(No Model.)

T. B. WILCOX.

WATCHCASE.

No. 548,791. Patented Oct. 29, 1895.

Fig. 1.

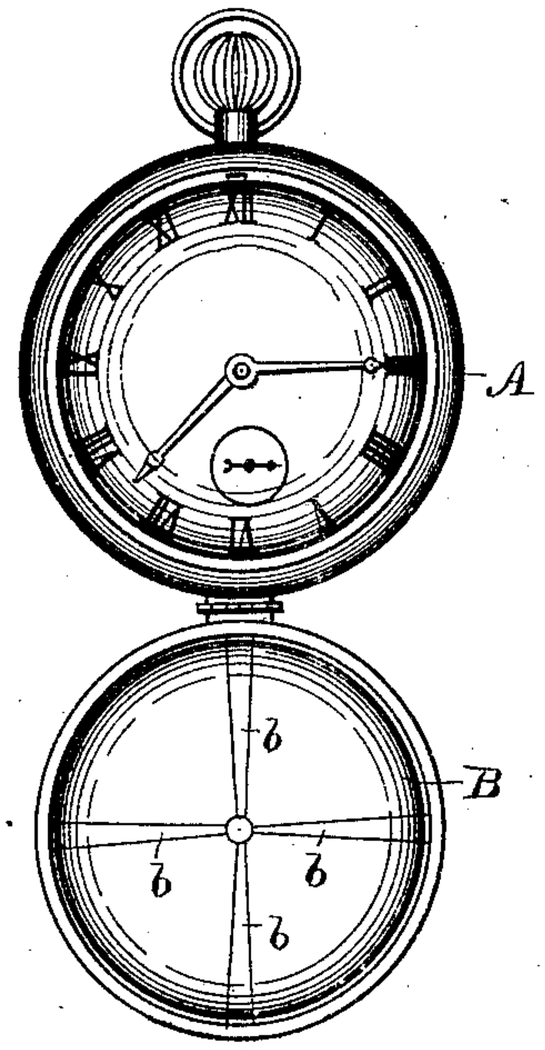


Fig. 2.

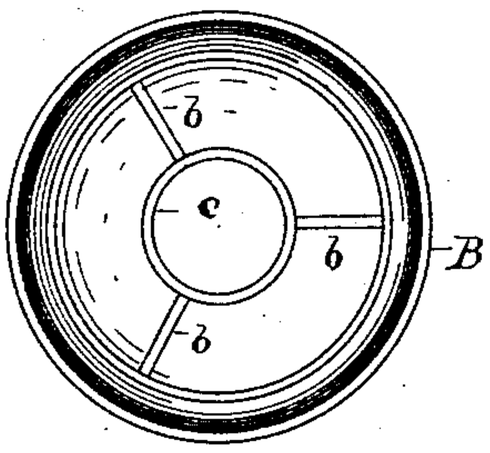


Fig. 3.

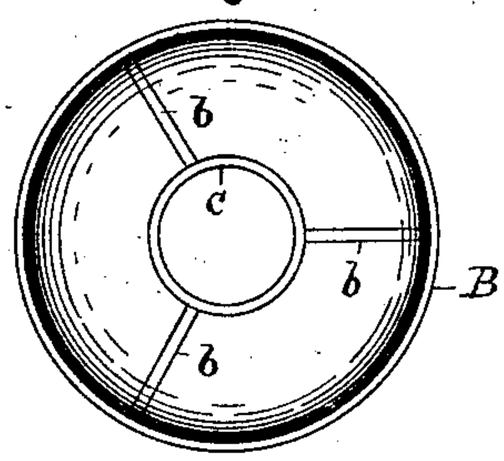


Fig. 4.

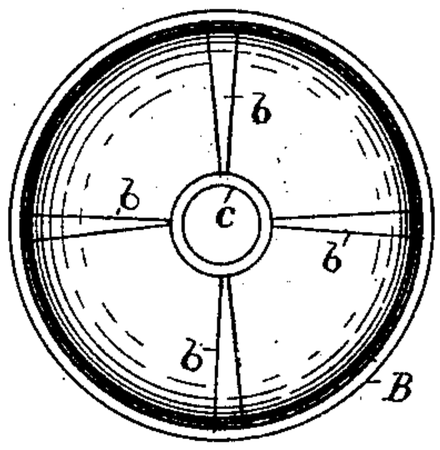


Fig. 5.

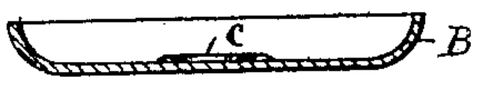
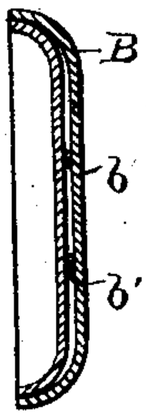


Fig. 6.



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THEODORE B. WILCOX, OF NEWARK, NEW JERSEY.

WATCHCASE.

SPECIFICATION forming part of Letters Patent No. 548,791, dated October 29, 1895.

Application filed January 17, 1895. Serial No. 535,198. (No model.)

To all whom it may concern:

Be it known that I, THEODORE B. WILCOX, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Watchcases; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The various attempts which have been made to produce a watchcase of good appearance, substantial purity, and reasonable cost have proved for the most part abortive by reason of the fact that purchasers object to the idea of a case which is made impure either by the circumstance that a piece of brass or other base material forms the bulk of the case or that the case is made up of several pieces of one or the other of the noble metals in different degrees of purity. The preference always is for a metal of substantially uniform purity, even though the case be made as thin as it can be and still resist ordinary pressure and wear. In other words, the various styles of plating, filling, double-stock arrangements, and so on, in which an inferior quality of metal or a solder or some base material is used as a part of the case, present something which customers do not like and which it would be very desirable to do away with. On the other hand, the well-known softness of fine gold and, to a degree, also, of pure silver, has hitherto made it necessary to construct good watchcases of such thickness of metal as to make them cost more than men of ordinary means could afford to pay.

The invention which I have made relates to means for making watchcases of, say, eighteen-karat gold, stiff enough even at small thicknesses to do the work required of them. I mention gold cases in particular; but it will be understood that my invention can be applied to silver cases as well. I accomplish the object aimed at by supplying such watchcases with ribs upon the inside, preferably radiating from the center or from a circular rib surrounding the center, the ribs, whether circular or simply following the lines of the case in a direction from center to circumference, being calculated to form "trusses," so to speak, or means of resistance to the collapse of the cases. The ribs thus formed on or added to the inside of a watchcase will give to the said case a rigidity which will be practically the same as if the whole case were made of the same thickness that it has at the ribs. At the same time the case as a whole can be made quite thin, and a considerable saving of precious metal can thus be effected. By putting the ribs upon the inside of the case the beauty of the exterior of the case is not defaced and a light watchcase of small cost and fine appearance is produced. In order to gain the advantage of an important saving of metal, I find that I need to place the ribs farther apart than the width of one of the said ribs at the base; otherwise too much metal will be put into the ribs themselves. Ribs of this sort can be made in separate pieces and soldered to the cases; but I prefer to form the ribs in one piece with the cases by means of dies, (not herewith shown,) which are brought together under great pressure sufficient to upset the metal or force it into grooves in the dies. The metal between the ribs may be comparatively thin and still, owing to the presence of the ribs, the case may resist ordinary pressure and the requirements of ordinary service in the way of wearing qualities. In fact, cases of this sort are adapted to last quite as well as much heavier cases, and they have the advantage of being cheaper, and that, too, without any sacrifice of genuineness. They thus meet the wants of the average purchaser and user of watches and embody qualities of cheapness, lightness, and purity which have long been sought for without success.

I have illustrated my invention in the accompanying drawings, in which—

Figure 1 is an elevation of the face of a hunting-case watch with the case opened out. Figs. 2, 3, and 4 show the interior of watchcases with different arrangements of the strengthening-ribs. Fig. 5 is a section of a watchcase, showing the presence of ribs on the interior of the watchcase; and Fig. 6 is a section of a made-up case, one part of which is strengthened as per my invention.

In the drawings I have exaggerated the thickness of the ribs for the sake of clearness of illustration.

Referring to the drawings by letter, A is

a hunting-case watch, and B is the case adapted to cover the face thereof. The case is made of fine gold or of silver approximately pure. The greater portion of the case is so thin that it would not ordinarily resist the pressure to which it is liable to be subjected. I mean that it would not be certain to resist such pressure if the whole face were of uniform thickness equal to the thickness of the greater part of it. I form, however, preferably upon the inner side of the case, a series of ribs extending in the form illustrated in Fig. 1 from the center to the edges of the case. The ribs are marked *b b*, and they are raised above the greater part of the surface for a short distance. Now these ribs strengthen the case to such a degree that a case otherwise too thin for ordinary use can be used without danger of collapse either by edgewise pressure or by pressure at the center of the case from the outside. The other figures show other arrangements of ribs, some of them being circular, as shown at *c*.

My invention has no reference whatever to the development of a new design or pattern for watchcases; but it is concerned with the matter of securing genuineness of material, combined with adequate strength and with such cheapness as will recommend the case to purchasers. When this recommendation of cheapness is combined with the assurance of the genuine quality of the metal employed, the value of my invention will be very easily understood.

In Fig. 6 I illustrate how one might take advantage of the principle herein involved in order to make a built-up case. Here the outer or the inner case (it doesn't matter which) is provided with ribs *b' b'*, upon which the other part of the case as a whole rests, or there might be a rib or ribs on both parts of such a built-up case. However that may be, the part of the case having ribs would, in fact, correspond to what I have called in the claims which follow a "watchcase"—that is to say, such a structure would not avoid the scope of the claims in the sense which is intended to be given to the said claims.

What I claim is—

1. A watch-case of precious metal having such a thickness that it would be liable to collapse in common use, the same being provided with integral internal strengthening ribs separated by spaces greater than the width of the said ribs at their base.

2. A watch case of precious metal having such a thickness that it would be liable to collapse in actual use, the same being strengthened by integral, internal ribs radiating from a circular strengthening rib about the center of the case.

In testimony whereof I have signed my name, in the presence of two witnesses, this 14th day of January, A. D. 1895.

THEODORE B. WILCOX.

Witnesses:

C. L. BELCHER,

G. H. STOCKBRIDGE.