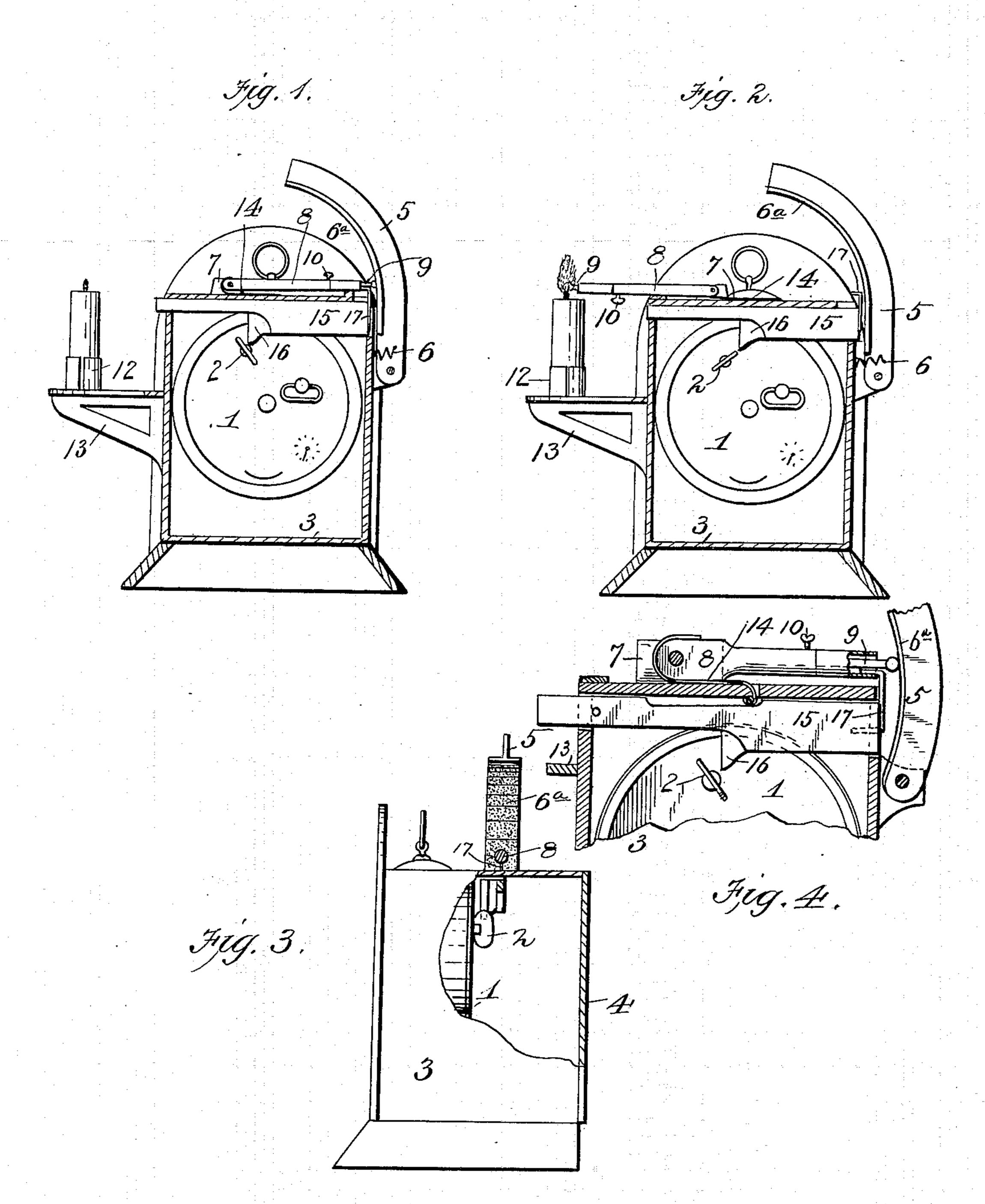
## N. DURANT. TIME LAMPLIGHTER.

(Application filed May 14, 1898.)

(No Model.)



Franck L. Orwand How L. County Mapoleon Durant, He Law Pagger Ho.

## United States Patent Office.

NAPOLEON DURANT, OF NORTH ADAMS, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO THOMAS DEMPSEY, OF SAME PLACE.

## TIME-LAMPLIGHTER.

SPECIFICATION forming part of Letters Patent No. 615,538, dated December 6, 1898.

Application filed May 14, 1898. Serial No. 680,709. (No model.)

To all whom it may concern:

Be it known that I, Napoleon Durant, a citizen of the United States, residing at North Adams, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in Candle-Lighting Attachments for Alarm-Clocks, of which the following is a specification.

My invention relates to attachments for alarm-clocks; and its object is to provide improved means whereby at any predetermined time at which the alarm is set a candle will be automatically lighted by the movement of the winding-key of the alarm mechanism.

The invention consists in the novel construction and combination of parts herein-

after fully described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal section of the casing which incloses the clock, looking from the rear, the alarm being set. Fig. 2 is a similar view showing the position of the parts after the alarm has been sounded and in the position they occupy when the match has been lighted.
Fig. 3 is a cross-sectional view. Fig. 4 is a detail sectional view on an enlarged scale, showing the match-carrying rod, the slide, and the catch for holding said rod in place.

In the said drawings the reference-numeral 30 1 designates an alarm-clock, the numeral 2 designating the key for winding up the alarm mechanism. I make no claim to the clock in itself, as it may be of any of the ordinary constructions now in common use. Said clock 35 is inclosed in a rectangular box or casing 3, provided at the rear with a hinged door 4, so that access may be had to the keys for winding up the time mechanism and setting the hands and also for winding up and setting 40 the alarm movement. Pivoted to said box or casing, on the outside thereof, is a curved arm 5, provided with a coiled spring 6, the tendency of which is to draw the arm inwardly. One end of this spring is secured 45 to one of the sides of the casing 3, while the other end is secured to said arm. The free end of this arm, on its under side, is serrated or provided with a roughened surface 6a, so that a match engaging therewith will by fric-50 tional contact be ignited, as hereinafter de-

scribed. Pivoted to lugs 7 on the top of the box or casing is a rod 8, recessed or made hollow at its outer end to receive a match 9, which is held in place therein by a set-screw 10. The head of the match protrudes beyond 55 the end of this arm, so as to come into coincidence with a candle when said rod is released by the movement of the alarm mechanism of the clock. This candle is held in a hollow socket 12 upon a shelf 13, secured 60 to one side of the box or casing. A spring 14 is connected with the rod 8 for throwing it forward when released. This spring consists of a strip of rubber or other elastic material, one end of which is secured to the top 65 of the casing 3, while the other end is secured to the rod 8. Located in said box or casing is a slide 15, provided with a lug 16, which is adapted to be struck by the windingkey of the alarm mechanism. At the oppo- 70 site or outer end said slide is provided with a catch 17, adapted to engage with a rod 8 and hold it in place.

The operation is as follows: The alarm mechanism is wound up and set to go off at 75 any predetermined time, as usual, and a candle placed in the holder on the shelf 13, so that the wick will coincide with a match secured to the rod 8 when the latter is released. The said rod 8 is then turned backward and 80 its end engaged with the catch 17, the head of the match engaging with the roughened portion of the curved arm 5, the catch holding the rod in the position shown in Fig. 1. At the predetermined time the alarm will be 85 sounded and the key of the alarm mechanism will be rotated, striking the lug on the slide 15 and forcing it outward, disengaging the catch and releasing the rod and allowing it to be thrown forward by its spring. The head 90 of the match carried by the rod will by its frictional contact with the roughened surface of the arm 5 be ignited and light the candle.

Having thus fully described my invention, what I claim is—

In a match-lighting attachment for alarmclocks, the combination with the casing, the clock provided with an alarm-winding key, and the shelf secured to said casing, provided with a candle-holder, of the curved springactuated arm pivoted to said casing having a roughened inner surface, the pivoted spring-actuated rod having a recess in its free end adapted to receive a match, the set-screw, the laterally-movable slide provided with a lug adapted to be struck by the alarm-winding key and the catch secured to the outer end of said slide having its upper end bent inwardly at a right angle and adapted to en-

gage with the recess in said rod, substantially 10 as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

NAPOLEON DURANT.

Witnesses:

E. C. KIELY, WM. BARRINGTON.