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DOOR FASTENER

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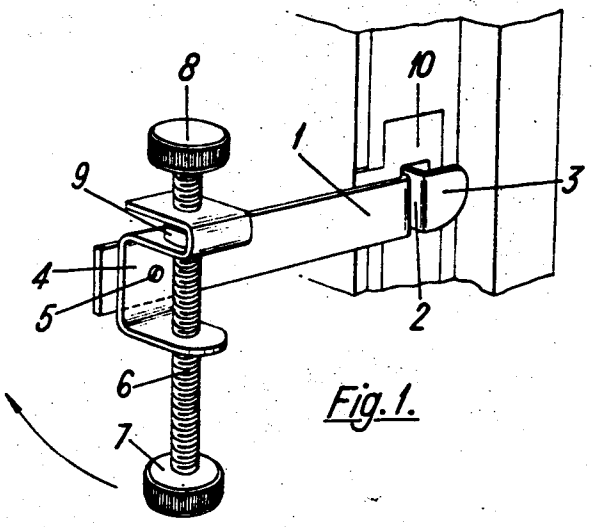


Fig. 1.

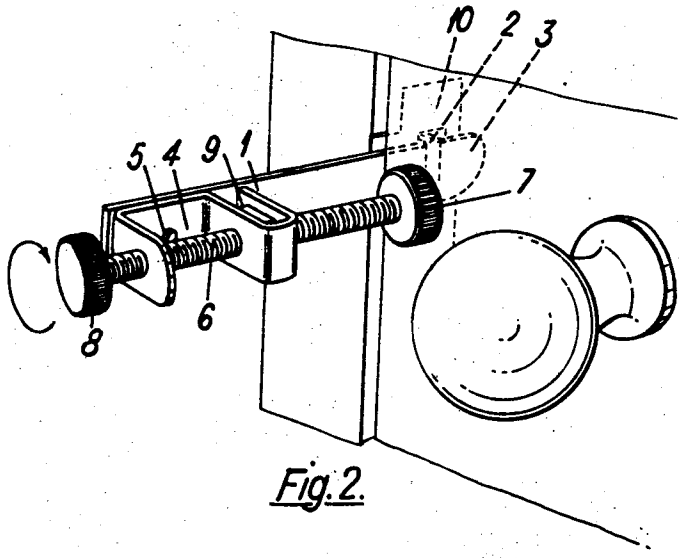


Fig. 2.

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DOOR FASTENER

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U.S. Cl. 292—291 3 Claims

ABSTRACT OF THE DISCLOSURE

The portable door fastener includes a strip of material which can be inserted between a door and a door jamb and has a projection adapted to engage in a bolt-hole or like recess in the jamb, also a toggle lever abutment which can be caused to engage the inner surface of the door adjacent the jamb so as to hold the door firmly closed. The toggle lever abutment is in the form of a second strip permanently pivotally attached to the first strip and bent in zig-zag manner so as to accommodate a number of aligned guide-holes. A clamping screw extends through the guide-holes with its axis parallel to the plane of the strip. The second strip is pivotable to bring the axis of the screw from a door engagement position parallel to the said first strip into a non-engagement position at right angles thereto parallel to the door or jamb face.

This invention relates to a portable door fastener which can be easily applied to an ordinary door so as to fasten it from the inside in such a way as to give maximum security to anyone on the inside of the door.

The fastener consists of a strip of material which can be inserted between the door and the door jamb and has a projection adapted to engage in a bolt-hole or like recess in or on the jamb, and which also has an abutment which can be caused to engage the inner surface of the door adjacent the jamb so as to hold the door firmly closed. The abutment may be a cam, toggle lever or other device constructed or equipped with means for adjustment to suit the thickness of the door.

The invention will be fully understood from the following more detailed description by way of example, of one embodiment thereof, reference being made to the accompanying drawing, in which:

FIGURE 1 is a perspective view showing the device applied to a door jamb, and

FIGURE 2 is a similar view showing the device holding the door firmly closed.

In this embodiment, the strip of material is a flat steel strip **1** and the projection is produced by bending the strip as indicated at **2** in the drawing so as to form a loop which is squeezed flat and projects at right-angles to the main body of the strip. The projection is thus integral with the strip. It is spaced a short distance from the extremity of the strip so that the strip has a projecting end **3** which is trapped between the door and the door jamb and thus gives additional support to the projection when the fastening is in use.

A toggle lever abutment is formed by another strip **4** pivotally attached to the first mentioned strip by a rivet **5** and bent in zig-zag manner so as to accommodate a number of aligned guide-holes which receive a clamping screw with its axis parallel to the plane of the strip **1**. The clamping screw **6** has an inner end equipped with a cap **7** made of rubber, plastics or other material for engaging the door and an outer end equipped with a knob **8** made of metal, plastics or other material. It is held in place

by a nut **9** threaded on it and trapped between adjacent bends in the zig-zag strip **4**.

The fastening can be easily carried in a pocket or handbag and can be used to fasten almost any door or like closure. In use the projection **2** carried by the strip **1** is engaged in a bolt-hole or like recess in or on the jamb and then the door is closed so that one end of the strip is trapped between the edge of the door and the door jamb. The abutment (which is swung into a position approximately at right-angles to the strip as shown in FIGURE 1 to allow the door to be closed) is then swung into alignment with the strip so that its inner end is brought into engagement with the inner surface of the door as shown in FIGURE 2. The abutment is tightened if necessary by rotating the screw **6** to hold the door firmly closed.

As illustrated in the drawing, the projection **2** is inserted into the keeper **10** of a mortise lock. The bolt hole in which the projection is engaged is thus actually in the door jamb. However, the device is not necessarily limited to doors having mortise locks. In the case of a door having a rim lock, the projection may be inserted into the keeper of the rim lock attached to the face of the door jamb, and the abutment may engage the surface of the rim lock, which for this purpose is regarded as part of the door. To enable the device to be used effectively for fastening doors with rim locks it may be necessary to provide it with a projecting end **3** which is of greater length than that needed for a device designed for use with mortise locks only.

A cam or wedge could be substituted for the abutment lever described. The complete device can easily be made very strong so as to give a high degree of security and is independent of any key.

I claim:

1. A portable door fastener comprising a strip of material which can be inserted between a door and a door jamb and having a projection adapted to engage in a bolt-hole or like recess in the jamb, and a toggle lever abutment which can be caused to engage the inner surface of the door adjacent the jamb so as to hold the door firmly closed, which toggle lever abutment is in the form of a second strip permanently pivotally attached to the first strip and bent in zig-zag manner so as to accommodate a number of aligned guide-holes which receive a clamping screw with its axis parallel to the plane of the strip, the said second strip being pivotable to bring the axis of the screw from a door engagement position parallel to the said first strip to a non-engagement at right angles thereto parallel to the door or jamb face.

2. In a fastener as set forth in claim **1**, a nut for said screw positioned within one bend of the zig-zag strip.

3. In a fastener as set forth in claim **1**, a bumper at one end of said screw; and a knurled knob at the other end of said screw.

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