No. 816,327.

PATENTED MAR. 27, 1906.

E. M. HOAGLAND.

DOOR SECURER.

APPLICATION FILED JULY 25, 1905.

FIG. 1

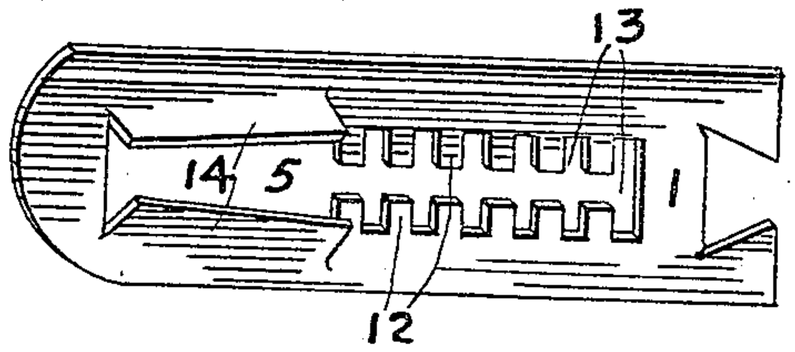


FIG. 2

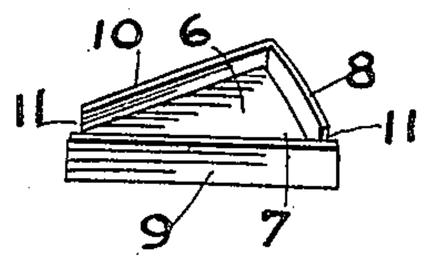


FIG. 3

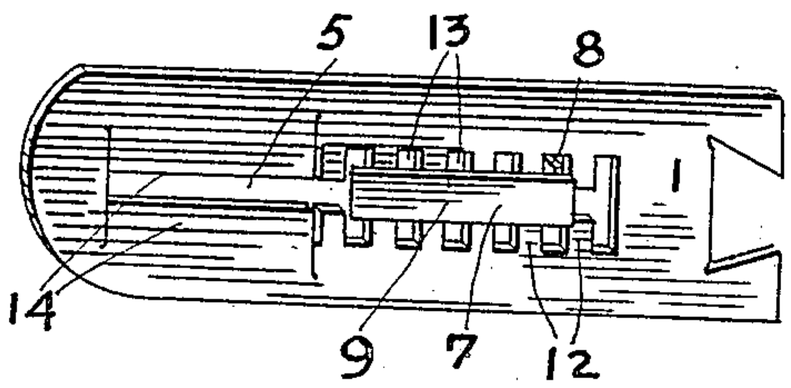


FIG. 4

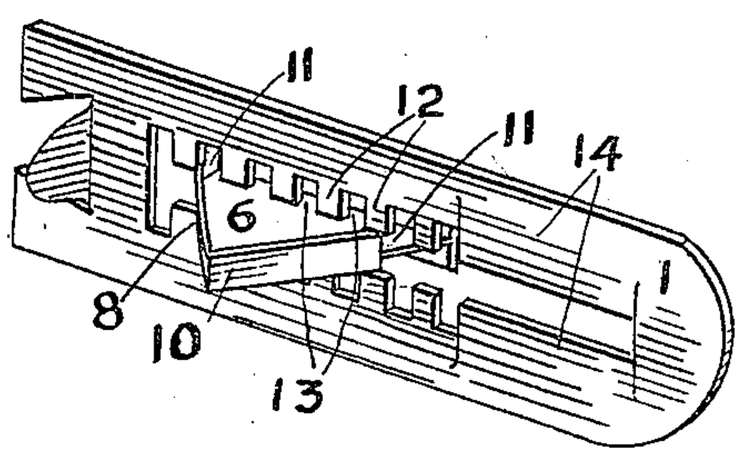


FIG. 5

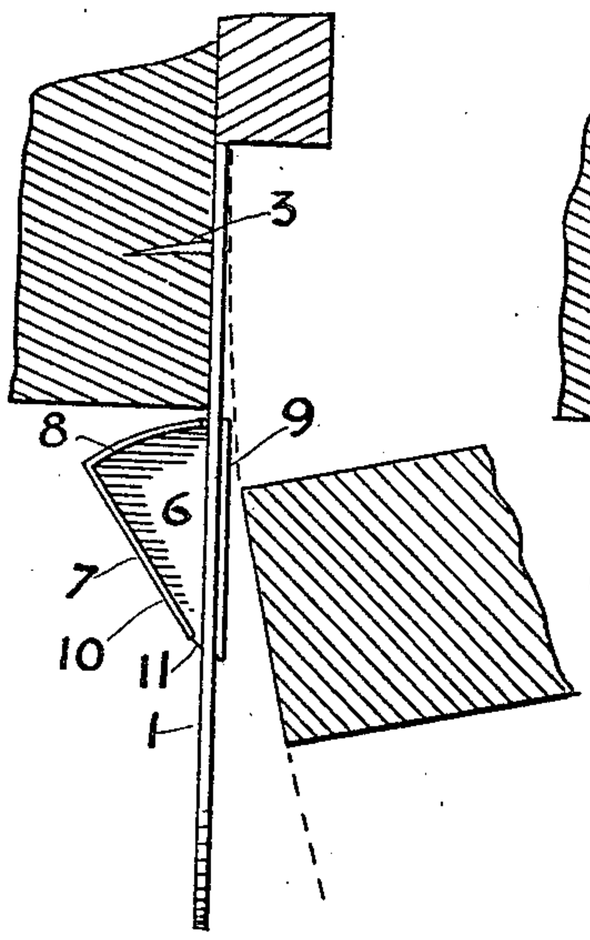


FIG. 6

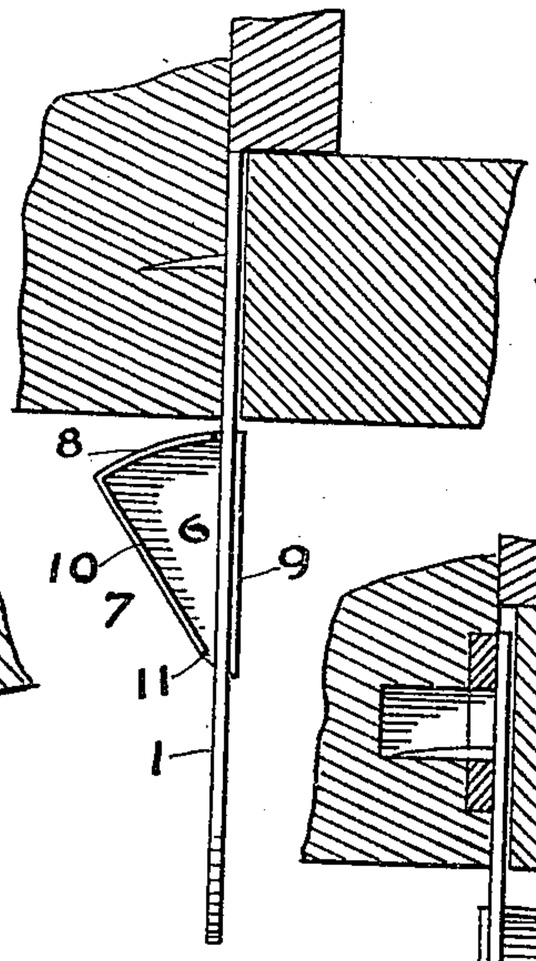


FIG. 7

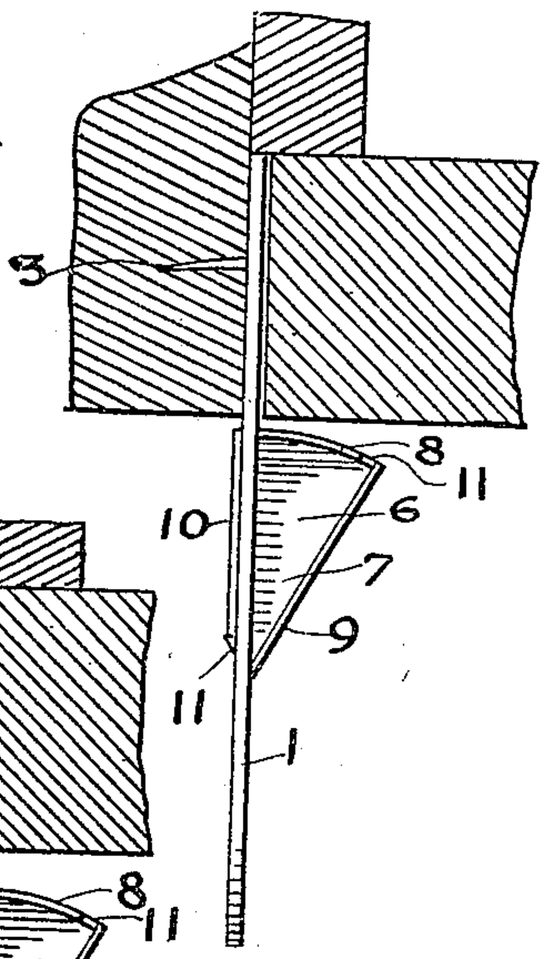
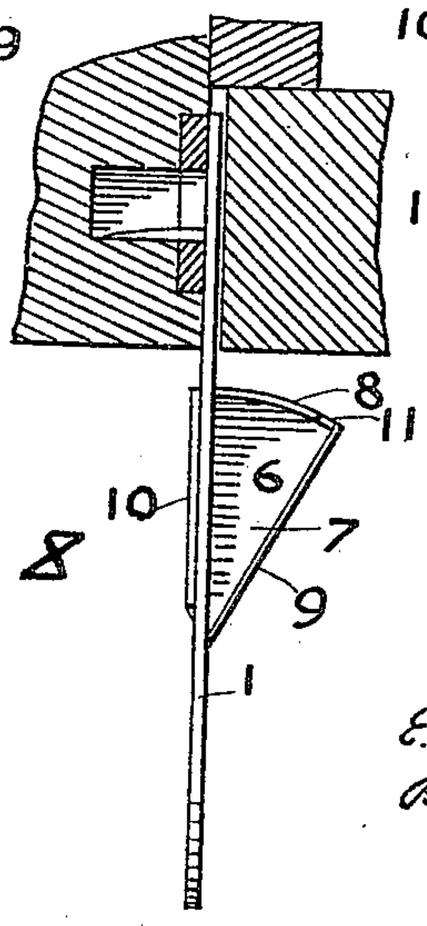


FIG. 8



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Atty.

UNITED STATES PATENT OFFICE.

ELLERY M. HOAGLAND, OF SAN FRANCISCO, CALIFORNIA.

DOOR-SECURER.

No. 816,327. Specification of Letters Patent. Patented March 27, 1906.

Application filed July 25, 1905. Serial No. 271,135.

To all whom it may concern:

Be it known that I, ELLERY M. HOAGLAND, a citizen of the United States, residing at 1389 O'Farrell street, San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Door-Securers, of which the following is a specification.

This invention relates to an improved door-securer, the object of the invention being to provide a device by means of which a door can be secured from the inside without a key, which will be cheap and simple and contain few parts, and especially one in which all the parts will be permanently secured together, so that there is no danger of the device being rendered useless by the loss of any of the parts.

In the accompanying drawings, Figure 1 is a perspective view of the main portion of the device before it is assembled. Fig. 2 is a similar view of the locking-slide. Fig. 3 is a perspective view of the device assembled. Fig. 4 is a similar view looking at the device from the opposite side to that of Fig. 3. Fig. 5 is a horizontal section of a door and casing, taken just above the device, the door being open. Fig. 6 is a similar view showing the door closed, but not locked. Fig. 7 is a similar view showing the door locked by the door-securer. Fig. 8 is a view similar to Fig. 7, showing another mode of using the device.

Referring to the drawings, 1 represents a plate which at one end has a tooth or prong stamped therefrom and bent at right angles, the edge of said prong being sharpened to permit it to enter the door-casing, as shown at 3. The prong can readily be forced into the casing by placing the plate in position, as shown in Fig. 5, and then closing the door, the pressure of the edge of the door upon the plate causing the prong to enter the wood of the casing. Said plate is cut out along the central or axial line thereof to form a guideway 5 for the web 6 of the locking-slide 7. Said locking-slide is substantially a right-angled triangle in form, the side 8 thereof, which forms the locking edge of the slide and receives the pressure of the door, being, however, curved for a purpose which will hereinafter appear. At the edges of the triangle the web is formed into flanges 9 10, extending both ways from said web, the flange 9, which extends from the hypotenuse, being spaced from the flange 10, which extends from the other two sides of the triangle. These spaces 11 permit the web to slide freely between teeth 12, formed in the plate by recesses 13 cut in said plate on each side of the guideway.

In order to secure the locking-slide in position in the plate, said plate is formed at its rear end with two inwardly-extending lips 14, which in the manufacture of the article are first spread out, as shown at Fig. 1, to permit the locking-slide to be placed in position so that the two spaces 11 between the flanges thereof are in alinement with the guideway. This having been done, the slide is moved forward along the guideway, the flange 9 then being upon the outside of the plate—that is, the side which will be next to the door—while the flange 10 on the two shorter sides of the triangle is on the opposite side. When the slide has been moved into this position, the two lips are pressed down into the plane of the plate, forming the rear portion of the guideway for the slide. The device is then ready for use. After the plate has been placed in position, as already explained, the door is closed. The slide is moved so that the curved portion of the flange 10 can pass through recesses 13 on each side the guideway as near to the door as possible. Then the slide is moved from left to right, from the position shown in Fig. 6 to the position shown in Fig. 7, the flange moving in the recesses and passing behind the edge of the door. In this position it securely locks the door, because the flange is held firmly against rearward movement by the teeth of the plate behind the recesses in which said flange has been moved.

The spaces between the flanges 9 and 10 are just wide enough for the plate to slide therethrough, and in order to provide an additional lock against the opening of the door the flange 9 is extended farther to the rear than the flange 10. When the locking-slide has been turned in the position to lock the door, the rear end of the flange is moved rearwardly behind the end of the flange 10, so as to bind upon the plate, and the more strongly the slide is pushed back the more firmly does it bind.

The object of making the front edge of the slide circular is to permit the recesses between the teeth to be made as narrow as possible, leaving the teeth themselves as strong as possible.

In Fig. 8 the prong is shown as entering the bolt-hole in the casing, as it may be used in this manner, if desired.

It is understood that this device, while here called a "door-securer," may also be used for securing together window-sashes from the inside, and I desire it to be understood that the invention is not limited to the particular use here shown; but I claim the same with all proper uses thereof.

I claim—

1. In a door-securer, the combination of a plate provided with means for securing it to a door-casing or the like, and cut out axially to form a guideway, and having also a series of recesses extending from the side of the guideway in the plane of the plate, and a slide sliding in said guideway and having a flange movable transverse in any one of the recesses, substantially as described.

2. In a door-securer, the combination of a plate provided with means for securing it to a door-casing or the like, cut out axially to form a guideway, and having also a series of recesses at each side of said guideway and a slide in form substantially a right-angled triangle, the hypotenuse having a flange and the two shorter sides also having a flange spaced from the first flange to permit the slide to slide freely in said guideway, the flange on a shorter side passing through one of said recesses to lock the slide against rearward movement, substantially as described.

3. In a door-securer, the combination of a plate cut out along its axis to form a guideway, said cut-out portion being closed at the end, said plate having lips cut out on each side of the rear end of said guideway, and recesses extending from the guideway on each side thereof at the forward portion, and a slide substantially a right-angled triangle in form, comprising a web and double flanges extending therefrom, one on the hypotenuse of the triangle and the other on the two shorter sides, said flanges being spaced from each other to permit the web to slide freely in said guideway, substantially as described.

4. In a door-securer, the combination of a plate provided with means for securing it to a casing or the like, and cut out axially to form a guideway, and a slide in said guideway comprising a web passing through the guideway, and extensions from said web at right angles to the plane thereof, the extension on one side of the web extending farther to the rear than that on the other side, whereby when the web has been moved transversely through the guideway the two extensions bind upon the plate and prevent rearward movement of the slide, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ELLERY M. HOAGLAND.

Witnesses:
FRANCIS M. WRIGHT,
M. FEEHAN.