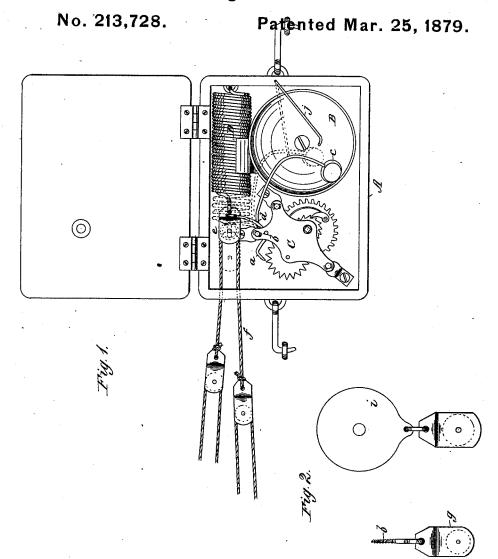
J. D. WILLIAM. Burglar-Alarm.



WITNESSES:

INVENTOR: Jao. D. Killiam

ATTORNEYS.

UNITED STATES PATENT OFFICE

JOHN D. WILLIAM, OF RISING SUN, INDIANA.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 213.728, dated March 25, 1879; application filed February 7, 1879.

To all whom it may concern:

Be it known that I, John D. William, of Rising Sun, in the county of Ohio and State of Indiana, have invented a new and Improved Burglar-Alarm; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of the device with the lid of the case opened. Fig. 2 represents devices for guiding and attaching the cord.

My invention is designed to provide a convenient and effective burglar-alarm, more especially for the use of travelers, which may be carried in the pocket or valise, and be easily applied to either the doors or windows of the apartment which it is desired to protect.

It consists of a small case provided with a bell, and a clock mechanism for ringing the same, in combination with a spiral spring and cords, which are to be connected with the doors and windows, the whole being so arranged that when the cord is under tension the spiral spring is brought to bear directly against the escapement of the clock-gear, to prevent movement in the same, and when the cord is slackened by the opening of the door or window the spring moves away from engagement with the escapement, to permit the alarm to be sounded, as hereinafter more fully described.

In the drawings, A represents a rectangular wooden case, made of a size adapted to be carried in the pocket, and nicely finished. In this case is arranged a bell, B, and a clock mechanism, C, consisting of a spring with spur-gear and escapement. This escapement consists of a pallet or anchor, a, connected to a shaft, b. To this escapement is attached the striking-hammer c and a tripping-arm, d. For holding this striking-hammer in place against accidental displacement during transportation, a hooked rod, j, is thrown beneath the same.

D is a spiral spring, of large size and considerable tension, which is arranged in the tween the spring and clock mechanism are dis-

upper part of the case, and is attached at one end to the case and at the other to a pulley, e, around which passes the cord f, that leads to the various points to be protected. The cord emerges through holes in the end of the case, and in being led to the desired points is guided by sheaves or pulleys g, attached to screw-eyes, for affixing them to the wood-work of the room.

In adjusting the alarm, the cord is affixed to the door or window, either by a plate, *i*, which is jammed between the joints of the door or window, or by one of the screw-eyes and pulleys. The case is then fastened to the head-board, or other suitable place about the bed, with the cord drawn sufficiently tight to stretch the spring D, and cause one end of the same to bear directly against the arm *d* and arrest the movement of the escapement. The hooked rod *j* is then removed from the hammer-rod, and the alarm is set.

Now, whenever the cord is slackened by the opening of the window or door, the spiral spring D, in contracting, recedes from the arm d, and the escapement being thus freed, the alarm is sounded on the bell.

When the alarm is no longer required for use the cord and its attachments are packed in the case, the cover shut down, and the alarm is thus made conveniently portable.

I do not claim, broadly, the spiral spring for drawing in the cord and releasing the escapement of a burglar-alarm, as I am aware that a spiral spring has heretofore been arranged to operate upon the escapement through intermediate devices. In the arrangement shown, however, it will be seen that the coils of the spring, in their advance movement, bear directly against the arm d of the escapement, and thus greatly simplify and cheapen the construction of the alarm by dispensing with intermediate devices.

As an example of the burglar-alarm upon which mine is an improvement, I would refer to the patent to Buck, April 27, 1869. My invention differs from this and other analogous alarms in that all intermediate devices between the spring and clock mechanism are dis-

pensed with, and the spring itself is made to abut directly against and co-operate with the arm regulating the escapement.

Having thus described my invention, what

I claim as new is—

The combination, with a bell and clock mechanism, arranged in a case, and having an arm, d, projecting from the escapement, of

the spiral spring D, arranged to advance from the tension of a cord directly against said arm, to arrest the action of said escapement, substantially as shown and described. JOHN D. WILLIAM.

Witnesses:

JOHN B. COLES, JAMES G. ESPEY.