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[54] **FRAGRANCE-RELEASING FLOWERPOT**
6 Claims, 1 Drawing Fig.

[52] **U.S. Cl.** **239/54, 252/522, 260/2.5, 264/49, 424/32**
[51] **Int. Cl.** **A61l 9/04**
[50] **Field of Search** 239/34, 36, 53, 54; 424/32; 252/522; 260/2.5; 264/49

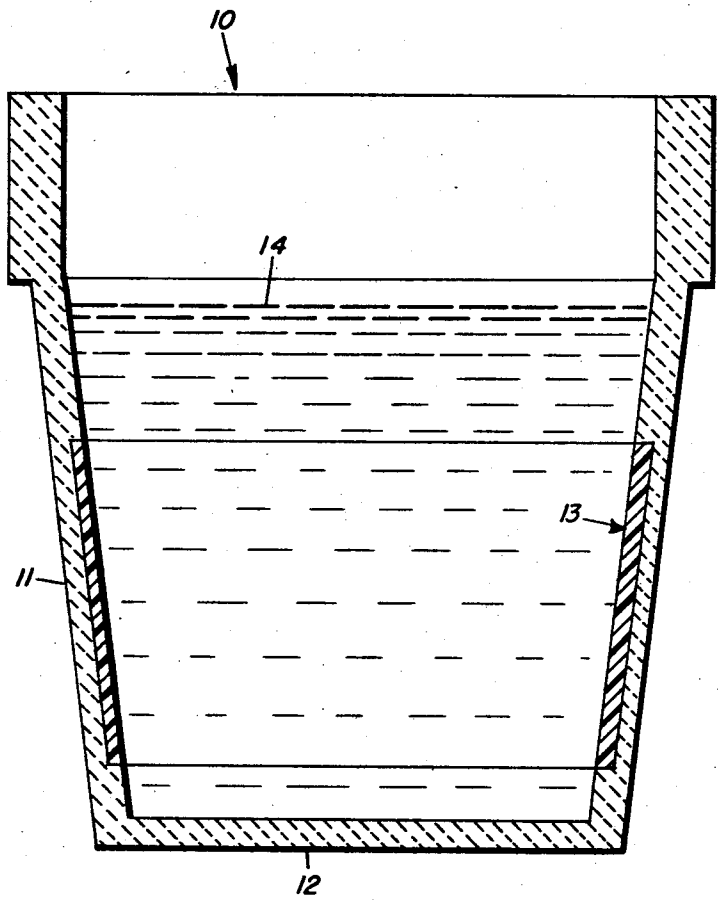
[56] **References Cited**

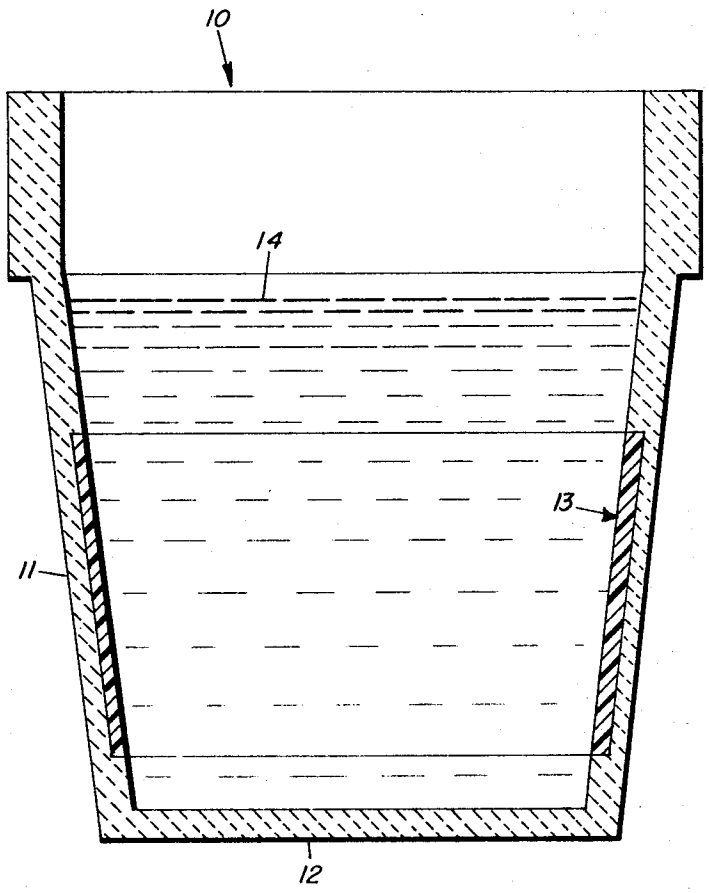
UNITED STATES PATENTS

3,220,960	11/1965	Wichterle et al.	260/2.5
3,400,890	9/1968	Gould	239/36

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ABSTRACT: A decorative article fabricated to resemble a flowerpot and incorporating therein a synthetic hydrophilic hydrogel capable of releasing fragrance in the presence of a solvent.





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FRAGRANCE-RELEASING FLOWERPOT

This application is a continuation-in-part of my copending application, Ser. No. 599,911, filed Dec. 7, 1966, now U.S. Pat. No. 3,400,890.

This invention relates to decorative structures having the capability of releasing fragrant aromas.

One object of the invention is to take advantage of the capability of certain synthetic chemical compositions to absorb liquid solutions of fragrances and aromas and to store the solid elements of these fragrances for an indefinite period of time so that upon the later addition of solvent, the fragrance may be released to the surrounding atmosphere.

Decorative articles of this type may also be made from certain of these synthetic chemical compositions which, in turn, may include fragrances in their solid form incorporated therein prior to the molding, or shaping, of the finished article; the fragrance itself being released when contacted by the appropriate solvent.

Compositions having these characteristics are disclosed in U.S. Pat. Nos. 2,976,576 and 3,220,960 issued to Otto Wichterle on Mar. 28, 1961, and Nov. 30, 1965, respectively, and also in the copending applications Ser. Nos. 576,856 and 654,044, filed July 26, 1966 and July 5, 1967, by Thomas H. Shepherd and Francis E. Gould, respectively.

Such compositions may be generally defined as consisting of a nonswollen, mechanically workable, infrequently cross-linked hydrophilic polymer.

Other objects and advantages will be apparent to those skilled in the art after reading the following specification in connection with the attached drawing, in which the single FIGURE is a cross-sectional elevation of a preferred form of decorative article fabricated in accordance with the teaching of this invention.

It is therefore one object of this invention to utilize the characteristics of the material disclosed in the aforementioned patents and applications to fabricate articles which may be utilized in association with simulated forms of natural fragrant flora, at least a portion of the articles being fabricated of one of the said materials, said material having been treated to absorb the solids contained in a fragrant essence solution, so that when it is desired, the fragrance may be released by the addition of the appropriate solvent, preferably water or alcohol.

While it is preferable to add the fragrance-releasing material after the article has been formed, in the case of the hydrogel material disclosed in the Shepherd and Gould applications, the solid fragrances or essences may be added to the hydrogel material prior to forming the article.

In the drawing, there is shown in cross section, an article indicated generally by numeral **10**, which resembles a conventional flowerpot such as is commonly used to display living plants, shrubs or flowers. Otherwise, it consists essentially of an open vessel having a generally cylindrical sidewall **11** and a flat bottom **12**. In the form of the invention shown, a portion of the interior wall of the vessel, indicated by numeral **13**, may be formed of a hydrogel material made in accordance with the teachings of the aforementioned patents and patent applications, while the remainder of the vessel, or pot, may be formed of any other material such as: plastic, metal, wood or the usual clay from which flowerpots are ordinarily made. Obviously, the interior of the vessel may have the liner **13** extend over a larger area of the sidewall, or might even from a continuous surface over the entire side and bottom thereof.

It will be understood that the hydrogel liner **13** will be fabricated so as to be capable of including the solid constituents of the particular fragrance desired. Thereafter, in use, when it is desired to liberate the fragrance, the pot will simply be filled with the appropriate solvent, indicated by numeral **14**.

For example, if it is desired to simulate the fragrance of violets, the liner material **13** would have incorporated therein the solid material of violet essence, which would remain therein indefinitely so long as no solvent were applied to it. However, if the liquid **14** in the vessel were the appropriate solvent, such as water or alcohol, it would penetrate into the hydrogel material and the violet fragrance would be gradually liberated so long as any such solid constituents remained therein.

As previously stated, the article may be fabricated in one of two ways. Either the portion which is to carry the fragrance may be first molded to shape then immersed in a solution of fragrance or essence until saturated. Then the solvent is removed, such as by air drying, after which the solid constituents of the solutions remain absorbed within the hydrogel material indefinitely.

This method can be used with all of the hydrogel materials previously mentioned but in the case of the material disclosed in the Shepherd and Gould applications, the powder may be immersed in a solution of a fragrance and dried to remove the solvent material prior to the actual molding step, the solid material being capable of release by applying the appropriate solvent to the material after it has been molded into the appropriate shape.

It will be realized that the invention teaches that an article may be produced having a portion of that article fabricated of the hydrophilic hydrogel material disclosed in the aforementioned patents and applications and that this hydrogel material may be treated to absorb a quantity of the solid constituents of a fragrance or essence, which solids, when the liquid solvent has been removed, will be retained therein indefinitely until it is desired to release them by the application to the hydrogel of the appropriate solvent.

Having disclosed a preferred form of the invention, it will be understood that various modifications and changes may be made which would come within the scope of the annexed claims.

I claim:

1. A decorative article of commerce comprising a liquid-containing vessel simulating a flowerpot fabricated at least partially of a synthetic material, said material including a composition consisting of a nonswollen, mechanically workable infrequently cross-linked hydrophilic polymer.

2. The article defined in claim **1**, wherein said hydrophilic polymer includes a fragrance-releasing soluble solid material absorbed therein.

3. The article defined in claim **1** wherein said hydrophilic polymer is arranged to expose a major portion of the surface thereof to the interior of the vessel for contact with a liquid contained therein.

4. The article defined in claim **3** wherein said hydrophilic polymer includes a fragrance-releasing soluble solid material therein.

5. The article defined in claim **3** wherein said hydrophilic polymer is arranged as a liner forming substantially the entire inner peripheral surface of the vessel.

6. The article defined in claim **5** wherein said hydrophilic polymer includes a fragrance-releasing soluble solid material absorbed therein.