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J. S. OSLER

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POROUS TRAYS FOR ARTISTS' COLORS

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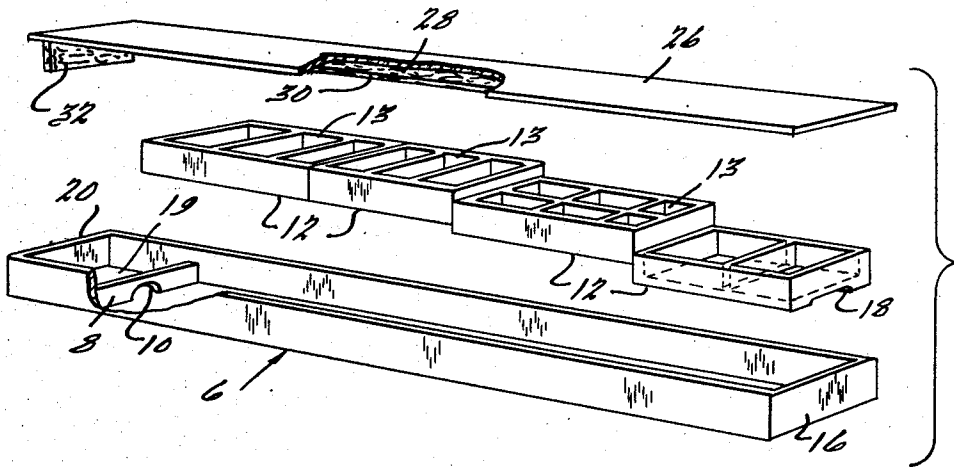


FIG. 1.

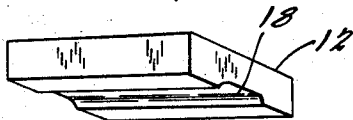


FIG. 2.

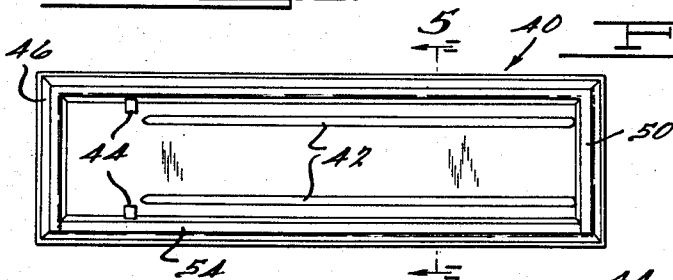


FIG. 4.

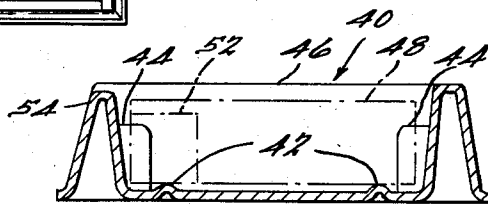


FIG. 5.

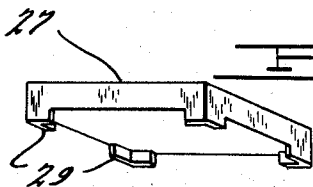


FIG. 3.

INVENTOR.

John S. Osler.

BY

Harnes, Dickey + Peiris
ATTORNEYS.

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POROUS TRAYS FOR ARTISTS' COLORS

John S. Osler, Birmingham, Mich.

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3 Claims. (Cl. 41—4)

The present invention relates to trays for artists' colors and more particularly to trays formed of unglazed, porous, ceramic material which will absorb a liquid to prevent the colors from drying out.

The present invention is comprised of a reservoir body in which a plurality of unglazed, porous, ceramic trays are longitudinally disposed. The trays may be divided into compartments to accommodate different colors and are disposed in the reservoir body in a manner to permit a liquid to flow beneath each of the porous trays to be absorbed through the bottoms thereof. A suitable lid lined with absorbent material on the underside thereof is provided to cover the entire assembly. A wick is provided at one end of the absorbent material to extend into the liquid at one end of the reservoir body to maintain the absorbent material in a moist condition. The end of the reservoir body in which the wick extends can be filled with liquid to a greater height than the space beneath the bottoms of the porous trays to assure that the liquid will always be in contact with the bottoms of the trays.

Under this arrangement, the unglazed, porous, ceramic trays absorb the liquid to retard the drying out of the paints during use and the absorbent material with its cooperating wick provides additional means for absorbing moisture to offset the evaporation of moisture from the colors.

Some examples of artists' colors with which the present invention may be used are transparent water colors, tempera colors, gouache colors and oil paints. When the first three colors are employed, the liquid used in the reservoir would be water and when oil paints are used the liquid would be turpentine. Of course, these are given by way of example only and it is not intended that the present invention be limited to these colors with water or turpentine as the liquid.

Therefore, it is an object of this invention to provide trays for artists' colors which maintain the colors in a moistened condition during use.

It is another object of the present invention to provide trays for artists' colors which, together with a special cover, offset the evaporation of moisture from colors disposed in the trays.

Other objects and features of novelty of the present invention will become apparent when referring, for a better understanding of the invention, to the accompanying drawings, wherein:

Fig. 1 is an exploded isometric view of the tray assembly of the present invention;

Fig. 2 is a perspective view of the underside of one of the trays of the present invention;

Fig. 3 is a perspective view of another embodiment of the underside of one of the trays of the present invention;

Fig. 4 is a plan view of another embodiment of the present invention illustrated on a reduced scale; and

Fig. 5 is an enlarged cross-sectional view taken along the line 5—5 of Fig. 4.

Referring to Figs. 1 and 2, the present invention is

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comprised of a reservoir body 6 having a partition 8 near one end thereof and porous trays 12 disposed therein. Each of the trays 12 is partitioned so that they are divided into a plurality of compartments 13 for holding various colored paints and each tray is dimensioned so that together they will occupy the entire space within the reservoir body 6 between the partition 8 and end 16.

Each of the trays 12 has a wide groove 18 disposed across the bottom thereof which is aligned with adjacent grooves to provide one long continuous groove which communicates with an aperture 10 when the trays 12 are disposed within the reservoir body 6. A reservoir 19 formed by the partition 8 and end 20 of the reservoir body may then be filled with liquid which will flow through the aperture 10 and fill the space defined by each of the grooves 18 and the bottom of the reservoir body 6.

Fig. 3 illustrates a third construction for elevating the bottoms of the trays 12. In this embodiment, each tray 27 has a plurality of legs 29 which elevate the bottoms of the trays so that water may pass through the aperture 10 and flow freely beneath each of the trays. Of course, in this embodiment, the over-all height of the trays would be the same as the over-all height of the trays illustrated in Figs. 1 and 2.

Referring to Fig. 1, a special cover 26 is illustrated having an absorbent material 28, such as sponge rubber, secured to the underside thereof. The edges 30 of the absorbent material 28 serve to position the cover 26 relative to the reservoir body 6 by fitting snugly within the walls of the body 6. Also when the cover 26 is in position, it will be seen that the absorbent material 28 will extend below the upper edge of the reservoir body 6. Therefore, the trays 12 are necessarily of less height than the sides of the reservoir body 6 to accommodate the absorbent material.

A wick 32 is made of similar material as the absorbent material 28 and is suspended from one end of the absorbent material so that it will be immersed in the liquid in the reservoir 19 when the cover 26 is in position over the reservoir body 6. In this manner, the wick functions to supply liquid to the absorbent material 28 to maintain it in a moist condition.

When the paints in the compartments 13 are being used, liquid in the reservoir body 6 will be transmitted through the porous trays 12 to the paints to compensate for the moisture which is removed from the paints by evaporation. When the paints are stored over-night, the cover 26 is positioned so that the moisture laden absorbent material 28 overlies the compartments 13 to supplement the moisture transmitted through the porous trays. Experience has proved that when moisture is transmitted to the paints by the porous trays of the present invention, the paints will not dry out for several days whereas in the past they dried out in several hours.

Referring to Figs. 4 and 5, another embodiment of the present invention is shown comprising a reservoir body 40 which may be formed of sheet steel, plastic, or other suitable materials having parallel projections 42 formed in the bottom thereof and stops 44 formed in the sides thereof adjacent end 46. The trays 48, shown in dotted fashion, have flat bottoms which rest upon the parallel projections 42 so that they are raised from the bottom of the reservoir body 40 to permit liquid to flow beneath them and are prevented from moving longitudinally by the stops 44 and end 50 of the reservoir body. As before, the space between the stops 44 and the end 46 defines a reservoir chamber into which the wick 32 may extend. The trays 48 may be provided with a narrow shelf 52 upon which the paint brush may be dabbed after being dipped into the colors. It will also be observed that side 54 of the reservoir body is shorter than the other three sides. With this construction, sides

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30 of the absorbent material 28 would fit within the other three sides of the reservoir body 40 but would rest upon the shorter side 54. Of course, if desired, the side 54 could be made the same height as the remaining side and the absorbent material 28 could be dimensioned to fit snugly within the four sides.

One satisfactory material for the porous trays of the present invention is an unglazed, porous, ceramic having the following chemical analysis given in terms of percentages by weight:

SiO ₂ -----	63.51
Al ₂ O ₃ -----	25.35
Fe ₂ O ₃ -----	.65
CaO -----	1.26
MgO -----	7.97
Na ₂ O -----	.18
K ₂ O -----	.24
TiO ₂ -----	.82
ZrO ₂ -----	.01
	99.99

This material is a product of the Electrical Refractories Co. of East Palestine, Ohio and is designated by their code symbol K-9. It is a powder-fine mixture which is conventionally fired at 2400° F. in a tunnel kiln to produce the trays 12 of the present invention. Of course, other ceramics, metal compacts, or the like, would be equally satisfactory materials for the trays 12 provided that they have interconnected interstices to enable liquid to be transmitted therethrough by means of capillary attraction. The only other requirement is that the material should have a porosity which will transmit sufficient moisture to the paints but will not permit flooding of the paints by the absorbed water or defusion of the paints downwardly through the material.

What is claimed is:

1. A tray assembly for artists' paints comprising a reservoir body for holding a liquid, a porous paint tray for holding paints disposed within said body with at least a portion of the exterior surface thereof in a position to be contacted by a liquid disposed within said reservoir body, said paint tray having a plurality of recesses in the upper surface thereof forming separate paint wells individually adapted to hold separated portions of differently colored paint, said paint tray having a porosity which will enable a liquid disposed within said reservoir body to pass therethrough by capillary attraction while retaining the paints in their individual paint wells whereby paints disposed within the paint wells will be maintained in a moist condition by a liquid absorbed by the porous tray, a cover in abutting relationship with the top of said reservoir body, an absorbent material secured to the underside of said cover in position to overlie said paint tray, and a wick depending from one end of said absorbent material and adapted to extend into the liquid disposed within said reservoir body to transmit moisture to the absorbent material.

2. A tray assembly for artists' paints comprising a reservoir body for holding a liquid, a plurality of porous paint trays for holding paints disposed within said body, said paint trays having a plurality of recesses in the upper surface thereof forming separate paint wells individually adapted to hold separated portions of differently colored paint, each of said trays having at least a portion of

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the underside thereof relieved from the bottom of said reservoir body to define a space therebetween, and means for providing communication between each of said spaces, said paint trays having a porosity which will enable a liquid disposed within said spaces to pass therethrough by capillary attraction while retaining the paints in their individual paint wells whereby paints disposed within the paint wells will be maintained in a moist condition by a liquid absorbed by the porous paint trays, a cover in abutting relationship with the top of said reservoir body, an absorbent material secured to the underside of said cover in position to overlie said paint trays, and a wick depending from one end of said absorbent material and adapted to extend into the liquid disposed within said reservoir body to transmit moisture to the absorbent material.

3. A tray assembly for artists' paints comprising a reservoir body having an elongated rectangular bottom panel and four side panels for holding a liquid, a transverse partition disposed within said reservoir body near one end of the body and having an aperture in the lower edge thereof, and a plurality of porous paint trays disposed within said reservoir body between said partition and the other end of said body, each of said trays having at least a portion of the underside thereof spaced from the bottom of said body to define a space therebetween, means for providing communication between each of said spaces and between the space adjacent said partition and said aperture in the partition, said paint trays having a plurality of recesses in the upper surface thereof forming separate paint wells individually adapted to hold separated portions of differently colored paint, said paint trays having a porosity which will enable a liquid disposed within said spaces to pass therethrough by capillary attraction while retaining the paints in their individual paint wells whereby paints disposed within the paint wells will be maintained in a moist condition by a liquid which can flow from the portion of the reservoir body between said partition and said one end of said body through said aperture in the partition and into said spaces where it can be absorbed by the porous paint trays, a cover in abutting relationship with the upper edges of said side panels of the reservoir body, an absorbent material secured to the underside of said cover in position to overlie said trays, and a wick depending from the end of said absorbent material, adjacent said one end of the reservoir body and adapted to extend into the liquid disposed within the portion of the reservoir body between said partition and said one end of the body to transmit moisture to the absorbent material.

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