Dec. 24, 1957 F. B. CAMPBELL 2,817,219

FINGER RING GUARD WITH SPACED GRIPPING PORTIONS

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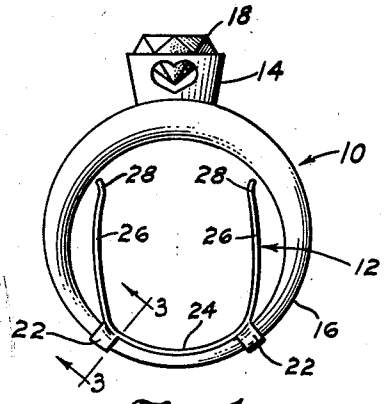


Fig. 1

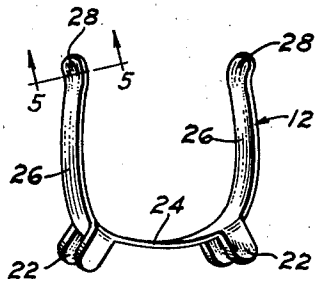


Fig. 2

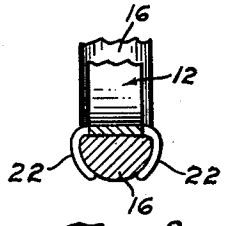


Fig. 3

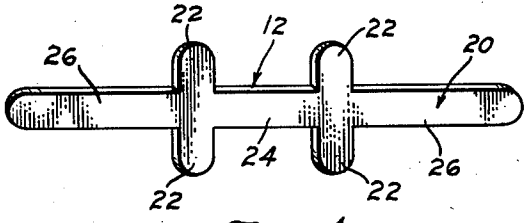


Fig. 4


Fig. 5

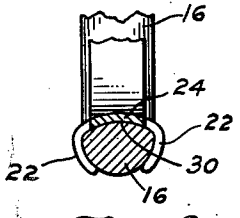


Fig. 6

INVENTOR.
FRANCIS B. CAMPBELL
BY
ATTORNEY

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# FINGER RING GUARD WITH SPACED GRIPPING PORTIONS

Francis B. Campbell, York, Pa.

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3 Claims. (Cl. 63—15.6)

This invention relates to improvements in ring guards, and more particularly, to ring guards which may be manufactured preferably on a commercial scale and readily and quickly attached to finger rings, especially for purposes of holding a finger ring in desired position upon a human finger.

It is frequently found that when finger rings are purchased, they will fit a human finger with reasonable closeness so as to maintain the head or setting of the ring in desired position upon the top of the finger on the back of the hand. However, after the ring is worn for a period of time, there is a tendency for the inner surface of the finger to assume a groove caused from wearing the ring and flexing the finger, whereby the ring will in many instances become somewhat loose upon the finger and no longer hold the setting or head of the ring in desired position upon the top of the finger. Further, particularly when a ring is purchased by an individual with knuckles of a larger diameter than the root or base of the finger where the ring normally is worn, it is necessary of course to purchase a ring which may be slidably moved over the knuckle of the finger incident to placing it in the desired position upon the finger. Many individuals suffer to varying degrees from arthritis which has a tendency to enlarge the knuckles of human fingers and, almost invariably in such instances, a ring will fit loosely upon such fingers even though the ring has to be forced over the enlarged knuckle when mounting the ring upon such a finger.

Various types of ring guards have been devised heretofore for attachment to finger rings in various ways so as to provide additional means on a finger ring to engage the finger and attempt to hold the ring more or less firmly upon the finger in a desired position so as to maintain the setting or head of the ring in desired position upon the top of the finger. The majority of such ring guards now available afford a strap-like arrangement somewhat in the shape of a chord extending across the portion of the shank of a finger ring opposite the head or setting of the ring, whereby said strap-like means engages the root portion of a human finger on the side adjacent the palm or inner surface of the hand. Ring guards of this type are obviously detectable, particularly when the fingers are extended and the palm is uppermost. Further, the clamping means usually afforded by such ring guards are not sufficiently firm to prevent the chord shape of the ring guard being altered so that the ring guard ultimately assumes the curvature of the inner surface of the shank of the ring and no longer functions as intended for ring guard purposes.

An additional undesirable feature of certain existing ring guards comprises the fact that they are attached to the inner surface of the shank of the ring by permanent means such as soldering. Such attaching means is undesirable in that in many instances, the solder engages symbols or names engraved on the inner surface of the shank of the ring, such engraving frequently being of sentimental value. If it is desired to remove the ring



guard under such circumstances, a certain amount of the solder will remain in the engraving, not only obliterating the same but also adversely affecting the appearance and sentimental value of the engraving.

Other types of available ring guards comprise strap-like bands which extend along the inner surfaces of the shank of the ring and engage the sides of the finger upon which the ring is worn, the extremities of such strap-like bands extending upward toward the head or setting of the ring and engaging the inner surfaces of the side portions of the shank of the ring, whereby constant use tend to wear the shank of the ring to such an extent that the ring frequently is damaged by such ring guards.

It is the principal purpose of the present invention to provide a ring guard which may be formed from a strip of suitable metal, preferably elastic or resilient, said strip being substantially formed into a U-shaped configuration, the intermediate portion of the band having a curvature preferably closely conforming to the inner surface of the shank of the ring opposite the head or setting thereof, while the leg portions of such configuration preferably are approximately parallel to each other and are spaced inward from the opposite inner surfaces of the side portions of the ring shank which normally engage the sides of the finger upon which the ring is to be worn and the extremities of said leg portions are curved and cupped to facilitate the placement and removal of the ring upon the human finger, but said extremities do not engage the inner surfaces of the shank of the ring, whereby wear of the ring does not result from the use of this type of ring guard.

Another object of the invention is to provide spaced pairs of ears respectively attached to opposite edges of the strip comprising the ring guard, said ears initially being substantially parallel to each other to facilitate the attachment of the ring guard to the inner surface of the shank of a ring, and such ears may readily be bent toward each other at the extremities thereof into firm engagement with the shank of the ring so as to securely anchor the ring guard to the ring without damage of any kind to any engraving or other forms of marking on the inner portion of the shank of the ring.

A further object of the present invention is to provide a design and construction of ring guard, whereby only a very limited number of different lengths and widths of ring guards will be required in order to provide a commercial type of ring guard suitable for application substantially to all types and sizes of finger rings, and, only the most elementary type of tools such as jewelers' pliers are required for quickly and satisfactorily attaching such ring guards to finger rings.

Details of the foregoing objects and of the invention, as well as other objects thereof, are set forth in the following specification and illustrated in the accompanying drawing comprising a part thereof.

In the drawing:

Fig. 1 is an axial elevation of an exemplary finger ring to which a ring guard embodying the principles of the present invention has been connected.

Fig. 2 is a perspective view of the ring guard per se shown in Fig. 1 as the same appears prior to being mounted within a finger ring.

Fig. 3 is an enlarged transverse fragmentary sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a perspective view of the ring guard shown in Fig. 2 as it appears upon being blanked from sheet stock material.

Fig. 5 is a transverse sectional view taken on the line 5—5 of Fig. 2 and showing the cupped shape of the terminal ends of the ring guard.

Fig. 6 is a view similar to Fig. 3 but showing a slightly different embodiment of the invention wherein the ring

guard is curved in a transverse direction to conform to a curved inner surface of the shank of a finger ring.

The finger ring **10** illustrated in Fig. 1 is exemplary only and represents a wide variety of different kinds and shapes of finger rings to which a guard **12**, made in accordance with the principles of the invention, may be applied and connected. Other than in wedding rings, most finger rings comprise a head **14** and a shank **16**. In many types of rings, the head **14** comprises mounting means for a gem **18**, normally referred to as a setting. The guard **12** comprising the present invention is applicable substantially to all types of finger rings, including both wedding rings as well as rings having a head of some sort.

The guard **12** preferably is made from suitable metal conforming in color to that of the shank **16** of the ring. For example, if the shank is formed from white gold or platinum, the guard **16** may be formed of a suitable resilient metal of a color harmonizing with the color of the metal of the ring shank **16**. In order to minimize the cost of the ring guard **12**, the same may be formed from suitable base metal upon which precious or semi-precious metal corresponding in color to that of the shank **16** is rolled upon the base metal of the guard **12**. When a guard for example is to be applied to a ring of substantial value, it may be that the guard **12** may be more costly and can be formed from solid gold for example which is appropriately worked in order to provide resilience in the guard, or a suitable alloy of which the principal ingredient is gold may be used to form the guard **12**.

In accordance with the preferred embodiment of the invention, the guard **12** is suitably shaped from a blank **20** such as shown in Fig. 4. The sheet stock from which the blank **20** is formed may comprise rolled gold stock such as that from which gold filled jewelry articles are made. In other circumstances, as described above, the sheet stock may be substantially of a solid alloy of suitable composition. Regardless of the composition of the metal from which the blank **20** is formed however, it will be seen that the blank **20** may be formed readily by dies of a desired shape, whereby a very limited number of dies of different sizes may be used to form an appropriate range of sizes of guards **12**, the sizes varying both in width and length particularly.

The blank **20** is provided with pairs of oppositely extending clips or ears **22**, the outer ends of which preferably are rounded as shown in Figs. 2 and 4. Inasmuch as the majority of finger rings are provided with a substantially flat inner surface in the axial direction of the ring **10**, it is preferred that the guard **12** be flat in a transverse direction as shown in Fig. 3. Also, the width of the guard **12** preferably is slightly less than the width of the narrowest portion of the shank **16**.

The positioning of the clips or ears **22** upon the guard **12** is such as to approximately divide the length of the guard into thirds. The intermediate portion **24** of the guard **12** is shaped to conform substantially to the inner surface of the shank **16** of the ring and is equal in length approximately to one quarter of the interior of the shank of the ring, as clearly shown in Fig. 1. The leg portions **26** however are bent substantially into parallelism with each other as shown in Figs. 1 and 2 and extend substantially to the side of said ring shank opposite to that on which said guard is anchored. Although these leg portions may have a limited amount of curvature in accordance with the principles of the invention, it is preferred that they be more or less straight so as to engage the opposite sides of a human finger in such a manner as to afford a floating action in a direction transversely of the finger along a line extending through the head **14** and the opposite portion of the shank **16**. Such an arrangement affords the greatest amount of comfort to the wearer and also centers the ring upon the finger without crowding the flesh of the finger either toward the head **14** or toward the opposite portion of the shank **16** as now is commonly resorted to in conventional ring guards, but evenly distributing the flesh in both of these directions.



The resilience of the leg portions **26** will maintain the ring centered at all times upon the finger in a transverse direction substantially parallel with the palm of the hand and, particularly to facilitate the placement of the ring upon the finger or removing the same therefrom, the outer extremities **28** are preferably cupped, as shown in Fig. 5, and also are curved outwardly from each other as viewed in Figs. 1 and 2 particularly.

The preferred shape of the leg portions **26** of the guard is such that the extremities **28** do not engage the inner surface of the shank **16** or any part of the head portion **14** of a ring, whereby no wear is subjected to the shank **16** as a result of using the guard in accordance with the invention. Further, the curved configuration of the intermediate portion **24** of the guard which conforms to that of the inner surface of the shank **16**, when securely clamped to the shank by the clips or ears **22**, affords a firm anchoring of the intermediate portion of the guard to the shank **16**, whereby the mounting of the ring upon the finger or removal therefrom does not tend to dislodge the guard **12** from its preferred mounting position within the ring **10**. In addition, such anchoring affords a firm attachment of the guard to the shank of the ring, whereby the flexing of the leg portions **26** of the guard toward and from the side portions of the shank **16** readily may take place, especially during normal flexing movement of the finger upon which the ring is mounted. Even when the finger is clenched, the ring will be disposed in normal position upon the finger without discomfort of any kind and the position of the head of the ring on the outer surface of the finger will remain normal.

Even though the leg portions **26** of the guard may be slightly curved, it is preferred that said curvature will be substantially coincident with the axis of the ring **10**, whereby there will be no tendency either to crowd the flesh of the finger only toward the head **14** or only toward the intermediate portion **24** of the guard during all normal positions of the finger in use.

When the guard is to be used with rings having a curved inner surface **30** on the shank **16**, the intermediate portion **24** particularly of the guard may be correspondingly curved in a transverse direction as shown in Fig. 6 and such curved conformity produces an even firmer anchoring of the intermediate portion **24** to the shank **16** than that afforded by the embodiment shown in Fig. 3.

Although the extremities of the clips or ears **22** may substantially meet when the guard is applied to a finger ring, it is preferred that the clips engage at least more than halfway around the opposed surfaces of the shank of the ring but that the extremities of such clips do not meet in order to insure closer conformity of the ears **22** to the outer surface of the shank **16** when mounting the guard upon the ring.

From the foregoing, it will be seen that the present invention provides a ring guard affording a substantially different concept of operation from those presently in use in that the guard has flexible fingers or leg portions **26** which respectively engage opposite sides of a human finger and cause the flesh of the finger to be moved in close conformity with the inner surface of the shank **16** of the ring adjacent the head **14** and the intermediate portion **24** of the guard. This results in centering the ring upon the finger and also provides a floating action of the ring relative to the finger during normal movement of the finger so as to result in greater comfort to the wearer. If, after extended use, it is found that the leg portion **26** of the guard should be flexed inwardly in order to enhance the engagement of the guard with the finger, such flexing may take place easily either by the use of a finger nail, knife blade, or similar instrument inserted between the leg portions and the inner surface of the shank **16** so as to slightly bend the leg portions as desired.

Should it ever be desired to replace or remove the

guard from the ring, only a simple operation of spreading the clips or ears **22** as required and, after such removal, it will be found that any markings or engravings within the shank **16** will not be impaired in any way.

The cupping of the outer extremities **28** may be formed readily and inexpensively either at the time the blank **20** is formed or by subsequent operation in a progressive die, for example. The forming of the blank **20** and particularly the clips or ears **22** thereon also may be accomplished in such a manner that slightly rounded outer edges may be formed particularly upon the ears **22**, whereby the opposite surfaces of said ears firmly engage the outer surfaces of the shank **16** of the ring when applied thereto.

While the invention has been described and illustrated in its several preferred embodiments, and has included certain details, it should be understood that the invention is not to be limited to the precise details herein illustrated and described since the same may be carried out in other ways falling within the scope of the invention as claimed.

I claim:

1. A substantially U-shaped guard for a finger ring formed from a strip of flexible metal no wider than the width of the shank of a finger ring to which it is to be attached and comprising integrally connected end portions and an intermediate portion therebetween, the intermediate portion of said guard having a length and curvature conforming substantially to that of approximately one quarter of the interior of the shank of said ring as viewed axially thereof, pairs of oppositely directed clips carried by said guard adjacent the ends of said intermediate portion and each pair of clips being arranged respectively to firmly engage at least more than halfway around opposed surfaces of said shank to anchor said intermediate portion of said guard firmly to said shank, the end portions of said strip being substantially straight and of similar length to said intermediate portion and respectively continuous with the ends of said intermediate portion and bent relative thereto substantially into parallelism with each other to comprise spring fingers flexibly movable relative to said intermediate portion and the sides of said ring shank and being spaced respectively inwardly from the inner surfaces of the sides of said ring shank, the said fingers extending substantially to the side of said ring shank opposite to that on which said guard is anchored but spaced at all times in operation from the inner surfaces of said sides of said shank.

2. The guard for a finger ring according to claim 1 further characterized by the outer extremities of said spring fingers being curved outwardly away from each other and respectively toward the inner surfaces of the sides of the shank of said ring to provide smooth contact with a finger upon which the ring is to be worn.

3. The guard for a finger ring according to claim 1 further characterized by said intermediate portion of said guard being curved transversely to present a concaved surface toward the ring shank upon which it is to be mounted, thereby affording firm contact between said shank and intermediate portion to resist movement therebetween incident to the flexing of said spring fingers relative to said intermediate portion.

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