L. Lillie,

Permutation Lock.

No. 24,647. Patented July 5, 1859.

Fig: 1.

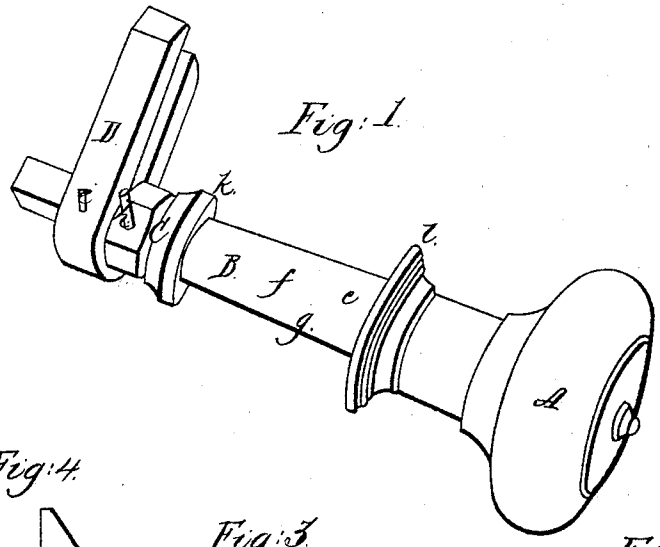


Fig: 4.

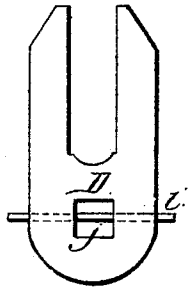


Fig: 3.

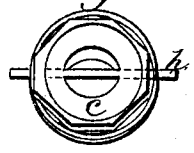
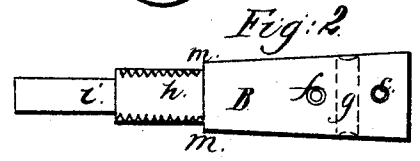


Fig: 2.



Witnesses:

Marcus P. Norton

S. S. B Lewis

Inventor:

Lewis Lillie

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

LEWIS LILLIE, OF TROY, NEW YORK.

DOOR-KNOB BOLT.

Specification forming part of Letters Patent No. 24,647, dated July 5, 1859; Reissued April 24, 1866, No. 2,233.

To all whom it may concern:

Be it known that I, LEWIS LILLIE, of the city of Troy, county of Rensselaer, and State of New York, have invented a new and Improved Bank and Iron-Safe Door-Knob Bolt or Spindle; and I do hereby declare that the following is a full and exact description of the construction, use, and object of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view; Fig. 2, is the knob bolt or spindle without any knob, nut or switch hereinafter to be described. Fig. 3, shows the nut, and Fig. 4, shows the switch.

Like letters represent like parts.

(A) Fig. 1, is the knob made of any material required to answer the purpose or use intended, and is securely fastened to the larger end of the knob bolt or spindle (B). This knob bolt or spindle (B) is made of wrought iron so as not to be easily broken, and with an even taper from the outside end, to which the knob (A) is fastened, to the inside end to which the nut (C), and twitch (D) are attached in the manner hereinafter described. The distance between (*h* and *l*) Fig. 1, shows the thickness of the door through which the said knob bolt or spindle passes. The hole in the door to receive the aforesaid knob bolt or spindle is made in a tapering form to correspond to, and exactly fit the form of the said bolt or spindle. This bolt or spindle is put through any door, &c., from the outside thereof, and is fastened therein strongly and securely by means of the nut as seen at Fig. 3, which is turned to, and firmly against the support (*m*, *m*) Fig. 2, and is there prevented from becoming loose by means of the pin (*h*) which passes through the said nut and the bolt thereof. (*j*) Fig. 4 is a square mortise through the switch (D) so as to receive the immediate end of the aforesaid knob bolt or spindle after the said nut is securely fastened. The switch (D) Figs. 1, and 4, is for the purpose of moving bolts or bars within the door into and from the jamb of the door of the bank, or any other door, where said invention can or may be applied, so as to secure the door thereof preparatory to the operation of moving the fastening bolt of the lock in any of the said doors. This switch is securely fastened in its proper place by means of the pin (*i*) passing through each as in the nut (C) hereinbefore described.

e, *j*, and *g*, Figs. 1, and 2, represent cast-steel pins driven firmly into and through the wrought iron knob bolt or spindle hereinbefore described, which cast-steel pins are so inserted for the purpose of preventing the possibility of and burglar drilling through the said bolt or spindle (B) and thereby effecting an entrance into the inside of the door, so that the said burglar or burglars can or may thereby and therein insert powder or other explosive material, so that, by the explosion of the same, the door may become broken into pieces, and a full and free access to the inside of the bank, safe or building so secured would thereby be effected. The object in making the knob bolt or spindle (B) in a tapering form as hereinbefore described, is, to prevent the driving in and out from the said door the aforesaid knob bolt or spindle, thereby firmly and strongly preventing any entrance into the inside of the door to receive powder or any other explosive material for the purpose of destroying the door by breaking it in pieces and thereby effecting an entrance as aforesaid, or for any other purpose. This knob bolt or spindle (B), therefore, cannot be pulled out, driven in or drilled from any door, to which it may be attached, by any burglar.

My invention hereinbefore described may be attached to any door or elsewhere for the purposes herein described, and is specially designed to give greater security to any door against any burglarious entrance in the manner as aforesaid, to any bank, safe, building or elsewhere to which it can or may be applied as hereinbefore specified.

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

1. The knob bolt or spindle (B) constructed in the manner as and for the purposes herein substantially described.

2. I further claim the switch (D), and the nut (C) arranged and fastened to and upon the knob bolt or spindle (B) in the manner as herein set forth.

LEWIS LILLIE.

Witnesses:

HARRY T. DAVIS,

MARCUS P. NORTON.