PROCESS FOR THE SECURING OF PRECIOUS STONES OR THE LIKE IN THEIR MOUNT AND PRODUCTS OBTAINED BY THE APPLICATION OF THE SAID PROCESS

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FIG. 5

FIG. 6

FIG. 7

FIG. 8

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PROCESS FOR THE SECURING OF PRECIOUS STONES OR THE LIKE IN THEIR MOUNT AND PRODUCT TAKEN THEREBY OR OBTAINED BY THE APPLICATION OF THE SAID PROCESS

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7 Claims. (Cl. 63—28)

ABSTRACT OF THE DISCLOSURE

This invention relates to a mounting for precious and semi-precious stones provided with a plurality of cavities for receiving said stones and rods or stirrups between the cavities which, when pressed down, act to retain the stones in both adjacent cavities in place.

This application is a continuation of application Ser. No. 377,910 filed June 25, 1964.

It is known that, in jewellery, stones which may or may not be precious are conventionally secured by means of clasps in cavities formed in a supporting mount which is generally made of precious metal. This mode of securing has the disadvantage that it leaves the ends of the clasps visible on the edges of the stone when seen from above, thus being particularly the case with stones of small dimensions.

It is the object of the present invention to obviate this disadvantage. The invention relates to a novel mode of securing stones which may or may not be precious on their supporting mount, the said process consisting essentially in that the said stones are, after having been contiguously disposed and retained in their cavities, secured by means of stirrup members disposed on the mount perpendicular to the alignment of the said stones, in a transverse plane extending through the zone connecting two adjacent cavities; the said stirrup members exerting on the stones simultaneously a pressure which applies them in their cavities and a lateral wedging effect which locks each stone between two stirrup members.

In one embodiment of the invention, the aforementioned stirrup members are manufactured from rods of appropriate section, brazed (hard-soldered) on one of the lateral faces of the mount, the said rods being bent and tightened successively on the point of junction of the stones or on the point at which they are nearest to each other, and then brazed on the other lateral face of the said mount, the latter operation being followed by finishing operations such as are conventionally effected in the manufacture of jewellery.

In a variant of the process specified hereinabove, the securing stirrups are brazed on two sides of the mount before the placing in position of the stones. This placing in position is effected by sliding each stone between two stirrup members which are laterally spaced apart, due to their malleability. After the positioning of all the stones, a slight degree of re-eruction and a slight degree of hammering, both operations well known to the person skilled in the art, completes the securing of the stone.

The present invention also covers, by way of novel industrial products, on the one hand the mounts of the jewels provided either with radial rods or with complete stirrup members, as specified hereinabove, and also the jewels, rings, brooches, ornaments of all kinds, comprising stones or other ornaments secured with the aid of stirrup members, as indicated hereinabove.

In order to make the subject of the invention more readily comprehensible, a description will now be given, by way of illustration only, of various embodiments, considered as examples and illustrated in the accompanying drawings, wherein:

FIGURE 1 is a diagrammatic view of a ring mount provided with radial rods intended for the formation of stirrup members for the securing of stones on the said mount.

FIGURE 2 shows, drawn to a larger scale, a portion of the ring shown in FIGURE 1 is seen from above, during the placing in position of the stones;

FIGURE 3 is a view in section of the ring taken in its median plane, showing the securing of the stones in accordance with the present invention;

FIGURE 4 shows, in section, various sections of rods capable of being used for the manufacture of stirrups for the securing of stones;

FIGURE 5 shows, in perspective, a completed ring, manufactured from the mount of FIGURE 1;

FIGURE 6 is a partial view showing, as seen from above, a ring manufactured with a mount comprising complete stirrups brazed before the placing in position of the stones; FIGURES 7 and 8 show two further embodiments of an article of jewellery according to the present invention.

Referring to the drawings, it will be seen that the mount 1 illustrated in FIGURE 1 comprises, juxtaposed on its periphery, a series of frusto-conical bezels (settings) 2 and, brazed at 3 on its lateral face, rods 4 disposed radially, the said rods optionally having various sections, notably those illustrated in FIGURE 4.

The said rods 4 are, in accordance with the present invention, bent over at right angles at 5 and 6 (FIGURES 2 and 3) so as—after brazing on the opposite lateral face of the mount—to constitute a stirrup member 4a straddling the point of contact 7 of the two successive stones 8 placed in position in their bezels 2.

After securing all the stones 8 in the manner indicated hereinabove and after the conventional finishing operations, the ring 5 is obtained, this ring being characterised in that all the stones retain practically all their brilliance.

FIGURE 6 shows the manner in which a stone is placed in position in the case wherein the stirrups 4a are previously formed on the mount. The said stirrups, which are brazed on two sides at 3—4 are first of all laterally spaced apart in such manner that the stone 8 requiring to be lodged in the bezel 2 has sufficient room to pass, and then they are drawn together so as to locate them in a plane perpendicular to the mount, whereupon they are gripped so as to provide the pressure necessary for the locking of the stones.

Of course, the stirrup members 4a of FIGURE 6 could be replaced by simple transverse soldered bars which are hammered on the stones 8 after being placed in position in their bezels.

FIGURE 7 shows the application of the invention to a brooch or similar article of jewellery, whereas in FIGURE 8 the invention is applied to the securing of stones on a ring.

It will be clearly understood that the embodiments discussed hereinabove have no kind of limitative character and could be modified in any way which might be desirable, without thereby exceeding the scope of the invention.

What is claimed is:

1. A decorative article comprising a plurality of decorative stones and a supporting mount, said mount being provided with a row of cavities, each cavity receiving an individual stone, and a plurality of stirrup members carried on said mount perpendicular to said row, each stirrup member occupying a plane extending through a zone connecting two adjacent cavities, and simultaneously...
pressing the stones in said two adjacent cavities in a direction perpendicular to said row which applies said stones into their cavities and in a direction longitudinally of said row which causes each stone to be gripped between two adjacent stiðrup members.

2. A decorative article as claimed in claim 1 in which the stones positioned in said cavities have sloping edge portions which extend into said connecting zones and receive the pressure exerted by said stiðrups perpendicularly of said row, so that a portion of said pressure is referred through said sloping edge portions longitudinally of said row.

3. A setting for decorative stones, said setting comprising mounting means provided with a row of cavities, each adapted to receive a single stone, and a plurality of rods affixed to said mounting means laterally of said row, each rod being positioned to engage a stone in each of two adjacent cavities when bent transversely across said row.

4. A setting for decorative stones, said setting comprising mounting means provided with a row of cavities, each adapted to receive a single stone, and a plurality of metal loops positioned transversely of said row midway between the centers of adjacent cavities, so that when pressed downwardly toward said mounting said loops will engage the stones in both said adjacent cavities.

5. The process for securing a plurality of decorative stones in a supporting mount provided with a row of cavities, each cavity being adapted to receive an individual stone, which process comprises the steps of positioning one of said stones in each cavity, and retaining said stones in said cavities by means of stiðrup members disposed on the mount perpendicular to said row, each stiðrup member occupying a plane extending through a zone connecting two adjacent cavities and exerting simultaneously on the stones in said two adjacent cavities a pressure in a plane perpendicular to said row which applies said stones in their cavities, and a pressure acting longitudinally of said row which serves to grip each stone between two adjacent stiðrup members.

6. The process claimed in claim 5 according to which each stiðrup member consists of a rod initially secured at one end laterally of said row, and in which said rods are successively bent, tightened in said zones onto said stones and brazed at their other ends to said mount.

7. The process claimed in claim 5 in which said stiðrups are first formed on said mount with both ends attached to said mount and sufficient space between each pair of adjacent stiðrups to admit a stone, said stones are subsequently inserted between said stiðrups, and said stiðrups are then forced toward the mount until they grip the stones.

No references cited.

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