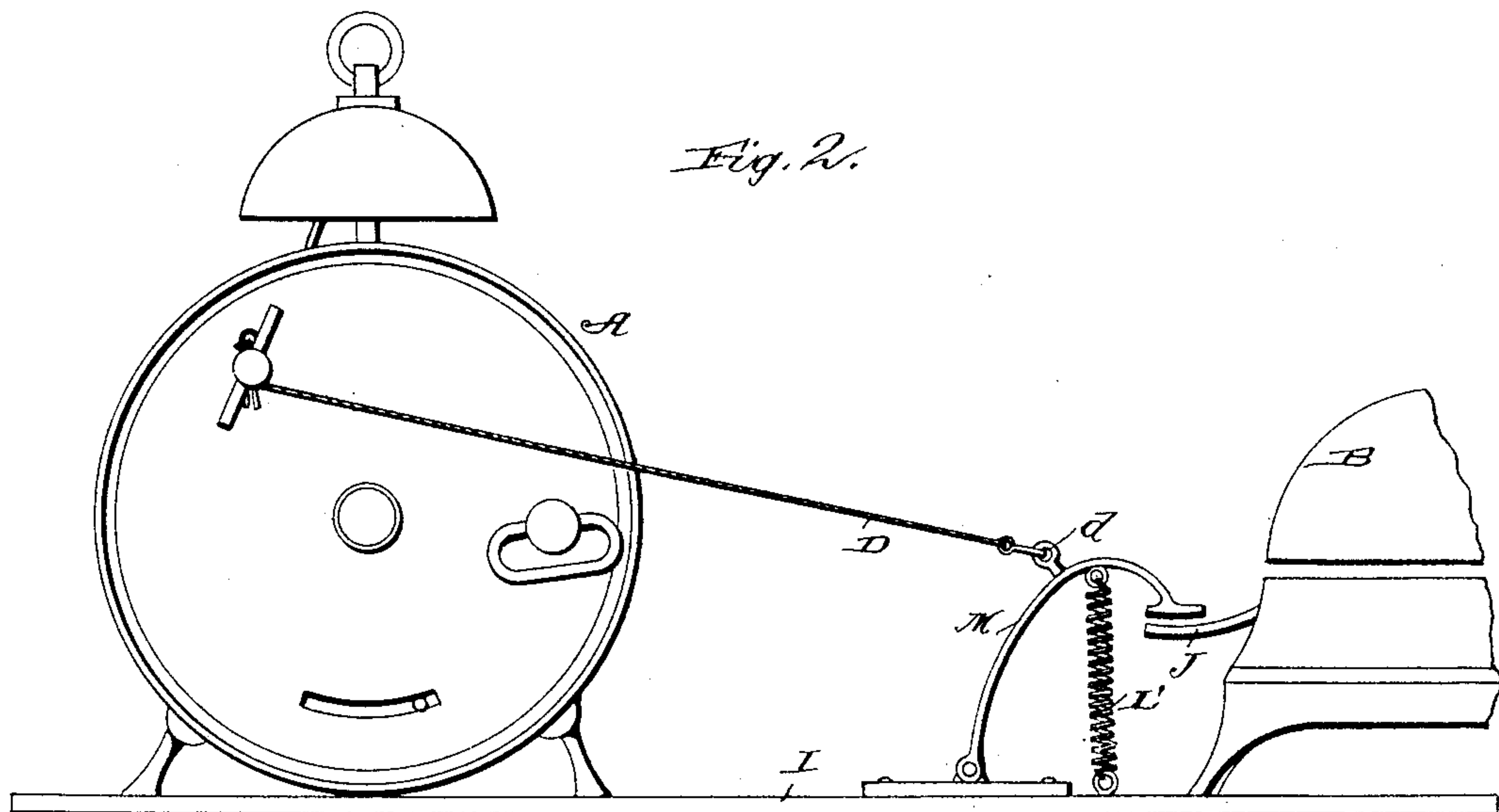
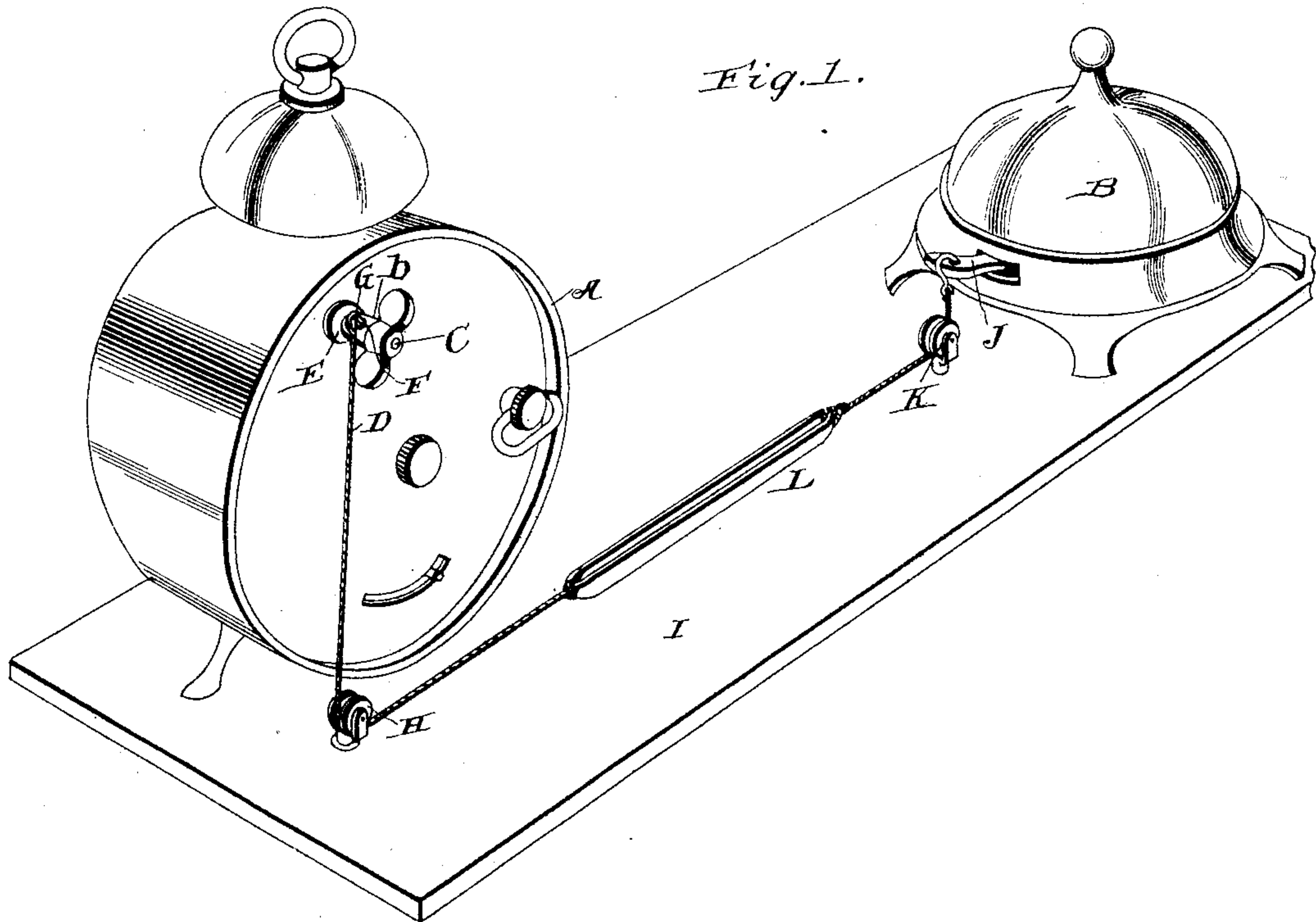


(No Model.)

T. WESTERFIELD.
ALARM CLOCK.

No. 538,306.

Patented Apr. 30, 1895.



Witnesses:
C. H. Under
H. F. Matthews

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UNITED STATES PATENT OFFICE.

THORP WESTERFIELD, OF NEW ORLEANS, LOUISIANA.

ALARM-CLOCK.

SPECIFICATION forming part of Letters Patent No. 538,306, dated April 30, 1895.

Application filed February 20, 1895. Serial No. 539,142. (No model.)

To all whom it may concern:

Be it known that I, THORP WESTERFIELD, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Alarms to be Operated by Clock Mechanism; and I do 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.

This invention relates to an improved alarm to be operated by ordinary clock mechanism, and the novelty will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of my improved apparatus; and Fig. 2 is a rear view illustrating a modification with a part of the alarm bell partly broken away.

Referring by letter to said drawings, A, indicates an alarm clock which may be of the type known as the "Ansonia Brass Company's" make, or it may be a clock of any other suitable make such as may be at present found upon the market, and B, indicates an alarm bell. This bell I have shown as of a make known as the "New Departure Bell" which is manufactured extensively by the New Departure Bell Company, of Bristol, Connecticut, and patented under date of October 29, 1889, No. 414,123. This bell may be briefly described as composed of a shell having within it ordinary metallic call-bell mechanism, and a lever projecting from one side, which when compressed or manipulated, will sound the alarm or ring the bell.

C, indicates the shaft which connects with the mechanism of the clock and which is commonly termed the alarm, as it is used for winding the alarm mechanism. In order to better adapt this shaft for the purposes designed, I prefer to make it a little longer than the usual length so as to provide a portion *b*, upon which the cord D may wind and unwind. The shaft is furthermore provided with a collar E, so as to prevent the winding cord from working into the clock mechanism or affecting the movements of the shaft. The shaft is furthermore provided with a hole F, to receive a

pin G, on one end of the cord D. The operating cord D, passes under a vertically-disposed guide pulley H, secured to a frame I, which may be of wood, metal, or other suitable material, and the opposite end of this cord is attached to the lever J, of the bell mechanism and is guided by means of a vertically-disposed pulley K, rising from the base as shown.

L, indicates a spring, which is interposed between the two ends of the operating cord, and this spring is preferably composed of a rubber band or piece of elastic, although it is obvious that a spring of any other suitable character might be employed, or the entire cord may be of elastic. The clock and bell are both arranged upon the base or frame I, and they may if found necessary or desirable, be secured thereto.

In the modification shown in Fig. 2, of the drawings, I provide a curved lever M, which is pivoted at one end to the base and its opposite end is carried above the lever J, of the bell so that when brought down by a spring L', it will contact with said lever J, and operate the sounding mechanism. One end of the operating cord being wound on the shaft of the alarm key of the clock, is released by the unwinding of the same, which in turn releases the curved lever M. The spring L', is here shown as of a light spiral spring having one end attached to the base and the opposite end attached to the arm or curved lever M. The operating cord D, is attached to the arm M, as shown at *d*, so that it will normally hold said arm out of contact with the bell lever J, and the spring L' expanded.

By the construction shown in Fig. 1 of the drawings, in setting the alarm, the pin G, should be placed in the hole of the stem *b*, after the alarm mechanism has been set for the time desired, when by the winding of the cord D, on the stem of the shaft C, the lever J, will be drawn down, after the spring L, has exerted a certain pressure and the bell will continue to ring until stopped by the authorized person.

By the construction shown in Fig. 2, of the drawings, the alarm will not be sounded until the cord has been unwound from the shaft C, so as to allow the spring L', to bring the

hinged or pivoted arm N, down upon the arm J, of the bell mechanism.

It is obvious that the bell may be removed and used for ordinary purposes and the clock
5 may be also used as an ordinary time piece, and I attach importance to the fact that the ringing of the bell will be of long duration, as the alarms at present in use, do not ring sufficiently long to accomplish the object for
10 which they are designed.

Having described my invention, what I claim is—

1. The combination with a bell and a clock,
15 and the shaft of the clock connected with the alarm mechanism; of a cord extending from the bell lever, and carrying at its opposite end a pin, adapted to be inserted in the hole of the alarm winding shaft, and a spring in

the cord between the clock and bell, substantially as specified. 20

2. The combination with a clock, and its alarm winding shaft; of a bell having a manipulating lever, the curved and hinged arm adapted to engage said lever, a cord connecting said arm with the clock mechanism so as
25 to keep the arm normally out of contact with the bell lever, and the spring connecting the arm with the base so as to draw it into contact with the bell lever, substantially as specified.

In testimony whereof I affix my signature 30
in presence of two witnesses.

THORP WESTERFIELD.

Witnesses:

H. E. ELLIS,

C. B. KNICKERBOCKER.