

C. EDMUNDSON.
ALARM WATCH.
APPLICATION FILED NOV. 21, 1917.

1,295,876.

Patented Mar. 4, 1919.

Fig. 1.

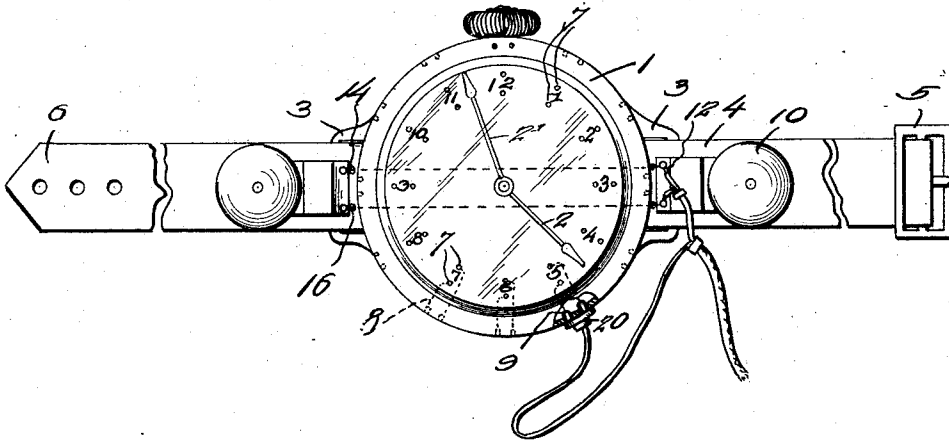


Fig. 2.

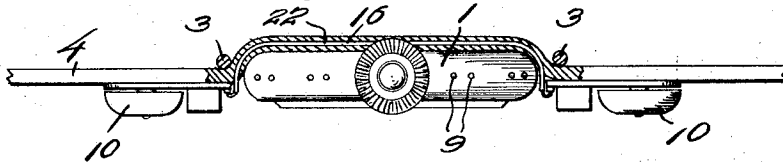
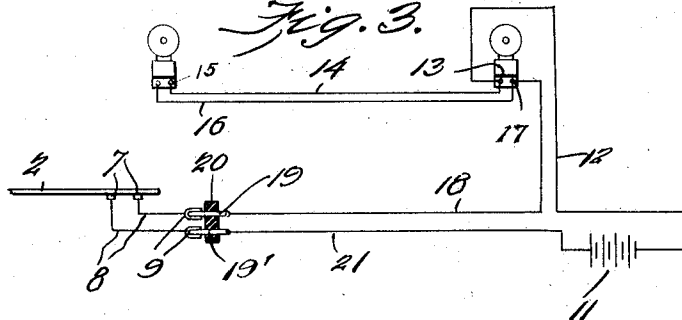


Fig. 3.



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ALARM-WATCH.

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To all whom it may concern:

Be it known that I, CHRISTIAN EDMUNDSON, a citizen of the United States, residing at Tientsin, China, have invented certain
5 new and useful Improvements in Alarm-Watches, of which the following is a specification.

This invention is an alarm watch and has for its principal object the production of a
10 device which will sound a signal at a desired hour.

Another object of this invention is the production of an alarm watch wherein one of the hands will close a circuit at a desired
15 hour for automatically sounding a signal.

Another object of this invention is the production of an alarm watch which has a plurality of insulated sockets carrying circuit
20 terminals, while a plug is also provided having fingers to fit within the sockets for allowing a circuit to be formed at a predetermined hour, according to the sockets in which the fingers are inserted.

With these and other objects in view, this invention consists of certain novel combinations, constructions, and arrangements of
25 parts as will be hereafter fully described and claimed.

One practical form of construction and assembly will be described and illustrated in the accompanying drawing in which—

Figure 1 is top plan view of the alarm watch as constructed in accordance with the
35 present embodiment,

Fig. 2 is a fragmentary side elevation of the alarm watch, portions of the retaining strap being shown in section, and

Fig. 3 is a diagrammatic view of the wiring system of the present invention.

Referring to the accompanying drawing by numerals, it will be seen that 1 indicates the watch casing, which may be provided with any suitable operating mechanism for
45 driving the hands 2 and 2'. Frames 3 are formed on the casing 1 in diametrically opposite positions, as shown in Fig. 1. The retaining strap 4 is passed through the frames 3 and bears upon the casing 1 as
50 illustrated in Fig. 2. It is of course obvious, that this strap 4 may be provided with a buckle 5 at one end to receive the opposite

end 6 of the strap, whereby the watch may be retained upon the wrist of the wearer.

The contact posts 7 are arranged in pairs
55 upon the dial of the watch, wherever it is desired or any hour or fraction of an hour as is illustrated in Fig. 1. The contact posts 7 have wires 8 extending therefrom and connected to the sockets 9, which sockets may be
60 suitably insulated from the casing 1, if so desired, as is shown in Fig. 1. These sockets 9 are arranged in pairs and spaced relation upon the peripheral side of the watch, as
65 shown in Fig. 2.

It is of course obvious that any suitable form of a signal may be employed in connection with the present invention although a pair of bells 10 are mounted upon the
70 strap 4 and these bells are obviously of the usual magnet type of an electric bell as is clearly shown in Figs. 1 and 2.

The source of supply, which may be a battery may be placed within the pocket of the garment of the user of the present alarm
75 watch, is illustrated at 11. The conductor 12 leads from this source of energy and is connected to one pole of the bell as shown at 13. The conductor 14 leads from the same pole and is connected to the pole 15 of the
80 remaining bell. The conductor 16 leads from the remaining pole of the last mentioned bell and is connected to the pole 17 of the first mentioned bell. A conductor 18 leads from pole 17 and is connected to the
85 finger 19 carried by the plug body 20. This plug body 20 is of course formed of suitable insulating material, as is clearly shown in Fig. 3. The plug body 20 is also provided with a second finger 19' projecting there-
90 beyond as the finger 19. The conductor 21 leads from the finger 19' and is connected to the source of energy 11 shown in Fig. 3.

When this alarm watch is in use, it is strapped upon the wrist of the user by passing
95 the strap about the wrist and buckling the same in the usual manner. It is intended to have the strap 4 provided with a plurality of passages 22 formed therein, whereby the cables or conductors 14 and 16 may
100 be passed therethrough, as shown in Fig. 2, thus presenting an even outer surface upon the face of the strap 4, although connecting the bells together. By the description set

forth it is obvious that the watch may be retained upon the wrist of the wearer in the usual manner. If it is desired to have the signal sounded at a certain hour, for instance as at 5 o'clock, the plug body 20 is moved to the necessary point for permitting the projecting ends of fingers 19 and 19' to be passed into the sockets 9 corresponding to the hour the signal is to be sounded. Thus it will be seen that the fingers 19 and 19' will be connected by the conductors 8 to the contact posts 7. When the hour hand finally engages the contact posts 7, it will close the circuit, thus causing the current to pass from the source of supply 11 over conductor 12 to the pole 13. A portion of the current will also pass over the conductor 14 through the bell 15 and return over conductor 16 to the pole 19. Therefore, the two bells will simultaneously ring. The current will pass from pole 17 over conductor 18 through finger 19 and the wires 8, as well as the hour hand 2. The current returns through finger 19' and conductor 21 to the source of supply 11, thus causing the bells to ring as long as the hour hand remains in engagement with the posts 7, at the hour the alarm is sounded, or until the plug has been removed from the selected sockets, which of course will break the circuit.

In order to change the hour when the signal is to be sounded, it is only necessary to withdraw the fingers from the sockets by the removal of the plug 20 from engagement with the periphery of the casing 1. The cables 18 and 21 are of sufficient length to permit the plug to be moved at any place desired from the periphery of the casing as it is necessary to perform this function in order to allow the signal to be sounded at different hours. By moving the plug around the periphery of the casing the fingers may be inserted in selected sockets in a manner similar to which they are inserted in the sockets adjacent the hour 5, as shown in Fig. 1.

From the foregoing description it will be seen that a very efficient alarm watch has been provided since the watch may be strapped upon the wrist of the wearer without interference from the alarm attachment therefor. The signal may be changed so as to be sounded at a desired hour, as has been hereinbefore described, and at the time desired, the circuit will be closed by the engagement of the hour hand with selected contact posts thus causing the bell to ring until the hour again disengages the contact posts. It is of course obvious that many detail changes may be made in the construction of the present invention without departing from the spirit of the device, such for instance as placing the sockets upon the dial rather than upon the periphery of the casing as shown and for this reason it is not

intended to limit the construction of the present invention to the specific form herein shown but to include all such forms of the alarm watch properly coming within the scope of the device as claimed.

What I claim is:—

1. In a device of the class described, the combination of a watch having alined frames formed on its periphery, a retaining strap extending across the back of the watch and extending through said frames, said strap having a longitudinal passage extending therethrough intermediate its ends, bells fixed upon said strap, adjacent the frames, conductors connected to said bells and extending through said passage, thus providing an even wearing surface upon the outer surfaces of the strap, and means for closing the circuit over said conductors at a predetermined hour for ringing said bells.

2. In a device of the character described, the combination of a watch, including hands, wires carried by said watch, contact posts connected to said wires in the path of movement of one of the hands, sockets connected to the remaining ends of said wires, signal means carried adjacent said watch and means removably fitting within selected sockets for closing a circuit at a predetermined hour, when one hand engages certain of the contact posts.

3. In a device of the character described, the combination of a watch having wires connected to contact posts, said watch having hands, said posts being in the path of movement of one of said hands, sockets connected to said wires, bells connected to said watch, conductors connected to said bells and including a source of energy, a removable plug consisting of a body having independent fingers extending therebeyond, said fingers also being connected to said conductors, whereby the projecting ends of said fingers may be removably carried within selected sockets, thus causing a circuit to be closed at a predetermined hour when one of said hands engages the binding posts corresponding to the sockets carrying the fingers of said removable plug.

4. In a device of the class described, the combination of a watch, a retaining strap extending across the back of said watch, and means for holding said strap in engagement with said watch, said strap having a longitudinal passage extending therethrough intermediate its ends, bells fixed upon said strap adjacent said watch, conductors connected to said bells and extending through said passage, thus providing an even wearing surface upon the outer surfaces of said strap, and means for closing a circuit over said conductors for ringing said bells.

5. In a device of the class described, the combination of a watch, a retaining strap extending across the back of the watch, 130

means for retaining said strap in engagement with said watch, said strap having a longitudinal passage extending therethrough, signaling means carried upon said strap adjacent said watch, and means for operating said signaling means including means extending through said passage for operatively connecting the signaling means together and

yet allowing the strap to have even outer wearing surfaces.

In testimony whereof I affix my signature in presence of two witnesses.

CHRISTIAN EDMUNDSON.

Witnesses:

N. G. MOY SUNG,
CY CHANG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."