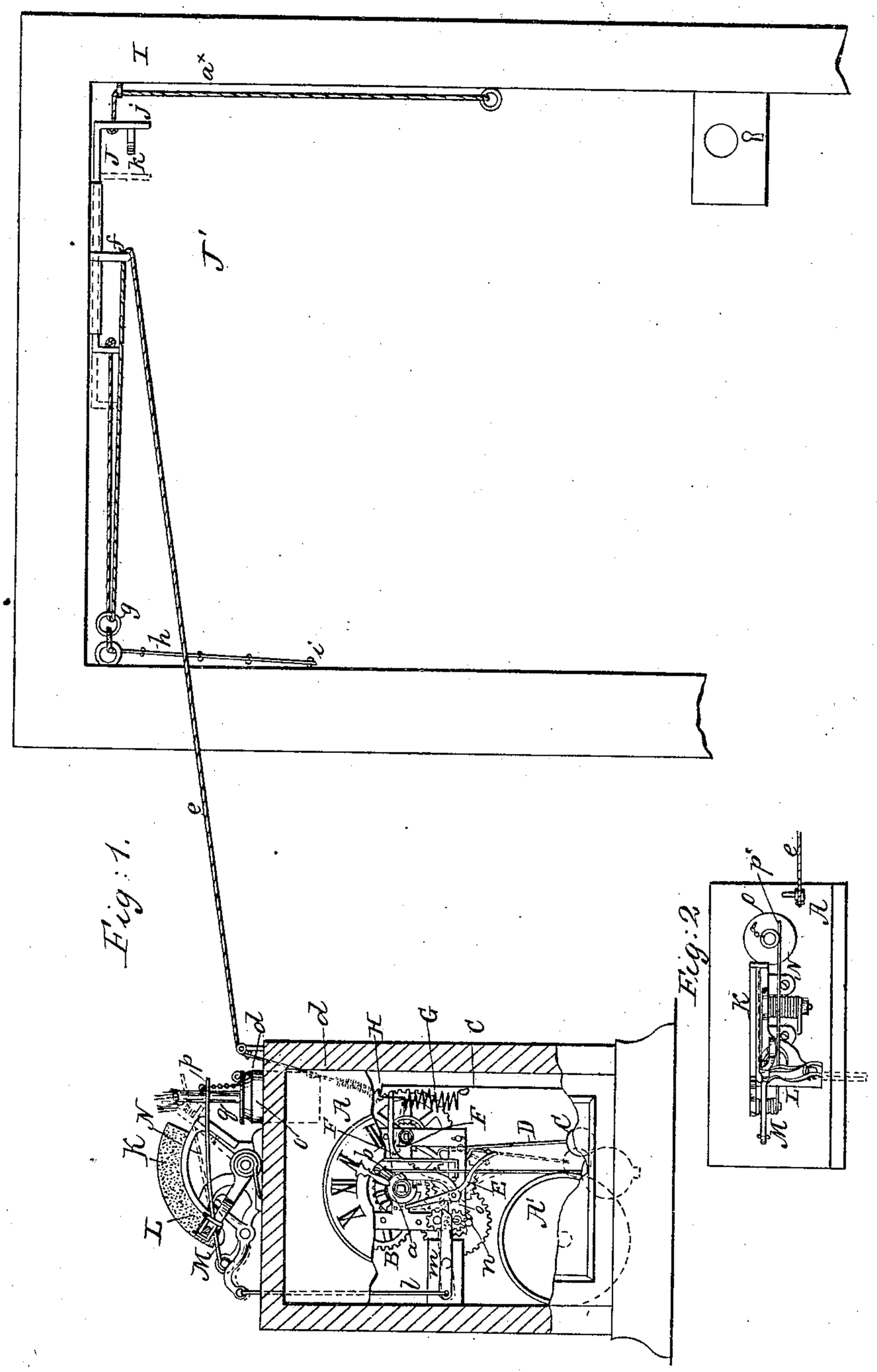
G. K. PROCTOR.

Combined Clock and Burglar Alarm.

No. 29,520. Patented Aug. 7, 1860.



Witnesses.

J. W. Coombs

R. S. Spencer

Inventor

G. K. Proctor

per Munn & Co

attorneys

UNITED STATES PATENT OFFICE.

G. K. PROCTOR, OF BEVERLY, MASSACHUSETTS.

COMBINED CLOCK AND BURGLAR-ALARM.

Specification of Letters Patent No. 29,520, dated August 7, 1860.

To all whom it may concern:

Be it known that I, G. K. PROCTOR, of Beverly, in the county of Essex and State of Massachusetts, have invented a new and useful Combination of a Clock and 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 annexed drawings, making a part of this specification, in which—

Figure 1, is a sectional elevation of a clock and an elevation of a door with my invention applied to them; Fig. 2, a plan or top-view of the clock with the lamp-lighting device attached.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in a very simple modification of a lamp lighting device and alarm attachment for clocks which was patented by me January 24th 1860.

The object of the within described invention is to render the invention aforesaid applicable as a burglar alarm by connecting the same with a door or window in such a manner that a burglar in tampering with a door or window will actuate the alarm mechanism and cause the lamp to be lighted, the invention thereby serving the triple function of a lamp-lighting device, and time or clock, and a burglar alarm.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents an ordinary clock, B the "works" or "movement" and C, the hammer of an ordinary clock alarm, the "crutch" or arm D, of the hammer being restrained or held back, when not in use, by a lever E, of the usual form, the upper end of which bears against the face of an eccentric or cam *a*, attached to a movable dial or index plate, by setting which the crutch or arm D, is liberated at the desired time, and the alarm sounded in consequence of the upper end of lever E, falling into the recess in the eccentric or cam *a*. These parts being of usual construction do not require a minute description. The lever E, however instead of being permanently pivoted or attached to the case or frame of the clock movement B, is pivoted to the lower end of a bent lever F, which has its fulcrum at *b*, the upper and outer ends of the lever F, has two spiral springs G, H, attached to it, one spring being above and the other below the end of the lever F, as shown in Fig. 1. The lower end of the spring G, is attached to the clock case as shown at *c*, and the upper end of the spring H has a rod *d*, attached to it, which rod passes up through the top of the clock case and has a cord *e*, connected to it, said cord passing over a fixed pulley *f*, attached to the door frame I, and around a pulley *g*, attached to a cord or chain *h*, which may also be secured to the door frame as shown at *i*, the end of the cord *e* is attached to a slide J, at the under side of the upper part of the door frame, said slide having a pendant *j*, attached which catches behind a projection *k*, on the door J′, when the latter is closed as clearly shown in Fig. 1.

On the top of the clock A, there is placed the automatic lamp-lighting device patented by me as previously alluded to.

K, represents the friction plate, L, the movable match holder, M the catch which is connected by a wire or rod *l*, with a lever *m*, within the clock case and actuated at the proper time, by a pin *n*, on a wheel *o*, so as to liberate the match holder M.

N is the rod which throws the extinguisher *p*, off from the lamp tube *q*, and O, is the lamp.

The operation is as follows: The alarm is wound up as usual and the door J′ being closed the slide J, is moved so that the pendant *j*, will catch behind the projection *k*. This movement of the slide J, distends the spring H, and causes the lever F to bear against a pin *a*′, which projects from the frame of the movement B, and also causes the lower end of the lever E, to bear against the crutch or arm D, and prevents the vibration of the latter. When the lever F, is in this position the alarm and lamp-lighting device may operate in the usual way, for when the recess in the eccentric or cam *a*, arrives opposite the upper end of the lever E, the lower part of said lever can be moved outward under the pressure of the arm D, of the hammer, and the latter allowed to act upon the bell A′; the catch M, being actuated at the same time so as to liberate the match holder L, by means of the pin *n*, on wheeel *o*, moving lever *m*, the lamp therefore being lighted simultaneously with the sounding of the alarm. In case however a burglar attempts to force the door J′, and succeeds in so doing, the door in opening

will liberate the slide J, and the lever E, will be moved by the springs G, H, so that its lower end will shove the lever F out from the hammer arm D, as shown in red Fig. 1, and the hammer will be allowed to vibrate and produce the alarm. In case the occupant of a room has occasion to go out a cord a^x, is attached to the slide, by which the slide J may be retained to prevent the unnecessary sounding of the alarm.

Thus it will be seen that by a very simple arrangement, a time or clock and burglar alarm, and also a lamp-lighting device, are combined in one piece of mechanism and as the cord *e*, would be burned in case of fire the device also answers as a fire alarm, the effect being precisely the same as if the door were opened and the cord *e*, liberated.

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

The attaching of the lever E of the clock alarm to the lever F, which has springs G, H, connected to it, and also a rod and cord *d*, *e*, by which, said lever E, is connected to the slide J, on the door frame I, which slide is arranged with the projection *k*, on the door J′, as and for the purpose set forth.

G. K. PROCTOR.

Witnesses:
JAMES HILL,
JOHN H. CROSS.