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T. J. SHANAHAN, JR
JEWELRY CLEANING DEVICE

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Fig. 1

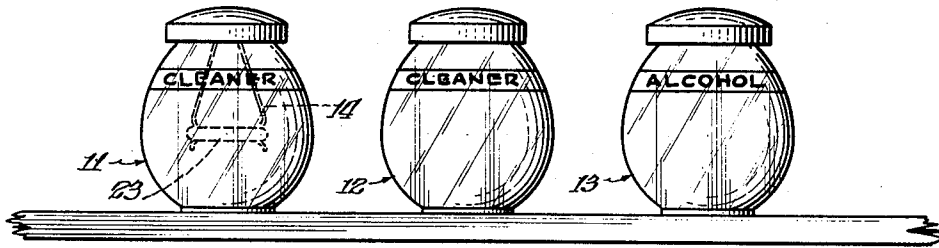


Fig. 2

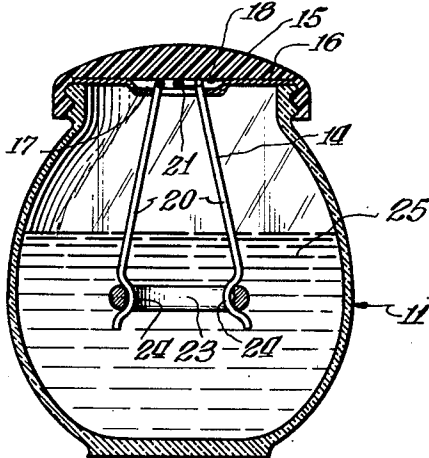


Fig. 3

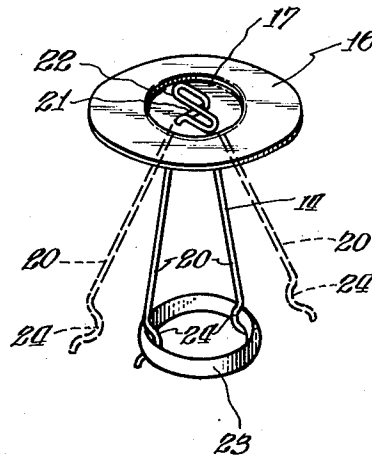


Fig. 4

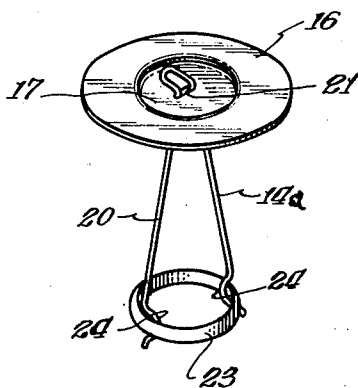
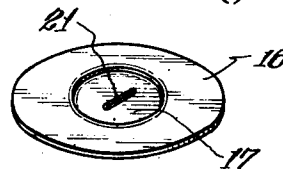


Fig. 5



Inventor:
Thomas J. Shanahan Jr.
By: Harbaugh and Finniche
Atty's.

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JEWELRY CLEANING DEVICE

Thomas J. Shanahan, Jr., Chicago, Ill.

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2 Claims. (Cl. 134-143)

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This invention relates generally to jewelry cleaning devices, and more particularly to an improved jewelry cleaner especially adapted for the cleaning of finger rings and suitable for use in the home.

Finger rings, when worn for everyday tasks, become dirty in a relatively short period of time, particularly if they are the type having stones set therein or engraved or filigree work thereon. Many persons clean their rings from time to time, usually by using an ammonia or soap solution and a small brush, such as a tooth brush. The cleaning solution serves to soften the deposited dirt, and the brush is used to remove the softened material from the surfaces and crevices of the ring. This procedure is not very satisfactory for two reasons, namely, because it is awkward to brush a solution onto a small article like a ring without spattering the solution and because the action of the brush, necessary to loosen the dirt, frequently loosens the stones in their settings, with the result that they are likely to drop out and become lost. Moreover, when the ring must be held in the fingers and the solution brushed on, strong solutions which might injure the skin, eyes or clothing of the person cleaning the ring cannot be used because of the spattering. If the ring is dropped into a container of solution, one side of it will rest on the bottom of the container and will not be exposed to the solution. Also there is no assurance that the solution will get into all of the interstices in order to attack dirt therein.

Accordingly, one object of this invention is to provide a jewelry cleaning apparatus suitable for use in the home, in which strong solutions may be used without danger to the person using the apparatus.

Another object is to provide a cleaning apparatus in which the cleaning solution reaches all spaces in which dirt may be lodged and with which no harmful brushing which might loosen settings or damage the jewelry is required.

Another object is to provide an apparatus in which various solutions may be used successively without the necessity for handling the jewelry between each stage.

Other objects and advantages of this invention will present themselves to those familiar with the art upon reading the following specification in conjunction with the drawing and the appended claims.

In the drawing:

Fig. 1 is a front view showing a ring cleaning set constructed in accordance with this invention;

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Fig. 2 is a vertical section showing the construction of one of the bottles of the set;

Fig. 3 is a perspective view showing a preferred form of the ring holder assembly;

Fig. 4 is a view similar to Fig. 3 of a modified form of ring holder assembly; and

Fig. 5 is a perspective view showing the plate.

A fundamental concept of this invention is to provide a set of bottles or jars containing different cleaning solutions, each jar having a readily removable closure and a novel element for supporting finger rings or other articles of jewelry substantially at the center of the bottle, the element being carried by the bottle closure and adapted to firmly support the article of jewelry at the center of the jar. The bottles are shaped so that they may be conveniently grasped in the hand and shaken to cause the cleaning solution therein to pass back and forth over the article being cleaned, thus insuring that the solution will reach every part of the article and producing an agitating action which dislodges dirt softened by the solvent action of the solutions.

A set of three jars, 11, 12 and 13, is shown in Fig. 1. These jars are preferably identical, but, if desired, two of the jars may be provided with ordinary closures, only one of the jars having a jewelry supporting element 14 attached to the closure.

The construction of the preferred form of jewelry supporting element 14 is shown in Figs. 2 and 3 of the drawing. The jar 11 is provided with a screw closure element 15, adapted to be threadably attached to the mouth of the jar 11 in the conventional manner. A circular plate 16 is pressed into the inside of the closure 15, serving as a sealing gasket at the edge of the closure as well as a support for the element 14. The central portion of the plate 16 is dished downwardly as indicated at 17 to provide a flat circular cavity 18 between the plate 16 and the closure 15.

The supporting element 14 is preferably formed of spring wire which is bent to the shape shown in broken lines in Fig. 3 and tempered. This is the normal resting position of the supporting element 14. The element is assembled with the plate 16 by pressing the two legs 20 together until their ends touch and passing the ends through an elongated slot 21 in the bottom of the dished portion 17, the element being pushed all the way down until the S bent portion 22 at its upper end lies in the dished portion 17 of the plate 16. The resiliency of the legs 20 then holds the element in the position shown in Fig. 3, and the

plate 16 may then be pressed into the closure 15. If desired, a separate gasket below the plate 16 may be used to seal the closure to the mouth of the jar 11 in the conventional manner.

For the purpose of supporting an article of jewelry such as the ring 23, on the element 14, the ends of the legs 20 are bent inwardly as indicated at 24 to provide hooks 24 which engage the inside of the ring 23. The width of the jar 11 is substantially greater than the normal unstressed width of the legs 20 to avoid interference between the legs 20 and the sides of the jar and to provide ample space for the liquid 25 to flow back and forth over the article to be cleaned.

To mount the ring on the element 14, the legs 20 are pressed inwardly, passed through the ring and allowed to spring outwardly so that the hooks 24 engage the inside of the ring. Other articles of jewelry usually have a pair of opposed faces which the hooks 24 may engage.

After the article of jewelry is supported on the hooks the closure 15 is screwed onto the jar 11, the jar having been filled to the level indicated with the cleaning solution 25. To clean a ring, the jar 11 is then shaken vigorously for a short period of time to agitate the solution, causing it to flow back and forth over the ring 23. A recommended procedure is to first shake the jar vigorously, for about thirty seconds, to insure that all parts of the ring have been wet by the solution. The jar may then be left to stand for a longer period of time until the solution has had a chance to soften the dirt deposits, at which time the jar may again be agitated vigorously for a short period of time to loosen the softened dirt and clean the ring. The closure 15 is then unscrewed and the ring may be rinsed in running water before it is removed from the supporting element 14.

In the case of the preferred embodiment illustrated in Fig. 1, the closure is also rinsed after removal from the jar 11 and transferred to the second jar 12 containing a second cleaning solution having a composition different from that of the first jar. The procedure is then repeated. After the second cleaning operation the closure carrying the ring 23 is again rinsed and transferred to the third jar 13 which contains a volatile solvent such as alcohol, in which the ring is shaken a third time. On removal from the third jar 13, the ring 23 may be air dried without removing it from the element 14. Thus it will be seen that the complete cleaning operation may be accomplished without the operator having to handle the ring or come into contact with any of the cleaning solutions. If all of the jaws are provided with ring holders, the closures may be rotated, simultaneously cleaning three articles of jewelry as a continuous operation.

A combination of solutions which has worked out quite successfully is to provide an aqueous solution of ammonia in one jar, and a solution of a non-suds-forming detergent in the second jar, followed by a solution of alcohol or acetone in the third jar. The use of two different cleaning solutions is preferred because such solutions are somewhat selective in their action. One will loosen dirt or dissolve particles which the other will not. The alcohol or acetone solution serves two purposes in that it not only dissolves certain organic materials which may not be attacked by the other cleaning solutions but also provides for quick, spot-free drying of the rings after the cleaning is complete, by dissolving any water left after rinsing which might otherwise evaporate

leaving a surface deposit of dissolved salts on the jewelry.

In Fig. 4 another modification of the invention is shown. In this embodiment the top of the element 14a is merely bent to the side at a right angle. This form of the invention may be preferred, from the production point of view, for the assembly of the element 14a and the plate 15 is simplified. To assemble the two, the top of the element 14 is merely pushed through the slot 21 and bent over sideways to hold the element 14a in the proper position. Once the plate 15 has been pressed into the closure 15 the element 14a is held perpendicular to the plate.

From the foregoing description it will be apparent that a novel jewelry cleaning device has been provided which is superior to those previously known and which fulfills the objects set forth.

Other modifications such as will present themselves to those familiar with the art may be made without departing from the spirit of this invention whose scope is commensurate with the following claims.

What is claimed is:

1. A device for cleaning finger rings which comprises a wide-mouthed jar for containing fluid solvent and adapted for screw-top closure, a closure element for said jar having a flat interior seating surface, a plate disposable between said closure element and said screw-adapted mouth of said jar, said plate being formed with a shallow central dished indentation and having within said indentation an elongated slot of predetermined width, and a support element which comprises a member formed of wire stock smaller than said slot width and provided with a transverse looped base portion adapted to reside within said plate indentation and two springably diverging leg elements symmetrical and opposite in formation, each of said leg elements having a semi-circular inwardly bent hook extremity, and both of said hook extremities constituting the sole support for a finger ring or similar article placed therewithin for submergence within said jar.

2. An apparatus for cleaning a finger ring or like object which comprises a receptacle for containing a level of liquid cleaning solvent, a closure element for screw fitting and sealing engagement with said receptacle, a plate disposable between said closure element and said receptacle formed with a shallow central indentation having a slot therethrough, and a support member for finger rings suspended within said cleaning fluid which comprises an element formed of wire stock having a base portion adapted to be confined between said indentation and said closure element and having a pair of spring fingers insertable through said slot, said spring fingers being symmetrical and opposite and each having a semi-circular hook inwardly directed whereby to embrace between said finger hooks a finger ring or similar article under conditions of minimum interior surface engagement.

THOMAS J. SHANAHAN, JR.

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