

UNITED STATES PATENT OFFICE.

ROBERT J. HARRISON, OF RALEIGH, ASSIGNOR OF ONE-THIRD OF HIS RIGHT TO MARK P. STONE, OF CARY, AND ONE-THIRD TO C. D. EDWARDS, OF MORRISVILLE, NORTH CAROLINA.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 175,833, dated April 11, 1876; application filed March 8, 1876.

To all whom it may concern:

Be it known that I, ROBERT J. HARRISON, of Raleigh, in the county of Wake and State of North Carolina, have invented certain new and useful Improvements in Combined Burglar Alarm and Lamp; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which my invention is represented by a perspective view.

This invention relates to that class of devices in which mechanism for lighting a lamp and mechanism for giving an alarm-signal are so combined that the opening of a door or window, in connection with which they are employed, will simultaneously give the signal and light the lamp, thereby announcing the presence of the intruder, and revealing his form; and the invention consists in an improved combination and construction of said devices, substantially as I will now proceed to set forth.

In the drawings, A represents the wall of the building, or the partition within the building, to which my improved apparatus is attached. B represents a rod sliding longitudinally in suitable guides *b b*, and having a notch, *c*, near its lower end, adapted to catch upon a projecting piece of metal, *d*, attached to the wall. E is a trigger, pivoted to the rod B in such a position that the edge of the door, or some projection extending out from the door, window, blind, or shutter will, by coming in contact with the trigger when the door, &c., is being opened, disengage the notch from the plate *d*, and allow the rod B to be forced up longitudinally by means of a spring, F. The lamp is represented at G, and near it is a tubular match-holder, H, adapted to hold a common friction-match in such a position that if rubbed hard by a rough surface

it will be lighted, and will light the lamp-wick. I is a covered anvil, against which the upper end of the rod B strikes with great force when the notch *c* is liberated from the plate *d*, as above described, and J is a bent piece of metal, fastened to the side of the rod B in such a position that when the rod is moved up or down the outer part of the metal piece J passes over the match-holder H. A thin plate of spring-metal, *m*, is attached to the inside of the bent plate J, in an inclined position, so that as the plate J is forced upward it will come in contact with the end of a match, *t*, held in the holder H, as shown. The inner surface of the spring *m* is roughened, in order that it may light the match as it passes over it. A thumb-piece, P, is attached to the rod B to facilitate setting the rod for operation. A common percussion-cap, *r*, or piece of priming-ribbon, attached to the upper end of the rod, is exploded by the stroke of the rod against the anvil I. The best mode of attaching the spring F is by means of a stout rectangular piece of metal, *n*, riveted to the rod, as shown.

The advantages of this improved construction and arrangement are too obvious to need further description.

Having thus described my invention, I claim as new—

The combined burglar-alarm and lamp-lighter, herein described and shown, consisting, essentially, of the rod B, trigger E, stationary match-holder H, covered movable match-lighter J *m*, covered anvil I, and spring attachment for operating the rod B, substantially as and for the purposes herein set forth.

ROBERT J. HARRISON.

Witnesses:

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