

[54] WATCH MOUNTED COUNTER

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[22] Filed: Jan. 29, 1973

[21] Appl. No.: 327,451

[52] U.S. Cl. 58/126 B, 58/152

[51] Int. Cl. G04b 19/00

[58] Field of Search..... 58/126, 127, 128, 58/152

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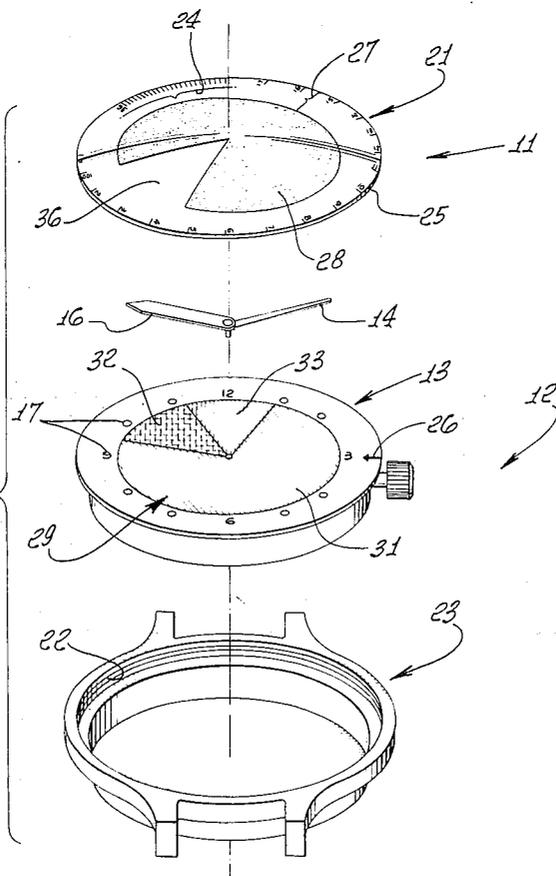
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[57] ABSTRACT

A manually operated counter is mounted on the face of a wristwatch for accumulating and totalizing quantities, such as the daily intake of calories, number of cigarettes consumed, the quantity of pills or other medication taken, etc. The counter is provided by a rotatable member overlying the watch dial face and having an auxiliary scale marked on the periphery thereof. By rotating this member the auxiliary scale may be selectively set relative to an index point on the periphery of the watch casing. A central portion of the rotatable member is generally opaque to form a mask overlying coded warning indicator colors provided near the center of the dial face of the watch. One sector of this opaque mask is transparent to form a window which selectively exposes the indicator colors as quantities, such as daily calories, are accumulated by rotating the member scale. The appearance of certain indicator colors warns the user that his daily intake of calories, cigarettes, etc. is approaching, has been reached, or has been exceeded.

4 Claims, 6 Drawing Figures



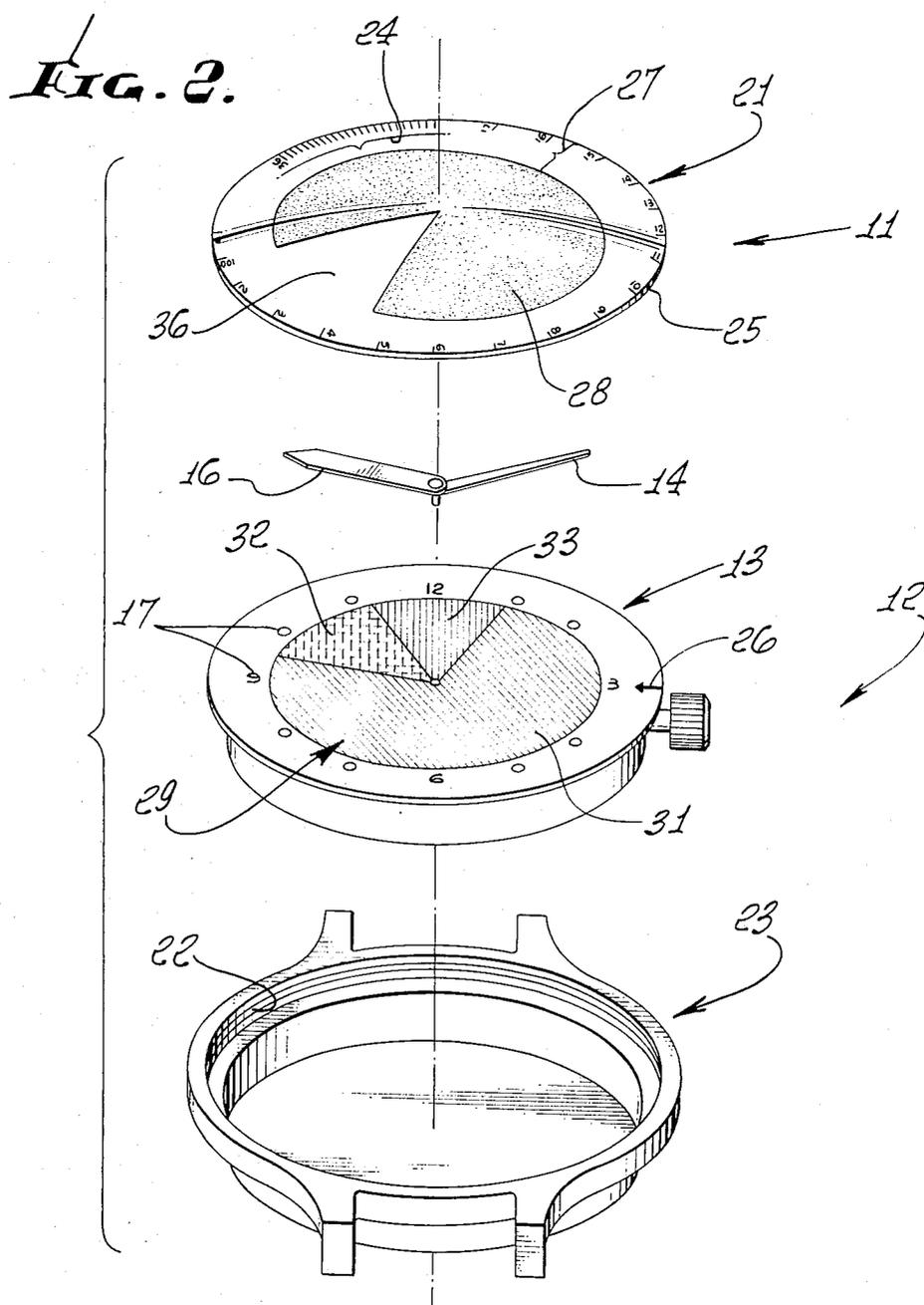
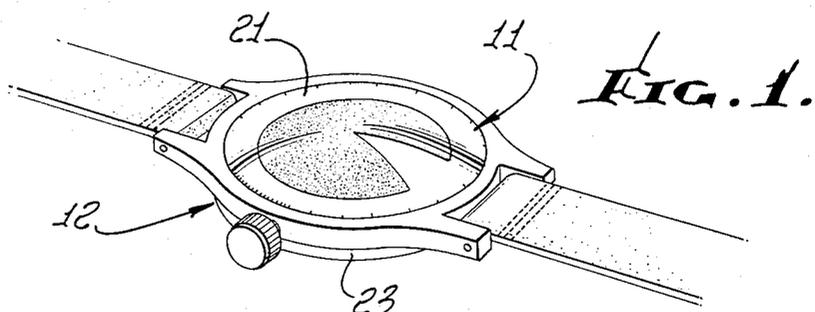


FIG. 3a.

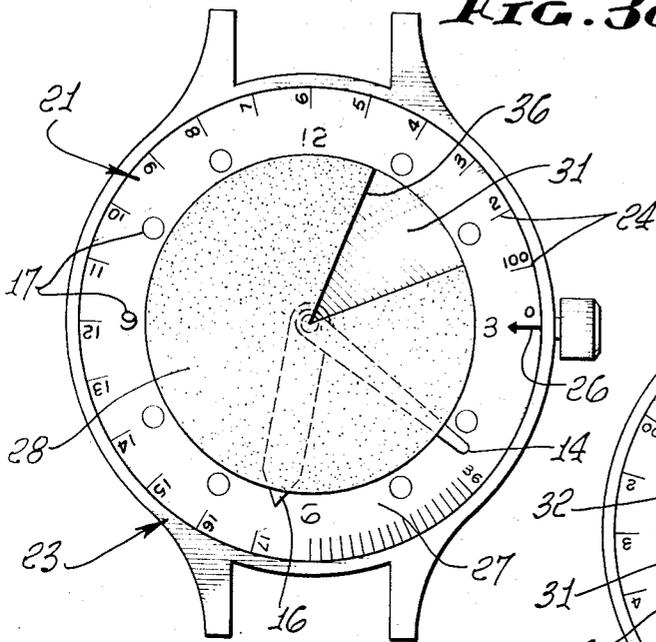


FIG. 3b.

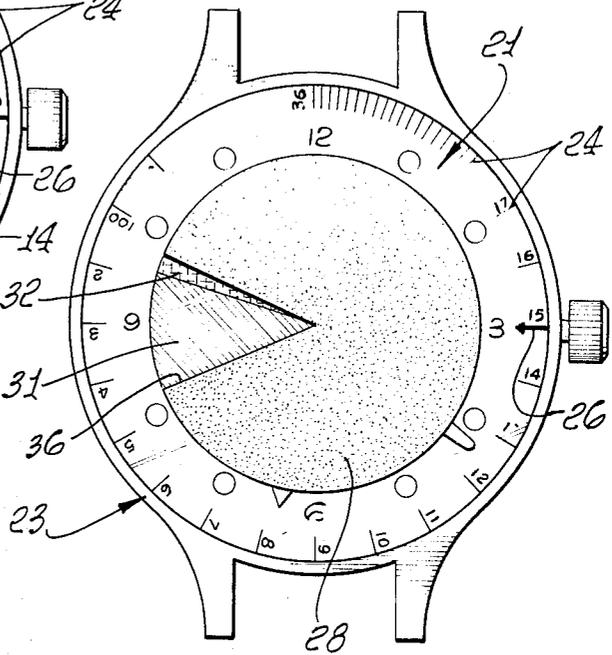


FIG. 3c.

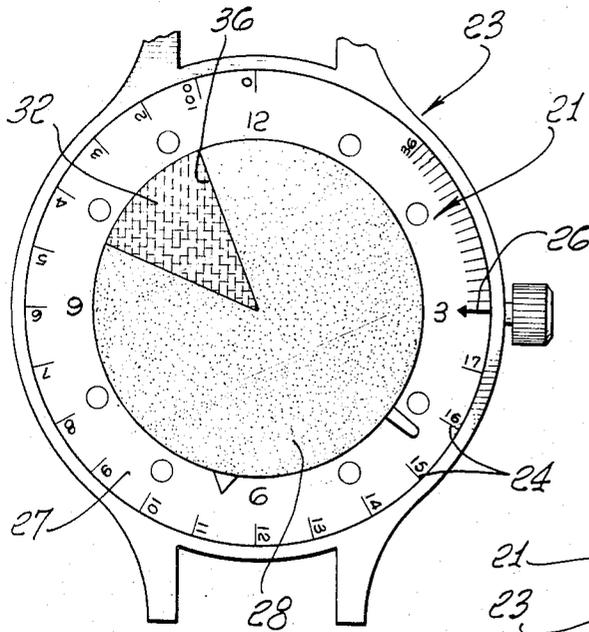
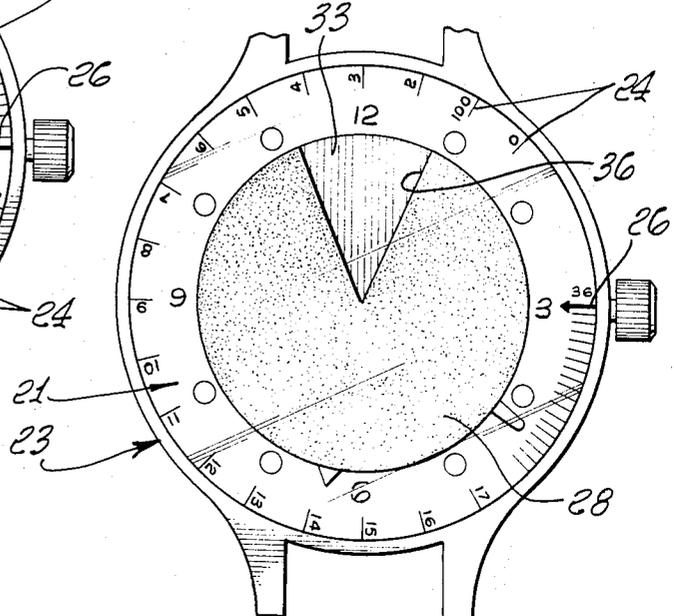


FIG. 3d.



WATCH MOUNTED COUNTER

BACKGROUND OF THE INVENTION

The present invention relates in general to counting or measuring devices and in particular to counters of the type which are manually operated to accumulate or totalize the measured quantity.

The present invention is especially useful as a psychological aid to dieters, heavy smokers, and others having habits involving the excessive use or consumption of such items as food, cigarettes, drugs, etc. For weightwatchers there is a need to constantly remind the dieter to limit his consumption of calories. It is also desirable to provide some mechanism by which the dieter is warned that his allowable limit of calories is approaching and to inform him when the limit has been exceeded. To be effective, the monitoring of the calorie intake and the warning and danger signals must be constantly presented to the weightwatcher. If the device or mechanism for counting and totalizing calories and issuing the warning signals is not always at hand, then its effectiveness will be diminished.

In addition to the monitoring and issuing of warnings when calorie consumption has been excessive, it is equally important to reward successful performance. Thus, it is desirable to provide a device which not only monitors daily consumption but also provides a means for rewarding successful performance.

SUMMARY OF THE INVENTION AND ITS OBJECTIVES

Accordingly, the present invention in general provides a watch mounted counter, especially to be worn on the wrist as a wristwatch, for accumulating such items as calorie intake, cigarettes smoked, pills taken etc. The wristwatch includes a standard dial face having minute and hour hand indicators movable relative thereto. A peripheral portion of the dial face is provided with the usual time scale. Mounted on the watch in superimposed or overlying relationship with the dial face is a rotatable member having auxiliary scale markings on the perimeter thereof. This member is rotatable in a plane generally overlying the dial face such that the scale markings may be moved into registration with an index marker provided on the perimeter of the watch casing at a fixed point, such as adjacent the windup stem for the watch. The perimeter of this rotatable member is transparent to expose the time scale and minute and hour hand indicators of the watch.

Centrally of this transparent peripheral region, the rotatable member is provided with an opaque portion. Coded warning indicator colors are provided on the watch dial face centrally inwardly of the peripheral time scale and underlying the opaque portion of the rotatable member. A transparent window is provided in the opaque portion of the member and is rotatable with the rotatable member to selectively expose these warning indicator colors depending upon setting of the auxiliary scale.

Thus, the rotatable member may be manipulated during the day to totalize the calorie intake of the dieter. Upon reaching a predetermined calorie limit, the window on the opaque portion of the rotatable member may rotate into a position in which one of the warning indicator colors is exposed. For example a yellow caution color may appear. If the calorie intake is exceeded, the auxiliary scale would be rotated to move the mem-

ber window to a position at which a red danger color is exposed. If the user remains within his predetermined intake limits, then the window may expose a safe green zone.

These and further objects and various advantages of the watch mounted counter according to the present invention will become apparent to those skilled in the art from a consideration of the following detailed description of an exemplary embodiment thereof.

Reference will be made to the appended sheets of drawings in which:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the watch mounted counter constructed in accordance with the present invention.

FIG. 2 is an assembly view illustrating the various components of the watch mounted counter of FIG. 1.

FIG. 3a through 3d are diagrammatic views of the watch mounted counter with various settings of the auxiliary scale.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to FIG. 1 the present embodiment of the invention is illustrated by a counter 11 mounted on a wristwatch 12. In general, this watch 12 is of a standard type including a dial face 13 and a minute and hour hands 14 and 16 respectively, movable relative thereto. Dial face 13 is provided in the well known manner with a peripheral time scale 17.

To provide for counting items such as calories, an auxiliary scale member 21 is provided having a shape generally mated to the dial face or front face of the wristwatch 12. Member 21 is rotatably mounted to the casing of wristwatch 12 for selective manual rotation relative to dial face 13. This rotatable mounting may be provided by a recess 22 of casing 23 in which the rim 25 of member 21 is rotatably secured.

Auxiliary scale member 21 may be provided, as in the present embodiment, by the wristwatch crystal which covers and protects the dial face and indicator hands of the wristwatch. Alternatively, member 21 may be formed by a separate cover or shield mated to the outside face of the watch crystal and rotatably secured to the watch casing and/or crystal by suitable means.

Positioned around the perimeter or periphery of member 21 is an auxiliary or counter scale 24. In this instance scale 24 is provided by a numerical count of zero through 3,600. As illustrated in FIG. 1, member 21 is rotated to position the zero scale adjacent an index mark 26. In this instance index mark 26 is provided on dial face 13 such that member 21 and its peripheral scale 24 may be rotated relative to the index mark.

Member 21 is provided with a transparent peripheral border or perimeter 27 in registration with peripheral time scale 17 and a centrally located generally opaque portion 28 as illustrated. Portion 28 masks or visually blocks a central circular portion of the dial face lying radially inside of time scale 17. The transparent perimeter portion 27 and opaque portion 28 are suitably proportioned to permit vision of time scale 17 and minute and hour hand indicators 14 and 16. Underlying the opaque portion 28 of auxiliary scale member 21 is a color coded indicator 29. This indicator is best illustrated in FIGS. 2 and 3 and in this instance is provided

by three sets of colored or otherwise visually distinguishable regions. Here, a safe zone 31, which may be colored green, a caution zone 32, which may be colored yellow, and a danger zone 33, which may be colored red are provided. These color coded zones are mostly shielded from view by opaque portion 28 of member 21. However, portion 28 is provided with a transparent window 36 selectively placed relative to the markings of counter scale 24. In this instance opaque portion 28 is in the form of a solid circle and transparent window 36 occupies a sector of this circle.

Similarly, indicator 29 has the overall configuration of a circle in which visually coded zones 31, 32 and 33 constitute different sectors. The circle formed by indicator 29 is concentrically located beneath circular opaque portion 28 such that rotation of auxiliary scale member 21 causes window 36 to be rotated to selectively expose different zones of indicator 29.

The purpose of this construction is best illustrated in FIGS. 3a through 3d. The user, in this instance a dieter, starts his day by manipulating member 21 to dispose the zero index of scale 24 in registration with starting index mark 26. This indicates zero calories and begins the accumulation of the daily calorie consumption. As shown in FIG. 3a this configuration of auxiliary scale member 21 positions window 36 in the safe green zone 31.

During the day as each meal or food item is eaten, the user keeps track of the calorie intake by adjusting scale member 21 on his wristwatch 12. For the present embodiment, it has been assumed that the daily calorie intake is to be limited to 1,500 calories preferably and an absolute maximum of 1,800 calories. Of course, the particular calorie limits may be varied depending upon the requirements of the individual. As the meals are consumed and the calories mount, they are accumulated by advancing member 21 in accordance with the calorie value of each food item.

When the 1,500 calorie limit is approached, window 36 of auxiliary scale member 21 begins to expose the caution or yellow zone 32 of indicator 29. This warns the dieter that he has used up his daily calorie allotment and that he is approaching the danger zone in which the calorie intake will be considered excessive. This condition of auxiliary scale member 21 and window 36 is illustrated by FIG. 3b.

If this calorie level is exceeded, window 36 advances to a position as shown in FIG. 3c in which the yellow caution zone 32 is fully exposed and the red danger zone 33 is on the horizon. FIG. 3d illustrates the worst performance in that the dieter has exceeded the absolute limit of 1,800 calories for the day and has consumed up to 3,600 calories.

It is contemplated that several different calorie scales 24 may be made available. For example, scales of 0-900 cal. for green, 900-1,200 cal. for yellow, and 1,200-1,800 cal. for red; or 0-1,200 cal. for green, 1,200-1,500 cal. for yellow, and 1,500-1,800 cal. for red may be used depending on the diet.

The weightwatcher is thus provided with an always present and displayed record of his dieting performance. The psychological stimulus is to watch calories so that the indicator stays in the safe zone 31. The yellow caution zone 32 shows approaching danger, and the red danger zone is particularly to be avoided. By wearing

the device, the individual is stimulated to show off and demonstrate his green success. His successes and failures are easily visible not only to himself but also to his family and friends. The device is of equal value for cutting back on other undesirable habits, such as smoking and alcoholic consumption. If used as a reminder of the results of smoking, the danger zone could appropriately be colored dark brown, the color of a diseased lung.

While only a limited number of embodiments of the present invention have been disclosed herein, it will be readily apparent to persons skilled in the art that numerous changes and modifications may be made thereto without departing from the spirit of the invention. Accordingly, the foregoing disclosure and description are for illustrative purposes only and do not in any way limit the invention which is defined only by the claims which follow.

It will be evident that, by appropriate modification of the scales, the present device could be used as a reminder of exercise to be taken, such as jogging a certain distance, a certain number of push-ups or the like.

I claim:

1. A watch mounted counter comprising:
 - a watch including a dial face and minute hand and hour hand indicators movable relative thereto, said dial face having a peripheral time scale;
 - a visually coded indicator disposed centrally of said peripheral time scale and being fixed relative to said dial face;
 - an auxiliary scale member overlying said dial face and said hands and said indicator, said member rotatably mounted to said watch for selective manual rotation relative to said dial face, said scale member having a transparent perimeter disposed in registration with said time scale and a generally opaque central portion overlying said coded indicator, said opaque portion having a transparent window therein to selectively expose said indicator by rotation of said auxiliary scale member, said auxiliary scale member further having a counter scale adjacent its perimeter, whereby said counter scale can be selectively manually set by rotation of said auxiliary scale member to accumulate and totalize a measureable quantity with said member window and coded indicator providing a displayed visual indication when the measured quantity reaches predetermined limits.

2. The watch mounted counter of claim 1, wherein said indicator comprises a color coded warning pattern including differently colored sectors of a circle and said opaque portion of said auxiliary scale member having a generally circular configuration in which said transparent window forms a sector of such circle, and such circle overlies and is generally concentric with the circle defined by said differently colored sectors of said indicator.

3. The watch mounted counter as defined in claim 1, wherein said indicator is provided on said dial face.

4. The watch mounted counter of claim 1, wherein said coded indicator comprises at least three different and visually distinct zones, whereby said zones may represent a "safe" zone, a "caution" zone and a "danger" zone.

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