

PATENT SPECIFICATION

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DRAWINGS ATTACHED

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(54) AUTOMATIC WATCH

(71) We, KABUSHIKI KAISHA SUWA SEIKOSHA, a Japanese company, of 3—4, 4—chome, Ginza, Chuo-ku, Tokyo, Japan, do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed to be particularly described in and by the following statement:—

This invention relates to automatic watches.

According to the present invention there is provided an automatic watch including a watch movement on which is disposed a first bridge having a first part, a second part and a step therebetween, an automatic winding mechanism disposed on said second part of the first bridge, and a second bridge for the automatic winding mechanism disposed on the first part of the first bridge.

The height of the step is preferably substantially equal to the thickness of the automatic winding mechanism.

Preferably said first bridge is a one-piece member.

Said step may be formed by bending.

The invention is illustrated, merely by way of example, in the accompanying drawing in which:

Figure 1 shows schematically and in cross-section one embodiment of a conventional automatic watch;

Figure 2 shows schematically and in cross-section a second embodiment of a conventional automatic watch; and

Figure 3 shows schematically and in cross-section an automatic watch according to the present invention.

Referring first to Figures 1 and 2 there are shown schematically and in cross-section two embodiments of a conventional automatic watch; like parts in these Figures have been designated by like reference numerals. Each conventional automatic watch has a watch movement 1 on one surface of which is disposed a bridge 2 which carries an automatic winding mechanism 3. Due to the fact that the automatic winding mechanism is disposed

on the bridge 2, the thickness of the automatic watch is increased and this tends to reduce its saleability. 50

The conventional automatic watch of Figure 1 has a further bridge 4 for guiding the parts of the automatic winding mechanism 3, and this automatic winding mechanism is accommodated in a recess 4a in the bridge. Thus, the automatic winding mechanism is located in the space defined by the bridge 2 and the recess 4a. The provision of the recess 4a in the further bridge 4 is undesirable because it increases the cost of the automatic watch. 55 60

The conventional automatic watch of Figure 2 does not have a further bridge and so does not suffer from the disadvantage of the automatic watch of Figure 1. However, the automatic watch of Figure 2 does suffer from the disadvantage that the automatic winding mechanism has to be designed so that it cannot be disassembled and this makes repair of the automatic watch difficult or impossible. 65 70

Referring now to Figure 3 there is shown schematically and in cross-section an automatic watch according to the present invention. The automatic watch has a watch movement 10 on one surface of which is disposed a first bridge 20. The first bridge 20 has two parts, namely, a first part 20a and a second part 20b with a step 20c therebetween. An automatic winding mechanism 30 is disposed on the second part 20b. A second bridge 40 is disposed on the first part 20a for guiding the parts of the automatic winding mechanism 30. 75 80 85

First, in contrast to the conventional automatic watch of Figure 1, the second bridge 40 is not recessed to accommodate the automatic winding mechanism 30 and so the construction of the second bridge 40 is simplified. That is to say, the height *m* of the step 20c is substantially equal to the thickness of the automatic winding mechanism with the result that the surface of the part 20a furthest from the watch movement 10 and the surfaces of the 90 95

[Price 25p]

Price 33p

automatic winding mechanism 30 and the second bridge 40 located nearest to the watch movement 10 are substantially coplanar.

5 The automatic watch according to the present invention illustrated in Figure 3 may be made thinner than the conventional automatic watch of Figure 1 and yet the automatic winding mechanism may be
10 repaired when necessary. It thus avoids the disadvantages of the conventional automatic watches illustrated in Figures 1 and 2.

15 The first bridge 20 is preferably a one-piece member and the step 20c is formed, for example, by bending. It will be appreciated that the first bridge 20 could be made in several parts if this is found to be desirable. The second bridge 40 is not
20 recessed and so a considerable number of the parts of a manual winding watch may be used in the construction of an automatic watch according to the present invention.

25 Thus, the automatic watch of Figure 3 can be made thinner and the manufacture can be simplified with the result that the cost may be reduced. As many of the parts of a manually winding watch may be used in the construction of an automatic watch ac-
30 cording to the present invention, efficiency

and quality of manufacture may be improved and the cost of the automatic watch may be reduced.

WHAT WE CLAIM IS:—

1. An automatic watch including a watch
35 movement on which is disposed a first bridge having a first part, a second part and a step therebetween, an automatic winding mechanism disposed on said second part of
40 the first bridge, and a second bridge for the automatic winding mechanism disposed on the first part of the first bridge.

2. A watch as claimed in claim 1 in which
45 the height of the step is substantially equal to the thickness of the automatic winding mechanism.

3. A watch as claimed in any preceding
claim in which said first bridge is a one-piece member.

4. A watch as claimed in claim 3 in which
50 said step is formed by bending.

5. An automatic watch substantially as
55 herein described with reference to and as shown in Figure 3 of the accompanying drawings.

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and quality of manufacture may be improved and the cost of the automatic watch may be reduced.

WHAT WE CLAIM IS:—

1. An automatic watch including a watch movement on which is disposed a first bridge having a first part, a second part and a step therebetween, an automatic winding mechanism disposed on said second part of the first bridge, and a second bridge for the automatic winding mechanism disposed on the first part of the first bridge.

2. A watch as claimed in claim 1 in which the height of the step is substantially equal to the thickness of the automatic winding mechanism.

3. A watch as claimed in any preceding claim in which said first bridge is a one-piece member.

4. A watch as claimed in claim 3 in which said step is formed by bending.

5. An automatic watch substantially as herein described with reference to and as shown in Figure 3 of the accompanying drawings.

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