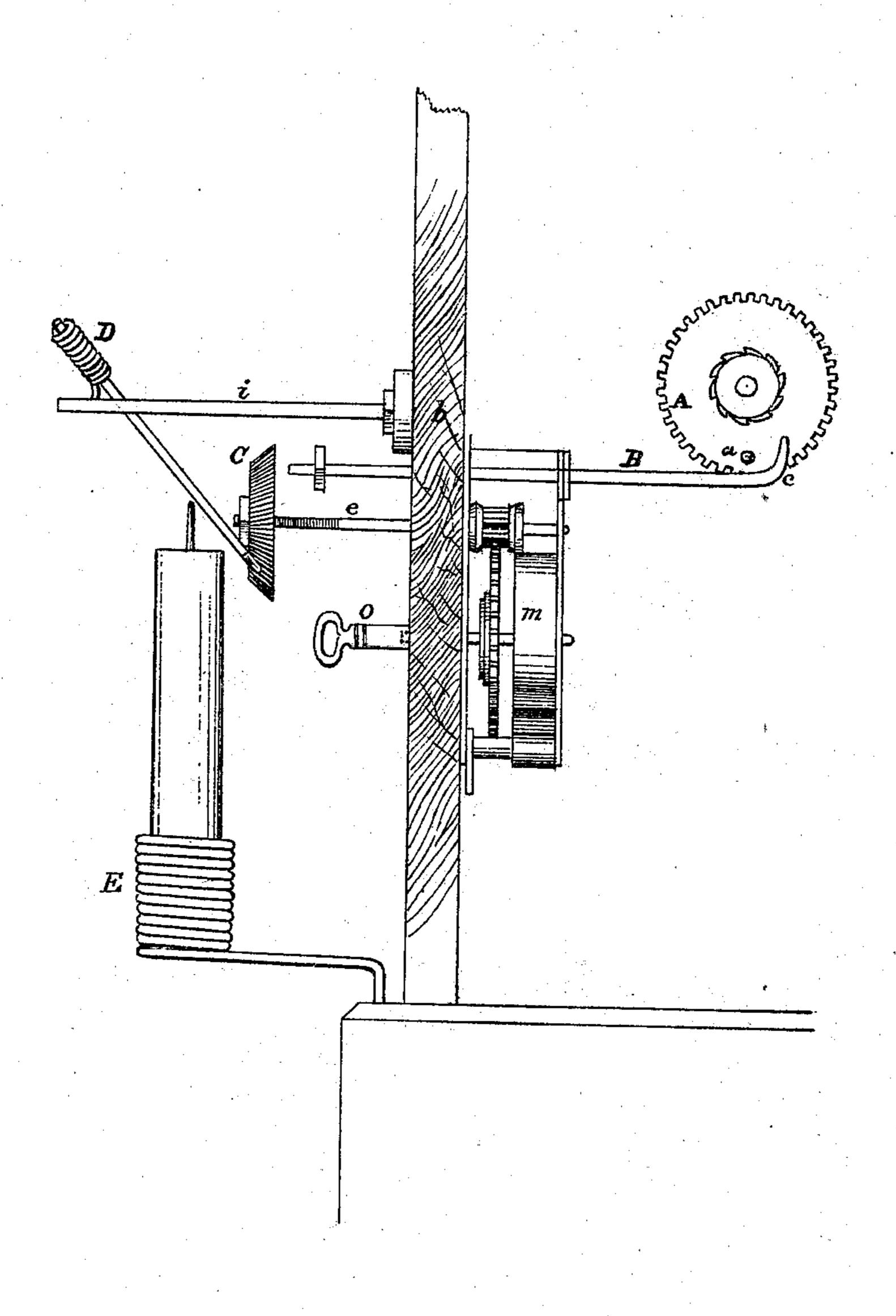
A. S. Miller,

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Faterited Mar. 28.1871.



Witnesses, H.a. Daniels, Co. Monny Henry C. Wright, Inventor, by 6.0. Whitman, Attorney

## Anited States Patent Office.

## HENRY X. WRIGHT, OF MEMPHIS, TENNESSEE. \*

Letters Patent No. 113,236, dated March 28, 1871.

## IMPROVEMENT IN LIGHTING ATTACHMENTS FOR ALARM-CLOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY X. WRIGHT, of Memphis, in the county of Shelby and in the State of Tennessee, have invented an Improved Lamp or Candle-lighting Attachment for Alarm-Clocks; and do hereby declare that the following description, taken in connection with the accompanying drawing hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to secure by Letters Patent.

My invention relates to attachments to alarmclocks, and consists in providing the alarm attachment with a trip-shaft, friction-disk, match-holder, and lamp or candle-holder, so that when the alarm goes off a lamp or candle is immediately lighted.

The construction and operation of my invention may be described as follows:

In the accompanying drawing which forms a part of this specification—

Letter A represents a motive or driving-wheel of the alarm attachment, with the bolt or trip-pin a, firmly fixed and projecting from it.

B designates the trip-shaft placed in a horizontal position, and extending through the casing b of the clock, the shaft being bent or hooked at the inner end c, and loosely supported by the casing so that it may slide outwardly or inwardly.

O is the friction-disk, which is circular in form and beveled at the circumference, where it is serrated for the purpose of causing friction. The disk C is rigidly attached to the shaft e, which is operated by the winding-spring m, within.

D is the match-holder, which is a small wire coil attached to the shaft i, projecting from the clock-cas-

E is the lamp or candle-holder attached to the

clock-casing, and may be made of wire, as shown in the drawing.

The lamp-lighting attachment is operated in this wise:

When the alarm attachment is wound up and set the lamp-lighting attachment is wound up with a key. indicated at letter O, and the trip-shaft B is moved to the friction-disk C, the extremity of the shaft entering an aperture in the disk, indicated at letter n; a friction-match, or other fuse susceptible of ignition by friction, is then placed in the holder D, so that the end to be ignited bears against the serrated or milled edge of the disk C, the holder serving as a spring for this purpose; the candle or lamp is set in the holder E so that the wick touches, or nearly touches, the match above, as shown in the drawing. At the point of time when the alarm operates, the trip-pin a, striking against the hook c, instantly withdraws the tripshaft B from the disk C, which is rapidly revolved by the spring m, communicating by toothed wheel and pinion with the shaft e, thus causing sufficient friction to ignite the match by which the candle is lighted.

I am aware that appliances have been heretofore applied to alarm-clocks for the purpose of lighting lamps or candles at a certain hour, or when the alarm is sprung, (see the patent granted to W. H. and R. T. Andrews, September 21, 1852.)

I therefore claim and desire to secure by Letters Patent—

The arrangement of the wheel A, provided with a trip-pin, a, trip-shaft B, spring m, shaft e, friction-disk C, match-holder D, and candle-holder E, when operating together as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of September, 1870.

 $\mathbf{W}$ itnesses: WRIGHT HENRY X.

"Assignor to himself & fames D. Wright of Bergen, New Jersey