

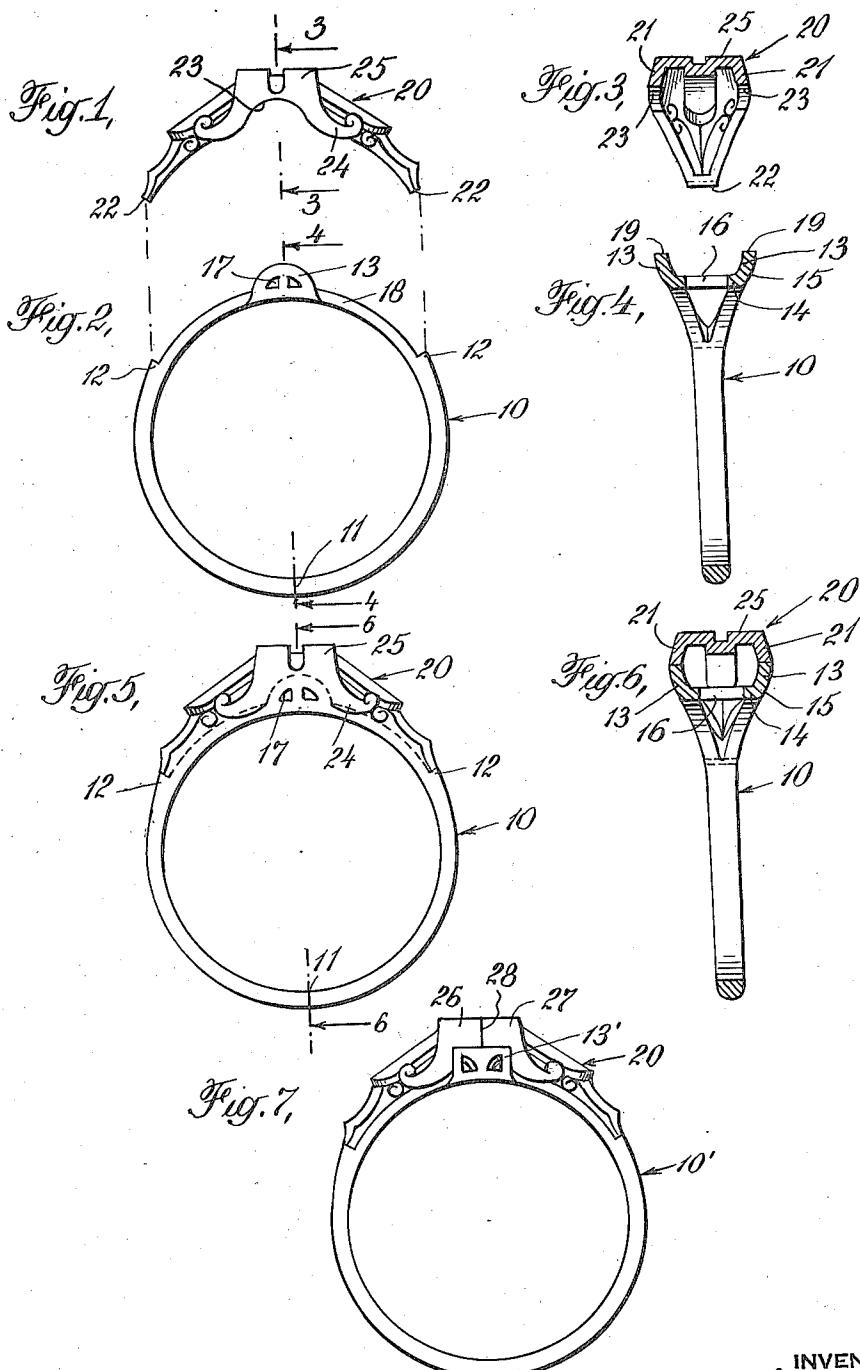
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FINGER RING AND METHOD OF MAKING IT

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FINGER RING AND METHOD OF  
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This invention relates to finger rings and has particular reference to a novel structure for a finger ring adapted to mount a stone or other setting, and to the method of making it.

5 Finger ring blanks are usually stamped in one piece out of a flat sheet of metal by means of dies shaped to the required design and, after appropriate polishing and finishing, the flat blank is then bent into circular shape and the abutting 10 free ends secured together by soldering or the like. In order to provide the necessary draft for the blanking dies, the decorative crown, or widest part of the blank in which the stone is to be set, tapers inwardly from the inner surface of the 15 ring, so that relatively sharp inner lateral edges are formed, which is an undesirable condition, principally because the ring so formed appears light and unfinished. The provision of the necessary draft for the dies also results in the formation of a large recess under the crown which 20 accentuates the sharpness of the inner lateral edges of the ring at the crown and increases the appearance of lightness of the ring, in addition to providing a large space under the crown in 25 which soap and dirt readily lodge.

In accordance with the present invention, a finger ring structure is provided by means of a novel method of fabrication, in which the inner lateral edges of the ring at the crown or widest 30 part are well-rounded, first tapering outwardly and then inwardly toward the crown so that the crown appears to be solid and massive, although only slightly more metal is employed in its structure than in rings formed according to the usual 35 methods. Also, although the crown is hollow in the new ring, the inner surface of the ring may be made entirely imperforate if desired, so that foreign matter will not lodge under the setting.

The new ring structure is built up of at least 40 two parts, the ring blank and the crown blank. The ring blank is stamped out of a sheet of metal with dies shaped to provide lateral upstanding flanges or lugs at the crown portion, which flare or taper outwardly from the inner lateral edges 45 of the blank, so that the blank at the crown portion is substantially channel or U-shaped in cross-section, with the outwardly flaring walls of the flanges or lugs merging smoothly with the inner wall of the blank to provide a well-rounded, 50 substantially continuous surface. The ring blank is then formed into circular shape and its free ends joined by soldering or the like, in the usual way.

The crown blank is also substantially channel 55 or U-shaped in cross-section and is curved longi-

tudinally to conform to the curvature of the ring blank. The side walls of the crown blank are cut out or recessed to conform to the shape of the flanges or lugs on the ring blank so that the ring and crown blanks, in effect, dove-tail when placed in cooperative relation, the two blanks being soldered together in that position, the ends of the crown blank extending down the sides of the ring in overlapping relation. If desired, the crown blank may be formed in two 10 or more parts which cooperate with the ring blank to complete the ring in the manner described.

It will be seen that the crown of the new ring structure fabricated of two or more parts in this 15 way is hollow, and that but little metal is used in forming it, although the ring has the well-rounded and massive appearance of the solid and consequently more expensive rings. Furthermore, it is not subject to the objections to rings 20 made in the usual way with their sharp inner lateral edges and dirt-collecting recesses, for the reason that in stamping the new ring blank the necessary draft for the forming dies is provided on the outer or upper surface of the blank instead of on the inner or lower surface of the blank 25 instead of as is done in the usual method.

For a more complete understanding of the invention, reference may be had to the accompanying drawing, in which:

Figure 1 is an elevation of a finger ring crown blank formed in accordance with this invention;

Fig. 2 is an elevation of a finger ring blank made in accordance with this invention and shown in alignment with the crown blank of Fig. 1 to illustrate the manner in which the blanks are adapted to cooperate to form the completed ring structure;

Fig. 3 is a cross-section through the crown blank, as seen along line 3—3 of Fig. 1;

Fig. 4 is a cross-section through the ring blank, as seen along the line 4—4 of Fig. 2;

Fig. 5 illustrates the ring structure completed by joining the respective crown and ring blanks of Figs. 1 and 2;

Fig. 6 is a cross-section through the completed ring structure, as seen along the line 6—6 of Fig. 5; and

Fig. 7 illustrates a modified form of the ring structure.

Referring to Fig. 2 of the drawing, numeral 10 designates the ring blank formed by stamping out of sheet metal a flat strip which is then bent into circular form and its free ends joined at 11 by soldering or the like. The dies employed for 55

stamping out the ring blank 10 are shaped as to provide shoulders 12 on opposite sides of the ring which extend outwardly from its outer surface in the manner illustrated in Fig. 2. Also, the dies are so shaped as to provide upwardly extending lateral flanges or lugs 13 on the opposite lateral edges of the ring blank 10, these flanges 13 forming with the flat portion 14 of the ring blank 10 a substantially U-shaped structure, as is illustrated in the cross section of Fig. 4.

In order to provide the necessary draft for the dies, the flanges or lugs 13 flare outwardly instead of inwardly as in the usual ring blanks, so that no sharp corners or edges are formed but instead, the flanges or lugs 13 merge smoothly with the flat portion 14 of the ring blank 10, whereby a smooth well rounded surface 15 is formed at the inner edges of the ring blank where these edges are joined to the flanges or lugs 13. The flanges or lugs 13 are located at the point where the crown or widest part of the finished ring is to be located and in which the stone or other setting is to be set. Also, if desired, perforations 16 may be formed in the ring blank 10 as well as decorative perforations 17 in the flanges or lugs 13.

It will be seen that in the ring blank so formed, the flanges or lugs 13 extend laterally a slight distance beyond the adjacent flat-sided portions 18 of the ring blank 10 and that these portions 18 are thinner radially than the remainder of the ring blank 10. Furthermore, the upper surfaces 19 of the flanges or lugs 13 are flat and horizontal as seen in Fig. 4.

The crown blank 20 illustrated in Fig. 1 and in cross section in Fig. 3, is also preferably stamped from a sheet of metal and is formed with downwardly-turned lateral flanges 21, the edges of which are flat and horizontal as seen in Fig. 3. The crown blank 20 is curved longitudinally to conform to the curvature of ring blank 10 and its length is such that the ends 22 thereof engage and rest upon the shoulders 12 of the ring blank 10 where the two blanks are placed in cooperative relationship. Also, the opposite lateral flanges 21 of the crown blank 20 are provided with notches 23 which are shaped to conform to the configuration of flanges or lugs 13 of the ring blank 10, so that these flanges or lugs 13 dovetail into the notches 23 when the two blanks are placed in cooperative relationship. The edges of the flanges or lugs 13 are spaced apart the same distance as the edges of the flanges 21 within notches 23, so that when the flanges or lugs 13 dovetail into notches 23 the aforementioned edges of the flanges of each blank abut evenly and smoothly.

The width between the flanges 21 of the crown blank 20 is such that when the two blanks are placed in cooperative relationship, those portions 24 of the flanges 21 which lie on either side of notches 23 of crown blank 20, align with and may overlap the flat sides of portions 18 on either side of the flanges or lugs 13 of the ring blank 10, so that all engaging parts of the two blanks fit evenly and smoothly. In this position, the ends 22 of the crown blank 20 not only engage shoulders 12 of the ring blank 10, but also overlap the upper surfaces of portions 18 above the shoulders 12.

The crown blank 20 may be variously decorated with scrolls and recesses for receiving precious stones or the like, while the upper portion 25 thereof forms or is arranged to receive a box

for receiving the central stone or other setting when the ring is finished.

In joining the two parts of the ring, namely the ring blank 10 and the crown blank 20, they are placed together in cooperative relationship in the manner described and illustrated in Figs. 5 and 6, the latter showing the manner in which the flanges and lugs 13 of the ring blank 10 not only dovetail into the notches 23 of the crown blank 20, but also the way in which the flat horizontal edges of the flanges 13 and 21 smoothly abut. The two blanks are then soldered or otherwise secured together in this position, so that, as will be observed in Fig. 6, the entire crown is hollow and still gives the appearance of weight and enhances the finished appearance of the ring, causing it to resemble a solid and therefore more expensive ring. Also, the well rounded edges 15 of the crown caused by the outwardly flaring flanges 13 provide no sharp corners. Although apertures 16 are shown in the ring blank 10 they may be omitted, or they may be made as small as desirable. These apertures have nothing to do with the formation of the ring blank, as is the case with ring blanks formed in the usual way, where the necessary draft for the forming dies leaves a large opening under the setting or crown in which foreign matter may collect.

As is indicated in Fig. 7, the flanges 13' of the ring blank 10' may be made any desirable shape 30 such as rectangular, it being only necessary to shape the corresponding notches in the crown blank to the contour of the flanges 13'. Also the crown blank 20' may be made in two parts 26 and 27 which are joined by soldering or the like along 35 the line 28, each of the parts 26 and 27 being appropriately notched to conform to the configuration of the flanges 13'. The ring structure illustrated in Fig. 7 is also made in accordance with the novel process of this invention and, although only two modifications of the ring structure of this invention are illustrated, it is to be understood that the ring may be made in many other ways in accordance with the method of this invention and that the invention is not limited to 45 the two forms of structure illustrated herein.

I claim:

1. The method of making a finger ring, which comprises forming a ring blank with opposite lateral members projecting upwardly from the peripheral surface of the ring, forming a crown blank with opposite downwardly-turned lateral members having the configuration of the members on the ring blank, placing the blanks together with the edges of their said members in abutting relation, and connecting said abutting edges together.

2. The method of making a finger ring, which comprises forming a ring blank with opposite lateral members projecting upwardly from the peripheral surface of the ring, said members extending only part way along the lateral edges of the ring blank, forming a crown blank with opposite downwardly-turned lateral members having opposite notches conforming to the shape of the members on the ring blank, placing the blanks together with the edges of their members in abutting relation in the notches of the crown blank, and securing the said abutting edges together.

3. The method of making a finger ring, which comprises forming a ring blank with opposite lateral members projecting upwardly from the peripheral surface of the ring, said members extending only part way along the edges of the ring blank, forming a crown blank with opposite down-

wardly-turned lateral members having opposite notches conforming to the shape of the said members on the ring blank and portions on either side of the notches conforming to the shape of the corresponding portions of the ring blank on either side of the said members thereof, and securing the blanks together with the edges of their said members in abutting relation in the notches of the crown blank and their said portions in engagement on either side of the said members on the ring blank.

4. The method of making a finger ring, which comprises forming a ring blank with opposite members flaring outwardly from the lateral edges of the blank at one point thereon and extending upwardly from the peripheral surface of the ring, forming a longitudinally-curved crown blank with opposite downwardly-turned lateral members having opposite notches conforming to the shape of the said members on the ring blank and portions on either side of the notches conforming to the shape of the corresponding portions of the ring blank on either side of the said members thereof, and securing the blanks together with the edges of their said members in abutting relation in the notches of the crown blank and their said portions in engagement and the ends of the crown blank overlapping the outer surface of the ring blank.

5. The method of making a finger ring, which comprises forming a ring blank with opposite lateral members extending upwardly from the peripheral surface at one point, forming shoulders on the outer surface of the blank at either side of the said members, forming a longitudinally-curved crown blank of a length substantially equal to the space between said shoulders and with downwardly-turned opposite lateral members having opposite notches conforming to the shape of the said members on the ring blank, and securing the blanks together with the edges of their said members in abutting relation in the notches of the crown blank and with the ends of the crown blank in engagement with the corresponding shoulders on the ring blank.

6. In a finger ring, the combination of a ring blank having a pair of lateral members extending upwardly from the peripheral surface of the blank and forming with said surface a substantially U-shaped cross-section, a crown blank having downwardly-turned lateral members and substantially conforming to the configuration of the ring blank, and means for securing together the edges of the said members on both blanks in abutting relation to form a hollow crown for the ring.

7. In a finger ring, the combination of a ring blank having a pair of lateral members extending upwardly from the peripheral surface of the blank and forming with said surface a substantially U-shaped cross-section, a crown blank having downwardly-turned lateral members notched to receive the said lateral members on the ring blank, and means for securing the blanks together with the edges of their said members in abutting relation to form a hollow crown for the ring.

8. In a finger ring, the combination of a ring blank having a pair of lateral members extending upwardly from the peripheral surface of the blank and forming with said surface a substantially U-shaped cross-section, a longitudinally-curved crown blank having downwardly-turned lateral members substantially conforming to the configuration of the cooperating portions of the ring blank, and means for securing together in abutting relation the cooperating edges of the said

members on both blanks to form a hollow crown for the ring, the ends of the crown blank engaging the ring blank in over-lapping relation.

9. In a finger ring, the combination of a ring blank having a pair of lateral members extending upwardly from the peripheral surface of the blank and forming with said surface a substantially U-shaped cross-section, a longitudinally-curved crown blank having downwardly-turned lateral members notched to receive the upstanding members on the ring blank and also shaped to conform to the configuration of the cooperating portions of the ring blank, and means for securing together in abutting relation the edges of the said members on both blanks to form a hollow crown for the ring, the ends of the crown blank engaging the ring blank in overlapping relation.

10. In a finger ring, the combination of a substantially circular ring blank having at one point a pair of opposed lateral members extending upwardly from the periphery of the blank, an elongated, longitudinally-curved crown blank having downwardly-turned lateral members conforming to the configuration of the cooperating parts of the ring blank and having notches in its opposite members for receiving the said members on the ring blank, means for securing together in abutting relation the cooperating edges of the said members on both blanks, and means for securing the other portions of the crown blank to the engaging portions of the ring blank in overlapping relation to form a hollow crown for the ring.

11. In a finger ring, the combination of a substantially circular ring blank having at one point a pair of opposed lateral members extending upwardly from the periphery of the blank, a surface shoulder on each side of the ring blank and facing the members in spaced relation thereto, an elongated, longitudinally-curved crown blank having downwardly-turned lateral members conforming to the configuration of the cooperating parts of the ring blank and having at its center portion opposite notches in the said members shaped to receive the said members of the ring blank, and means for securing together the engaging portions on the ring blank and the crown blank whereby the said members on the ring blank are seated within the corresponding notches in the crown blank and the ends of the crown blank abut the corresponding shoulders on the ring blank to form a hollow crown for the ring.

12. In a finger ring, the combination of a substantially circular ring blank having opposite lateral members at one point extending upwardly from the periphery of the blank, a pair of cooperating crown blanks formed to fit together at one end over the said ring blank members and having their lower edges in abutting relation with the edges of the said members on the ring blank, and means for securing the crown blanks to each other in this position to form a hollow crown for the ring.

13. In a finger ring, the combination of a ring blank having a pair of members extending upwardly from the peripheral surface of the blank at the side edges thereof and forming with the peripheral surface a substantially U-shaped cross-section, a crown blank substantially conforming to the configuration of the ring blank and having downwardly turned lateral members, the edges of the said members on said crown blank lying in abutting relation to the edges of the said members on said ring blank,

and means for securing the said abutting edges of the said members on the two blanks together, said pairs of members forming a hollow crown having its greatest transverse dimension between the top and bottom thereof.

14. In a finger ring, the combination of a ring blank having a pair of lateral members extending upwardly and outwardly from the peripheral surface of the blank at the side edges thereof and forming with said surface the lower half of a crown, a crown blank conforming to the configuration of the ring blank and having members extending downwardly and outwardly from the said edges thereof, a portion of said crown blank and its said members forming the upper half of said crown, the edges of the said members on the two blanks lying in abutting relation, and means for securing said abutting edges together.

15. In a finger ring, the combination of a ring blank having a pair of members extending upwardly from the peripheral surface of the blank at the sides thereof and forming with said surface a substantially U-shaped cross-section, a crown blank substantially conforming to the configuration of the ring blank and having members extending downwardly from the side edges thereof, the edges of the said members on said crown blank lying in abutting relation to the edges of the said members on said ring blank and also lying in overlapping relation to the lateral edges of the ring blank on either side of the said members on the ring blank, and means for securing the abutting edges of the said members together.

16. In a finger ring, the combination of a ring blank having a pair of laterally projecting members extending upwardly and outwardly from opposite side edges of the blank in alignment across the peripheral surface of the blank, a crown blank substantially conforming to the configuration of the ring blank and having opposed lateral members extending generally vertically, the edges of the members on said ring blank meeting the edges of the members on said crown blank in abutting relation, and means for securing the said abutting members of the two blanks together.

17. In a finger ring, the combination of a ring blank having a pair of oppositely disposed members projecting from the peripheral surface of the blank at the side edges thereof, said members having an outward flare, a crown blank substantially conforming to the configuration of the ring blank, and having a pair of oppositely disposed lateral walls extending downwardly from the top thereof and flaring outwardly, the upper edges of the members on the ring blank and the lower edges of the walls on the crown blank meeting in abutting relation, and means for securing the said abutting edges together.

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