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H. A. WALSH

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STORAGE RACK FOR VESSEL CONTAINING UNSTABLE MATERIAL

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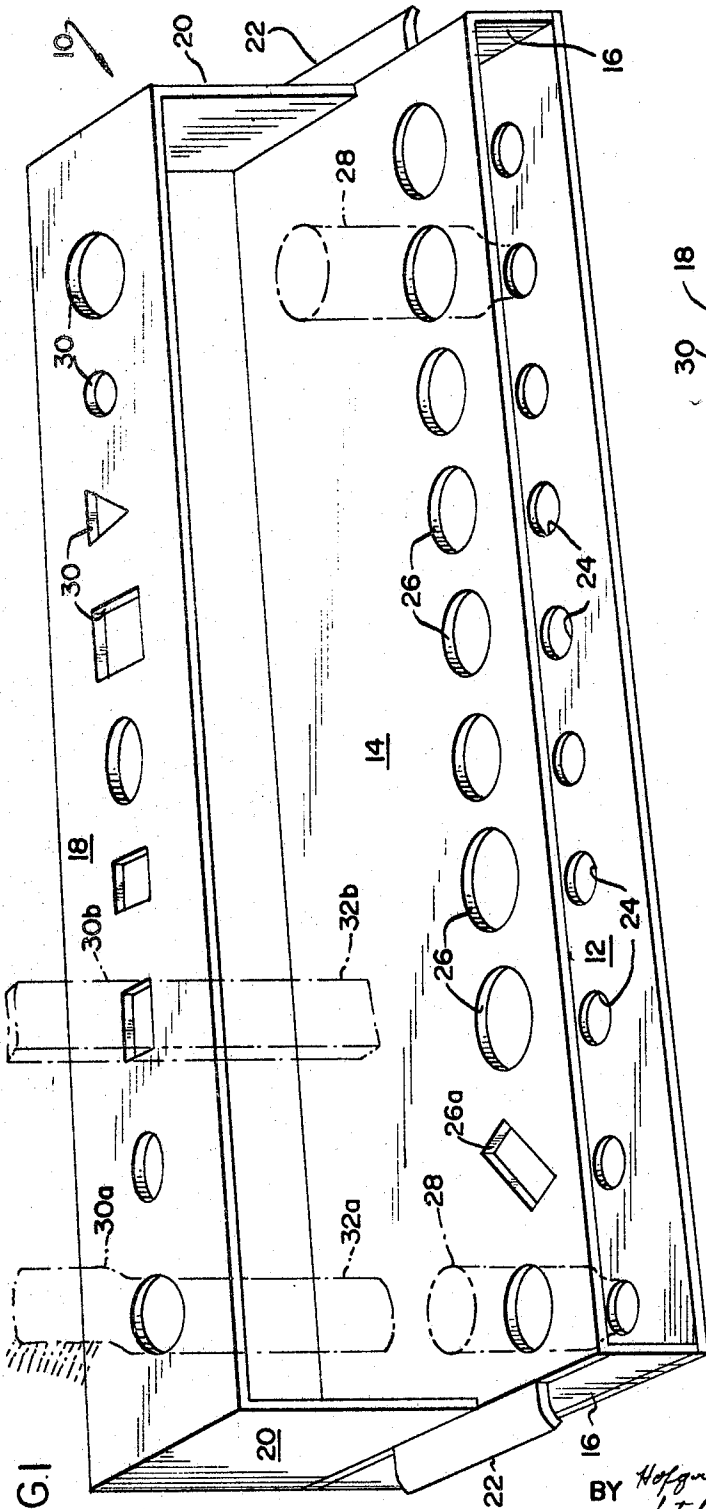


FIG. 1

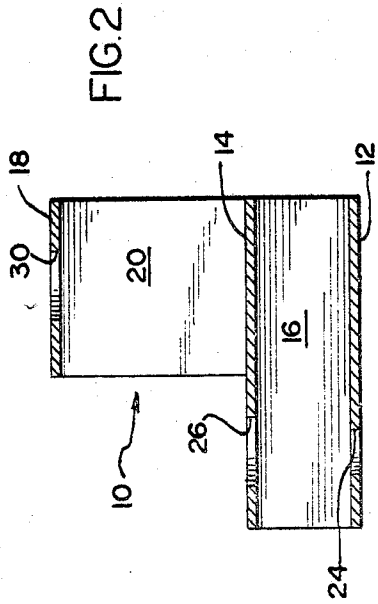


FIG. 2

INVENTOR
HELEN A. WALSH
BY *Hofgren, Wegner, Allen,
Stillman & McCord.*
ATTORNEYS.

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STORAGE RACK FOR VESSEL CONTAINING UNSTABLE MATERIAL

Helen A. Walsh, 4447 Howard St., Skokie, Ill. 60076

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2 Claims

ABSTRACT OF THE DISCLOSURE

A storage rack for bottles or the like, containing unstable material, the rack being constructed and arranged to store the bottles upside down so that the material being stored accumulates adjacent the closure end of the bottle to assist the closure end in sealing against the entry of air to the interior of the bottle.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to racks for storing or holding bottles and the like, and more particularly to a rack which is constructed and arranged to hold a bottle or similar vessel upside down.

DESCRIPTION OF THE PRIOR ART

The most pertinent prior art known to the applicant are the patents to Eick, No. 808,824, and to Linfoot, No. 1,460,068.

SUMMARY OF THE INVENTION

Many substances such as beauticians' dyes used in tinting or dying hair are extremely unstable and exposure to small amounts of air for even brief periods of time may cause sufficient oxidation of the material to render it unsuitable for future use. Frequently, beauticians in coloring or tinting a client's hair may select small fractions of dye of different colors to achieve a mixture which will be of the color desired to impart to the client's hair. However, if even one of the dyes has oxidized slightly, it is no longer suitable for use. When it is considered that several bottles of such dyes must be kept on hand for providing the basic dyes from which several mixtures may be obtained, it can be appreciated that continued frequent re-preparation of new base dyes is both time consuming and wasteful.

It has been found that if the bottles of basic dyes are left upside down, the dye assists the sealing structure in the cap by preventing the entrance of air into the interior of the bottle. Even though the bottle cap may be substantially liquid tight when held right-side up, it is not necessarily airtight and therefore a sufficient amount of air may enter the interior of the bottle to cause damaging oxidation. However, when the bottles are inverted, the dye itself prevents the entry of any significant quantity of air, thereby preventing oxidation and prolonging the usefulness of the mixture.

It is a primary object of this invention to provide an improved rack for holding vessels containing unstable materials in an inverted position.

It is a more particular object of this invention to provide an improved bottle rack for holding bottles, or the like, containing unstable liquids, upside down so that the liquid in the interior of the bottle may assist in maintaining a seal against the entry of ambient air.

Other objects and advantages will be readily apparent from the following detailed description taken in connection with the accompanying drawings, in which:

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BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a perspective view of the bottle rack of this invention; and

FIGURE 2 is a vertical section view through the rack.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The bottle rack 10 of this invention includes a base or first bottle supporting member or vessel holding member 12 and an intermediate member or second vessel holding member and first auxiliary implement supporting member 14. The intermediate member 14 is held spaced from member 12 by side walls 16. A top member or second auxiliary implement supporting member 18 is held spaced from intermediate member 14 by side walls 20 and generally occupies the rear half of the structure, as seen in side elevation or vertical section, as illustrated in FIGURE 2. For ease in carrying the rack 10, handles 22 may be provided at opposite sides thereof.

Member 12 is provided with a plurality of first vessel receiving surfaces or recesses 24 which are generally of a size and shape to fairly snugly embrace the cap or closure portion of a vessel or bottle which is intended to be stored in the rack. While in the illustrated embodiment, the recesses 24 are shown as being substantially circular, it is to be understood that the particular shape of the recess can be changed to accommodate different cap configurations whether hexagonal, rectangular, or the like. The intermediate member 14 is provided with means cooperating with the recesses 24 in the base member for maintaining a bottle or vessel upright. In the illustrated embodiment, this means includes a plurality of vessel receiving surfaces or openings 26 substantially coaxial with the recesses 24 in the base member. Openings 26 may be of different sizes to accommodate bottles 28, shown in dotted outline, which may be of different sizes. In addition, these openings may be of different configuration other than the circular configuration illustrated, so as to accommodate bottles or vessels of different configurations, such as rectangular, hexagonal, and the like. For example, some openings such as 26a, could be rectangular to accommodate bottles so shaped. In general, it is to be understood that the size and shape of the openings 26 will closely approximate the exterior size and configuration of the body portion of a bottle which is to be held upright thereby.

Top member 18 includes a plurality of auxiliary implement grasping means or surfaces which, in the illustrated embodiment, comprises different openings 30 shaped to correspond to the configuration of brushes or auxiliary implements, such as 30a and 30b, so that the same may be telescoped through openings 30 and generally held upright. Preferably top member 18 will be held above intermediate member 14 a distance approximately the same as the length of the handle or shank portions 32a and 32b of implements 30a and 30b, respectively. In this manner, the ends of shank portions 32a and 32b may rest on intermediate member 14 which will support the implements upright.

In use, the openings 26 and recesses 24 may support bottles containing unstable liquids in an inverted position so that the liquid in the interior of the bottle assists the sealing structure about the cap in preventing the introduction of ambient air to the interior of the bottle and therefore preventing oxidation of the contents of the bottle. In addition, auxiliary implements which may be used in association with the bottles may be held to the rear and slightly elevated from the bottles themselves so that they are in a handy position for use and may be easily observed as to their nature and location

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by virtue of being supported elevated relative to the bottles in front.

Whereas legends or labels on the bottles may be upside down when the bottles are inverted and stored upright in the rack, suitable legends or indicia may be affixed to the member 14 adjacent the several openings 26 so that a user of the rack 10 may readily ascertain the nature of the material which is being held inverted in the opening, and, after withdrawing the bottle therefrom, may again ascertain into which opening the bottle should be reinserted. If desired, the different openings could have color coded areas adjacent them which would match color codings on the bottles to further assist in properly orienting the bottles.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, as some modifications may be obvious to those skilled in the art.

I claim:

1. A rack for storing bottles containing unstable liquids in an inverted position and an auxiliary implement for use therewith, comprising: a base member having a plurality of vessel receiving recesses arranged near one edge thereof, said recesses being generally of a size and shape to nestably receive the top portion of a bottle; an intermediate member connected to the base member and vertically spaced therefrom, said intermediate member having a plurality of vessel receiving openings near one edge generally in registration with the recesses in the base member, said openings being generally of a

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size and shape to nestably receive the body portion of a bottle; and a top member connected to said base and intermediate members and being vertically spaced from the intermediate member and laterally spaced from said intermediate member openings, said top member having a plurality of implement receiving openings of a size and shape to generally nestably receive the shank of auxiliary implements, said implement receiving openings being vertically misaligned relative to said vessel receiving openings.

2. The storage rack of claim 1 wherein said intermediate member includes a portion underlying the implement receiving openings in the top member, said intermediate member being imperforate in the area underlying the top member openings.

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CHANCELLOR E. HARRIS, Primary Examiner