# United States Patent [19]

**Nesbit**

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[54] **RING WITH MAGNETICALLY SECURED SHIM HELD BY ADHESIVELY SECURED MEMBER**


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[52] **U.S. Cl.** ..... **63/15.6,** 63/29 M
[51] **Int. Cl.** ..... **A44c 9/02**
[58] **Field of Search** ..... 63/15.6, 15.5, 29 M



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[57] **ABSTRACT**

Means for reducing the diameter of a finger ring to produce a fit secure and comfortable for the wearer. The ring is fitted with a relatively flat member directly beneath the setting facing inwardly of the ring. This member may be constructed of a magnetic material or may be of a material such as iron which is attracted to a magnet. The member is secured by means of a suitable adhesive or by soldering or the like. In order to reduce the diameter size of the ring, a disc-like shim, which may be a magnet, is positioned on the underside of the secured member. The shim, is not adhesively secured but is secured to the member by magnetic attraction so that if the member is a magnet, the shim need not be, but can be of an attractable material. Shims of varying sizes may be employed so that the diameter of the ring may be modified over considerable reductions.


**8 Claims, 5 Drawing Figures**

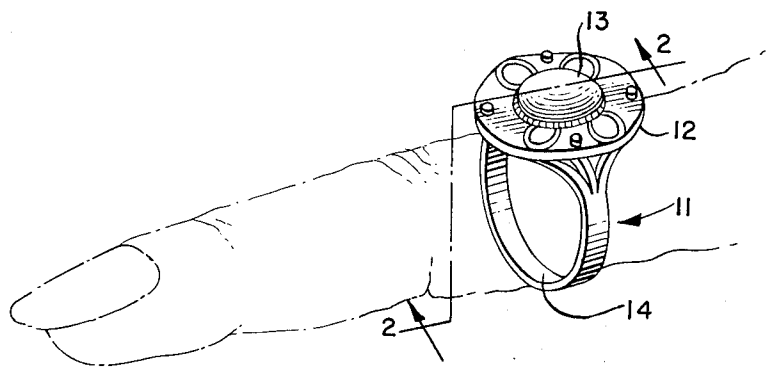


FIG. 1.

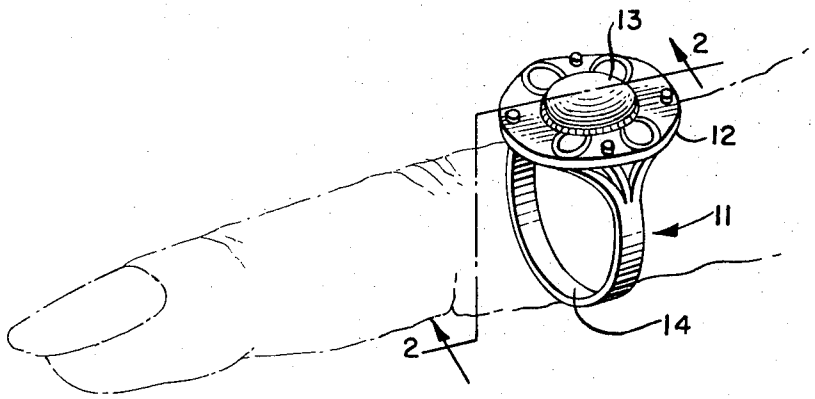



FIG. 2.

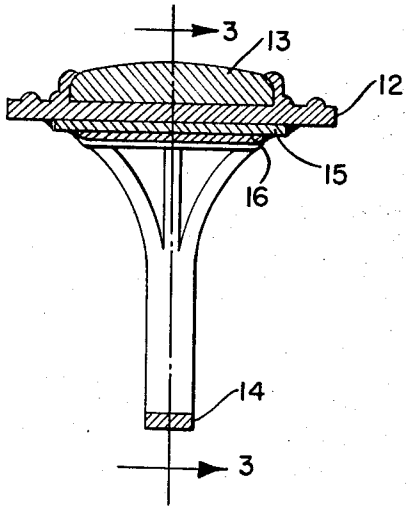



FIG. 3.

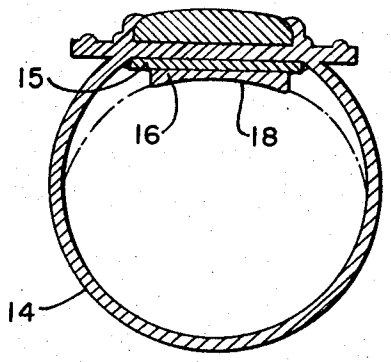



FIG. 4.

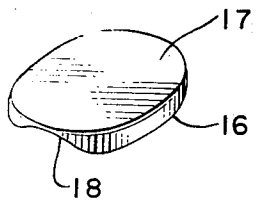
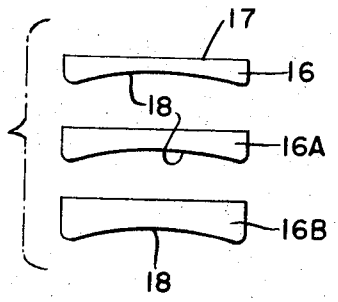



FIG. 5



# RING WITH MAGNETICALLY SECURED SHIM HELD BY ADHESIVELY SECURED MEMBER

## BACKGROUND OF THE INVENTION

It will be appreciated that the prior art is replete with different types and means for reducing the diameter of a finger ring. Consequently, the need for such adapting means is well-known. The need arises due to the fact that a valuable ring may be desirably worn even though it is too large. The fact that a particular ring may not fit may be due to the fact that the ring was initially intended for a man's hand but is now being worn by a female. Another reason may arise when a person obtains a ring originally constructed for a larger finger on the hand but then desires to wear it on the smallest finger.

The solutions of the prior art include the removal of a section of the ring to produce a smaller diameter. Such an operation, of course, is relatively expensive to undertake and necessarily is virtually irreversible. Consequently, the prior art includes various clips of metal which are attached to the lower portion of the ring opposite the setting. These clips act as spacers or shims to reduce the diameter of the ring. They may be securely fastened or they may be removably fastened. In any event, the underside of the ring does not produce a pleasing appearance.

In another fashion, spring loaded wedges have been positioned under the setting. These wedges may be released from a latched position so that they thrust into the area occupied by the finger when worn so that the diameter of the ring is reduced. This latter type of arrangement can only be employed when the setting is sufficiently large to permit the construction of such a device. Of course, it will be further appreciated that such a device is relatively expensive.

## SUMMARY OF THE INVENTION

These is disclosed herein an ingenious means for reducing the diameter of a ring of the jewelry type so that a ring having a diameter too large for a particular individual's finger may be reduced easily to produce a fit secure and comfortable for the wearer. The ring, which has a normal upwardly facing setting, is fitted with a relatively flat member directly beneath the setting facing downwardly along its flat surface. This member may be constructed of a magnetic material or may be of a material such as iron which is attracted to a magnet. The member is fitted under the setting portion of the ring by means of a suitable adhesive or by soldering or the like. In order to reduce the diameter size of the ring, a disc-like shim is employed which may be a magnet. The magnet is positioned on the underside of the secured member thereby reducing the size of the ring. The shim, is not adhesively secured but is secured to the member by magnetic attraction so that if the member is a magnet, the shim need not be but can be of an attractable material. It will be appreciated that shims of varying sizes may be employed so that the diameter of the ring may be modified over considerable reductions.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a finger shown in dotted lines and a ring in place on the finger.

FIG. 2 is a cross-sectional view taken along line 2—2 of FIG. 1.



FIG. 3 is a cross-sectional view taken along line 3—3 of FIG. 2.

FIG. 4 is a perspective view of a shim utilized in the present invention.

FIG. 5 are side elevational views of three different sizes of shims utilized in carrying out the present invention.

## DETAILED DESCRIPTION OF THE INVENTION

Now, turning to the drawings, attention is directed to FIG. 1 for a ring which has been modified in accordance with the principles of the present invention. The ring in FIG. 1 is identified generally by reference numeral **11**. It will be appreciated that it consists of an attractive setting **12** having a valuable precious stone **13** thereon. The setting **12** is secured to the uppermost portion of the ring by suitable and conventional means. The encircling band **14** of the ring is in a conventional manner and encircles the finger as shown in dotted lines in a normal manner. In order to accomplish the purposes of the present invention, a disc-like member **15** is secured to the underside portion of the setting **12.** The disc **15** may be secured to the said underside by means of an adhesive, such as an epoxy glue or it may be soldered thereto as with a precious metal solder, such as silver. The disc **15** may be constructed of stainless steel or any other alloy or metal which is attracted to a magnet. On the other hand, it is contemplated within the purview of the invention that the disc **15** may be constructed of magnetizable material such as alnico, a wellknown material having a great magnetic ability. The shape of the disc **15** should be considerably smaller in diameter than the setting of the type shown in the instant matter. Of course, in the event that the setting is smaller, as is frequently the case, the disc **15** may underlie a considerably larger proportion of the setting. Additionally, the disc **15** may be relatively thin so that in essence it does not by itself essentially reduce the diameter of the ring. It will be found in examining a number of finger rings, that a space is provided underneath the setting which is in the form of a recess. In such an event, it is contemplated that the disc **15** takes the shape of the recess so that it may be inserted therein and the downwardly facing surface of the disc is constructed to be relatively flush with the downwardly facing surface or surfaces of the setting.

As can be seen from FIGS. **2** and **3** directly below disc **15** is positioned a shim **16.** The shim **16** has a flat upper surface **17** and may have a longitudinal concave surface **18.** The shim is constructed of magnetic material such as alnico. Inasmuch as member **15** is constructed of a material attracted to a magnet, it will be appreciated that shim-magnet **16** will attract itself to fixed member **15.** The concavity **18** is positioned longitudinally, that is, along the axis of the ring so that it easily accepts the convex surface of a finger.

The shim, as can be readily seen from FIG. **3** acts as a means to reduce the diameter of the finger ring by that amount represented by the thickness of the shim. FIG. **3** also shows in dotted lines a cross section of what would be the area taken by a finger with the shim in place. It will be readily seen that with the absence of the shim a larger finger can be accommodated or the ring would be too loose on the same sized finger as illustrated in FIG. **3.**

Attention is now directed to FIG. **5.** It will be seen therefrom that the shim may take different thicknesses.

For instance, the first shim **16** shown is of the thickness used to illustrate the invention as seen from FIGS. **2, 3** and **4.** If the diameter of the ring is to be decreased even more, then shim **16A** can be utilized. It would be employed in the same fashion as in connection with shim **16.** Additionally, the diameter of the ring may be reduced considerably more by the use of shim **16B** which is seen to have an even greater thickness.

Additionally, inasmuch as the magnetic material may be iron or the like which has been magnetized, it will be useful to protect iron or its alloy if it is subject to rusting or corrosion by coating the shim with a water or liquid impervious material such as a plastic. The art is replete with conventional means for encasing metal items in order to protect such items from corrosion.

From the foregoing, it will be well appreciated that a ring may have its internal diameter decreased in accordance with the use of a selected shim having a particular thickness. It will be also noted that the accomplishment of such an operation is relatively simple and results in producing a ring which is as attractive as heretofore as no unsightly clip, as used in the prior art, is seen on the underside of the ring. The setting on the upper side of the ring, ingeniously hides the shim and the disc so that one cannot tell that the ring has an adjusting feature to control the annular diameter.

Undoubtedly, from the foregoing, additional concepts will come to mind, nevertheless such additional concepts are deemed to be within the purview of the instant invention.



What is claimed is:

**1.** In combination, a finger ring having a widened portion, said widened portion having secured to the internal underside thereof a flat disc-like member, means for reducing the size of said finger ring comprising a substantially flat shim, said shim being positioned at the underside of said disc-like member, said shim being of a sufficient thickness to decrease the internal annular diameter of the ring, said shim and said flat disc-like member having means by which they are mutually magnetically attracted to one another whereby the shim is retained in place.

**2.** The finger ring combination of claim **1** wherein the shim is a magnet.

**3.** The finger ring combination of claim **1** wherein the flat disc-like member is a magnet.

**4.** The finger ring combination of claim **1** wherein the shim has a longitudinal concavity at the internally facing portion thereof.

**5.** The finger ring combination of claim **1** wherein the flat disc-like member is adhered to the underside of the setting by an adhesive.

**6.** The finger ring combination of claim **1** wherein the flat disc-like member is adhered to the underside of the setting by solder.

**7.** The finger ring combination of claim **2** wherein the shim is constructed of the alloy alnico.

**8.** The finger ring combination of claim **2** wherein the shim is coated with a fluid impervious coating.

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