided for the dual purpose of maintaining the separation of the sediment from the fluid in the tank and of dampening the movement of the fluid when the container is in transit.

The clip or holder illustrated in Fig. 13 is designed for the support of brushes of the type that are formed with handles that are too small to drill, for example, an artist's brush; however, the holder may be used for other brushes where it is impractical or undesirable to pierce the handle. In this embodiment the clip 17 is substantially the same as that heretofore described save that the inner arm thereof is die-struck and formed with a pair of laterally disposed flanges 32 having intumed lips 33 in their outer ends. The brush retainer comprises a substantially rectangular block 34 of sponge rubber or a similar

material which is split throughout the major portion of the medial axis 35 thereof and also formed with a short transverse kerf 36 normal to the axis 35 and in or adjacent the center of the block. The outer end of the block is formed with a notch 37 terminating in the axial slot 35 to accommodate the ready entry of the brush handle as it is forced between the yieldable furcations of the block. The block is supported by the flanges 32 which are bent inwardly during assembly with lips 33 imbedded in the soft yieldable material of the block.

Although the foregoing description is necessarily of a detailed character, in order that the invention may be completely set forth, it is to be understood that the specific terminology is not intended to be restrictive or confining, and that various rearrangements of parts and modifications of detail may be resorted to without departing from the scope or spirit of the invention as herein claimed.

I claim:

1. A container for used paint brushes comprising a carrying case, a hinged lid thereon, means comprising a deformable strip mounted on the lid for sealing the joint between the lid and the body of the carrying case, a plurality of removable open-ended tanks in said case adapted to contain a fluid, a wringer for squeezing fluid from the bristles in a brush incorporated in one of said tanks and removable clips each comprising a U-shaped plate engaged with the upper edges of said tanks for the suspension of brushes in the fluid.

2. A container for used paint brushes comprising a portable box, a plurality of removable tanks therein for the reception of a fluid, a wringer in one of said tanks, said wringer comprising a roller journaled in the upper portion of the tank, a pair of crank arms, a second roller journaled in one end thereof, a lever affixed to the opposed end thereof, trunnions intermediate said second roller and said lever and journal bearings in said tank formed to accommodate the entry and removal of said trunnions.

3. A container for used paint brushes comprising a portable box, a plurality of removable tanks therein for the reception of a fluid, a wringer in one of said tanks, said wringer comprising cross bars having slots thereon disposed in spaced relation with the end walls of said tank, a roller journaled between said cross bars, crank arms adjacent said bars, a roller journaled between said arms, a lever affixed to the opposed ends of said arms and trunnions intermediate said lever and the last-named roller for removable engagement with the slots in said cross bars.

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