Jan. 14, 1969 V. SHANOK ET AL 3,421,350

PROTECTIVE COVER FOR A KEYHOLE ASSEMBLY

Filed Feb. 2, 1967

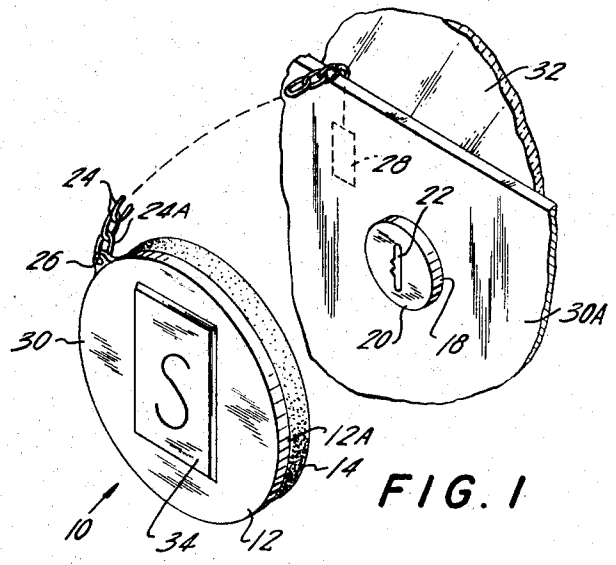


FIG. 1

FIG. 2

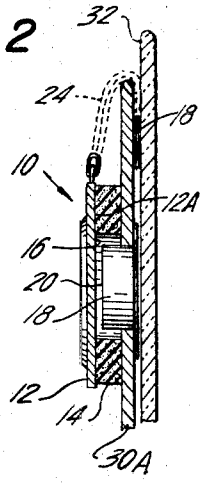
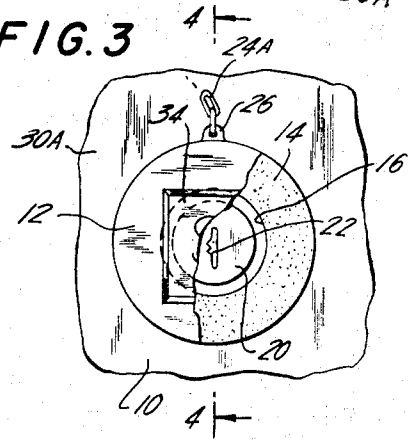


FIG. 3



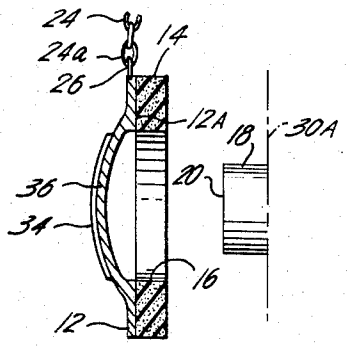


FIG. 4

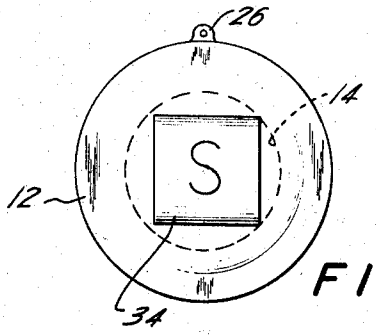
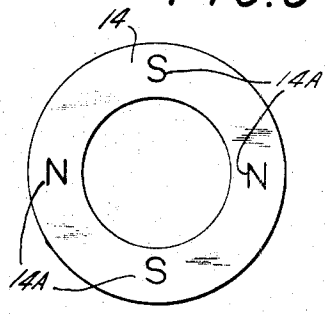


FIG. 5

FIG. 6



INVENTORS
VICTOR SHANOK
JESSE P. SHANOK

BY
Friedman & Goodman
ATTORNEYS

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PROTECTIVE COVER FOR A KEYHOLE ASSEMBLY

Victor Shanok and Jesse P. Shanok, Brooklyn, N.Y., assignors to Glass Laboratories Company, Brooklyn, N.Y., a limited partnership of New York

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Int. Cl. E05b 17/18

ABSTRACT OF THE DISCLOSURE

This invention is concerned with the provision of a protective device for a keyhole or key receiver which is subject to moisture and/or freeze up through exposure to the elements or otherwise. The subject protective device is in the form of a protective cover which is adapted to be self-mountable around the said key receiver and thus protect the key receiver and the lock of which it forms apart from freezing in cold weather or become damaged by moisture.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates generally to a protective device for a keyhole. More particularly, this invention relates to a protective cover for a keyhole, or the like, which is adapted to be self-mountable by magnetic means around the said keyhole.

Description of the prior art

The problem of frozen automobile door locks is of course well known. Almost every motorist has been confronted, in cold, wet, freezing or otherwise inclement weather, with a door lock whose keyhole or key-receiver has been sealed off by ice in freezing temperatures. Quite frequently the motorist has had to resort to holding lighted matches under the key-receiver in order to free the opening or heating the door key itself by the same way, so that the opening can be thawed, the key inserted and the lock opened. Very often this procedure is most unsatisfactory resulting in burned fingers, or the match is continuously extinguished by howling winds. Even more disconcerting is that occasion which arises when the motorist has no matches, leaving only the heat of his hands or breath to try and thaw the key opening.

An attempt has been made in the past to overcome this common and well-known motorists' problem: For example, there has been employed a circular metal disk pivotally mounted over the key-receiver. Ostensibly this disk was intended to overcome the above-mentioned problem, however what did happen, in fact, was that the entire assembly froze up, both the keyhole and the pivotally mounted metal disk which was supposed to act as a cover to prevent the freezing. In other words the keyhole assembly froze as before, only now additionally, the so-called "protective" cover froze over the keyhole creating a further problem.

SUMMARY OF THE INVENTION

It is therefore among one of the principal objects of this invention to overcome this problem of frozen auto lock key receivers by providing a protective cover against such hazards that will be truly portective and can be removed. It is a still further important object to provide a cover that will also prevent moisture from seeping into the auto lock mechanism.

In accordance with the present invention, there has now been devised a truly protective cover for a keyhole on a car or truck door lock, to guard against the hazards

of freeze-up of the said keyhole or moisture seepage into the lock mechanism, said cover being adapted to overlie and be self-mountable, by magnetic means, around said keyhole.

BRIEF DESCRIPTION OF THE DRAWING

The invention will be hereinafter more fully described with reference to the accompanying drawing in which:

FIG. 1 is an exploded perspective view of the invention showing the protective cover, in one of its embodiments, detached from a conventional motor vehicle door lock keyhole assembly.

FIG. 2 is a front view of the invention, showing the protective cover magnetically abutted against a car door and covering the keyhole assembly, with the cover plate being partially cut-away to expose the magnet and keyhole.

FIG. 3 is a side elevational cross-sectional view of FIG. 2 taken along line 4—4 in the direction of the arrows located near the reference numeral.

FIG. 4 is a side elevational view of another embodiment of the invention, in cross-section, showing the protective cover disposed away from the keyhole assembly.

FIG. 5 is a front view of the protective cover device in another embodiment.

FIG. 6 is a front view of an annular magnet, used for magnetic mounting means for the cover device, and shows the four poles of the magnet.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the figures of the drawing, the protective cover shown in substantially circular form is generally identified by the numeral **10** and comprises a circular face-plate **12** and a generally annular shaped magnet **14**. For the sake of convenience, the magnet **14** has a central aperture **16'** so that it is adapted generally to conform to the circumferential edge **18** of keyhole assembly **20**, with the keyhole (or key receiver) shown therein as **22**. If desired, a chain **24** may be connected to face plate **12** through the eye-let **26**, by means of link **24A** and a tabular member **28** may be attached at the other end of the said chain so that the tab **28** may be inserted between the car door **30** and window **32**. The position of the eye-let **26** is not critical and may be placed at any point on the edge **30** of face plate **12**. A decorative element **34** is mounted on face plate **12**, which said decorative element may take the form of an initial crest, seal, or a trademark. As can be seen by referring specifically to FIGS. 2 and 3, the protective cover **10** is abutted against the car door **30** by magnetic means (to be described further hereinbelow), so that the magnet **14** overlies and covers keyhole assembly **20** and its keyhole **22** by means of central aperture **16** which is placed in registry with said keyhole assembly **20**. The tab **28** of chain **24** is then inserted between window **32** and door **30** so that it is held securely in place. It is to be understood that tab **28** may be soldered or welded to car door **30** to provide for a permanent mount, however, it is preferable for purposes of this invention that tab **28** not be permanently mounted to door **30**, for the reason that the novel protective cover of this invention is adapted to be sold over the counter in novelty shops, auto accessory stores, dime stores and the like. Thus any individual can freely purchase it without any need for permanent installation.

FIG. 4 describes still another embodiment of the invention, in that the face plate **12** may be constructed so that an arc-like extension **36** is formed to be in registry with central aperture **16** of magnet **14**. This proviso is made for a keyhole assembly **20** that is unusually projected

forward, from car door **30**, for a distance greater than on conventional car doors. Thus the arc-like extension **36** is adapted to comfortably receive such unusual projection described. Of course, decorative element **34** is then constructed to conform to the curvature of the arc-like extension **36**, so that it can be mounted to said extension **36** on face-plate **12**.

As previously mentioned the protective cover **10** is adapted to be self-mountable by magnetic means upon any surface attracted by a magnetic field. Thus the said protective cover **10** may be disposed not only around keyhole assemblies provided in automobiles or trucks but can be used to protect any keyhole exposed to freezing weather or moisture such as conventional storm doors, or the like, which have surfaces attracted by a magnetic field. When desired to use the keyhole, the protective cover **10** is simply pulled away from door **30** and the key (not shown) is inserted.

To provide the magnetic field required for the mounting of said protective cover **10**, it is provided with magnetic poles **14A**, designated as N and S, so that it may be readily attached to any surface attracted by a magnetic field. While the face plate **12** mounted over said magnet **14** at inside surface **12A** may be plastic or other suitable material, it is preferred that the face plate **12** be a material such as steel, or other suitable material attracted by a magnetic field, since the use of such material will provide for an armature effect between the poles **14A** of said magnet **14**. By the action of the magnet **14** attaching itself to the door **30** attracted by the magnetic field, the keyhole assembly **20** and keyhole **22** are effectively sealed off from snow, rain, or moisture in the air, thereby preventing freeze-up of the keyhole in below freezing temperatures. Of course, the lock mechanism (not shown) is also effectively protected, in the same manner. The magnet **14** is bonded to face plate **12** at inner surface **12A** by a suitable cement, by welding or by other suitable means.

The magnet **14** has been hereinabove described as having a generally annular shape, with its attendant central aperture **16**. It is to be understood, however, that the said magnet need not be annular in shape since it obviously can be any shape so long as there is an aperture or recess provided to receive and protect the keyhole assembly **20**. If desired the outer surface of the face plate **12** may be provided with suitable indicia to define a direction of vertical orientation for the magnet **14** or the decorative element **34** may be used for such purpose.

As shown by FIG. 5 the annular magnet **14** (dotted lines) need not extend to the peripheral edge of face plate **12** but may be of a smaller diameter than said face plate **12**. Preferably, however, the peripheral edges of face plate **12** and magnet **14** substantially coincide, so that they are flush.

Having thus described the fundamental novel features of the invention, as applied to a specific embodiment, or embodiments, it is to be understood that various changes may be made in the form of the device illustrated and in its operation by those skilled in the art, without departing from the spirit and scope of the invention.

What is claimed is:

1. A protective cover for a keyhole assembly comprising a face plate connected at its inner surface to a substantially annular shaped magnet, said inner surface being

that surface of said face plate closest to said keyhole assembly, said annular shaped magnet having an exposed surface adjacent to said keyhole assembly and being provided with a central aperture means which allows the passage of said keyhole assembly therethorugh, said inner surface of said face plate covering said aperture means to protect said keyhole assembly.

2. A protective cover according to claim **1** wherein said face plate is provided with an arc-like cross-sectional extension adapted to be in registry with said central aperture means, said arc-like extension also being adapted to overlie and allow passage of a projection of said keyhole assembly at least partially into the cavity formed by said arc-like extension.

3. A protective cover according to claim **1** wherein said face plate comprises a metal capable of being attracted to said annular shaped magnet.

4. A protective cover according to claim **1** wherein said face plate is a substantially circular shaped metal disk attractable to a magnetic field, said metal disk having a decorative element adhered to its outer surface, said outer surface being that surface of said face plate furthest disposed from said keyhole assembly, said metal disk exacting an armature effect, said magnet coinciding in size to that of said metal disk so that their respective peripheral edges coincide as a result.

5. A protective cover comprising a face plate connected at its inner surface to a substantially annular shaped magnet, said face plate provided with a receiving member at its peripheral edge, said receiving member receiving elongated carrying means having one end thereof adapted to engage said receiving member and the other end thereof adapted to be secured to a door containing a keyhole assembly, said inner surface being that surface of said face plate closest to said keyhole assembly, said annular shaped magnet having an exposed surface adjacent to said keyhole assembly and being provided with a central aperture means which allows the passage of said keyhole assembly therethrough, said inner surface of said face plate covering said aperture means to protect said keyhole assembly.

6. A protective cover according to claim **5** wherein said receiving member consists of an eyelet, said carrying means being a chain having a link thereof passed through the opening in said eyelet and said chain having attachments connected to its end furthest disposed from said eyelet.

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MARVIN A. CHAMPION, *Primary Examiner.*

PERRY TEITELBAUM, *Assistant Examiner.*