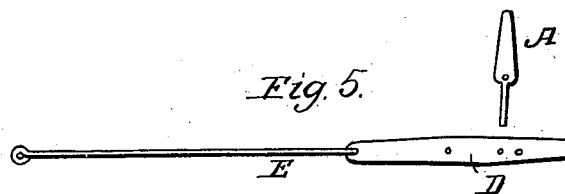
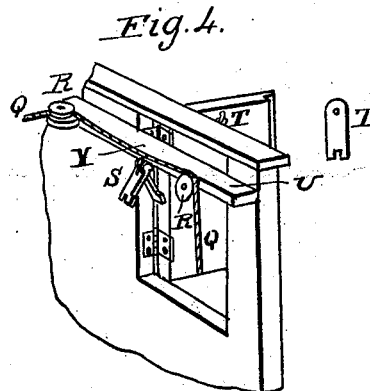
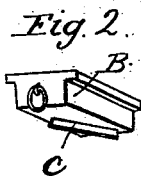
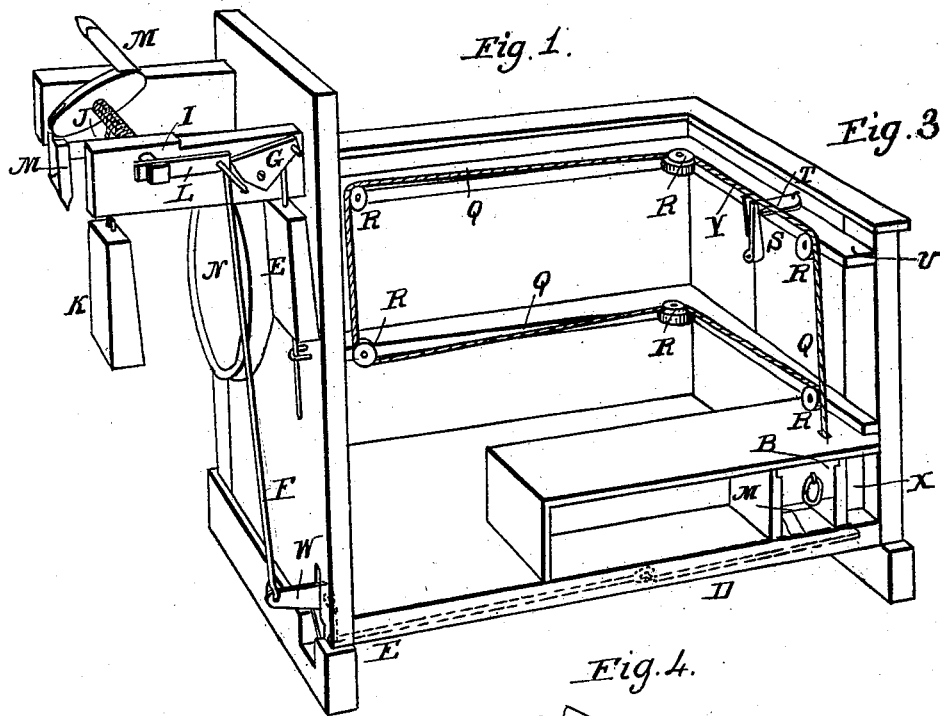


L. E. DENISON.

Burglar Alarm.

No. 1,835.

Patented Oct. 22, 1840.



UNITED STATES PATENT OFFICE.

LESTER E. DENISON, OF SAYBROOK, CONNECTICUT.

ALARM TO PROTECT HOUSES AGAINST THIEVES, &c.

Specification of Letters Patent No. 1,835, dated October 22, 1840.

To all whom it may concern:

Be it known that I, LESTER E. DENISON, of Saybrook, Middlesex county, State of Connecticut, have invented a new and useful Alarm for Protecting Houses, Stores, &c., Against Thieves, Fire, &c., which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

10 The nature of this invention and improvement consists in a certain new and useful combination and arrangement of lever, plate, rods, elbows, cord, weight, axle, hammers, and bell, with the money box or other articles to which the alarm is attached, so that by drawing forward said money drawer or other article the alarm is sprung and the axle becomes disengaged and free to turn around with velocity by the descent of a weight attached to the end of a cord wound around the aforesaid axle, in the manner of a clock cord which gives motion to a number of hammers that strike against the before-mentioned bell and thus produce the alarm and which will take place as soon as the thief moves the article to which the alarm is attached by means of the said wires, &c. Also in a combination of weight and cords carried around among the shelving and attached to the same or other place in such a manner that in case of fire and the burning of the cords and the consequent parting of the same and the falling of the weight which strikes against the end of the horizontal plate the alarm will be given.

15 Likewise in an arrangement of cords and weight attached by hinge and staple or forked plate to a bale, box, bundle, or other article and to the shutter or door in such manner that as the door or shutter is opened or the bundle or article moved the cord becomes lengthened which causes the weight to descend and spring the alarm by starting the aforesaid horizontal plate from a fixed point or pin to which it is hooked.

20 Figure 1, is a perspective view of the interior of a store and one side of an adjoining room, the front wall being removed in order to show the arrangement of the parts of the alarm which would be concealed thereby. Fig. 2, is a view of the money drawer, showing the oblique ledge on the bottom thereof which holds the alarm until started by moving the draw. Fig. 3, is a view of the hinge and forked plate when set for giving alarm. Fig. 4 is a view of the hinge

and plate when separated in giving the alarm. Fig. 5, is a view of part of the apparatus for starting the alarm.

25 A vertical lever A turning on a horizontal pin as a fulcrum is placed under the money drawer B; its upper end touches the side of the oblique rib *c* on the bottom of the drawer its lower end passes into an aperture in a horizontal perforated sliding plate D, placed under the floor or in any convenient place and made to slide over the stationary plates, studs, or in staples or some other convenient fixture which will hold it to its proper place and at the same time allow it to have a free horizontal movement lengthwise. To the opposite end of said plate from that which is perforated is attached a rod or wire E attached to one arm of a vibrating elbow W turning on a pin and to the other end of said elbow is attached another wire F which is carried up to the corner of a segment plate G, which vibrates on a pin inserted through the lower side thereof and to whose opposite corner is suspended a weight H, which vibrating segment plate and weight are arranged on a level, or nearly so, with the alarm bell or in any convenient position in the building, the weight being designed for the purpose of drawing down one end of said segment plate and throwing up the other end, so as to disengage it from the crank of the alarm which rests upon it when the alarm is set.

30 When the weight is wound up the aforesaid segment plate is brought under the crank of the alarm which prevents the axle from turning around until the alarm is sprung.

35 The alarm does not vary materially from other alarms in use, consisting of an axle I, cord J, weight K, crank L, hammers M, and a bell N, which is struck by said hammers.

40 The operation of the before described apparatus is as follows:

45 The alarm is first set by winding up the weight and bringing one end of the vibrating segment plate under its crank which prevents it from turning; at the same time the weight H is raised and the lower end of the vertical lever A inserted into one of the apertures in the horizontal plate D and the oblique rib C of the money drawer brought against the upper end of said lever and shoved inward, which forces said end of the lever toward the alarm and the horizontal plate in a contrary direction which sets the

alarm. The money drawer being drawn forward the upper end of the lever moves from the alarm, the weight H descends drawing down the end of the segment plate to which
5 it is attached and raising the end which is under the crank handle until it is liberated therefrom when the alarm is set in motion by the descent of the weight K attached to the cord wound around the axle of the alarm
10 in the manner of a clock alarm.

The whole of the before described alarm may be inclosed in a case so as to be entirely out of sight.

Another mode of producing alarm is as follows: The alarm being set and the horizontal plate hooked to the lower end of a permanent pin projecting downward from any convenient part of the building instead of hooking it to the before-mentioned vertical lever A, a weight X sufficient to drive
20 said plate from said pin is suspended directly over the end thereof and the cord Q which suspends it is carried over pulley R and around about among the shelving or
25 other places where they would be likely to be burned, in case the interior of the building should take fire, in which event, and the cord being parted, the weight will fall and in falling will strike the plate and drive it
30 down from the pin to which it is hooked when the alarm will take place by means of the other weights cords, &c., in the manner before described.

A third mode of springing an alarm is
35 by attaching the cord to an eye Y at the joint of a hinge S, (as seen in Fig. 4 in the extended position) and then closing said hinge upon the cord (as seen in Fig. 3), which contracts and shortens the cord and
40 raises the weight that is to act on the plate, and in this position the hinge is held by a

forked plate T attached to the inside of a shutter whose prongs embrace the sides of the hinge, which forked plate is held in a horizontal position when the shutter is
45 closed and the alarm is set by a shelf V or other kind of support, when it is opened the plate drops down and hangs in a vertical position against the inside of the shutter as seen in Fig. 4. This forked plate may
50 be attached to any article that would be likely to be moved by the burglar in the act of housebreaking. And the operation is as follows. When he moves the article to
55 which said plate is attached the prongs leave the hinge which instantly flies open by the gravity of the weight suspended to the cord which is partly embraced by the hinge; the weight in descending strikes upon the horizontal perforated plate and drives it from
60 the stud or pin to which it is hooked, in the manner before described in the second place, and thus springs the alarm. The sides of the hinge which come together when they are closed are recessed or channeled, so as
65 to form a space to receive the cord and allows the hinge to close. They are also notched at the ends and have shoulders which rest upon the forked plate when closed.

What I claim as my invention, and which
70 I desire to secure by Letters Patent, is—

The before-described combination and arrangement of the oblique plate or ledge on the bottom of the money drawer with the vertical lever, horizontal plate, rods, elbows,
75 and segment plate for springing an alarm when the money drawer is moved.

LESTER E. DENISON.

Witnesses:

SAMUEL INGHAM,
AMASA HAYDEN.