

73154

L. BAUM,

TIME ALARM

Fig. 1.

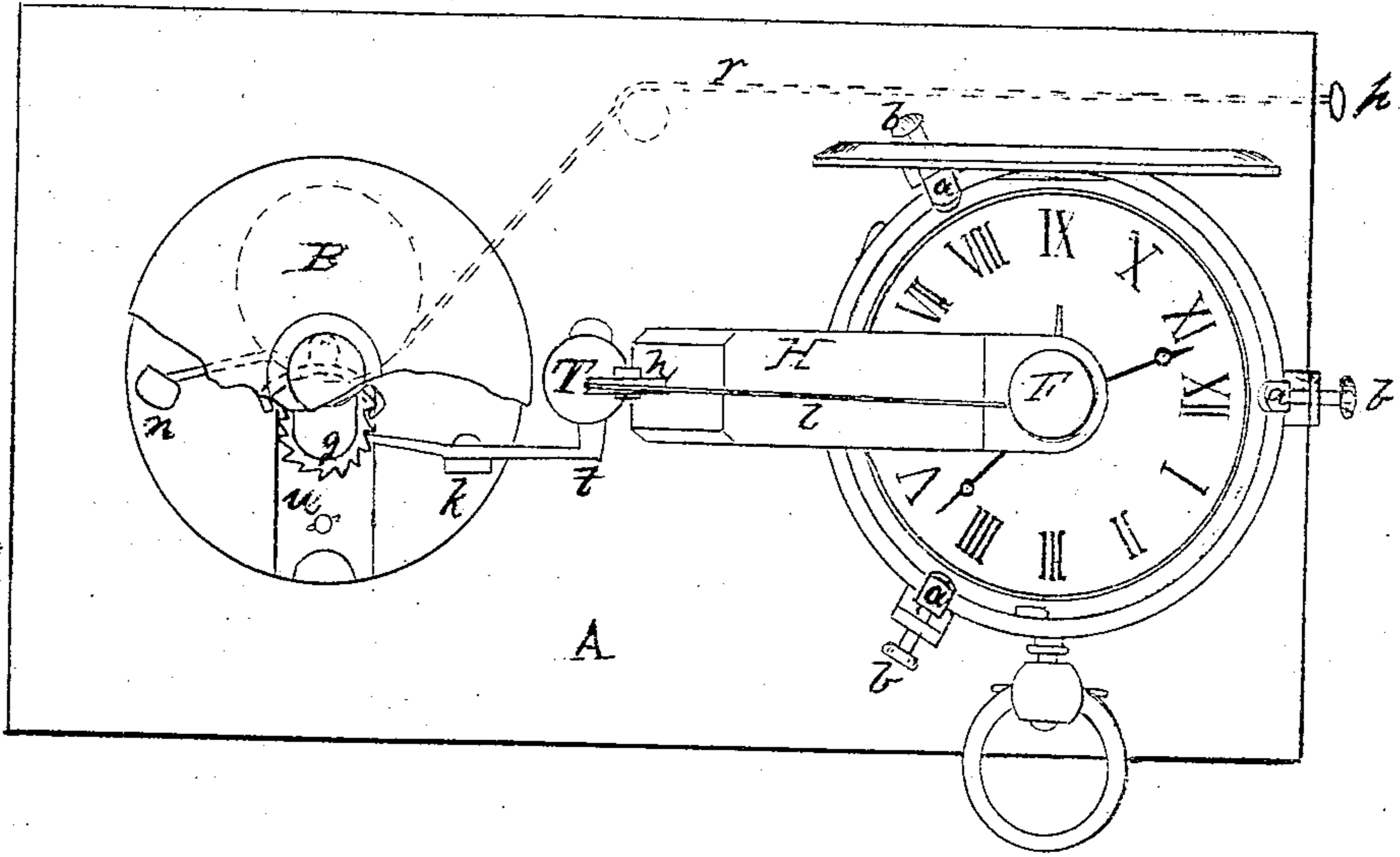
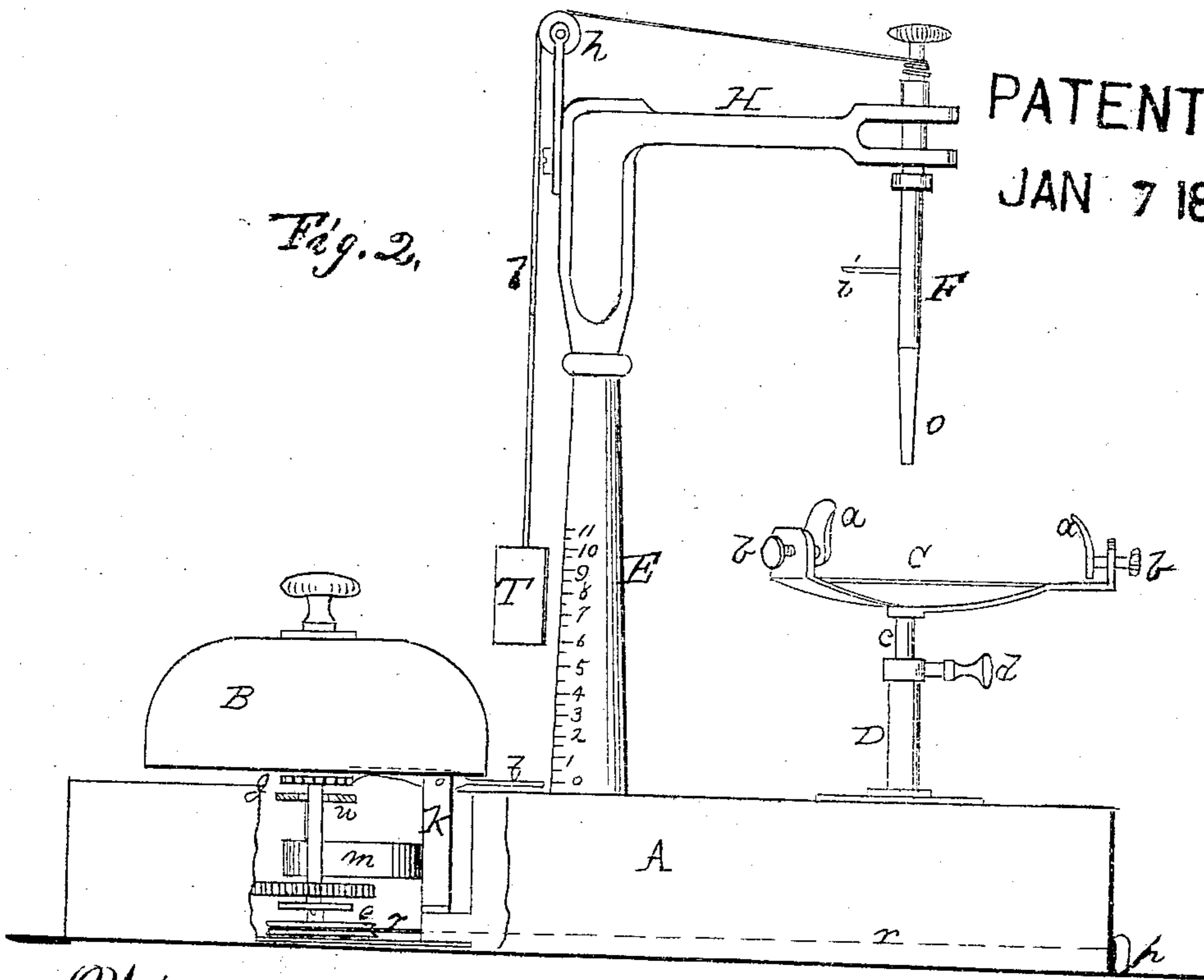


Fig. 2.



PATENTED
JAN 7 1868

Witness
J. J. Dodge
Saml. C. Higaway

Louis Baum
Inventor.
By Dodge & Co.
Atty.

UNITED STATES PATENT OFFICE.

LOUIS BAUM, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN TIME-ALARMS.

Specification forming part of Letters Patent No. **73,154**, dated January 7, 1868.

To all whom it may concern:

Be it known that I, LOUIS BAUM, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Time-Alarms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention consists in a novel apparatus or mechanism for sounding an alarm, at any designated time, by means of an ordinary pocket-watch.

Figure 1 is a top-plan view, and Fig. 2 is a side elevation with a portion broken away to show the mechanism that sounds the alarm.

In constructing my apparatus, I provide a platform or base, A, which may consist of a simple block or plate, or it may be made in the form of a box with a lid or drawer, as may be desired. On or in one end of this I locate any suitable mechanism for operating a hammer, *h*, and causing it to strike a bell, B, which, in this case, I so locate as to cover the mechanism that operates the hammer. This mechanism may be constructed similar to that ordinarily used in alarm-clocks, *m* being the spring that operates it, and *r* is a cord for winding it up, this cord being wound around a pulley, *e*, and lying in a groove, recess, or hole in the case, and having a button or ring, *p*, secured to its outer end, to prevent the end from being drawn within the hole, and also as a means of taking hold of to wind up the spring *m*.

Upon the shaft of the mechanism that operates the hammer *h* is secured a ratchet-wheel, *g*, with which engages a lever, *t*, pivoted to a standard, *k*, or in any other suitable manner, so that its opposite end shall protrude from under the bell B, where it may be hit by a falling weight, T, as represented in the drawings. Upon the opposite end of the platform I mount a disk, C, of proper size to hold a watch, and to its edge secure three or more ears vertically, through which pass thumb-screws *b*, to the inner ends of which are pivoted clips *a*, by which the watch may be secured and firmly held on

the disk C, as represented in the drawings. This disk C is attached rigidly upon a stem, *c*, which slides vertically within a tube, D, secured to the base A, and provided with a thumb-screw, *d*, for adjusting and holding the watch at any required height.

A post, E, is secured to the base A, and has an arm, H, at its top projecting horizontally out over the disk C, as shown in Fig. 1. In this arm, and directly over the center of the disk C, is placed a small vertical shaft, F, around which is wound a cord, *l*, which passes thence back over a pulley, *h*, at the top of the standard E, and has a weight, T, secured to its end, this weight being arranged to hang suspended directly over the lever *t*, that locks the alarm mechanism.

To the lower end of the shaft F is secured a tube or pipe, *o*, like that of an ordinary watch-key, having a square hole in it to fit on the arbor of the watch, to which the hands are secured.

The operation is as follows: The watch being placed on the disk C, it is elevated until the tube *o* is fitted upon the arbor of the watch, when the disk and watch are secured in place by tightening the screw *d*, the shaft F having been previously turned, and the cord *l* wound thereon as many turns as it is desired to have the watch run hours before the alarm is to be sounded. The cord *r* is then or previously pulled, and the alarm thereby wound up. As the watch continues its movements it is obvious that the shaft F will be caused to rotate with the arbor which carries the hour-hand, and will therefore make one revolution each hour. As it revolves the cord *l* will be unwound, and thereby the weight T will be lowered until, at the time set, it will rest upon and tip the lever *t*, thereby unlocking the alarm mechanism, which then sounds the alarm on the bell B. In winding up the cord *l* care must be taken to wind it in the opposite direction from that in which the hands of the watch move, as both move together in unwinding.

In order to adapt it to watches of various sizes and styles, a series of pipes, *o*, will be provided, and they should be so attached and fitted to the shaft F that they may be changed at will. A drawer or receptacle for these may be made in the case A, and the apparatus may be so constructed as to have the elevated por-

tions detachable for convenience, to pack in the case, and thus render it convenient to carry in the pocket or otherwise when traveling. To indicate the number of turns to be given to the shaft F in order to have it run the required time before sounding the alarm, a pin, *i*, is attached to the shaft, as shown in Fig. 2, and for greater certainty the post E may have marked on it a series of graduations, with numbers to indicate the hours and fractions thereof, the weight being raised to a point opposite the number indicating the number of hours that is to elapse before the alarm is to sound.

It is obvious that by substituting for the alarm the ordinary striking mechanism of a clock, and so arranging the locking or dogging device that it will be released at each rev-

olution of the shaft F, the hours may be struck in regular succession, the same as in a clock.

By these means I provide an apparatus by which any person having a watch may arrange to have an alarm sounded at any required hour of the day or night, that is portable, and can be used in any situation where a watch will run.

Having thus described my invention, what I claim is—

An alarm arranged to be operated by an ordinary watch through the medium of the weight T, cord *l*, and revolving shaft F, arranged to operate substantially as described.

LOUIS BAUM.

Witnesses:

H. B. MUNN,

JNO. MANSFIELD.