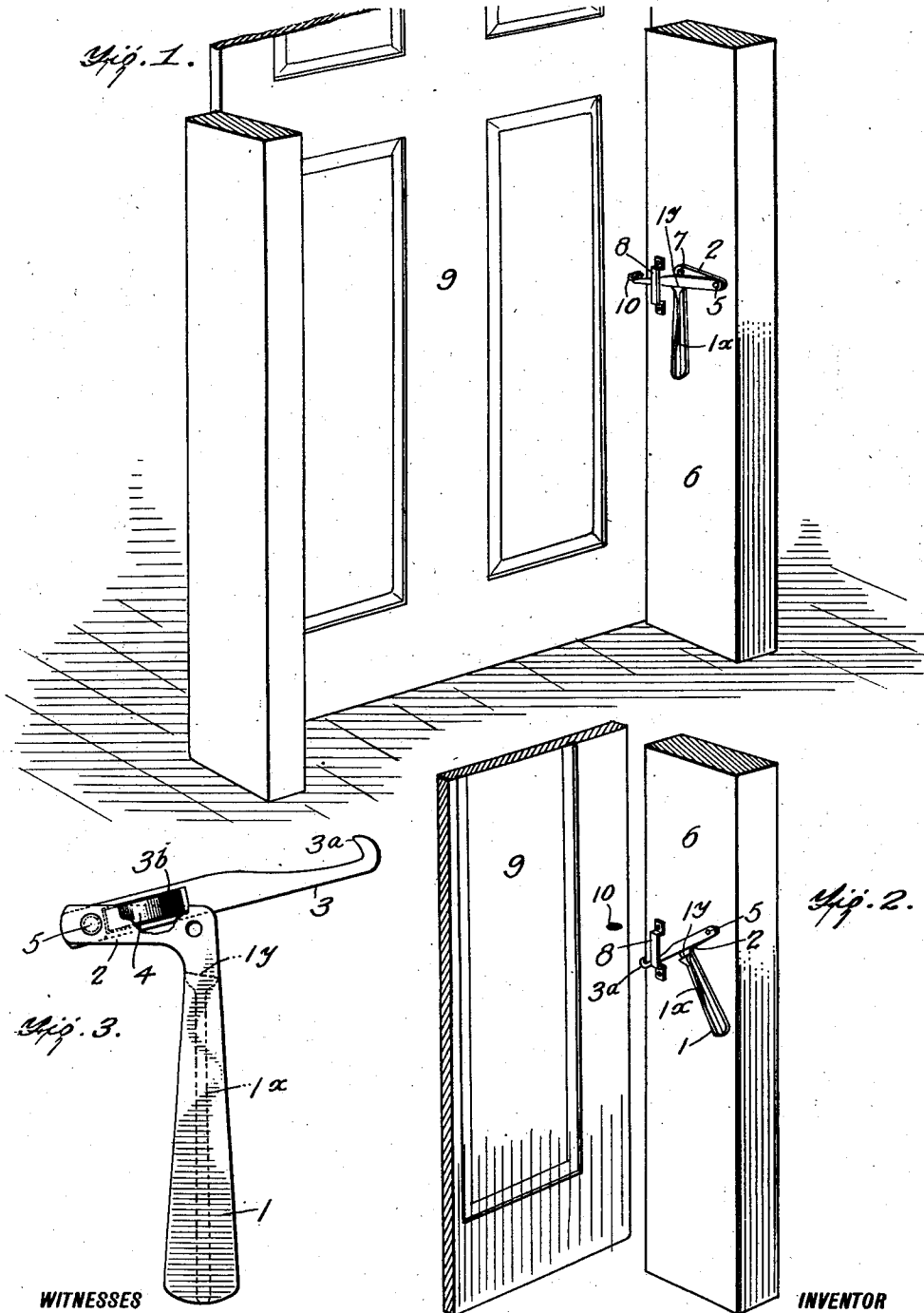


E. J. TANGEMAN.
GATE OR DOOR LOCK.
APPLICATION FILED DEC. 16, 1911.

1,022,981.

Patented Apr. 9, 1912.



WITNESSES

L. H. Schmidt
L. Stanley

INVENTOR

ELDO J. TANGEMAN,
BY *Mumford Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

ELDO J. TANGEMAN, OF KEYSTONE, IOWA.

GATE OR DOOR LOCK.

1,022,981.

Specification of Letters Patent.

Patented Apr. 9, 1912.

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To all whom it may concern:

Be it known that I, ELDO J. TANGEMAN, a citizen of the United States, and a resident of Keystone, in the county of Benton and State of Iowa, have made certain new and useful Improvements in Gate or Door Locks, of which the following is a specification.

My invention relates to improvements in devices for locking doors or gates, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a device which will engage a portion of the door, and which will pull the door tightly shut, thereby preventing sagging or rattling.

A further object of my invention is to provide a simple device including a lever and a hook, the said lever and the hook being so connected that by manipulating the former the latter will be caused to move in such a way as to insure the positive locking of the door.

A further object of my invention is to provide a device of the character described which while holding the door securely will instantly release it when the lever is moved.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claim.

My invention is illustrated in the accompanying drawings forming part of this application in which—

Figure 1 is a perspective view showing the lock in its operative position, Fig. 2 is a perspective view showing the door released, and Fig. 3 is a rear view of the locking device, a portion being cut away for the sake of clearness.

In carrying out my invention, I provide a handle 1, which has an integral lateral extension 2 at one end thereof, the body portion 1 and the extension 2 forming in fact a bell-crank lever. The body portion 1 is provided with a rib 1^x which terminates in a shoulder 1^y. At the outer end of the extension 2 I secure a hook-like member 3 which is provided on its rear side with a slot 3^b arranged to receive a spring 4. The end of the spring is held by means of the pivot pin 5, which extends through the member 4 and the member 2. The forward end of the member 3 is provided with the hook proper 3^a.

The locking device described is designed to be fastened to a door frame such as that shown at 6 in Figs. 1 and 2, by means of a screw or nail 7 about which the device may be rotated.

A U-shaped guard 8 is secured to the frame near the end 3^a of the hook. The door or gate 9 is provided with a screw-eye 10 or other suitable device for engagement by the hook 3^a.

From the foregoing description of the various parts of the device the operation thereof may be readily understood.

Fig. 1 shows the door in its locked position. In this position it will be seen that the member 3 rests on the shoulder 1^y. Any attempt to open the door will be counteracted since the point 5 is below the pivotal point 7 and the engagement of the member 3 with the shoulder 1^y will prevent a movement of the handle by force exerted on the door. Now to unlock the door it is only necessary to shift the handle into the position shown in Fig. 2, thereby bringing the point 5 above the point 7 and at the same time swinging the hook forwardly and downwardly, thereby freeing it from the screw eye and permitting the door to open. It will be observed that the hook will engage the lower part of the guard whereupon further movement of the handle will merely result in thrusting the hook farther toward the door so that the disengagement of the hook with the eye is insured.

In order to lock the door it is only necessary to shut it and to swing the lever into the position shown in Fig. 1. This will result in a double action, *i. e.*, the retraction and the raising of the hook at the same time so that the latter will enter the screw-eye, whereupon further movement of the handle will serve to force the door against the frame, thereby locking it securely. In order to hold the parts in their shifted positions I provide the spring 4 which presses against the extension 2 so that when the lever is shifted it will maintain its shifted position with respect to the member 3 until it is again shifted.

The device forms a simple yet positive means for not only locking the door, but for drawing it tightly into position. It also tends to prevent the door from sagging by relieving the hinges of part of the strain.

I claim:—

The combination with a door frame and

a door having an eye, of a locking device pivotally secured to the door frame, said locking device comprising a bell-crank lever having its arm directed away from the eye
5 on the door, the long arm having a shoulder, a hook pivotally secured to the end of the short arm and arranged to engage the eye of the door, and a spring carried between the hook and the shorter arm for maintain-
ing the members in their shifted position, 10 the movement of the long arm serving to bring the hook into engagement with said shoulder.

ELDO J. TANGEMAN.

Witnesses:

J. H. ROZEMA,

W. C. HAMANN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."