(Model.)

A. E. VOOS.

KEY HOLE GUARD.

No. 249,124. Patented Nov. 1, 1881.

Fig: 2.

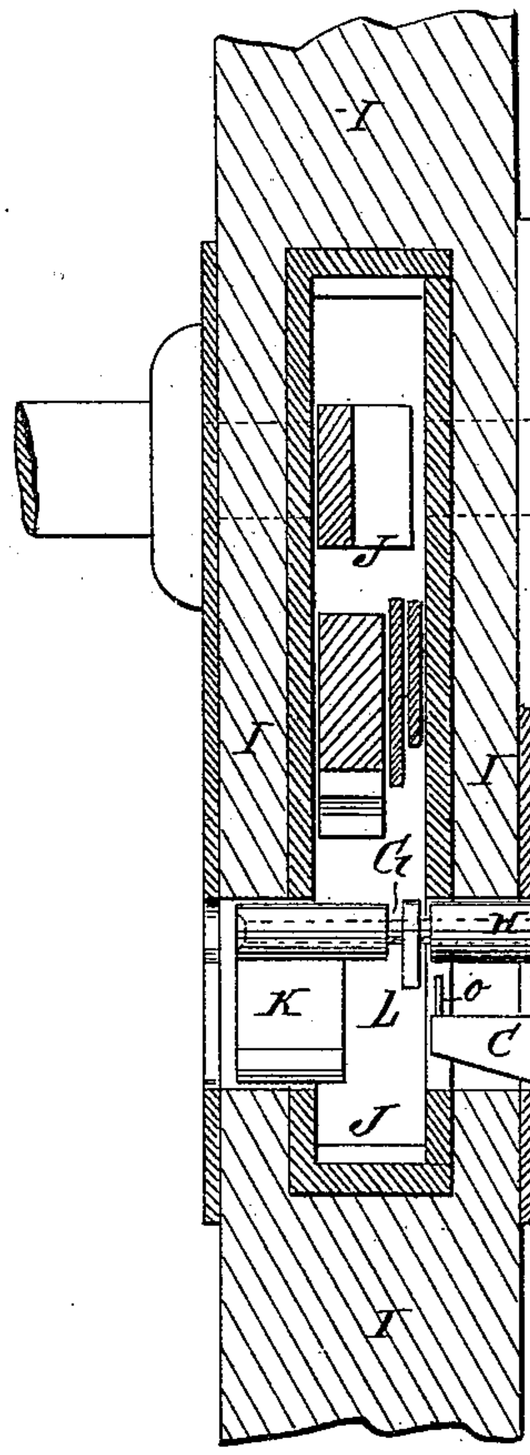


Fig: 1.

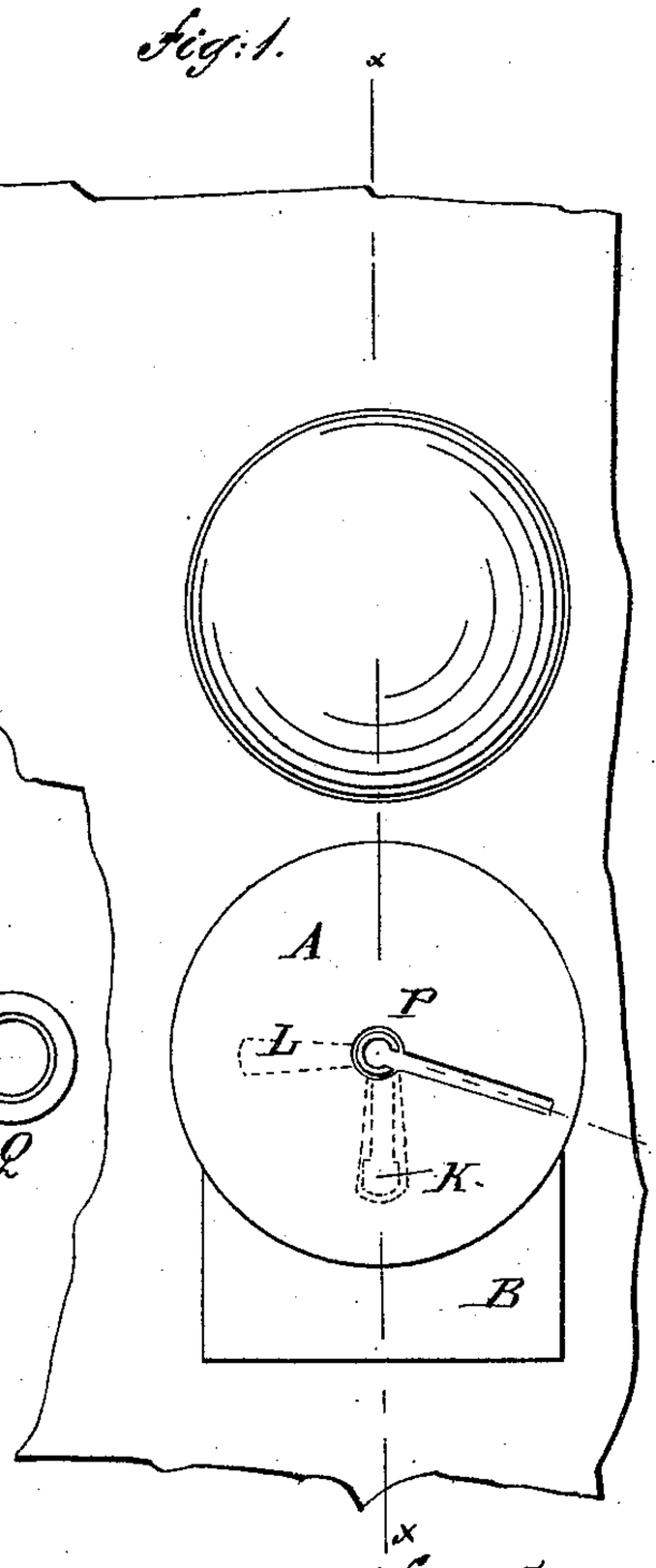


Fig: 4.

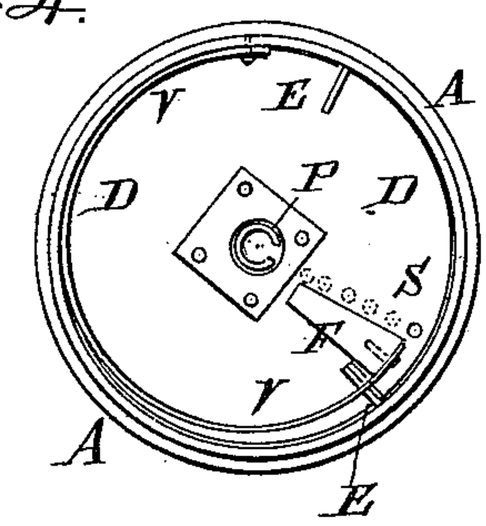


Fig: 3.

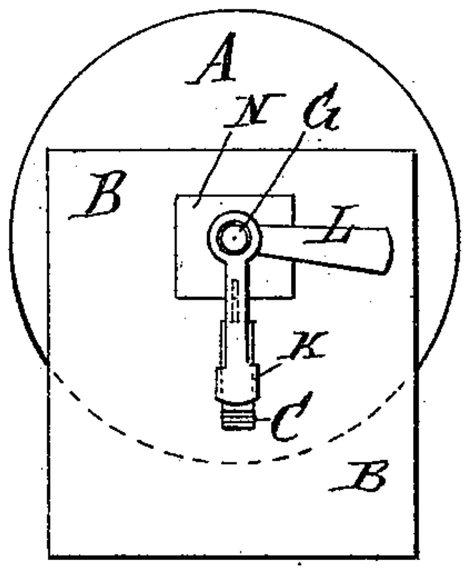
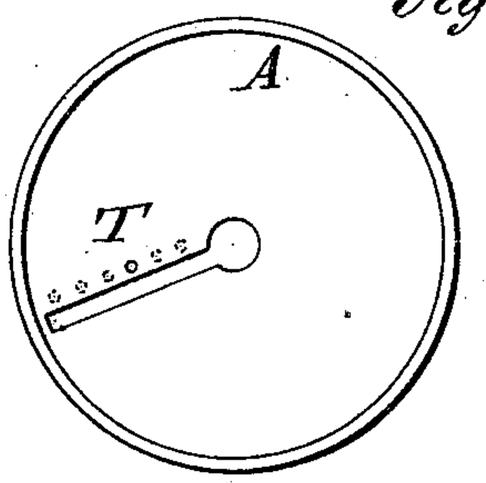


Fig: 5.



WITNESSES:

Chas. Neal.

C. Sedgwick

INVENTOR:

A. E. Voos

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALWILL E. VOOS, OF NEW YORK, N. Y.

KEY-HOLE GUARD.

SPECIFICATION forming part of Letters Patent No. 249,124, dated November 1, 1881.

Application filed March 19, 1881. (Model.)

To all whom it may concern:

Be it known that I, ALWILL EMIL VOOS, of the city, county, and State of New York, have invented a new Improvement in Key-Hole Protectors, of which the following is a full, clear, and exact description.

Figure 1 is a front elevation of my improvement. Fig. 2 is a sectional side elevation of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a rear elevation of the same. Fig. 4 is a sectional front elevation of the same, taken through the line *y y*, Fig. 2. Fig. 5 is a sectional rear elevation of the same, taken through the line *y y*, Fig. 2.

The object of this invention is to prevent locks for doors and other places from being picked; and the invention consists in attaining this object by means substantially as hereinafter described and claimed.

A represents a small case, of cylindrical or other desired form.

To the inner or rear side of the case A is attached a block, B, of a thickness equal to the thickness of a key-hole escutcheon, and which does not extend quite to the top of the case A, space being left for the escutcheon when turned to one side.

To the lower part of the block B is attached, or upon it is formed, a projection, C, to enter the lower part of the key-hole and prevent the cylinder A and block B from being turned when applied to a door.

Within the rear part of the interior of the case A is placed a circular block or plate, D, which is kept in place by pins E, attached to the inner surface of the shell of the said case A, and which also serve as stops for the projection F, formed upon or attached to the forward side of the plate D, to strike against to limit the movement of the said plate D.

To the center of the rear side of the plate D is rigidly attached a rod, G, which passes through a sleeve, H, attached to the rear head of the cylinder A. The rod G and sleeve H pass through the upper part of the block B. The sleeve H is made of such a size as to enter the enlarged upper end of the key-hole in the door I, and of such a length as to enter the case of the lock J. The rod G is made of such a length as to pass through the lock J and enter the part of the door upon the farther side of the said lock.

To the end of the rod G is swiveled a blank or guard, K, of such a size as to pass through the key-hole easily, and of a shape corresponding with the shape of the key-hole.

To the rod G, between the guard K and the end of the sleeve H, is rigidly attached an arm or catch, L, to be turned up within the case of the lock J to prevent the protector from being withdrawn from the lock.

The catch L is turned up and down by the turning of the plate D.

Upon the sleeve H is placed a spiral spring, M, one end of which enters a recess in the block B, into which the said spring can be compressed. To the other end of the spring M is attached a small plate, N, through which the sleeve H passes, and which rests against the side of the door when the protector is in place. The outward movement of the plate N is limited by a pin, O, attached to the projection C. The spring M is designed to hold the protector in place and adapt it to be used upon doors of different thickness.

To the outer or forward side of the plate D is swiveled the inner end of a tube, P, which is slotted longitudinally. The tube P is designed to receive the stem of the key Q and support the said key while being used. The swiveling of the slotted tube P allows it to turn with the key Q, but is especially intended to prevent the plate D from being turned by grasping the said tube P with a pair of nippers, or by means of any other instrument. The bit of the key Q has a point, R, formed upon its inner edge, to enter a hole, S, in the block D, so that the said block can be turned by the key to turn the catch L down into line with the key-hole of the door. The hole S is formed at the side of the stop-block F, which thus serves as a guide to stop the key in proper position for the point R to enter the hole S. With this construction, by varying the position of the point R and hole S an indefinite number of protectors can be formed, no two of which can be operated by the same key.

To the inner surface of the forward head of the cylinder A is attached a pin, T, which passes through a slot, U, in the outer edge of the bit

of the key Q, as shown in Fig. 2. By varying the position of the pin T and slot U an indefinite number of protectors can be formed, each of which can only be operated by its own key. Various positions for the hole S and pin T are indicated by small dotted circles in Figs. 4 and 5.

The plate D is turned to raise the catch L into the lock-case by a spring, V, one end of which is attached to the said plate D, and its other end is attached to the shell of the case A. The stops E E F are so arranged that the plate D and catch L can be only turned about a quarter of a revolution.

In using the protector, the lock J is locked in the ordinary manner and the key is withdrawn. The key Q is inserted in the key-hole in the cylinder A, and turned to turn the catch L downward into line with the key-hole in the door. The guard K and catch L are inserted in the key-hole of the door, the key Q being held firmly in place, and the protector is pressed toward the door until the catch L has entered the case of the lock J. The key Q is then released and withdrawn, leaving the protector attached to the door, and preventing all access to the key-hole of the said door until the protector has been detached. The protector is detached by inserting the key Q and turning it to bring the catch L in line with the key-hole, which allows the catch L and guard K to be withdrawn from the key-hole.

The protector can be attached to either the outside of the door or the inside, as circumstances may require. When the protector is attached to the inside of a door the guard K prevents any access to the lock through the key-hole upon the outside of the said door.

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

1. In a key-hole protector, the combination, with the swiveled guard K, the catch L, and the rod G, of the key-actuated plate D, inclosed in a case, A, and provided with a spring, V, to hold it in place, and stops E E F, to limit its movements, substantially as herein shown and described.

2. The combination of the case A, the block B, extending not quite to its top, and having the projection C, the rod G, and sleeve H, passing through said block, the guard K, and the catch L, substantially as shown and described.

ALWILL EMIL VOOS.

Witnesses:
JAMES T. GRAHAM,
C. SEDGWICK.