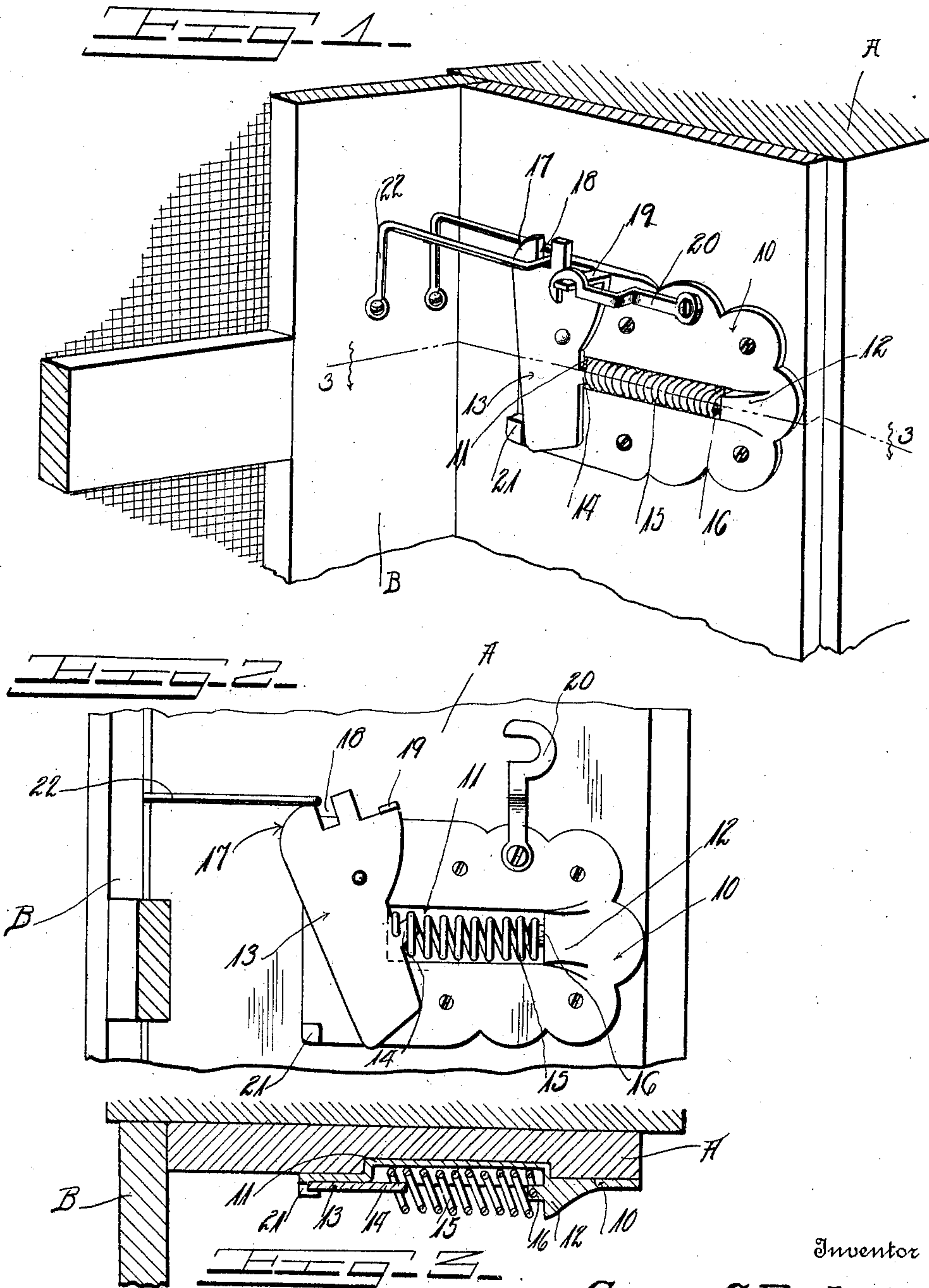


G. G. FREDERICK.
LATCH.
APPLICATION FILED SEPT. 9, 1910.

983,432.

Patented Feb. 7, 1911.



Witnesses

Wm. C. Shielding
Henry T. Bright

Inventor

George G. Frederick.

By

[Signature] *[Signature]*

Attorneys

UNITED STATES PATENT OFFICE.

GEORGE G. FREDERICK, OF GAS CITY, INDIANA.

LATCH.

983,432.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed September 9, 1910. Serial No. 531,178.

To all whom it may concern:

Be it known that I, GEORGE G. FREDERICK, a citizen of the United States, residing at Gas City, in the county of Grant, State of Indiana, have invented certain new and useful Improvements in Latches; and I do hereby 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 latches and particularly to that type utilized to secure doors in closed position.

The object of the invention resides in the provision of a latch of the character named which is adapted to automatically hold a door in closed position against the influence of ordinary forces such as jarring and wind but which will readily release the door to opened position when a given force is applied to the latter in the direction in which it opens.

With the above and other objects in view the invention consists in the details of construction in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claims.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views, and in which—

Figure 1, is a detail fragmental perspective view of a door jamb and door frame showing the improved latch associated therewith and in locked position; Fig. 2, a side elevation of what is shown in Fig. 1 with the door frame slightly opened and the bail carried thereby about to become disengaged from the latch; and Fig. 3, a section on the line 3—3 of Fig. 1.

Referring to the drawings A indicates the door jamb and B the door frame. Mounted upon the door jamb A is a base plate 10 provided with an intermediate dished portion 11 extending transversely of the door jamb A. Formed on the outer face of the base plate 10 at one end of the dished portion 11 is a lug 12 and a latch 13 is pivotally connected to said base plate and has its inner edge disposed adjacent the other end of the dished portion 11. The inner edge of this latch 13 is provided with a stud 14

which partially overlies the dished portion 11 and a spring 15 is disposed in said dished portion and has one end extending around the stud 14 and bearing against the inner edge of the latch 13 while its other end bears against the lug 12 which latter is provided with a stud 16 around which the spring 15 extends. The upper end of the latch 13 is rounded as at 17 and just inward of this rounded portion is formed a recess 18. Extending laterally from the latch 13 at the junction between its outer and top edges is a finger 19 and a hook 20 adapted to engage said finger 19 is pivoted upon the base plate 10. Movement of the latch 13 under the influence of the spring 15 is prevented beyond certain limits by means of a lug 21 projecting from the base plate 10.

Secured to the door frame B is a U-shaped bail 22 formed preferably of a single piece of resilient wire. As the door is being closed this bail is disposed beneath the upper edge of the latch 13 until the bight portion of the bail passes into engagement with the curved edge 17. The bail will then ride over this curved edge and its bight portion will seat in the recess 18 and thereby lock the door against opening under ordinary conditions. However, should sufficient force be applied to the door frame B the latch 13 will be moved to the position shown in Fig. 2 against the influence of the spring 15 and the bail thus disengaged from the latch. The door frame B is positively locked against movement to open position by moving the hook 20 into engagement with the finger 19.

What is claimed is:

1. In a latch, the combination of a base plate adapted for attachment to a door jamb, a latch pivoted to the plate and having its upper end provided with a recess, spring actuated means constantly tending to move said latch to locked position, a bail provided with means for attachment to a door frame and adapted to ride over the upper end of said latch and seat in the recess therein, and means for securing said latch against movement to unlocked position.

2. In a latch, the combination of a base plate adapted for attachment to a door jamb, a latch pivoted to the base plate and having its upper end provided with a recess, a laterally projecting finger on the

upper end of said latch, spring actuated means constantly tending to move said latch to locked position, a bail provided with means for attachment to a door frame and
5 adapted to ride over the upper end of said latch and seat in the recess therein, and a hook mounted on the base plate and adapted to engage the laterally projecting finger on

the latch whereby the latter is secured against movement to unlocked position. 10

In testimony whereof, I affix my signature, in presence of two witnesses.

GEORGE G. FREDERICK.

Witnesses:

WILL C. JAY,
L. H. CONLEY.