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R. N. DI CROCE

3,263,444

SAFETY FINGER RING HAVING SEPARABLE PARTS

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FIG. 1

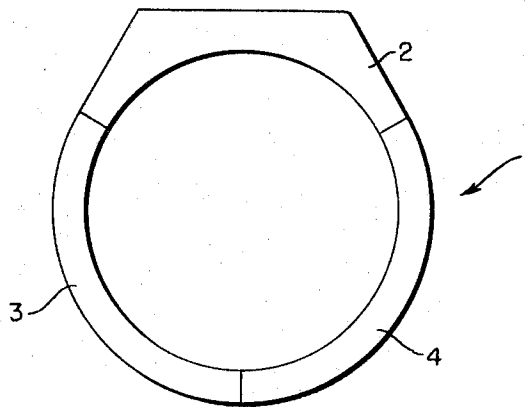


FIG. 2

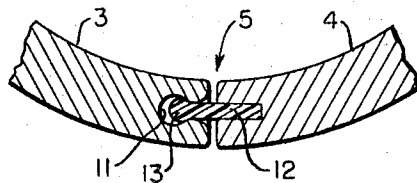


FIG. 3

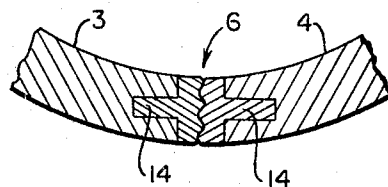
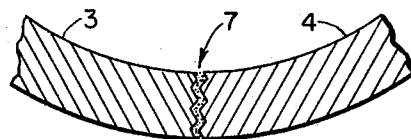


FIG. 4



INVENTOR
ROBERT N. DICROCE

BY
Kennedy, J. J. & Hildreth
ATTORNEYS

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3,263,444 SAFETY FINGER RING HAVING SEPARABLE PARTS

Robert N. Di Croce, 25 Spruce St., Brockton, Mass.

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4 Claims. (Cl. 63-15.7)

This invention relates to an improved finger ring, and more particularly to a finger ring of a plurality of circumferential segments readily separable from one another to release the ring from about the finger.

Known finger rings generally are of two styles; continuous unitary rings of a fixed size and adjustable rings having overlapping end portions adjustable relative to one another to vary the size of the ring. The unitary style of finger ring generally is preferred, especially for a high fashion ring, since with an adjustable ring the overlapping end portions tend to protrude from the body of the ring and scratch, tear or hook materials and other members. Also, the overlapping end portions of an adjustable ring tend to separate from one another over a period of time, to enlarge the ring size and loosen the ring on the finger. Since these disadvantages are not present with a unitary ring, it generally is preferred. Unitary rings must be large enough to slip over the knuckle of a finger to the fleshy base of the finger, which often is smaller than the knuckle itself. Thus, a unitary ring large enough to slip over the knuckle will be too large for the base of the finger, and will readily rotate about the base of the finger. Also, there will be a space between the unitary ring and the base of the finger, which enhances the tendency of such unitary rings to catch on an obstruction such as a piece of machinery, a branch, or the like and yank the ring and finger into the path of the machinery, or with the branch, possibly severely injuring the finger and hand. Accordingly, while unitary rings commonly are preferred, there is an inherent danger present when these rings are worn.

An object of the present invention is to provide a safety finger ring having the appearance of a unitary ring, which if caught on an obstruction will readily separate from the finger. A further object is to provide a finger ring which is slightly adjustable in size so that it will both slip over the knuckle and grip the base of the finger. Another object is to provide a finger ring comprising a plurality of circumferential segments so attached to one another as to be readily separable to free the ring from the finger. These and other objects of the invention will become apparent from the following description of preferred embodiments of the finger ring.

In general, the finger ring of the present invention comprises a plurality of circumferential segments, the end portions of which abut, and means at the end portions of the segments to releasably attach the segments together. In the various embodiments of the invention set forth herein, the abutting end portions of the ring segments are releasably attached by resilient compressible members received in recesses in the ring segments by cooperating magnetized elements, by an adhesive, or by a combination of these means. Preferably the abutting end portions interlock with one another to prevent lateral movement of the segments relative to one another, and the means releasably attaching the abutting end portions permits a slight longitudinal movement of the segments relative to one another to allow the segments to separate somewhat and slightly enlarge the ring size while not releasing the segments from one another.

The invention will be further described in connection with the accompanying drawings in which:

FIG. 1 is an elevational view of the finger ring;

FIG. 2 is an enlarged cross-sectional view of a por-

tion of the finger ring showing one form of the means releasably attaching abutting end portions of the circumferential segments of the finger ring; and

FIGS. 3 and 4 are views similar to FIG. 2 of other forms of the means releasably attaching abutting end portions of the ring segments.

As shown in FIG. 1, the finger ring 1 of the invention comprises three releasably attached circumferential segments; a top circumferential segment 2, and two side circumferential segments 3 and 4. Commonly, such finger rings are made from a precious metal alloy, such as gold or silver. While three circumferential segments are illustrated, and are preferred, it is to be understood that two, or any greater number of segments may be employed.

The abutting end portions of the circumferential segments of the finger ring may be releasably attached to one another by a snap fastener arrangement 5 as shown in FIG. 2, or by an arrangement of magnets 6 as shown in FIG. 3, or by an adhesive 7 as shown in FIG. 4.

The snap fastener arrangement 5 includes a necked recess 11 formed in the end portion of one of the abutting segments, and a stud 12 with a compressible head 13 secured to the end portion of the other of the abutting segments with the head 13 projecting beyond the end of the segment. The head of the stud is received within the necked recess of the adjacent circumferential segment, and releasably attaches the circumferential segments together. Preferably the head of the stud also is resilient and somewhat elongated, as shown, so that the ends of adjacent segments may be separated slightly as shown in FIG. 2 without releasing the attachment of the segments to one another, the base of the head of the stud being compressed by the neck of the recess. A suitable resilient and compressible material from which the stud may be formed is polyethylene, which also has the advantage of low frictional resistance against the metal sides of the recess for ease in assembly and disassembly of the segments. However, other compressible materials, including other polymers, may be employed.

A finger ring formed of such releasably attached circumferential segments appears as a continuous unitary ring, although if caught by a piece of machinery, a branch, or the like, the circumferential segments will readily separate from one another, the head projecting from the end portion of one segment slipping from the necked recess of the abutting segment. In this manner, the improved finger ring comprises a safety ring in that it includes segments which will readily separate from one another to release the ring from about the finger.

In normal use, the finger ring may be slipped over the knuckle of a finger to the smaller fleshy base of the finger. As the ring is passed over the knuckle, the segments will separate somewhat, each head 13 being compressed and partially slipping through its encompassing necked recess 11. After passing over the knuckle, each head will spring back into its recess, reducing the size of the ring, and the ring will fit snugly on the fleshy base of the finger to hold the ring in desired position. Alternatively, the segments may be assembled about the base of the finger itself. Because of this snug fit, the danger of the ring catching on an obstruction is minimized. However, if the ring should be so caught, the segments will readily separate as previously noted, freeing the ring from the finger.

In the magnet arrangement 6 for releasably attaching the circumferential segments as shown in FIG. 3, the end portions of each segment include a magnet pin 14. The pins of abutting ends of the segments are oppositely magnetized so that opposing poles of the magnet pin face outwardly, attracting one another, and by this magnetic attraction hold the segments together while permitting a slight separation and axial expansion of the ring seg-

ments. Preferably the head of each pin covers the end of each segment, thereby maximizing the magnetic force of attraction between abutting segments. The head surfaces of the magnets preferably are formed with complementary recesses and protrusions, as shown, to prevent the ends of the segments from slipping laterally relative to one another.

As shown in FIG. 4, the ends of adjacent segments may be secured to one another by an adhesive 7. Preferably the end surfaces of abutting segments have complementary corrugations, as shown, to increase the surface area of the adhesive attachment and to prevent lateral displacement of the ends of the segments. An adhesive with some resiliency, such as a latex base adhesive, may be used to permit some axial expansion of the ring, or alternatively a solid adhesive, such as a polyvinyl acetate emulsion, may be used. While a solid adhesive will not permit separation of the segments and expansion of the ring without breaking the adhesive bond and releasing the segments, the adhesive easily may be reapplied by the wearer to reattach the segments and form a unitary ring.

Since the ring segments may be detached from one another, and reattached to one another, various top segments 2 may be utilized with a single set of side segments 3 and 4. For example, in a costume jewelry ring, various ornamental and jewel mounted top segments of a standard single size may be supplied for attachment to a single set of side segments 3 and 4 in the wearer's size. The standard size top segments will reduce the inventory expense of the rings. Since the wearer would only have to purchase a top segment once the side segments of his correct size had been purchased, his expense also will be reduced. Also, the assembled ring with the desired top segment will appear to be a more expensive unitary ring, and will have the safety and adjustability advantages described previously.

Thus, the finger ring of the present invention includes a plurality of circumferential segments, the end portions of which abut and are releasably attached to one another. Preferably the abutting end portions are both resilient and releasably attached to one another.

Since various modifications may be made in the details of construction of the finger ring, it is to be understood that the invention is defined solely by the scope of the following claims.

I claim:

1. A ring of such size as to be worn upon the finger comprising a plurality of rigid circumferential segments, the end portions of the segments abutting one another the mutually abutting ones of said end portions being of uniform cross-section and forming a smooth continuous external surface in the assembled ring, the abutting end faces of the segments extending transversely thereof and having complementary interfitting corrugations, means connecting said segments in such a way that they are separable by pulling circumferentially of the ring, said means including mutually-adherent surfaces such that said segments are separable and re-connectable.

2. A finger ring as set forth in claim 1 in which said mutually-adherent surfaces are provided by a coating of an adhesive between said abutting ends and securing the segments to one another.

3. A finger ring as set forth in claim 1 in which the end portions of abutting segments comprise magnetic elements having opposite poles facing outwardly to magnetically attract one another.

4. A finger ring as set forth in claim 3 in which said magnetic elements are magnet pins; the head of each magnet pin substantially completely covering the end of the segment to which it is attached, the heads of abutting magnet pins including said corrugations for preventing lateral movement of the segments relative to one another.

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RICHARD C. PINKHAM, *Primary Examiner.*

45 F. BARRY SHAY, *Examiner.*