

(No Model.)

E. B. WINGER.
ALARM CLOCK.

No. 491,328.

Patented Feb. 7, 1893.

Fig. 1.

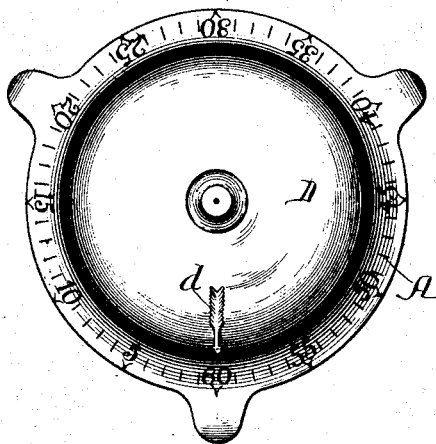


Fig. 2.

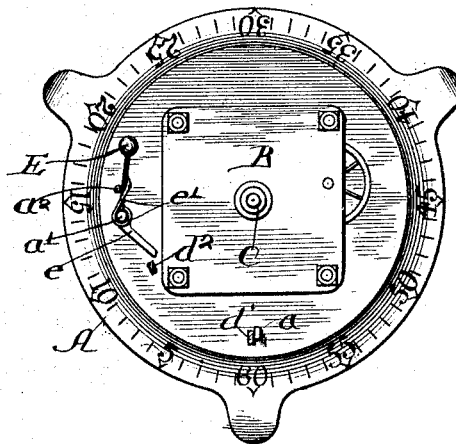


Fig. 3.

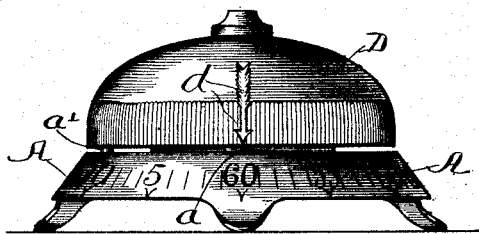
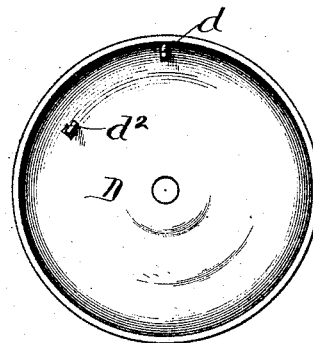


Fig. 4.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

ELAM B. WINGER, OF CHICAGO, ILLINOIS.

ALARM-CLOCK.

SPECIFICATION forming part of Letters Patent No. 491,328, dated February 7, 1893.

Application filed June 3, 1892. Serial No. 435,350. (No model.)

To all whom it may concern:

Be it known that I, ELAM B. WINGER, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Alarm-Bells, of which the following is a specification.

My invention relates to certain improvements in an alarm bell, designed for use upon an office-desk, in a kitchen or in other similar places, where it is desirable to have an alarm, which can be set to sound at the end of a short interval. The purpose of the invention is to provide the simplest, cheapest and most compact device which will answer this purpose and be reliable in its operation.

My preferred construction is illustrated in the accompanying drawings, by means of four figures; of which,

Figure 1 is a plan view of my device in its preferred form; Fig. 2 is a plan of the base and operating mechanism disclosed by the removal of the bell; Fig. 3 is a side elevation; and Fig. 4 is an under view of the bell.

In general appearance it will be seen to resemble the ordinary call bell. The bell, however, is mounted upon a rotatable arbor carrying a main spring and geared to a suitable escapement, whereby the rotation of the arbor under the torsion of the spring is regulated. The base is lettered A, and bears about its beveled margin sixty spaces marked off by suitable characters and properly numbered. Upon this base is mounted the driving mechanism B, adapted to rotate the spindle C, and also to be wound up thereby. The bell D, is carried by this spindle and has a mark *d*, (shown as an arrow) upon its periphery. The spring is partially wound up, the bell secured to the central arbor and a stop *d'*, provided thereon, adapted to engage with a lug *a*, upon the base to prevent the bell from being rotated back of the sixty or zero mark. When the bell is turned in the direction in which the numbers increase, it will, when released, return to its first position, and the movement

is so timed that it will take it five minutes to return from the figure 5, ten from the figure 10, and so on. A hammer E, carried by a lever *e*, pivoted at *a'*, to the base, is thrown toward the bell by means of a coiled spring *e'*. A stop *a''*, prevents it from resting upon the bell, but is so located as to allow it to strike the latter by means of the elasticity of the arm which carries the hammer. The opposite arm of the lever is located where it will engage with a lug *d''*, upon the bell just before the arrow upon the latter reaches the zero point, be crowded outward by said lug and released when said point is reached. This lug is hinged to the bell so that in winding up the latter, it may yield to pass over the end of the lever, but upon the return will bear forcibly against it.

It is obvious that various modifications of the different parts of the above invention are possible, and I hence do not wish to confine myself to the exact construction of any portion thereof.

I claim as new, and desire to secure by Letters Patent:—

1. In an alarm bell, the combination with a suitable frame, bell and time mechanism, of a pointer connected with the winding arbor and rotated by the movement of the latter, a stop to prevent the pointer from passing the zero point of the dial, and a striking device actuated by the return of the pointer to the zero mark; substantially as described.

2. In an alarm bell, the combination with a suitable base, of a bell rotatably mounted thereon and provided with a time mechanism which is wound up by the turning of the bell in one direction, and which in unwinding rotates the bell in the opposite direction, a mark upon the bell, a stop to prevent said mark from passing the zero point, and a striking device actuated by the return of the bell to said zero point; substantially as described.

ELAM B. WINGER.

Witnesses:

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CHAS. O. SHERVEY.