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WATCH CASING

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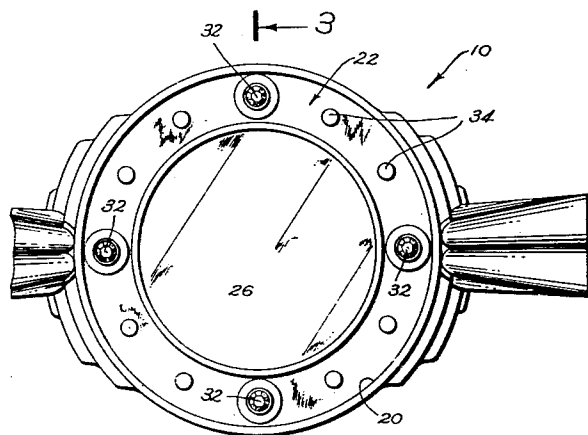


FIG. 1

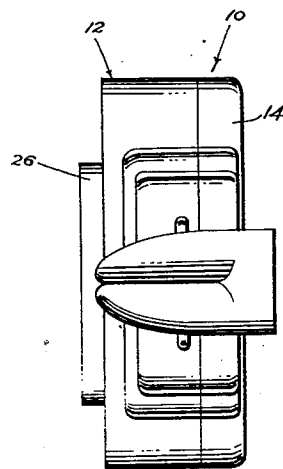


FIG. 2

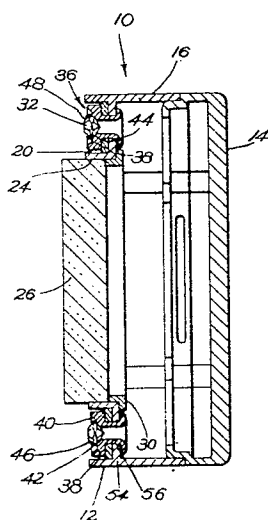


FIG. 3

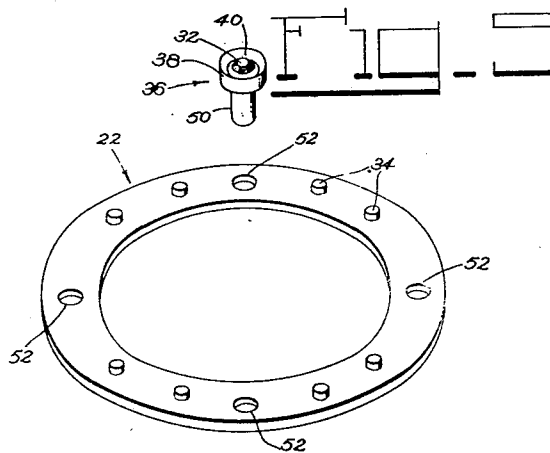


FIG. 4

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## UNITED STATES PATENT OFFICE

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## WATCH CASING

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4 Claims. (Cl. 58—88)

1

This invention relates to watches, and more particularly to watches of which the time dials are integral parts of the watch casings.

It is the primary aim and object of the present invention to provide a watch casing, particularly for a wrist watch, with an integral time dial which is not covered by the customary crystal over the watch hands, but is nevertheless protected to the extent that it may not be brushed against unintentionally.

It is another important object of the present invention to provide preferably more than one of the more prominent hour indicia of the integral time dial of the watch casing in the form of diamonds, while the remaining hour indicia may, in distinct and pleasant contrast with the diamond indicia, be mere raised portions in the time dial.

It is another important object of the present invention efficiently and inexpensively to manufacture the time dial as a separate part, and to provide for facile and secure mounting of the time dial on the watch casing.

The above and other objects, features and advantages of the present invention will be more fully understood from the following description considered in connection with the accompanying illustrative drawings.

In the drawings:

Fig. 1 is an enlarged front view of a watch casing embodying the present invention;

Fig. 2 is an enlarged side view of the same watch casing;

Fig. 3 is a section taken on the line 3—3 of Fig. 1; and

Figs. 4 and 5 are enlarged perspective views of certain detail parts.

Referring to the drawings, the reference numeral 10 designates a watch casing which, in the present instance, is suited for a wrist watch, and comprises the usual casing member 12 and a cover member 14 therefor. The rim 16 of the casing member 12 fits relatively tightly over an inwardly offset portion 18 of the cover member 14 (Fig. 3) so that the latter is removable from the casing member 12 for access to the usual watch movement (not shown) in the casing.

The casing member 12 is so formed of precious or nonprecious sheet metal as to have in its exposed face a relatively deep recess 20 which, in the present instance is annular and serves for the reception of a time dial 22. The exposed face of the casing member 12 is further provided with a central opening 24 for the reception of a crystal 26 through which the hands of the watch in

2

the casing may be observed. The crystal 26 may be mounted in any suitable manner. By way of example, the opening 24 in the casing member 12, as well as the crystal 26, may be slightly tapered so that the latter will become firmly seated in the opening 24 on insertion therein from the inside of the casing member 12. A ring-like retainer 30 may be tightly fitted into the opening 24 to lock the crystal 26 therein.

To embellish the watch casing, as well as to lend it a distinctive and highly pleasant appearance, several synthetic or genuine stones, such as diamonds 32, for instance, are used to good advantage for certain ones of the hour indicia on the time dial, while the remaining hour indicia may, in distinct and pleasing contrast with the diamond indicia, be in the form of pin-like projections 34, for instance, on the time dial. In the present instance, the indicia corresponding to the hours of three, six, nine and 12 are in the form of diamonds, while the remaining hour indicia are in the form of the pin-like projections referred to. The projections 34 may be separate pins that may conveniently be pressfitted in properly spaced holes in the time dial 22 (Fig. 4).

Each diamond 32 is mounted in a setting 36 that may be of any conventional construction. In the present instance, each setting 36 is in the form of a disk 38 of non-corroding and preferably precious metal, having in its top a frusto-conical depression 40 (Fig. 3) from the bottom of which rises a rim 42 that encircles the diamond. The diamond itself is seated on a frusto-conical surface 44 of the disk 38, and the rim 42 is stemmed over the usually slanting sides 46 of the diamond as at 48 in order securely and permanently to retain the diamond on its seat 44. The disk 38 of each setting is provided with a rearwardly projecting, preferably hollow shank 50. The time dial 22 is provided with the requisite number of correctly spaced holes 52 for the reception of the several diamond settings 36, respectively. The holes 52 in the time dial are of a size to receive the shanks 50 of the diamond settings 36, respectively. The shanks 50 are here used not only for the secure mounting of the diamond settings to the time dial 22, but also for the secure mounting of the latter to the casing member 12 in correct position thereon. To this end, the bottom wall 54 of the recess 20 in the exposed face of the casing member 12 is provided with holes 56, respectively, in the time dial 22 and through which the shanks 50 of the diamond settings 36 also extend. The ends of the shanks 50 of the diamond settings are then spun or crimped over

3

the adjacent bottom wall 54 of the recess 20 in the casing member in the fashion shown in Fig. 3 in order securely to mount the parts 22 and 36 on the watch casing.

By virtue of the location of the time dial 22, including the diamonds 32 thereon, in the recess 20 of the casing member 12, the parts of the time dial and parts carried thereby may not be brushed against unintentionally and are thus effectively protected even though they are fully exposed at the outside of the watch casing. This protection is enhanced by the crystal 26 which, in accordance with modern trend, is comparatively thick and projects considerably above the casing member 12.

The provision of the separate time dial 22 and its mounting on the casing member 12 affords several important advantages. Thus, the embellishment of the time dial does not require any operation on the watch casing itself other than the drilling of a few holes in the casing member 12. Also, the separate time dial 22 may conveniently be machined and otherwise operated on while it is outside of the casing member 12. The use of a separate time dial further permits the manufacture of a large number of watch casings which may be identical so far as their mountings for the separate time dials are concerned, and these watch casings may subsequently be equipped with time dials of various appearances. Thus, the appearance of the otherwise identical time dials may be varied by selecting a different number and arrangement of diamonds 32 and projections 34, or by the use of stones other than diamonds, or both. The provision of the separate time dial 22 affords the further advantage of adding a unique and pleasant contrast to the appearance of the watch casing, by using for the time dial a metal other than that of the watch casing and/or polishing the exposed face of the time dial so that it will have a surface appearance different from that of the watch casing.

While I have shown and described the preferred embodiment of my invention, it will be understood that various changes may be made in the present invention without departing from the underlying idea or principles of the invention within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. A watch casing, comprising a casing member having an open bottom and a top provided with an opening for a crystal and an externally exposed endless recess having an open top and a closed bottom, said recess surrounding said opening and having a hole in the bottom thereof, a cover on said casing member for closing the bottom thereof, a dial located on the bottom of said recess, said recess being deeper than the

4

thickness of said dial so that the latter is spaced from the open top of said recess, and said dial bearing certain hour marks and having in lieu of another associated hour mark a hole in alignment with the hole in the bottom of said recess, and a separate hour mark on the exposed face of said dial, said separate mark representing said other mark and having a shank extending through said aligned holes, and means for securing said shank in said holes.

2. A watch casing as set forth in claim 1, in which said separate mark is a setting for an ornamental stone.

3. A watch casing, comprising a casing member having an open bottom and a top provided with an opening for a crystal and an externally exposed endless recess having an open top and a closed bottom, said recess surrounding said opening and having in its bottom holes spaced angularly in accordance with certain prominent hour indicators on a time dial, a cover on said casing member for closing the bottom thereof, a dial located on the bottom of said recess, said dial bearing first hour marks other than, but associated with, said certain hour indications and having in place of said certain hour indications holes, respectively, in alignment with the holes in the bottom of said recess, said recess being deeper than the thickness of said dial so that the latter is spaced from the open top of said recess, and separate hour marks on the exposed face of said dial, said separate marks representing said certain hour indications, respectively, and having shanks extending through said aligned holes, respectively, and means for securing said shanks in their respective holes.

4. A watch casing as set forth in claim 3, in which each of said separate marks is a setting for an ornamental stone.

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#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

| Number    | Name    | Date           |
|-----------|---------|----------------|
| 2,178,957 | English | Nov. 7, 1939   |
| 2,179,294 | Heit    | Nov. 7, 1939   |
| 2,253,715 | Lux     | Aug. 26, 1941  |
| 2,427,961 | Group   | Sept. 23, 1947 |

#### FOREIGN PATENTS

| Number  | Country     | Date           |
|---------|-------------|----------------|
| 65,167  | Switzerland | Mar. 4, 1913   |
| 74,040  | Switzerland | Dec. 9, 1915   |
| 115,557 | Switzerland | Sept. 24, 1925 |
| 131,147 | Switzerland | Jan. 31, 1929  |
| 201,332 | Switzerland | Nov. 30, 1938  |