J. A. WARREN.

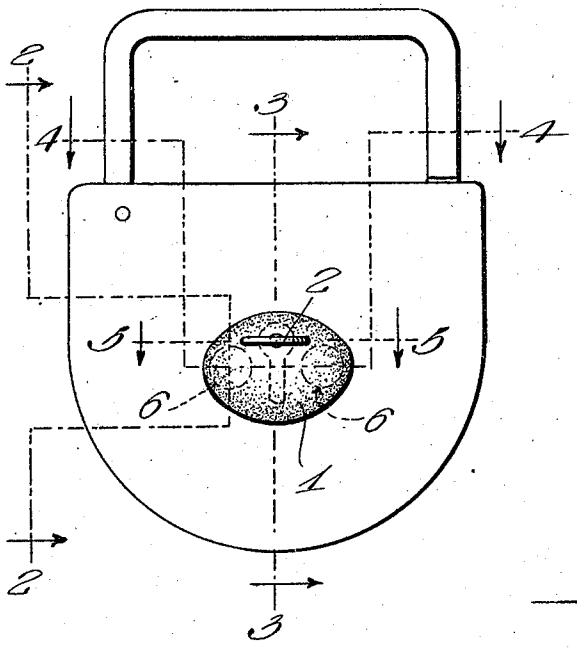
KEYHOLE PROTECTOR.

APPLICATION FILED JULY 26, 1920.

1,405,368. Patented Jan. 31, 1922.

FIG. 1

FIG. 2



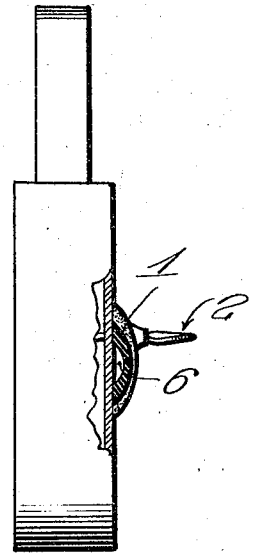
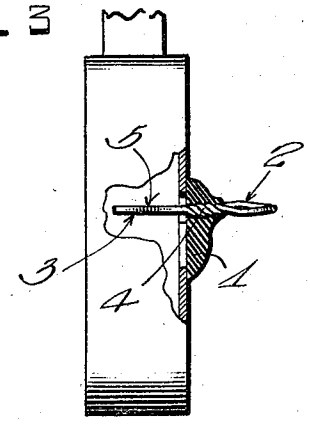
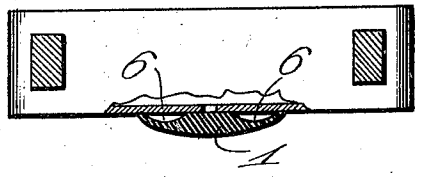


FIG. 4

FIG. 3





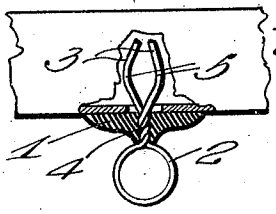


FIG. 5

Inventor

Joseph A. Warren

By H. B. Williamson & Co

Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH A. WARREN, OF MANCHESTER, NEW HAMPSHIRE.

KEYHOLE PROTECTOR.

1,405,368. Specification of Letters Patent. Patented Jan. 31, 1922.

Application filed July 26, 1920. Serial No. 398,867.

To all whom it may concern:

Be it known that I, JOSEPH A. WARREN, a citizen of the United States, residing at Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Keyhole Protectors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to keyhole protectors, and has more particular reference to a device of this class which is especially, although not necessarily, adapted for use on padlocks and the like.

It is well known that the keyholes of locks, especially padlocks, become filled with mud, water, and dirt, which not only interfere with and ruin the mechanism of the lock, but also interfere with the insertion and withdrawal of the key. These circumstances, of course, are very objectionable and should be overcome.

It is my intention to overcome them by the employment of a small device to be placed over and close the keyhole and prevent the entrance of mud, water, and dirt, this device including means for insertion in the keyhole for retaining it in position.

Another object of the invention is to provide a device of this class which is extremely simple and effective, strong, durable, and inexpensive to both the manufacturer and user.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a front elevation of a padlock with my improved keyhole protector in position thereon.

Figs. 2 to 5 inclusive are sections taken on the lines 2—2, 3—3, 4—4, and 5—5, respectively, of Figure 1; parts of the padlock being broken away and shown in section in all of these views to clearly illustrate the manner in which the device coacts with the keyhole.

In carrying out my invention I employ a body of a size to cover and extend on opposite sides of the keyhole, this body carrying spring arms for insertion in the keyhole to retain it in position. The body also carries a handle for conveniently manipulating it and includes additional retaining means in the form of suction cups.

Referring to the drawings, wherein the preferred embodiment of the invention is shown, the numeral 1 designates a resilient body of elliptical shape which is sufficiently large to permit it to completely cover the keyhole opening and extend on opposite sides of the latter. It is obvious that when this body is in position, it will prevent the entrance of all extraneous matter from the keyhole. A combined handle and retaining member is carried by this body. This member is, by preference, constructed from a single length of wire, bent between its ends to form a loop 2 and a pair of spring arms 3, the latter being twisted about one another as indicated at 4 to form means for effectively embedding this member in said body. It is desirable, for the purpose of preventing possible displacement of the device from the keyhole, to bend the arms 3 to provide oppositely disposed shoulders 5. Since the arms 3 may not effectively retain the body in position under all circumstances, I provide the latter adjacent its opposite ends with recesses 6, which constitute suction cups and engage the lock on opposite sides of the keyhole and serve, in conjunction with the aforesaid arms, as an additional retaining means. It is to be noted that the extremities of the arms 3 diverge toward each other to assist in inserting them in the keyhole.

In use, the key is removed from the lock as is usual, and the divergent extremities of the arms 3 of my device are placed in the enlarged end of the keyhole. Then, the loop 2, which constitutes the handle of the device, is gripped and the arms forced into the keyhole until the inner face of the body contacts the lock casing. It is obvious that as the arms enter the keyhole they will automatically expand and engage the adjacent walls frictionally and retain the device in position. The shoulders 5 on the arms, as before stated, will prevent possible displacement of the device and the suction cups will also assist in holding the device in effective position.

From the foregoing description, it will be seen that I have devised an extremely simple, effective, and inexpensive device which may be very easily and readily applied and re-

moved and will absolutely prevent the entrance of mud and other extraneous particles from the keyhole, thus insuring effective working of the lock and permitting easy and ready insertion of the key.

While I have shown and described my protector in use on a padlock, I desire it to be understood that it may be well used to protect keyholes of various other types of locks.

A careful consideration of the foregoing description taken in conjunction with the accompanying drawings will enable persons skilled in the art to which this invention relates to obtain a clear understanding of the same, therefore, further description is deemed unnecessary.

While I have shown and described a particular construction and arrangement of parts to be employed and while I believe this construction to be such as to insure effective results, I desire it to be understood that minor changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. A keyhole protector comprising a body of a size to cover the keyhole and exclude water and dirt, a pair of expansible spring arms carried thereby and extending laterally from the inner face thereof, being adapted for insertion in the keyhole, a finger-loop arranged on the outer face of the body, having rigid connection with said arms, the connecting portion extending through said body, the extremities of said arms being directed toward each other to facilitate insertion in the keyhole.

2. A device of the class described comprising a body to cover the keyhole and exclude extraneous matter, and a combined handle and retaining member carried thereby, said member being constructed from a single length of wire bent between its ends to form a finger-loop and a pair of spring arms, the latter being twisted around one another and this twisted portion being embedded in and extending through said body, thus positioning the arms on one side of the body and the finger-loop on the other side thereof.

3. A keyhole protecting device comprising a resilient body of a size to cover and extend on opposite sides of the keyhole for excluding rain and dirt, said body having recesses formed in the inner face of the extended portions, thus forming suction cups which assist in retaining the body in place over the keyhole, and additional retaining means carried by the body for insertion in the keyhole.

In testimony whereof I have hereunto set my hand.

JOSEPH A. WARREN.