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C. W. SCOTT

2,294,577

FINGER RING

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FIG. 2.

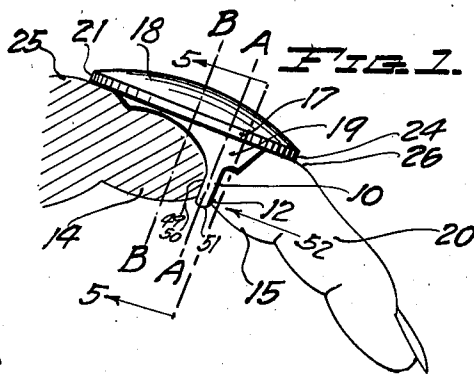
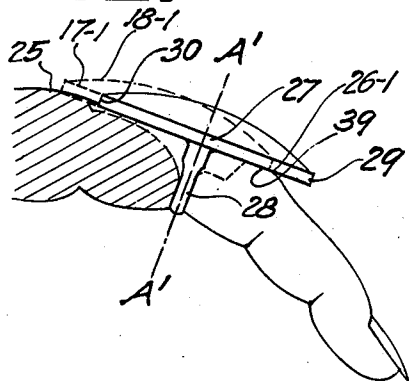


FIG. 4.

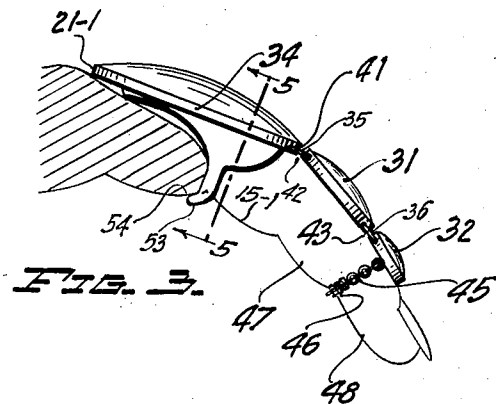
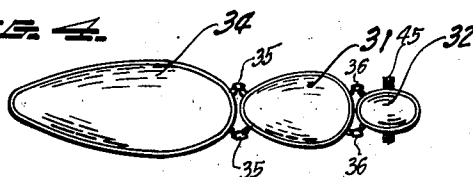


FIG. 6.

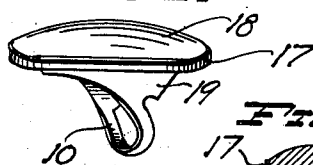


FIG. 5.

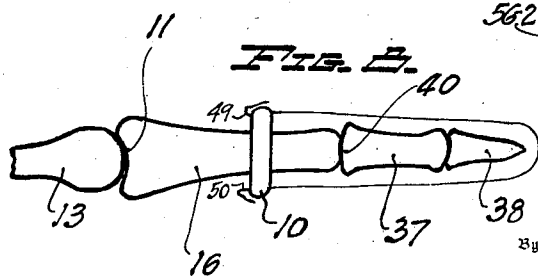
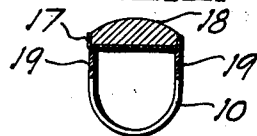
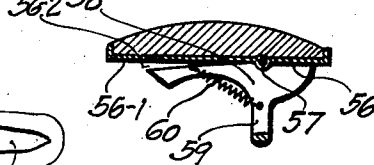


FIG. 7.



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FINGER RING

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9 Claims. (Cl. 63—15)

This invention relates to an article of manufacture for adorning the human hand, and more particularly to an article of jewelry commonly known as a finger ring.

The principal objects of the invention are to provide:

First: A ring in which the component parts are disposed with especial regard to appearance, but also with regard to the anatomy of the human hand.

Second: A mounting for precious or other stones, or for any other decorative items.

Third: Taking into account the bony structure of the hand, a decorative setting at any desired point between two knuckle joints, lengthwise of a human finger.

Fourth: Proper consideration for the comfort and convenience of the wearer.

Fifth: An article of adornment for the human hand, in which an ornament having an extremely elongated form is advantageously used.

Sixth: An article of adornment that is streamlined to fit into the modern scheme of artistic design.

Seventh: An article that may be supplied in forms that are relatively inexpensive.

The finger ring, consisting essentially of a ring band and top plate, has been a device of personal adornment for many thousands of years, but heretofore, little or no attempt has been made to cause the ring and its top plate to fit the general contour of a finger. The customary ring has the top plate and the ring band mounted symmetrically with respect to each other; that is to say, the center plane of the ring band cutting transversely through the finger, divides the top plate symmetrically lengthwise of the finger, irrespective of its exact position on the finger. This indicates clearly that the structure of a human finger has not been taken into account.

It is deemed proper at this point, to state briefly the anatomy of that portion of the human hand to which finger ring decoration is applied.

Each finger includes three phalange bones connected one to another by means of two knuckle joints which, counting from the palm of the hand, are hereinafter designated respectively, as the first finger knuckle and the second finger knuckle. The three phalanges, counting from the palm, are hereinafter referred to respectively, as number one, number two and number three. Phalange number one of each finger is connected to a respective metacarpal bone of the palm of the hand by means of another knuckle joint

which, for convenience, is hereinafter termed a palm knuckle.

With the ordinary construction of finger rings, if the ring band is placed in the bend between the palm knuckle and the first finger knuckle, the top plate naturally positions itself closer to the first finger knuckle and farther from the palm knuckle joint, because the flesh between any two fingers prevents the ring band from being pushed back sufficiently far to space it symmetrically between the two knuckles.

In the present novel construction, in order to bring the disposition of the top plate higher on the finger, the ring band must be off center with respect to the top plate. Moreover, side restraining means, hereinafter called capes, are provided for the purpose of holding the top plate in alignment with the finger. Without the capes, the top plate might often assume positions extending angularly across the finger, thereby giving the top plate a crooked appearance. This would be particularly noticeable in the case of a large top plate.

In applying the artistry of streamlining to finger rings, it becomes desirable to use ornaments that are extremely elongated lengthwise of a finger, but the proper and comfortable positioning of such an elongated ornament on a finger, I have found to be impossible if the ring band is positioned symmetrically with respect to the center line between the extremities of the elongated ornament. Therefore the device of the invention is particularly applicable to streamlined design.

In my improved and novel finger ring, offsetting the top plate with respect to the center plane of the ring band, forms a major cantilever arm extending from the center plane of the ring band, back towards the palm knuckle.

Bending of the finger sometimes has a tendency to tip the long cantilever arm upwardly, away from the top of the finger. This tendency may be counteracted if desired, by slightly crooking the lower part of the ring band back towards the palm, or by placing a flexing connection between the ring band and the top plate.

In the drawing, which illustrates a specific embodiment of the invention,

Fig. 1 represents a side elevation of a ring disposed on a human finger, the finger being shown more or less in diagrammatic form;

Fig. 2, a side elevation similar to Fig. 1, but illustrating the relative difference between the device of the invention and one of a usual construction;

Fig. 3, a side elevation similar to Fig. 1, but showing a ring with auxiliary ornamental units attached thereto;

Fig. 4, a top plan corresponding to Fig. 3;

Fig. 5, a transverse section taken on the line 5—5 in either Fig. 1 or Fig. 3;

Fig. 6, a view in perspective, corresponding to Fig. 1;

Fig. 7, a longitudinal, vertical center section showing a construction where the top plate is flexibly connected to the ring band; and

Fig. 8, a fragmentary diagram, showing the position of a ring band as it appears on a finger in an actual X-ray photograph of a human hand, viewing the palm thereof.

Referring to the drawing, the numeral 10 in Fig. 1 designates a ring band seated in the angular depression 12 formed by the flesh mounds 14 and 15 directly below phalange bone number one. The phalange is indicated at 16, Fig. 8, where it is shown connected to the metacarpal 13 by means of the palm knuckle joint 11. Mounted on the ring band 10 is a top plate 17, the latter serving as a mounting for an ornament or setting 18. In Fig. 1 the top plate 17 is shown as being integral with the ring band 10, and is connected thereto by means of the capes 19. The workmanship and constructive details may be advantageously in accordance with approved practices in the jewelry art.

The novel disposition of the ring band of the invention relative to the top plate, is ascertained by an inspection of Figs. 1 and 2.

In Fig. 1, the broken line A—A indicates the center plane of the ring band 10, cutting transversely through the finger 20. Similarly, the broken line B—B indicates the center plane of the top plate 17. The space between the lines A—A and B—B shows how considerably the respective centers are offset from each other, and therefore the unsymmetrical relation between the ring band and its top plate. This unsymmetrical relation is responsible for the highly desirable condition of locating the extremities 21 and 24 of the unusually long top plate 17 approximately in coincidence with, respectively, the palm knuckle 25 and the first finger knuckle 26. It is frequently advantageous to have the extremities 21 and 24 somewhat within the limits defined by the knuckles 25 and 26.

In Fig. 2, the broken line A'—A' indicates a plane similar to the one at A—A in Fig. 1, but in Fig. 2, the top plate 27 of a ring constructed as usual, is shown as being symmetrical with respect to the plane A'—A'. Consequently the top plate 27 is symmetrical also with respect to the ring band 28, the placement of the latter corresponding exactly to the aforementioned placement of the ring band 10. Obviously, the extremity 29 of the top plate 27, protrudes far beyond the finger knuckle 26—1, thereby forming a hook-like obstruction that would be highly objectionable, because in the normal usage of the hand, when a finger is flexed, the hook-like obstruction is liable to catch in any object with which it comes in contact. Also, the pinching or frictional crowding of the flesh at 39, under the top plate and above finger knuckle joint 40, Fig. 8, would be objectionable.

The lines at 17—1 and 18—1 in Fig. 2, correspond to the lines at 17 and 18, respectively, in Fig. 1, and serve to visualize the difference between the unsymmetrical novel arrangement of the device of the invention and the undesirable symmetrical arrangement which would result if 75

the elongated top plate were to be mounted on a ring band in the usual manner.

In Figs. 3 and 4 is shown an arrangement wherein auxiliary ornaments, in this instance 31 and 32, are flexibly linked to the top plate of the ring 34, the linkages, for example, being indicated at 35 and 36, respectively. In this example, the ornament 31 is above phalange number two, this phalange being indicated at 37, Fig. 8, while the ornament 32 is above phalange number three, this phalange being indicated at 38, Fig. 8.

Since the invention makes it possible to locate the extremity 41 of the top plate 34 accurately, just short of the fleshy knuckle peak 42, over the first finger knuckle joint, it becomes likewise possible to accurately locate the successive auxiliary ornaments 31 and 32 over the second and third phalanges 37 and 38, respectively. This arrangement clears the finger knuckle peaks 42 and 43 and constitutes a flexible organization of ornaments which conforms to the natural flexing of the finger. This flexible organization, further, may advantageously be attached to the finger, for example, by means of a band or light chain 45 encircling the fore part of the finger, the lower portion of element 45 resting advantageously in the angular depression 46 formed between the fleshy mounds 47 and 48.

The portion of the top plate included between the section plane A—A and the terminal 21 at the palm knuckle 25, Fig. 1, is a major cantilever springing from the near vicinity of the plane A—A, centered in the depression 12.

Normally, the ring band 10 bears snugly against the web cushions of flesh at 49 and 50 as indicated in Figs. 1 and 8. This bearing, when the finger is bent downwardly, has a tendency to allow the mound 15 to crowd the lower portion 51 of the ring band back, as indicated by the arrows 52, against cushions 49 and 50, which latter two then are liable to act as a fulcrum, thereby tending slightly to lift the cantilever extremity 21 of the top plate. If this becomes objectionable, the matter can be corrected by turning the lower portion of the ring band back abruptly and shortly at a low point relative to the height of said ring band, somewhat as indicated at 53 in Fig. 3. That counteracts the fulcrum action or even lowers it to the point 54, so the pressure of mound 15—1 becomes ineffective to lift the cantilever extremity 21—1, Fig. 3.

The lifting tendency just described, can also be overcome by providing a flexible connection between the top plate and the ring band. Such a connection is illustrated in Fig. 7, where the top plate 56 is hinged or pivoted at 57 to the cape portions 58 forming the two opposite sides of the ring band 59. Very light side springs 60 serve to draw the major cantilever 56—1 towards the side capes. When the ring is in place normally on a finger (not shown) a gap 56—2 exists between the top plate and the capes, but as the finger is bent, the tension of the springs closes the gap, thereby causing the free end of the cantilever to always remain in contact with the top (not shown) of the finger.

The terms "top plate" and "ring band" as hereinbefore used, are to be broadly construed, and are not intended to be limited to any specific form.

The capes described in connection with the various figures are suggestive only, and offer a wide latitude for artistic jewelry designing.

While the flexible organization employing a

definite plurality of ornamental items articulated together in tandem order as illustrated in Figs. 3 and 4, is particularly applicable where relatively large auxiliary ornaments are used, the purpose being to dispose the ornaments comfortably intermediate the knuckle joints, still, it must be clearly understood, that in the broad concept of the invention, it is also contemplated to provide for constructions wherein the number of separate ornaments and the articulated joints connecting such ornaments one to another, are increased indefinitely. Thus it becomes feasible to spread such an articulated ornamental organization comfortably over the back of a finger from the palm knuckle to the finger tip, caterpillar fashion, and to anchor the caterpillar organization to a finger at any necessary or desired point or points by means of suitable ring elements encircling the finger. Inasmuch as the production of such ornamental articulated organizations are matters of only mechanical skill, when based on the present disclosure, it is considered not necessary to illustrate them herein.

In finger rings as heretofore constructed, it is common to employ two cantilever portions extending from opposite sides of a ring band. In my improvement, the extent of the overhang in the one or major cantilever is definitely greater than that in the other or minor cantilever. Also, in the invention it is possible to reduce the extent of overhang of the minor cantilever to zero, so that the top plate will lie wholly or almost wholly on one side of a plane cutting transversely through a finger. Such constructions are made practicable and comfortable because of the aligning side capes provided pursuant to the invention.

Having fully described my invention, what I claim is:

1. A finger ring, including in combination, a top plate, a ring band on which the top plate is mounted, the ring band being disposed off center with respect to the said top plate lengthwise of a finger at least partially encircled by the ring band, and a side cape disposed to hold the said top plate in alignment with the said finger.

2. A finger ring, including in combination, a ring band adapted to at least partially encircle a human finger in a position such that the lower part of the ring is seated in the angular depression formed between the two mounds of flesh situated below the first phalange bone of the finger, a top plate mounted on the said ring band, the said top plate comprising a major cantilever portion extending from the plane cutting transversely through the finger at the center of the ring band to approximately the palm knuckle back of the said finger, a minor cantilever portion extending from the said transverse plane to approximately the first finger-knuckle and a side portion so disposed that it rests along the length of the finger when the ring is in place on the finger.

3. A finger ring including in combination, a ring band adapted to at least partially encircle

a human finger, a top plate mounted on the ring band, and a side cape disposed to hold the said top plate in alignment with the said finger.

4. A finger ring including in combination, a ring band disposed to at least partially encircle a human finger, a top plate flexibly mounted on the said ring band so as to allow a limited motion of the top plate relative to the ring band when the said finger is flexed, and spring means effective to cause the flexing top plate to yield relative to the ring band when the finger is flexed.

5. A finger ring, including in combination, a ring band adapted to encircle a human finger in a position such that the lower part of the ring is seated in the angular depression formed between the two mounds of flesh below the first phalange bone of the said finger, a top plate flexibly mounted on the said ring band, and a side cape disposed to hold the organization constituted as aforesaid, in alignment with the said finger.

6. A finger-adorned article of manufacture, including in combination, a plurality of decorative elements adapted for disposal along a human finger, the said decorative elements being articulated one to another for the purpose of causing the articulated organization thus formed, to follow closely the flexing of the said finger, ring-means for attaching the said articulated organization to the said finger, and side cape means disposed to hold the said finger-adorned article in at least partial alignment with the finger.

7. A finger ring, including in combination, a top plate, a ring band on which the said top plate is mounted, a plurality of auxiliary decorative elements flexibly connected to the said top plate and one to another in tandem, so that, when the said ring band is placed on a human finger, the said decorative elements are strung in tandem along the length of the finger, and an aligning side cape depending from the said top plate.

8. An articulated organization for a human finger, comprising a plurality of individual decorative elements articulated one to another so as to be strung in tandem along the said finger, ring-band means disposed to attach the said articulated organization to the said finger, and aligning means, including a side cape portion disposed on the ring band means, effective to hold the articulated organization at least approximately in alignment with the finger.

9. A finger ring, including in combination, a top plate centered intermediate the palm knuckle and the first finger knuckle of a human finger, a ring band coinciding with a plane cutting transversely through the finger at the angular depression in the flesh directly below phalange number one, the said top plate and the said ring band being connected to each other, and capes depending longitudinally from the top plate along opposite sides thereof, the said capes being connected to the said top plate and to the said ring band.

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