

(No Model.)

2 Sheets—Sheet 1.

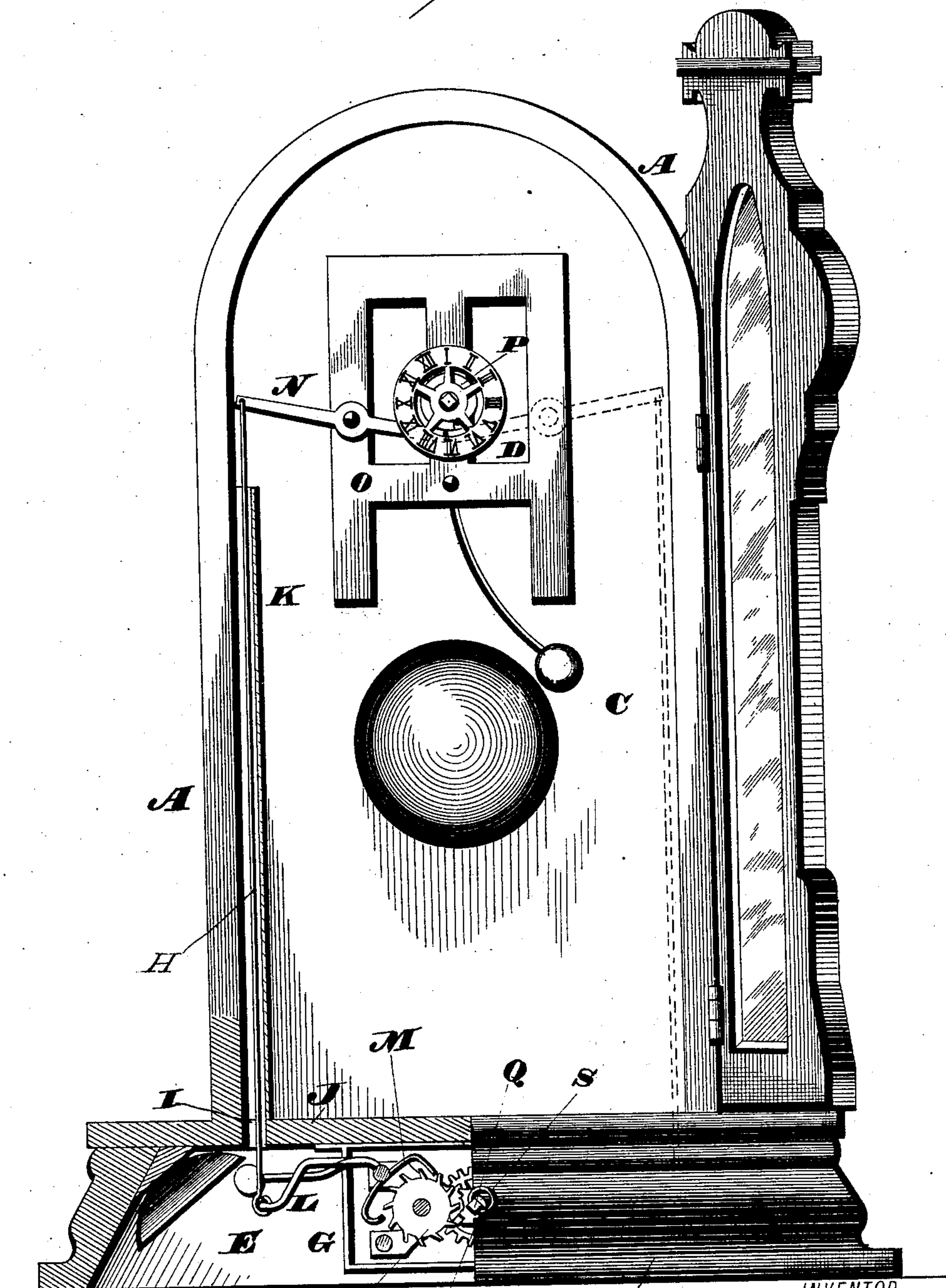
A. D. SMITH.

ALARM CLOCK.

No. 283,429.

Patented Aug. 21, 1883.

Fig. 1.



WITNESSES

E. R. Nottingham
J. H. Huntman

F *R*

B

INVENTOR

A. D. Smith
By H. A. Symmon
Attorney

(No Model.)

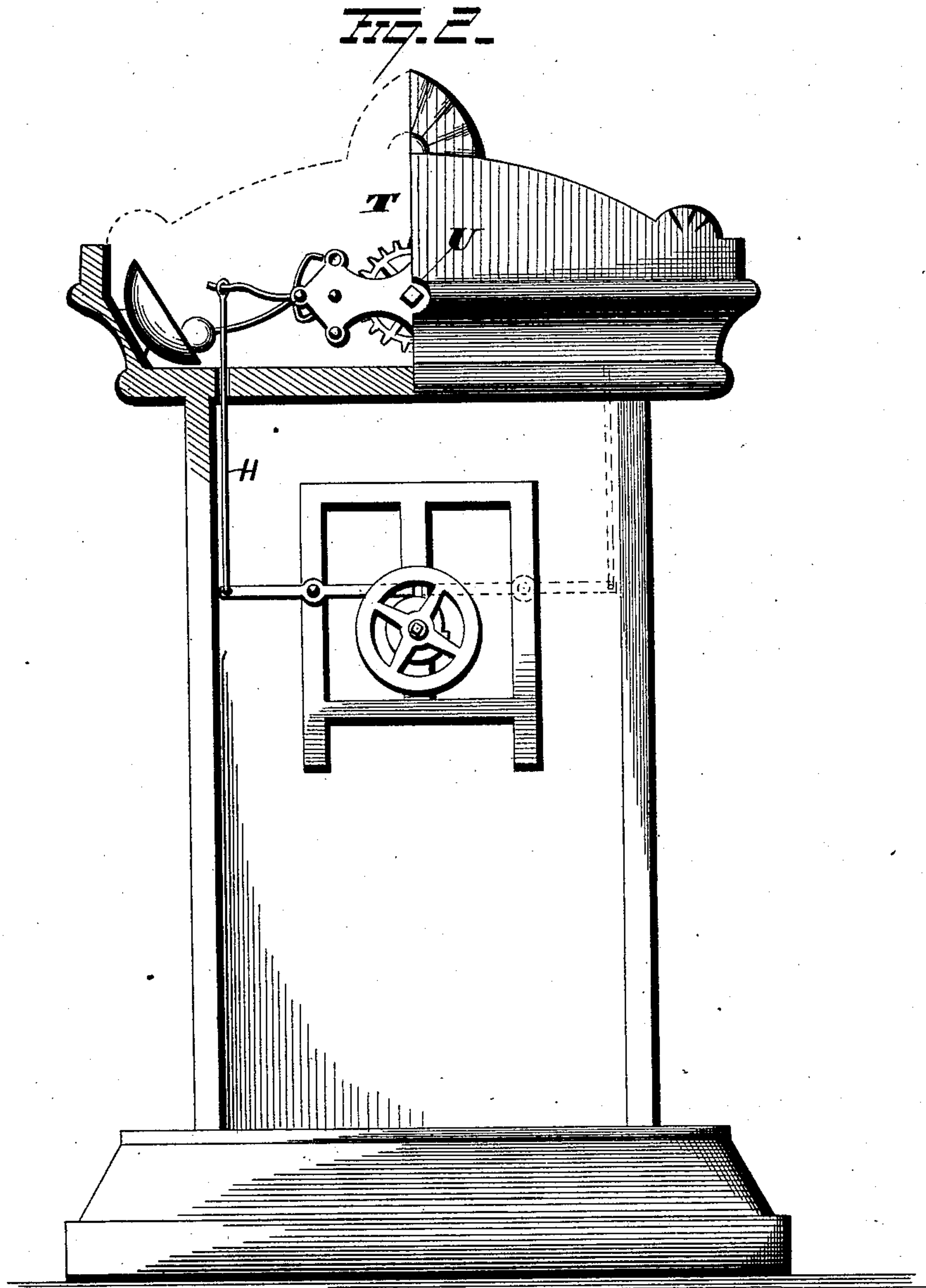
2 Sheets—Sheet 2.

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E. D. Nottingham,
J. H. Huntman

INVENTOR
A. D. Smith.
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Attorney

UNITED STATES PATENT OFFICE.

ALGERNON D. SMITH, OF CINCINNATI, OHIO.

ALARM-CLOCK.

SPECIFICATION forming part of Letters Patent No. 283,429, dated August 21, 1883.

Application filed November 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALGERNON D. SMITH, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Alarm-Clocks; and I do hereby 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 pertains to make and use the same.

My invention relates to an improvement in alarm-clocks, and more particularly to that class thereof in which the timer and alarm mechanism are isolated from each other, the object being to conceal the latter, to prevent it from interfering with the action of the timer, and to connect it with the timer by devices of positive action, combining simplicity and cheapness of construction with durability and efficiency in use.

A further object of my invention is to provide means for winding the alarm mechanism without opening the clock-case.

With these objects in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view partly in elevation and partly in section of a clock embodying my invention, and Fig. 2 is a similar view of one of the modified forms which the invention may assume.

The clock-case shown in Fig. 1 of the drawings is composed of a body, A, and a base, B, the former inclosing the chamber C, in which the timer D is located, and the latter inclosing the chamber E, in which the alarm mechanism F is placed, the said mechanism, which may be of any approved construction, being preferably inclosed in a case, G, as shown in the drawings.

The tripping-rod H, consisting of a straight piece of wire, is arranged to extend through a hole, I, in the floor or partition J, between the chambers C and E. As shown in the drawings, this rod is inclosed in a sheath, K, attached to the jamb of the body portion of the case; but this sheath may be dispensed with, if desired. The lower end of the rod is attached to a wire, L, attached to the pallet M of the alarm mechanism, its upper end being connected to the outer end of a lever, N, piv-

oted midway, or nearly midway, of its length to the front plate, O, of the timer, the inner end of the said lever being arranged to bear upon the periphery of the trip-wheel P at its nadir point.

The winding-arbor Q of the alarm mechanism is prolonged and extended through an aperture, R, formed in the base portion B of the case, and provided with a winding-ring, S, which latter may be substituted by a knob or any equivalent device. If desired, the alarm mechanism, and the levers connecting it with the timer, may be located on the other side of the clock, as indicated by dotted lines in the drawings.

In the modification shown in Fig. 2 of the drawings the clock-case is provided with a chambered top piece, T, in which the alarm mechanism is located, the wire L of the said mechanism being connected to the timer by means of the same rod and lever, as shown, the inner end of the lever having bearing in this instance upon the periphery of the trip-wheel at the zenith point. As shown in this figure of the drawings, the alarm mechanism is wound by a key inserted through a hole, U, formed in the front of the top piece. If desired, however, the winding-arbor may be extended and provided with a ring or knob, as before described. It is also apparent that the alarm mechanism and its connections may be changed to the other side of the clock.

The constructions shown in Figs. 1 and 2 of the drawings may be further modified by dispensing with the chambered base and top portions of the clock and locating the alarm mechanism in the chamber in which the timer is situated, the said mechanism being located above and below and on either side of the timer, and connected therewith by same levers as shown for the other constructions. I would therefore have it understood that I do not limit myself to the exact construction shown and described, but that I hold myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an alarm-clock, the combination, with

the timer, of alarm mechanism located above or below and on either side thereof, a straight tripping-rod, one end of which is attached to a wire secured to the pallet of the alarm mechanism, and a lever pivoted midway, or nearly midway, of its length to the front plate of the timer, its outer end being attached to the other end of the tripping-rod, and its inner end having bearing upon the periphery of the trip-wheel, substantially as set forth.

2. In an alarm-clock, the combination, with the timer, of alarm mechanism located in a chamber isolated from that in which the timer is located, a casing for the alarm, a straight

tripping-rod extending into the chamber in which it is located, and connected with it, and a lever pivoted midway, or nearly midway, of its length to the front plate of the timer, its outer end being attached to the tripping-rod, and its inner end bearing upon the periphery of the trip-wheel, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing-witnesses.

ALGERNON D. SMITH.

Witnesses:

HENRY J. HARROP,
CHAS. F. SEYBOLD.