

Lock.

Patented Nov. 28, 1865.

Fig 1

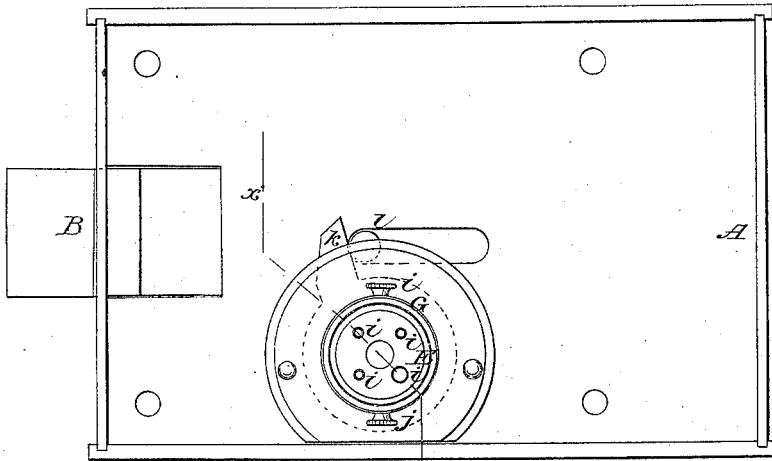


Fig 2

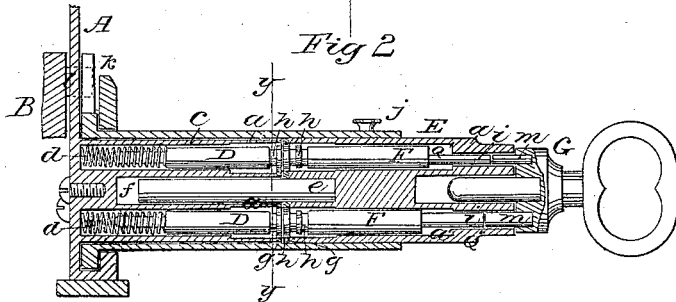


Fig 3

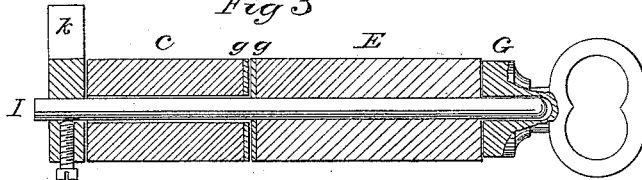


Fig 4

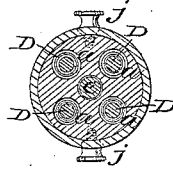
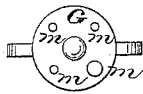


Fig 5



Witnesses:

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UNITED STATES PATENT OFFICE.

ALONZO E. DEITZ, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN LOCKS.

Specification forming part of Letters Patent No. 51,152, dated November 28, 1865.

To all whom it may concern:

Be it known that I, ALONZO E. DEITZ, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Burglar-Proof Attachment for Locks and Latches; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an external view of my invention; Fig. 2, a longitudinal section of the same taken in the line *x x*, Fig. 1; Fig. 3, a longitudinal section of a modification of the same; Fig. 4, a transverse section of Fig. 2 taken in the line *y y*, and Fig. 5, a face view of the key pertaining to the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to obtain a simple, economical, and burglar-proof attachment, which may be applied to all kinds of locks and latches without injury to the door, and which will render any ordinary lock or door to which said lock may be applied secure against burglary, the device being capable of being used as a night-latch, or as an auxiliary attachment, or so as to form the only means for operating the bolt.

A represents a case, which contains an ordinary slide-bolt, B, arranged in the usual way; and C is a tube which is attached permanently to the case A, projecting from its side at right angles, and having a series of chambers, *a*, made in it longitudinally to receive pins D, four of which are used in this instance, as shown in Fig. 4. These chambers *a* contain spiral springs *d*, against which the pins D bear, each pin being reduced in diameter at one end to fit into said springs, as shown clearly in Fig. 2.

E is a rotary tube, which may be of the same diameter as C, and provided with a similar number of chambers *a'*, in which pins F, similar to D, are fitted. The chambers *a'*, however, are not provided with springs, and they extend entirely through E, and the tube E has a rod, *e*, extending centrally from its inner end, and this rod fits into a chamber, *f*, made centrally in tube C, said rod *e* serving as a guide or center for E to turn on.

The abutting ends of the tubes C E have

plates *g* attached to them, through which holes are made for the pins D F to pass through the holes in said plates, being of such a diameter as to admit of the pins working singly in them, while the chambers *a a'* are a trifle larger in diameter, as shown in Fig. 2.

The abutting ends of the pins D F have a series of grooves, *h*, made circumferentially in them, the use of which will be presently explained, and the outer ends of the pins F are turned down, as shown at *i*, so as to be considerably smaller in diameter than the main portions, the chambers *a'* in tube E, in which the parts *i* of the pins F fit, being of a diameter equal to said parts.

The diminished parts *i* of the parts F are eccentric with the larger or main portions in order to prevent the pins being withdrawn from E by drilling the chambers *a'* larger from the outer end of E. By this means a burglar will be completely foiled in endeavoring to remove the pins by drilling.

G represents a tube, which is fitted on the tube E, and is secured thereto by screw *j*. This tube G extends over the fixed tube C, and is provided at its inner end with a foot or projection, K, which acts against a pin, *l*, on bolt B. In order, therefore, to throw back the bolt B, the tube E requires to be turned, and to effect this the pins D F require to be adjusted so that their abutting ends will be precisely in line with the abutting sides of the plates *g* of the tubes C E, for the pins D of the tube C are forced into the chambers *a'* of the tube E, and said pins are of different lengths, so that each one will require to be pushed into C a different distance in order to admit of the turning of E. The pins D are operated upon by the pins F, and the pins F are actuated by a key, G, which is provided with bits *m* of different lengths, corresponding to the difference in the length of the pins D. Thus it will be seen that the device will be difficult to pick or open in an illegitimate manner.

Drilling, as before stated, is rendered impracticable, and picking also, for the reason that the pins D F, in case of being tampered with separately, will catch into or engage with the plates *g* by means of the circumferential grooves *h*, previously described.

A slight modification of the above arrangement is shown in Fig. 3, in which the foot or

projection K is attached to a spindle, I, which passes centrally through tube C and into tube E, the latter being secured to the spindle. This arrangement dispenses with the exterior tube, G. The device, however, is essentially the same in both cases.

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

1. The combination of the separate tubes C, E, and G, the separate sets of pins or tumblers D D and F F, and the eccentric pins *i i*, all arranged and operating substantially as and for the purposes set forth.

2. The plates *g g*, at the inner ends of the tubes C E, in connection with the grooves *h*, made circumferentially in the pins D F, substantially as and for the purpose specified.

3. Having the outer parts of the pins F diminished or reduced in diameter and eccentric with the main portions, substantially as and for the purpose set forth.

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Witnesses:

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