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FINGER RING HAVING MEANS FOR SUCCESSIVE TEMPORARY AND PERMANENT MOUNTING OF A PLATEN

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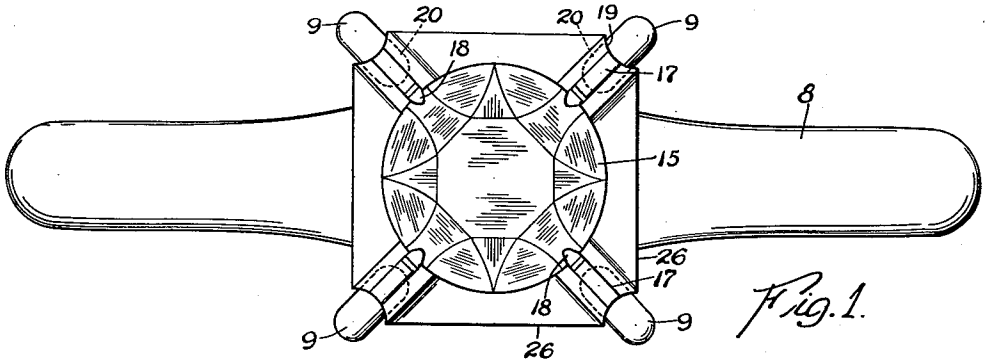


Fig. 1.

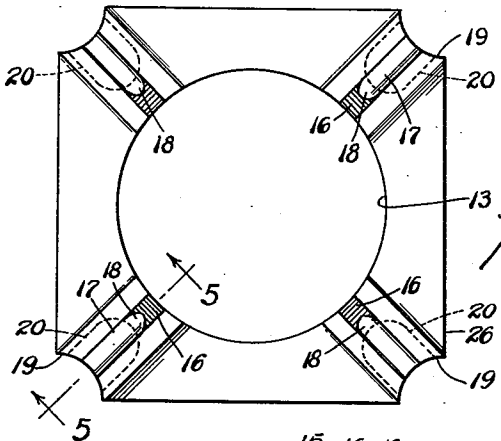


Fig. 4.

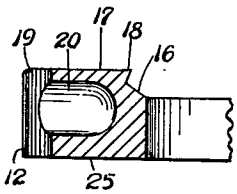


Fig. 5.

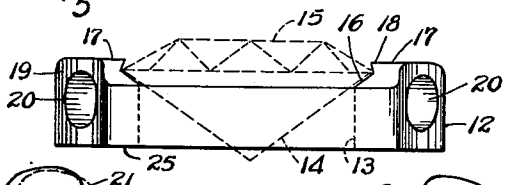


Fig. 3.

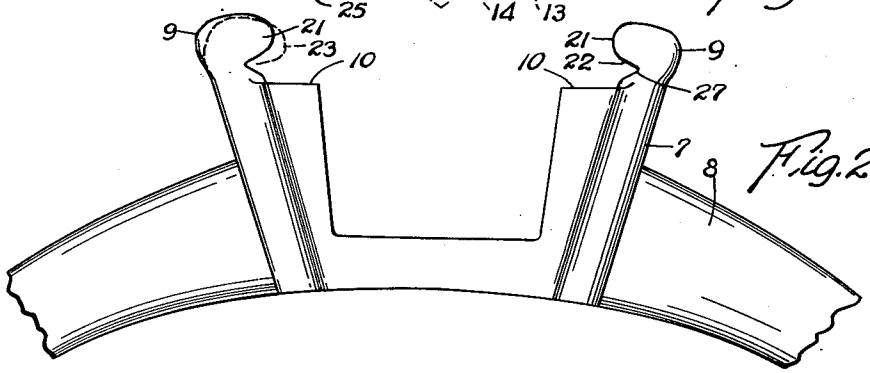


Fig. 2.

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FINGER RING HAVING MEANS FOR SUCCESSIVE TEMPORARY AND PERMANENT MOUNTING OF A PLATEN

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3 Claims. (Cl. 63—26)

This invention relates to an improvement in finger rings.

An object of the invention is to so construct a finger ring, as to facilitate and expedite the substitution therein of gems or stones of various types and sizes temporarily, or until the purchaser is satisfied with the appearance and price of the ring. The construction is such that immediately upon satisfying the purchaser, a selected gem may be permanently secured in the mounting, without the services of a skilled gem setter, and the sale thereby may be consummated without delay.

Another object of the invention is to construct a finger ring as above explained, with the advantage that a retailer of jewelry may keep on hand a wide selection of ring bodies, and relatively few gems to be applied selectively and temporarily to the bodies so that without undue expense the purchaser may be offered a large selection of ring styles at various prices determined principally by the gems, while at the same time the jeweler is relieved of the expense of keeping in stock a very expensive inventory in gems. The supply of ring bodies, of course, involves minor expense in comparison with that of the gems.

A further object of the invention is to construct the ring in such manner as to securely and reliably mount the gem in final position upon the ring body, without weakening any of the vital parts prior to and in the course of final mounting, thereby ensuring against subsequent loss of the gem.

Another object is to accomplish the foregoing objectives and advantages in a manner and with structure that involves very little manufacturing expense, the parts utilized being few in number, and simple of design so that production is rapid and inexpensive.

The foregoing and other objects are attained by the means described herein and illustrated upon the accompanying drawing, in which:

Fig. 1 is a top plan view of a typical finger ring embodying the improved mounting of the invention.

Fig. 2 is an enlarged fragmentary side view of a ring body, showing the head in detail, and with the gem and its mounting platen omitted.

Fig. 3 is a side elevational view of a gem mounting platen to be embraced by the ring head of Fig. 2, a gem being shown in broken lines preparatory to securement upon the platen of Fig. 3.

Fig. 4 is a top plan view of the gem mounting platen, with the gem omitted.

Fig. 5 is a fragmentary cross-sectional view taken on line 5—5 of Fig. 4.

In the jewelry art, there has always existed the problem of maintaining a satisfactory selection of merchandise to suit the fancy of individual purchasers characterized by differing likes and dislikes, and differing circumstances as to wealth so that as a result, the successful jeweler usually was one who had command of almost unlimited funds enabling him to stock great quantities of the expensive merchandise involved. The jeweler having access to modest funds was always at a selling disadvantage, for lack of selection of merchandise suitable for all classes of purchasers.

With the use of the present invention, a jeweler of limited financial means may offer to his customers a full selection of merchandise, without assuming the burden of stocking a high inventory of expensive gems. That is, he may keep on hand a wide variety of ring bodies, which are relatively inexpensive, and may exhibit any one of them in association with gems of a kit consisting of stones variously cut, graded, and sized, the gems of the kit being replenished as sales are completed. It is therefore unnecessary for the peweler to keep on hand, articles of jewelry each fitted with expensive gems permanently applied. In accordance with the invention, gems are easily and instantly interchanged with relation to any given base article, without the use of tools and without waste of the customer's time. Of great importance also is the fact that repetitious interchange of gems in the base article, does not result in wear or looseness of parts which might impair final securement of the gem upon the base article. In these respects, the structure of the present invention is far superior to those constructions which involve the use of screw threads, pivoted parts, and spring elements as heretofore proposed.

In the accompanying illustrations, all ornamentation generally characterizing an article of jewelry, has been omitted in the interests of simplicity and clarity of disclosure of that which constitutes the invention. Thus, the band **8**, is shown in its bare essentials without flair or flourish. The band may be integral with, or attached to the ring head, in accordance with known practice, and the head may consist essentially of a mass of precious metal molded or otherwise formed to provide a plurality of upwardly extended clamps **9** each overhanging a shelf or support **10** integral with the head. The several shelves **10**, of which four are shown in the example illustrated, all rest in a common plane beneath the level of the clamps. The shelves, or support means **10**, provide a bed upon which may rest a gem-embracing platen **12**, to be described.

The platen may comprise a mass of metal cast or otherwise formed as a substantially flat plate, usually but not necessarily rectangular in form, and centrally apertured as at **13** to accommodate the conical back side **14** of the gem **15**. Adjacent to the periphery of the aperture is provided ledge means **16**, inclined inwardly and downwardly as shown, to support the marginal peripheral area of the gem and serving to prevent passage of the latter through the aperture. A series of gem clamps **17** is formed integrally with the metal of the platen, the clamps being each in the form of an upstanding rib on the outer face of the platen, directed substantially radially toward the center of aperture **13**. Each clamp includes a tip portion **18** to be displaced radially inwardly and onto the marginal edge of the gem in usual manner, to clamp the gem against the ledge means **16**. Usually, the clamping operation is performed with the use of a punch or chisel which mutilates the clamp rib and turns the tip onto the gem edge.

At the four corners, the platen side wall **26** preferably is thickened somewhat, and the corners are cut away to provide upright channels **19** each having a concave exposed area in which is formed a socket **20**. The sockets **20** are quite deep, and extend axially inwardly toward the center of aperture **13**, Fig. 4. The clamps **17** may overlie the sockets, as shown, to enhance the strength and rigidity of the platen corners.

From the disclosure of Figs. 2 and 3, it will be understood that platen **12** may be lowered onto the head of the ring, with the noses **21** of clamps **9** sliding snugly along the channels **19** until said noses register with the

sockets 20 at all four corners of the platen. The extent to which the clamp noses enter the sockets 20 is slight, because the inherent resiliency of any precious metal constituting the clamps is naturally quite limited. However, the limited snap action resulting from entry of the clamp noses into the sockets, is sufficient to temporarily hold the platen in the embrace of the clamps for purposes of exhibition and display.

Should the exhibitor wish to remove the platen and substitute another carrying a different gem 15, he need only grasp the platen with the fingers and lift it upwardly and out of contact with the clamps. The procedure may be repeated indefinitely using platens like 12 carrying gems of various sizes and grades. The platens are to be interchangeable and applicable to ring bodies of many types and designs. All platens used in effecting the different combinations of gems with ring bodies, are to be uniform in size and shape, with the possible exception of slight changes in location of the gem clamps 17 and aperture 13, which might advantageously be gauged to properly accommodate gems of different sizes and types. Exteriorly, however, all platens would be uniformly shaped and formed so far as mechanical features are concerned.

Platens such as 12 of Fig. 3 may be applied and removed repeatedly, in relation to the ring body, without injurious wear or loosening of any parts. Should a customer finally decide to accept the ring carrying a selected gem, the salesman would be required merely to impart a final set to the clamps 9 by forcing them deeply into the sockets 20 for permanent securement of the platen 12. The final setting of clamps 9 may be performed by means of pliers or another suitable tool. As will be understood, the clamps 9 are of ductile metal, such as gold or platinum as usually incorporated in the ring body. The slight resiliency inherent in such metals is proper to render the clamps effective for holding the platen temporarily for display or exhibition. These same qualities of ductility and limited resiliency in the clamps, are utilized to advantage when the clamps are set to final position, to securely and firmly hold the gem-holding platen in position upon the ring head. The absence of delicate moving parts, and the care and expense of assembling them, are factors to be especially noted here.

With further reference to the clamps 9, it may be noted that each is provided with an inwardly and upwardly directed inclined surface 22 overlying a shelf 10. Between the inclined surface 22 and the shelf 10, the clamp may be transversely notched as at 27, to establish a line of bending for the clamp in final setting. The inclined surface performs as a cam when the clamp is bent inwardly (broken line 23 of Fig. 2), so that a downward force in the direction of the shelf acts upon the lower wall of socket 20 when the clamp is set with relation to the platen. This action of each clamp tending to lower the platen into the ring head, results in a firm setting of the platen bottom 25 upon the shelf means 10, precluding any tendency of the platen to rock or become loose with relation to the head. In effect, the platen becomes an integral part of the ring head positively and indefinitely, after setting of the clamps 9.

In the initial position of the clamps 9, depicted by Fig. 2, the noses 21 of the clamps are disposed toward the center of the head just far enough to be sprung slightly outwardly as the platen of Fig. 3 is pressed into the space between the clamps, by the fingers of the exhibitor. The clamps progress slidingly along the grooves 19 in advance of the sockets 20, and when the clamps reach the sockets the pressure is relieved, allowing the clamp noses to enter slightly into the sockets. Due to the fact that the clamps as initially disposed are tilted upwardly, in comparison with the broken line indication at 23 of Fig. 2, the clamp noses have no power to press the platen onto the supports 10 of the ring head, and as the result, subsequent deliberate lifting of the platen from the head mount is facilitated. On the other hand, final setting of the clamp noses into the sockets to the maximum depth, by means of a clinching tool, is accompanied by a downward application of force upon the platen as previously explained, to establish firm fixation of the platen.

In the light of the foregoing explanation, it should be evident that the substitution of gems upon the ring body is achieved in an instant, without the use of tools, and with no risk of damage to any parts of the ring mounting such as might easily occur if delicate screw threads, fine pivot pins, or sensitive springs were incorporated in the structure. Noteworthy also is the fact that only one detachable part is employed, and that part, the platen, is a simple and inexpensive part stamped or molded on a production basis requiring no assembly procedure other than conventional setting of the gem therein. Regardless of the number of times interchanges of platens are made on a ring head, no wear or injury of parts can occur to impair the strength and durability of the mount as finally established. The fact of inexpensive manufacture of the structure is believed to be self-evident.

Various modifications and changes in structural details may be resorted to, within the scope of the appended claims, without departing from the spirit of the invention. Amongst such modifications would be items such as variation in the number of clamps employed, and their positions relative to one another; changes in the shape of the platen and the ring head; changes in the method of gem clamping, herein shown as conventional; and various other possible variations not of concern to the concept of the invention. The invention is as well applicable to brooches and pins of various types incorporating one or more principal gems of an expensive nature.

What is claimed is.

1. In an article of jewelry, the combination of a body including a head, a substantially flat platen for successive temporary and permanent mounting upon the head, said platen having side portions grooved vertically of the plane of said platen and depressed to provide within the confines of each groove a socket open at a side of the platen and extending centerward thereof, means on the platen embracing a gem, a plurality of ductile and resilient clamps on said head being spaced with one another to correspond to the spacing of the grooves and sockets in said platen, said clamps having a nose formed thereon with the distance between the noses of a pair of opposed clamps being less than the distance between a pair of opposed grooves, the nose of each of said clamps having a substantially rounded surface thereon to slide along said groove as said platen is moved toward said head and to partially enter the socket in said groove under the resiliency of said clamps to temporarily and detachably support the platen with relation to the head, said clamps being bendable for full entry of the nose into the sockets to establish a permanent fixation of the platen to the head.

2. In an article of jewelry, the combination of a body including a head, a substantially flat platen for successive temporary and permanent mounting upon the head, said platen having side portions grooved vertically of the plane of said platen and depressed to provide within the confines of each groove a socket open at a side of the platen and extending centerward thereof, means on the platen embracing a gem, a plurality of ductile and resilient clamps on said head being spaced with one another to correspond to the spacing of the grooves and sockets in said platen, said clamps having a nose formed thereon with the distance between the noses of a pair of opposed clamps being less than the distance between a pair of opposed grooves, the nose of each of said clamps having a substantialy rounded surface thereon to slide along said groove as said platen is moved toward said head and to partially enter the socket in said groove under the resiliency of said clamps to temporarily and detachably sup-

port the platen with relation to the head, said clamps being bendable for full entry of the nose into the sockets to establish a permanent fixation of the platen to the head, and support shelves on the head, one underlying each clamp nose, to contact one face of the platen in the permanently fixed condition of the platen.

3. In an article of jewelry, the combination of a body including a head, a substantially flat platen for successive temporary and permanent mounting upon the head, said platen having side portions grooved vertically of the plane of said platen and depressed to provide within the confines of each groove a socket open at a side of the platen and extending centerward thereof, a fixed platen support means on the head located to support the under face of the platen, means on the platen embracing a gem, a plurality of ductile and resilient clamps on said head being spaced with one another to correspond to the spacing of the grooves and sockets in said platen, said clamps having a nose formed thereon with the distance between the noses of a pair of opposed clamps being less than the distance between a pair of opposed grooves, the

nose of each of said clamps having a substantially rounded surface thereon to slide along said groove as said platen is moved toward said head and to partially enter the socket in said groove under the resiliency of said clamps to temporarily and detachably support the platen with relation to the head, said clamps being bendable for full entry of the nose into the sockets to establish a permanent fixation of the platen to the head, each of said clamps having an under-surface inclined at an acute angle to the platen support means and serving as a cam bearing firmly against one side of a socket when the clamp is bent toward and into said socket with consequent reduction of inclination of the clamp under-surface, thereby to force the platen into firm contact upon the support means of the head.

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