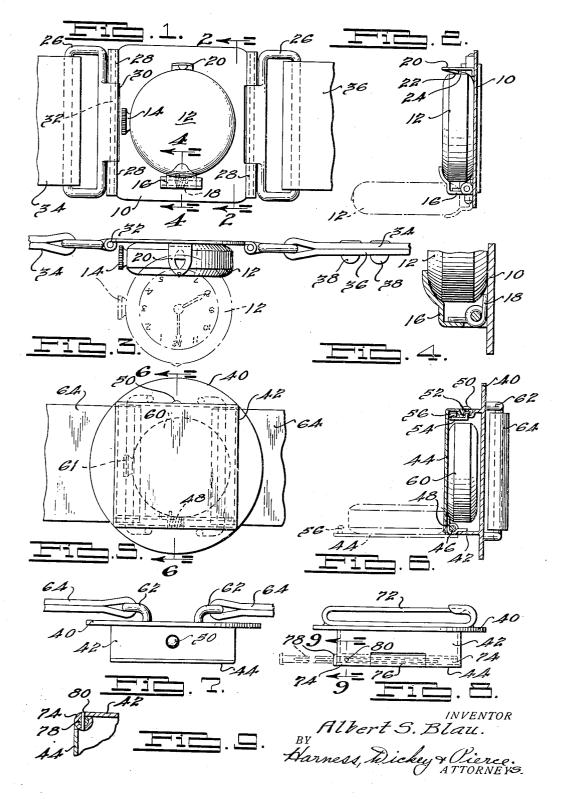
WATCH MOUNTING

Filed Feb. 10, 1938



## UNITED STATES PATENT OFFICE

2,182,194

## WATCH MOUNTING

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Application February 10, 1938, Serial No. 189,845

1 Claim. (Cl. 58-88)

The present invention relates to mountings for watches, the principal object being the provision of a mounting that will safeguard the watch from damage, that will facilitate inspection of the face of the watch under many conditions, that will relieve the watch case from the strain such as it is subjected to in many types of mountings, and that will present an article particularly adapted to embellishment or ornamentation.

Objects of the invention include the provision of a mounting for a watch so constructed and arranged that the face of the watch is normally concealed and protected by the mounting member and is so movably arranged with respect to the mounting member that when it is desired to inspect the face thereof to determine the hour of the day it may be readily moved to a position to expose the face for such purpose; the provision of a watch mounting including a plate-like 20 or other member adapted to be attached to wearing apparel or otherwise secured to a person or to an object and to which a watch is pivotally secured, readily releasable means being provided for normally maintaining the watch in such po-25 sition that its face thereof is protected by the mounting member; the provision of a watch mounting including a mounting member which may or may not be in the form of a plate and provided with means for attachment to a person 30 or his garment and including a watch carrying member pivotally associated therewith and carrying a watch or watch movement, as the case may be, with the face of the watch normally concealed and protected by the mounting member, the pivoted member being swingable to a position to expose the face of the watch in a plane preferably approximately perpendicular to the plane of the mounting member for the purpose of permitting observation of the time of day thereby, and means being provided for normally maintaining the pivoted member in a position whereby the face of the watch is substantially concealed and protected by the mounting member; the provision of a construction as above described in which 45 the mounting member is provided with strap engaging means; and the provision of a construction as above described in which the mounting member is provided with an associated belt.

The above being among the objects of the presone invention the same consists in certain novel features of construction and combinations of parts to be hereinafter described with reference to the accompanying drawing, and then claimed, having the above and other objects in view.

In the accompanying drawing which illustrates

suitable embodiments of the present invention and in which like numerals refer to like parts throughout the several different views,

Figure 1 is a front elevational view of a watch mounting constructed in accordance with the present invention illustrated in combination with a strap which may, for the purpose of illustration, be considered either as a belt or as a strap of a wrist watch;

Fig. 2 is a vertical sectional view taken transversely through the watch mounting shown in
Fig. 1 as on the line 2—2 thereof, and indicating by dotted lines the position to which the
watch may be moved when it is desired to inspect its face;

Fig. 3 is a top plan view of the construction shown in Fig. 1, the watch being shown by dotted lines in open position;

Fig. 4 is a fragmentary vertical sectional view taken transversely of the construction shown in 20 Fig. 1, as on the line 4—4 thereof;

Fig. 5 is a view similar to Fig. 1 but illustrating a modified form of construction;

Figs. 6 and 7 are views corresponding to Figs. 2 and 3, respectively, further illustrating the 25 construction shown in Fig. 5;

Fig. 8 is a top plan view of a modified form of the construction shown in Figs. 5, 6 and 7, and in which a pin is provided for securing the mounting plate to wearing apparel and also 30 showing a different type of releasable means for securing the pivoted watch carrying member in normally closed position; and,

Fig. 9 is an enlarged transverse sectional view taken on the line 9—9 of Fig. 8.

The modern trend in connection with watches is away from pocket type of watches towards that type of watch which is worn by the person in some position exteriorly of a pocket. With men the trend is almost entirely towards wrist watches and with women the trend is towards both wrist watches and watches that may be pinned to the front of a dress. With both these modern types of watches no protection is afforded the crystal over the face of the watch and particularly with wrist watches, because of their exposed position, it is a common occurrence for them to come into contact with various objects and to cause damage to the watch. The same possibility exists in connection with watches 50 which are pinned to a dress but perhaps with less liability. However, in connection with watches which are pinned to a woman's dress, whenever it is desired to ascertain the time of day it is necessary to tilt the watch up to a position more 55 or less perpendicular to the line of sight of the wearer which makes it impossible to provide a firm mounting for the watch and endangers tearing of the wearing apparel due to the strain put thereon when the watch is tilted to impose it.

5 put thereon when the watch is tilted to inspect it. The present invention obviates both of the above disadvantages of wrist watches and watches pinned to wearing apparel. The disadvantage of the wrist type of watch is obviated by provid-10 ing a mounting means which may or may not be of plate-like formation and which is adapted to be directly secured to the wrist of the wearer by conventional means such as a strap, chain, bracelet or the like. The watch proper is then 15 directly or indirectly pivotally secured to the mounting member with the face of the watch disposed toward or against the mounting member so as to be normally protected thereby. Spring means may be provided to normally 20 and/or constantly urge the watch toward either closed or open position and with the latter readily releasable means may be provided for maintaining the watch with its face in protected relation with respect to the mounting member. In 25 this latter case when the releasable securing means are released the watch will automatically be moved outwardly away from the mounting member so as to expese the face thereof to the vision of the wearer. By this means the watch 30 and particularly the face and crystal side thereof which is ordinarily most subject to damage in conventional constructions, is admirably protected against damage, and where the construction is properly designed and constructed the 35 operating parts of the watch are protected from contact with foreign material to a much higher degree than is possible in conventional watch constructions. Furthermore, by mounting a watch in the manner described all the strains 40 of the usual mounting which are transmitted directly to the case of the watch are in this instance completely eliminated in that all such strains are taken directly by the mounting mem-

ber and not by the case of the watch itself.

When the present invention is applied to the type of watches worn by pinning to a woman's dress the mounting member in such case is provided with suitable pin means, the protected watch is mounted outwardly of the mounting means, and when it is desired to observe the time of the day therefrom, release of the releasable securing means permits the watch to immediately pivot outwardly so as to expose its face for quick and easy reading by the wearer without subjecting the dress to any unusual strains in the operation.

The present invention also makes it admirably adapted for an entirely new type of mounting that has all of the advantages of the wrist type 60 of mounting without the disadvantages thereof and this specific type of mounting constitutes a more limited and specific phase of the present invention. In this mounting the watch is carried by the belt of the user. In the broader aspects 65 of this phase of the invention the above described mounting plate may be mounted on or in a belt either independently of or as a part of the usual buckle thereof. In any event the mounting plate will serve to take all of the strain exerted cir-70 cumferentially of the belt so that the watch mounted upon the mounting plate is entirely free at all times of such strain. The watch in such case will lie flat against the body of the wearer and preferably centrally in front of the wearer, 75 and the watch will be mounted thereon for piv-

otal movement about a line adjacent the lower surface thereof so that when the catch is released the upper edge of the watch will swing outwardly and downwardly so as to present the face of the watch in upwardly facing relation fully exposed to the vision of the wearer. This particular adaptation of the present invention largely eliminates the possibility of the watch being struck or coming into contact with foreign bodies such as inevitably occurs when the watch is worn upon the wrist of a person, the watch is relieved from the shock and jars to which wrist watches are commonly subjected to because of the use of the hands of the wearer, and it provides a type of mounting which admirably lends itself to ornamentation and/or embellishments which may render it more attractive in its exposed condition in a manner somewhat similar to but usually to a greater extent than in the case of belt buckles themselves.

It will be understood that the present invention, in its broader aspects, does not require the watch to be carried by a person, as it may equally well be mounted on inanimate, as well as animate, objects and the inanimate objects may be of any 25 desired character and in such event the watch may assume larger proportions and be of clock-like size rather than watch-like. Accordingly, the term "watch" is to be interpreted broadly enough to include what is commonly known as 30 a clock.

Referring now to the accompanying drawing and particularly to Figs. 1 to 4, inclusive, a mounting member, shown for the purpose of illustration as of plate-like form, is indicated at 35 18. A watch of the conventional open face type, in which the movement may be either of the conventional fixed or pivoted type, is illustrated at 12 and as being provided with a conventional winding and setting stem !4 preferably disposed at the side thereof. The case of the watch !2 may be of any desired shape or configuration, shaped if desired for special co-operation with the plate 10, but for the purpose of illustrating the invention in its simplest form is shown in 45 Figs. 1 to 4, inclusive, as being of the conventional round type. The watch 12 is mounted with the face surface thereof in contact or in substantial contact with the front face of the plate 10 and is secured to the plate 10 by means of a hinge structure indicated generally at 16, one half of which is fixed with respect to the plate 10 and the other half of which is fixed with respect to the case of the watch !2. Preferably a suitable spring means such as the torsion spring 18 co-operating in a conventional manner between the two halves of the hinge 16 is tensioned to normally urge the watch 12 to swing toward one limit of its pivotable position. Where such spring constantly urges the watch against the mounting plate 10 no catch will be required to hold it in its normal position, but ordinarily it will be preferable to arrange the spring means to constantly urge the watch outwardly away from the plate 10 to the position indicated by dotted lines in Figs. 2 and 3. Any suitable type of readily releasable catch means may be provided in this latter case for normally holding the watch !2 with its open face in protected relation with respect to the mounting plate 10 as illustrated 70 in full lines in Figs. 1 to 4, inclusive. The catch means shown in these figures as being illustrative of one suitable type includes a spring arm 20 secured to the plate 10 on the diametrically opposite side of the watch 12 from the hinge 16 and 75

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as being provided with an inwardly struck tooth portion 22 which co-operates with an abutment 24 at the upper edge of the watch to hold the watch in its normal position. As will be apparent when it is desired to observe the time of the day by the watch the wearer may simply press the outer end of the catch 29 outwardly away from the watch, thereby releasing the tooth 29 from the abutment 24 immediately upon which 10 the watch 12 will swing outwardly about the axis of the hinge structure 16 to the position indicated in dotted lines, thereby exposing the face of the watch.

The particular position of the hinge structure 15 16 on the mounting plate 18 will, of course, vary in accordance with the use to which the watch is to be put and the manner in which the plate 19 is to be applied to the wearer. Ordinarily it will be desirable that the hinge structure 18 will be 20 on the far side of the watch from the eye of the wearer when the watch is positioned to be read so that in opening up its face will be brought into substantially perpendicular relationship with respect to the line of vision of the wearer.

Any suitable means may be provided for securing the plate 10 to the person or object upon which the watch is to be supported or carried. When it is to be applied to an inanimate object it may be soldered, screwed or otherwise suitably 30 secured thereto. When incorporated either as a wrist watch or a belt watch it may be incorporated as a part of the buckle or fastening means between the two ends of the strap, chain or the like in any suitable or conventional manner. 35 One suitable way of adapting the watch for a belt watch is illustrated in Figs. 1, 2 and 3 including a pair of loops 26 pivotally mounted at opposite side edges of the plate 10. For the purpose of mounting loops 25 on the plate 10 the 40 opposite side edges of the plate 10 adjacent the upper and lower margins thereof are provided with a pair of outwardly projecting eye members 28 axially spaced from one another and between which a co-operating eye member 30 on the cor-45 responding loop 26 is received. A hinge pin 32 extending between each aligned pair of eye members 28 and through the corresponding eye member 30 completes the hinge securement of each loop 26 to the plate 19.

The belt which is illustrated at 34 has one end looped through one of the eyes 26 and the opposite end looped through the opposite eye 26. Although a separate buckle may be employed in connection with such construction, one or both 55 loops of the belt 34 may be provided with an end portion such as the portion 36 illustrated in Fig. 3 normally releasably secured to the opposed portion of the belt by means of one or more conventional glove fasteners or the like 38. In such 60 case when it is desired to remove the belt the glove fasteners at one end of the belt may be released and such end of the belt simply pulled through the corresponding loop 26. By providing a plurality of equally spaced glove fasteners such as the fasteners 38, adjustment of the circumferential dimensions of the belt may be readily accomplished.

As previously suggested where the construction illustrated in Figs. 1 to 4, inclusive, is particularly adapted as a belt type of watch, the hinge structure 16 will be located at the lower edge of the watch 12 as illustrated so that when the catch 20 is released the upper edge of the watch will swing outwardly and downwardly with the

face thereof exposed in an upward direction convenient and easy for inspection by the wearer.

The construction shown in Figs. 1 to 4, inclusive, is perhaps the most elementary form of the invention in that little is required in addition 5 to a conventional open face watch and a simple mounting plate in order to complete the construction. When adapted as a belt watch as described it places the watch in a position where danger from contacts or striking foreign objects 10 is greatly minimized as compared to a wrist watch. Moreover the face is completely protected from direct contact with foreign objects except during actual inspection of the face thereof under which conditions very little danger of damage to 15 the face is to be expected, and the case of the watch is entirely relieved of any strain to which the mounting plate 10 may be subjected in service and which in conventional construction would be taken by the case of the watch itself. Further- 20 more it will be apparent that the case of the watch may be made of any desired configuration and preferably in actual practice will be made to blend into or to ornamentally co-operate with the mounting plate 10 to enhance the appearance 25 thereof.

Referring now to Figs. 5, 6 and 7 a further adaptation of the present invention is shown and while it is as widely adaptable for use as the type first described, for the sake of simplicity in 30 description it will be considered, for the purpose of illustration, as being either of the wrist or belt type. In this case instead of exposing the case of the watch directly to view when the watch is in normal closed condition, a separate casing is 35 provided in which the watch is enclosed when the time thereof is not being observed, the supporting member or plate in this instance not only serving its primary function as the mounting member, but additionally serving as a supple- 40 mentary enclosure for the sides of the watch. In this case the mounting member is illustrated at 40 as of generally circular outline and of platelike formation but provided on its forward face with four perpendicularly extending co-operating 45 flange portions 42 forming therewith a box-like structure closed at its sides and back but open at its front. A plate-like closure member 44 for the open side of the box thus formed is pivotally secured by means of a pin 46 to the outer marginal 50 edge of the lower flange portion 42 and suitable spring means such as the torsion spring 48 encircling the pin 46 and having end portions bearing on the flange 42 and member 44, respectively, is provided for constantly urging the member 44 55 towards one limit of its pivoted position, here shown as its open position indicated in dotted lines in Fig. 6.

As in the construction first described a suitable readily releasable catch means is provided 60 co-operating between the flange portion 42 and the member 44 to normally maintain the member 44 in closed position against the outer edges of the flange portion 42 when the spring 48 urges the member toward open position. In the particular 65 form of catch means illustrated in Figs. 5, 6 and 7 a depressible button 50, normally urged outwardly by means of a surrounding coil spring 52, is provided in the upper part of the flange portion 42 and interiorly of the corresponding flange por- 70 tion 42 is provided with an outwardly projecting catch portion 54 which cooperates with an opposed catch 56 secured to the member 44 to releasably hold the member 44 in a position to close the open end of the box-like structure formed 75 by the plate 40 and flange portions 42. As will be appreciated downward pressure upon the button 50 will release the catches 54 and 56 from inter-engagement immediately upon which the member 44 will swing outwardly to the position indicated in dotted lines in Fig. 6. Upon the member 44 being moved from the position indicated in dotted lines in Fig. 6 to the position indicated in full lines, by suitable manual pressure, the catch member 56 will engage and depress the catch member 54 until the inter-engaging relationship of the two is re-established to maintain the member 44 in closed position until it is again desired to inspect the face of the watch.

In the construction illustrated by Figs. 5, 6, and 7 the watch itself may be a conventional open face type of watch, and while it may be pivotally mounted on the member 44, or its movement may be pivotally mounted in its case, to render the winding stem more accessible, the particular watch illustrated at 60 may be assumed to be secured to the member 44 by soldering or the like with its back in contact with respect to the inner 25 face thereof, or otherwise supported in spaced relation to such inner face, the depth of the boxlike structure formed by the plate 40, flange portions 42 and member 44 being of sufficient depth and size as to freely accommodate the watch 60 therein and preferably with the open face of the watch 60 in slightly spaced relation with respect to the forward face of the plate 40, as illustrated in Fig. 6. The winding stem 6! of the watch 60 may be arranged either internally or externally of the box-like structure thus formed by the parts 49, 42 and 44 but preferably it is arranged interiorly thereof so as to form a more completely sealed enclosure for the watch 60 when the member 44 is in closed position. The stem 61 may be readily operated to wind and/or set the watch by 40 releasing the member 44 to the position indicated in dotted lines in Fig. 6 as in such case the only possible interference with its operation will be the plate 44 and which experience shows offers no disadvantage to the ready manipulation of 45 the stem 61.

It will be observed that with the construction illustrated in Figs. 5, 6 and 7 not only is the watch sealed against the entrance of dust, dirt or other foreign material in the conventional 50 manner, that is by its own case, but additionally it is in effect normally enclosed in a second container or case, which may be made essentially dust-proof and waterproof and is thus of a material aid to the continued proper operation of 55 the watch without the necessity of adjustment or repair. Furthermore, with the construction illustrated in Figs. 5, 6 and 7 the case of the watch 60 is in and of itself not directly exposed to contact with any foreign bodies except when the 60 member 44 is swung into open position for inspection of the face of the watch. Accordingly, for this reason this construction offers a great amount of protection for a watch.

An additional feature of the construction illustrated in Figs. 5, 6 and 7 is that because of the character of the mounting including the side flanges 42 and separate member 46, substantial areas are presented which are readily susceptible to ornamentation or the like thereby enabling the device to be made and ornamented as attractively as desired to enhance its appeal to purchasers.

A modified form of mounting for the mounting plate 40 is illustrated in the construction shown 75 in Figs. 5, 6 and 7. In this case a pair of loops 62

are provided adjacent each side margin of the mounting plate 40 but in this case loops 52 are rigidly secured to the mounting plate 40 and are normally concealed by the face thereof. The loops 62 may accommodate a strap or belt such 5 as 64 in the manner described in connection with the preceding construction, or in any other suitable way.

In Fig. 8 a construction substantially identical to that illustrated in Figs. 5, 6 and 7 is shown 10 except that a modified means for mounting the plate 40 is provided and a modified means for releasably securing the face member 44 in position is shown. Accordingly, the same parts are indicated by the same numerals and the differ- 15 ences only described. Instead of providing the loops 62 on the back of the mounting plate 40 a conventional type of pin element 72, such as is commonly employed for securing articles of jewelry or the like to wearing apparel, is shown 20 as being soldered or otherwise suitably secured to the back of the mounting member. As previously mentioned such type of mounting fastening adapts the construction to the application thereof to wearing apparel such as the front 25 of a lady's dress.

Instead of employing the type of catch for releasably holding the member 44 and watch 60 mounted thereon in normally closed position as illustrated in Fig. 6, the flange portion 42 op- 30 posite the hinge securing member 44 to the lower flange portion 42, at each end thereof is provided with an elongated eye-member 74, and the front member 44 is provided with an elongated eyemember 76 which, when the member 44 is in 35 closed position, lies between the eyes 74 and is aligned therewith. A pin member 78, preferably of the split type as illustrated best in dotted lines in Fig. 8 and clearly shown in Fig. 9 is insertable through the various eyes 74 and 76 so  $_{40}$ as to positively lock the front member 44 against outward swinging movement when in position. The two legs of the pin member 78 are preferably sprung outwardly a slight amount so that they are contracted when the pin 78 is fully inserted  $_{45}$ in position so as to firmly hold the parts against possible rattling. When it is desired to release the member 44 so as to expose the face of the watch for inspection the pins 78 may be withdrawn axially in the direction of its head so as to release it from the opposite eye 74 and the eye 76 thereby releasing the front member 44 for outward swinging movement under the influence of the spring 48. A pin 88 which projects through the lefthand eye 74 is received between the legs of the pin 72, as shown in Fig. 8 and the slot between the legs of the pin 73 is closed at its end so as to prevent complete withdrawal of the pin 78 from the lefthand eye 74, thereby insuring against its inadvertent loss.

It will be understood that the above described modifications of the present invention are merely illustrative of various forms in which the present invention may occur, as it will be apparent that in actual practice the present invention adapts itself to a great variety of forms and arrangements. Accordingly, it will be understood that formal changes may be made in the specific embodiments of the invention described without departing from the spirit or substance of the broad 70 invention, the scope of which is commensurate with the appended claim.

What I claim is:

In combination, a belt buckle including a plate member, upstanding imperforate walls on said 75

plate member cooperating therewith to form an open faced receptacle, a cover for the open face of said receptacle hinged to said receptacle along its lower edge, releasable means normally holding said cover in closed position whereby to seal the interior of said receptacle against the entrance of dust and dirt, a watch supported on the inner face of said cover and movable therewith to a position in which it is completely concealed within and protected from harm by said

receptacle and cover or to a position in which it is exposed exteriorly of said receptacle, and a winding stem for said watch projecting therefrom but normally lying within the margins of said cover and movable with said watch from a position completely concealed and protected within said receptacle to a position exposed for manipulation exteriorly thereof.

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