

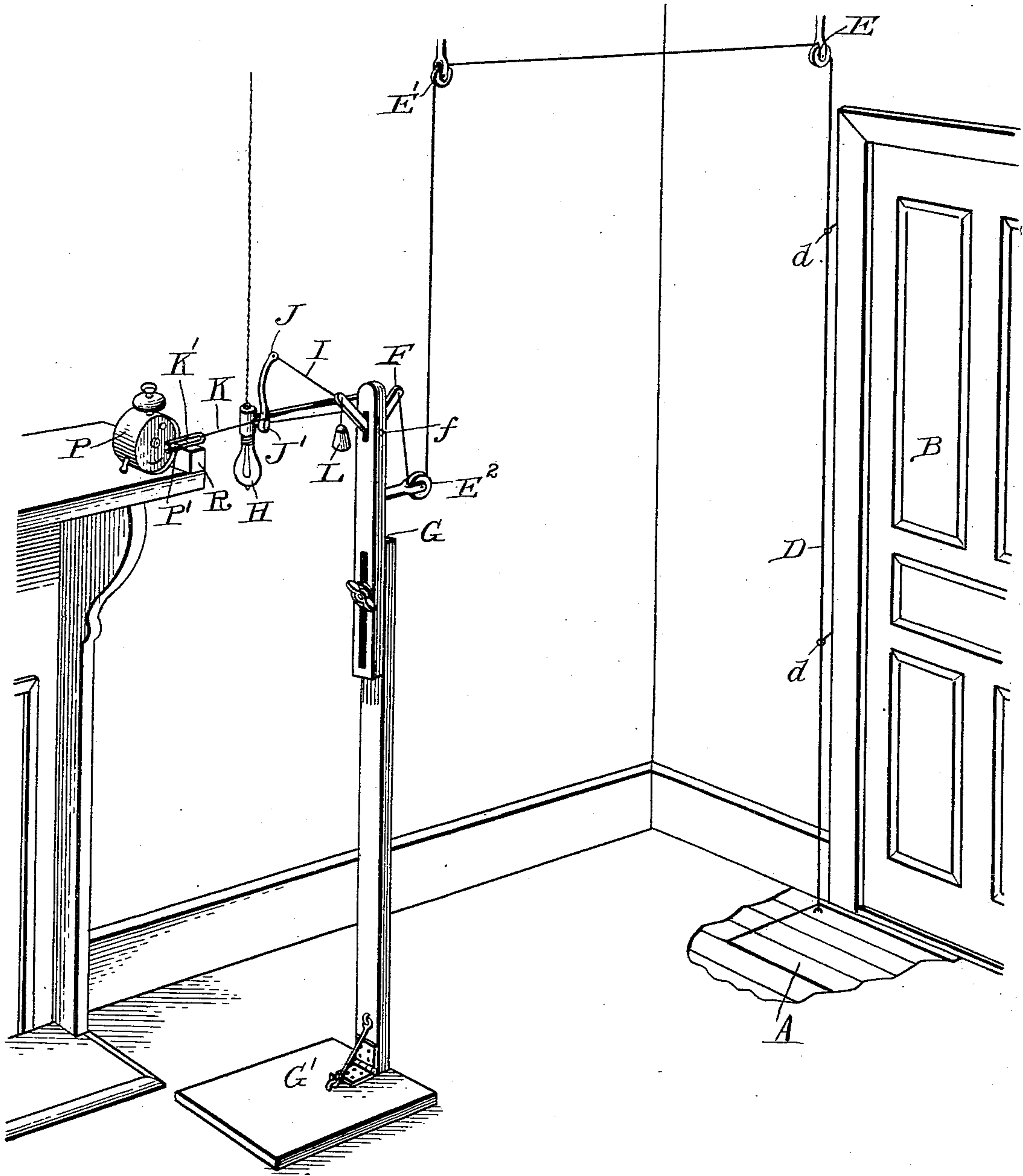
No. 620,513.

Patented Feb. 28, 1899.

J. THORSEN.
COMBINED LIGHTING AND ALARM DEVICE.

(Application filed June 30, 1898.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN THORSEN, OF NORTH AURORA, ILLINOIS.

COMBINED LIGHTING AND ALARM DEVICE.

SPECIFICATION forming part of Letters Patent No. 620,513, dated February 28, 1899.

Application filed June 30, 1898. Serial No. 684,837. (No model.)

To all whom it may concern:

Be it known that I, JOHN THORSEN, a citizen of the United States, and a resident of North Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in a Combined Lighting and Alarm Device; 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, reference being had to the accompanying drawing, and to letters of reference marked thereon, which forms a part of this specification.

The figure of the drawing is a perspective view showing my invention as applied.

This invention has relation to alarm devices and is designed to provide a combined alarm and lighting device which is arranged to be set in action by a person stepping upon or walking over certain portions of the floor of a building. It is especially adapted for use in connection with doors and windows in such a manner as to be operated by the entrance of a burglar through the same; but it may be used at various other places, such as in the neighborhood of safes, vaults, &c.

With this object in view the invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claim.

Referring to the accompanying drawing, the letter A designates a trap or movable section of the floor of a building which for the purpose of illustration I have shown as being located just inside of a door B. This trap or movable section is supported in such a manner as to be capable of being depressed a short distance when subjected to weight, as by a person walking or stepping over or upon it. Connected to this trap is a wire D, which runs up along the door-post over suitable bearings *d* to a pulley E at the ceiling, thence to and over a second pulley E', thence down and under a third pulley E², and from thence to one arm of an angle-lever F, which is pivoted at *f* to any suitable support. This support may consist of a post G, carried by a movable base G', whereby it may be moved and set up in any desired position in the room or building. This post may also serve as a support for the pulley E² and for an electric

incandescent lamp H. Connected to the opposite arm of this lever is a wire I or the like, which is also connected to a lever J, which is attached to or forms an integral extension of the switch-key J' of the lamp H. K is a second wire also connected to the same arm of the said lever F. The opposite end of said wire K has attached thereto a loop device K', which is designed to be connected with the turning post P' of the alarm mechanism of an ordinary alarm-clock P.

R is a block which is supported near the clock in such a position that the loop device K' will contact therewith, and thereby prevent the post P' from turning.

L is a weight which is suspended from the same arm of said lever F.

The operation will be readily understood. Whenever a person steps upon the trap A, which may be concealed by an ordinary doormat or rug or by a carpet, the wire D will be put under tension and will pull down on that arm of the lever F to which it is connected, thereby causing the opposite arm of said lever to be raised. This causes a pull on the wires I and K, whereby the switch-key of the lamp H is turned to close the lamp-circuit and light the lamp, and at the same time the loop device K' is disengaged from the turning post P' of the clock, and thereby releases the alarm mechanism. As soon as the pressure on the trap A is relieved the weight L acts to return the lever L to normal position, thereby shutting off the light. The alarm-bell will, however, continue to ring until its spring or other motor becomes exhausted. In lieu of the alarm-clock other suitable alarm mechanism may be employed.

The connecting-wires from a number of different traps may all be connected to the same lever F, which with the alarm may be located in any desired part of the room or building, the arrangement of the bearing-pulleys for the said wires being modified to suit the particular conditions.

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

In an alarm device of the character described, the combination with a movable floor-section or trap, of an angle-lever, a wire or the like connected to one arm of said lever,

and to the floor-section or trap, suitable guides
for said wire, an adjustable support for said
wire, an alarm mechanism having a turning
post, a slotted device adapted to engage said
5 post and normally prevent its turning, a con-
nection between said device and the said an-
gle-lever whereby the device is disengaged
from said post, when the lever is operated,
an electric lamp having a lever connected to

its switch-key, and a connection between said 10
lever and the angle-lever, substantially as
specified.

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

JOHN THORSEN.

Witnesses:

JAMES H. D'LAMATTER,
CHARLES BARLEW.