

(No Model.)

G. J. CAPEWELL.
ALARM ATTACHMENT FOR WATCHES.

No. 488,062.

Patented Dec. 13, 1892.

Fig. 1

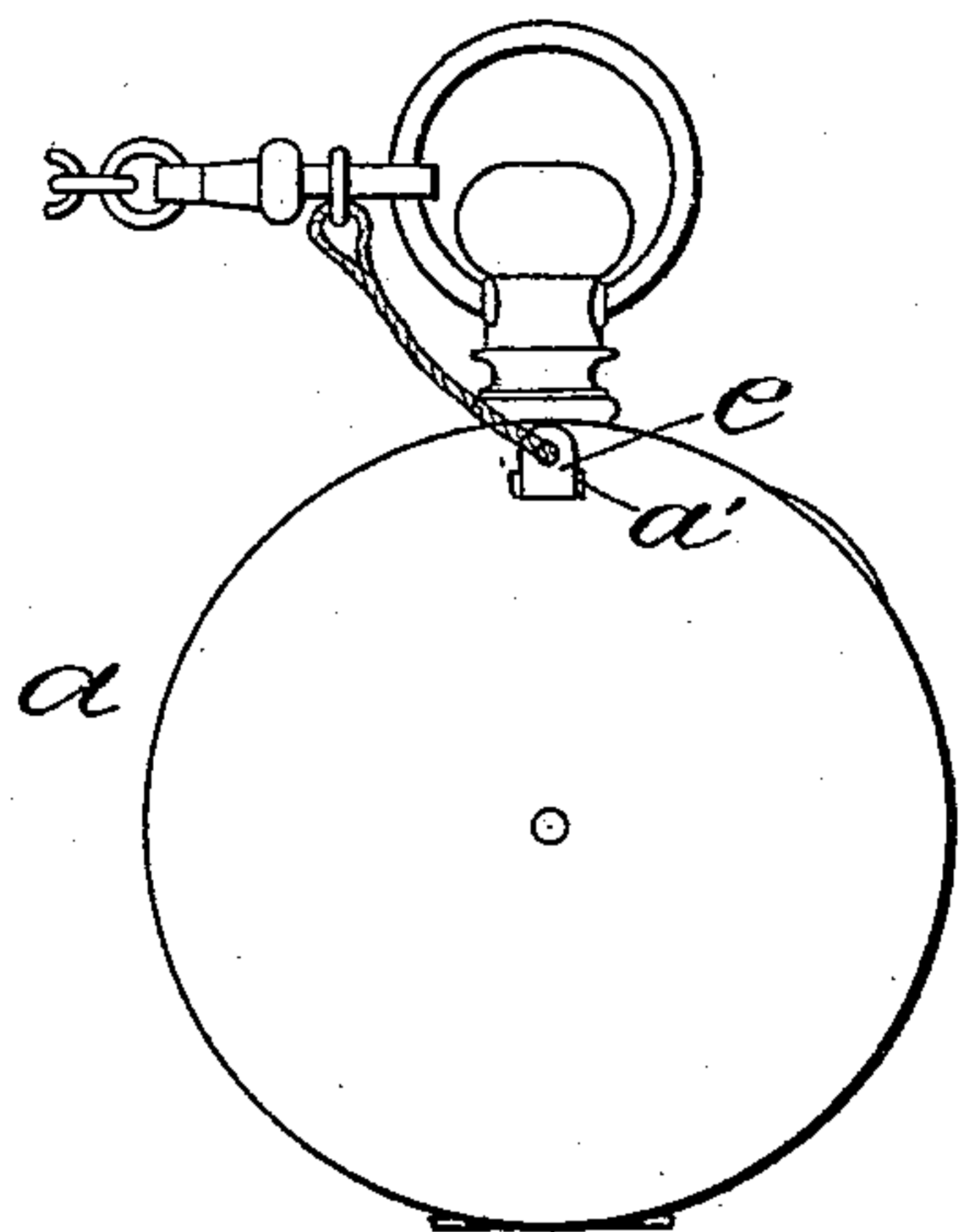


Fig. 2

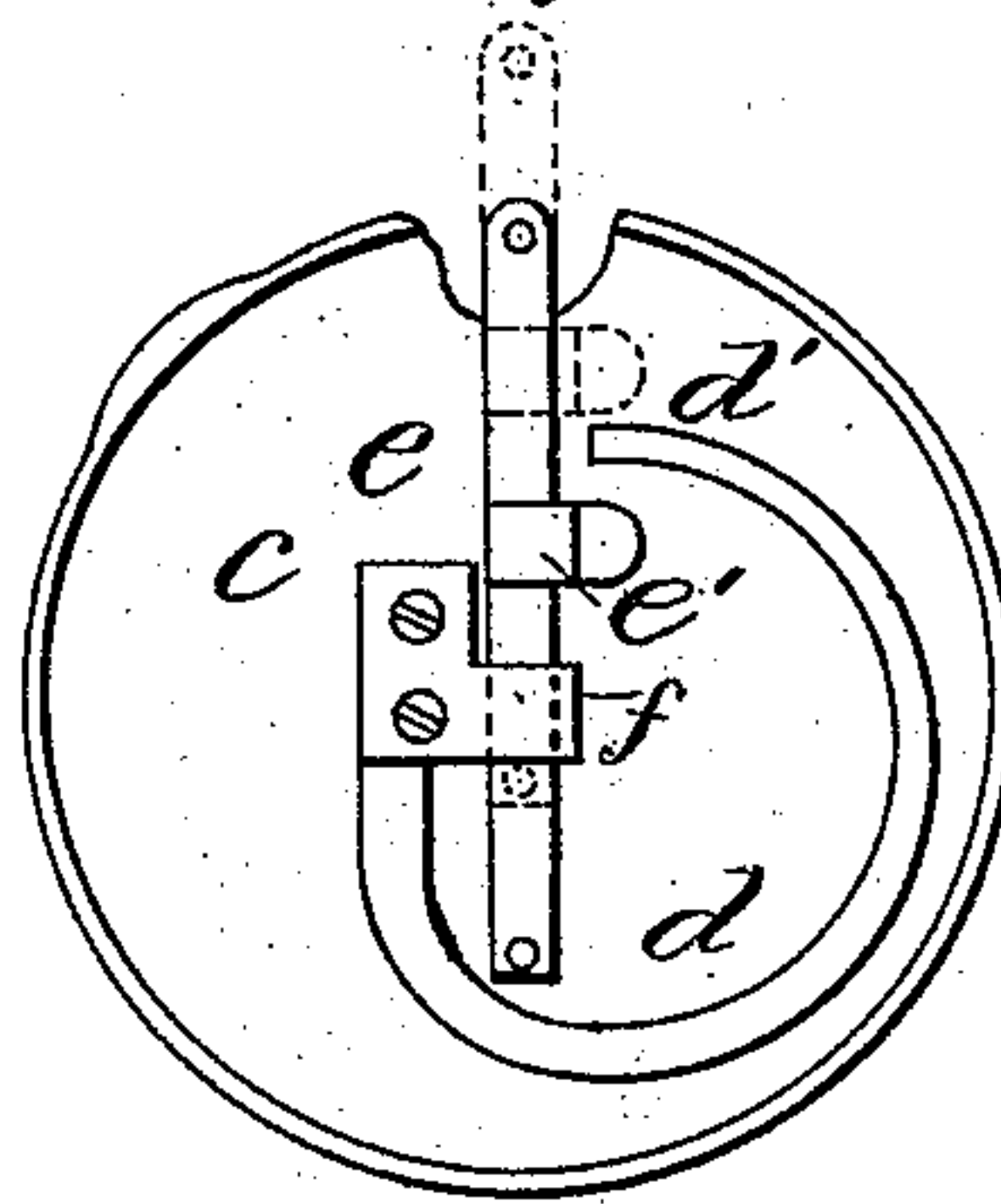


Fig. 4

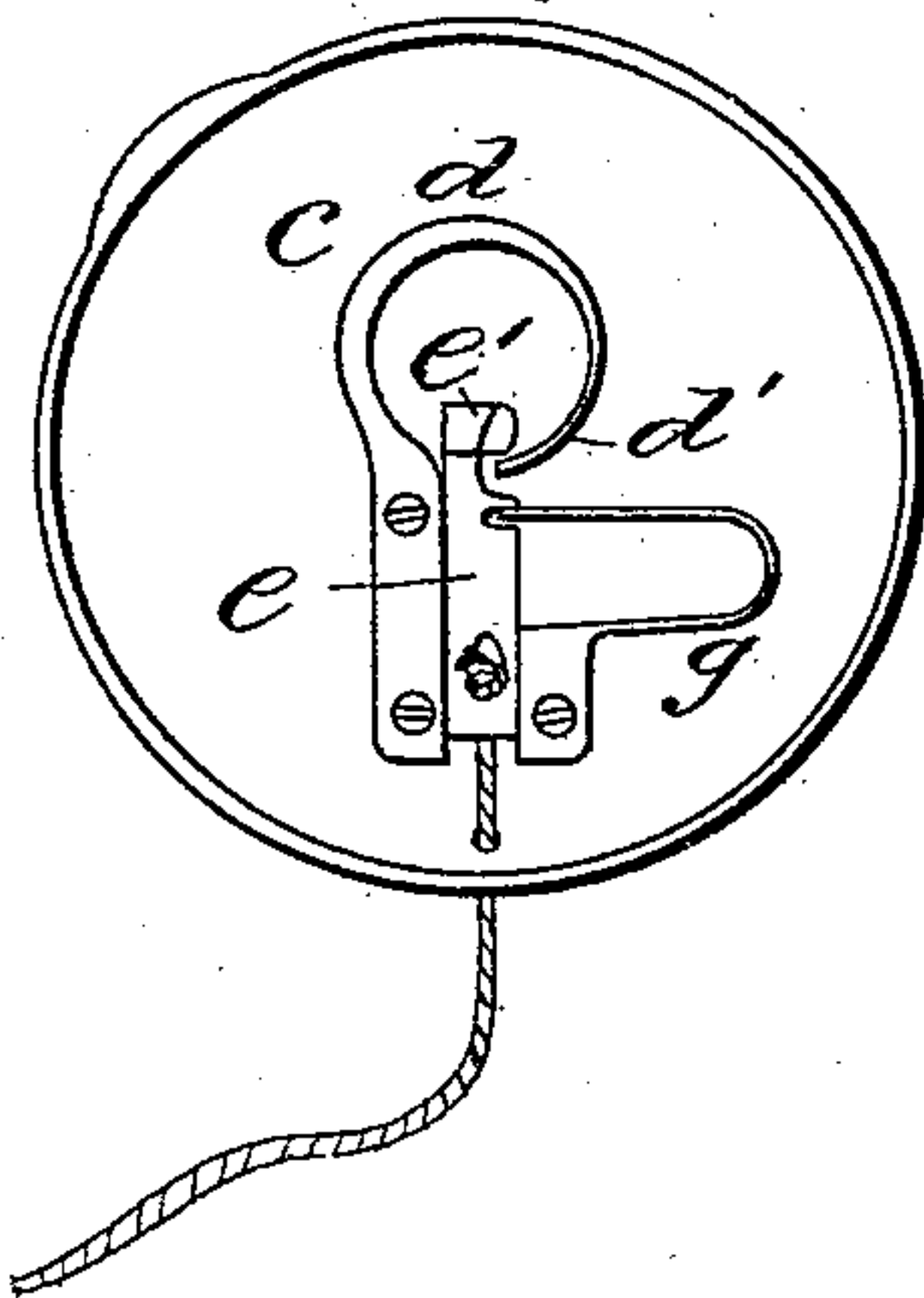
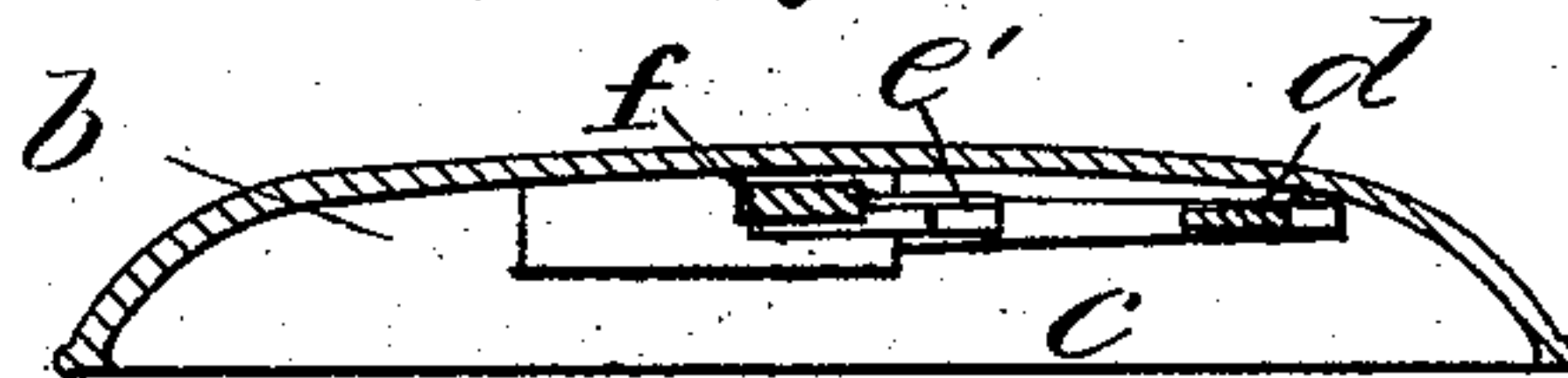


Fig. 3



Witnesses
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ALARM ATTACHMENT FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 488,062, dated December 13, 1892.

Application filed April 8, 1892. Serial No. 428,302. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. CAPEWELL, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Alarm Attachments for Watches, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The object of my invention is to provide an alarm device that may be attached to a watch, preferably by arranging it within the case in such manner that the removal of the watch from the pocket of the wearer will cause, under the ordinary circumstances of such an act, an alarm to be sounded that will attract the attention of the person to the fact of the withdrawal.

To this end my invention consists in the details of the several parts making up the device as a whole and in their combinations, as more particularly hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a view in elevation showing the back of a watch embodying my invention. Fig. 2 is a view in elevation of a watch-case, showing the interior. Fig. 3 is a view, on an enlarged scale, in section across the center of the part of the case shown in Fig. 2. Fig. 4 is a view in elevation of the interior of a watch-case, showing the alarm mechanism.

In the accompanying drawings, the letter *a* denotes a watch-case as a whole, containing the usual works and having, preferably, just underneath the back cover a space *b*, within which there is room for the arrangement of an alarm device *c*. In the form of the invention illustrated in the accompanying drawings this device consists of a curved spring *d*, secured to the case and curving around, so that the free end *d'* of the spring projects into the path of movement of a trip device *e'*, borne on a movable bar *e*. This bar extends through guide-socket *f*, formed, preferably, in the base-block to which the spring is secured, and its outer end extends, preferably, through an opening *a'* in the case. To this outer end the watch chain or a cord is attached, so that when the chain or cord is pulled upon the bar will move in such manner as to draw the trip device *e'* underneath the end *d'* of the spring, the lat-

ter riding up on a cam-surface and dropping off from the highest point in such manner as to cause a sharp and somewhat musical sound to be given out from the spring. This alarm is loud enough to at once attract the attention of the wearer of the watch and notifies him that an attempt is being made to remove the watch from the pocket. This trip device can be reset by pushing in upon the bar *e* and returning the trip to its inner position, the end *d'* of the spring passing underneath the cam. If it is not desired to set the alarm, the bar can be left in its downward position and the watch can then be drawn out by means of a chain without causing any alarm to be sounded.

In the form of alarm shown in Fig. 4 the trip-bar is given a return movement by means of a spring *g*, that is secured to the back of the case and has an end engaging the bar in such manner that when the bar is drawn so as to cause the spring to sound the spring *g* will return the bar and reset the trip device automatically.

In the several forms of alarm devices in which my invention may be embodied a peculiar feature of the construction resides in the absence of any escapement, such as is commonly used when a hammer forms the immediate means of sounding an alarm.

The main feature of my improvement resides in the employment of a sounding part, preferably a curved spring, and a movable trip device that lifts the end of any part of the coil or length of the spring and causes a snapping action as the spring slides off the trip device. This device is useful, not only as an alarm to prevent the removal of a watch from a pocket without notice to the wearer, but it may also be made to serve as an aid in a somewhat rude system of mnemonics, the sounding of the alarm calling the attention to a thing that was to be done at some time during the day. By arranging the tone or key of the alarm within the watch it may also be used as a device for determining the proper pitch in music, and serving in this the same purpose as a tuning-fork.

I claim as my invention—

1. In combination with a watch or like case, an alarm device comprising a spring secured at one end to the case and a sliding trip device bearing a cam adapted to engage and

disengage the spring in the movement of the sliding bar, all substantially as described.

2. In combination with a watch, an alarm attachment comprising the sounding part secured to the case, a movable trip device bearing a cam adapted to engage the sounding part, and a cord or like part secured to the trip device and extending beyond the case, all substantially as described.

10 3. In combination with a watch, a spring secured within the case at one end and having

a free end located in the path of movement of a sliding trip device, the sliding trip device bearing a cam adapted to temporarily engage the end of the spring, a flexible connection 15 between the outer end of the bar and a watch-chain, and the watch-chain secured to the ring of the watch, all substantially as described.

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