J. N. HERMON.

SCREEN DOOR LOCK.

APPLICATION FILED APR. 10, 1911.

1,006,211. Patented Oct. 17, 1911.

Fig. 1.

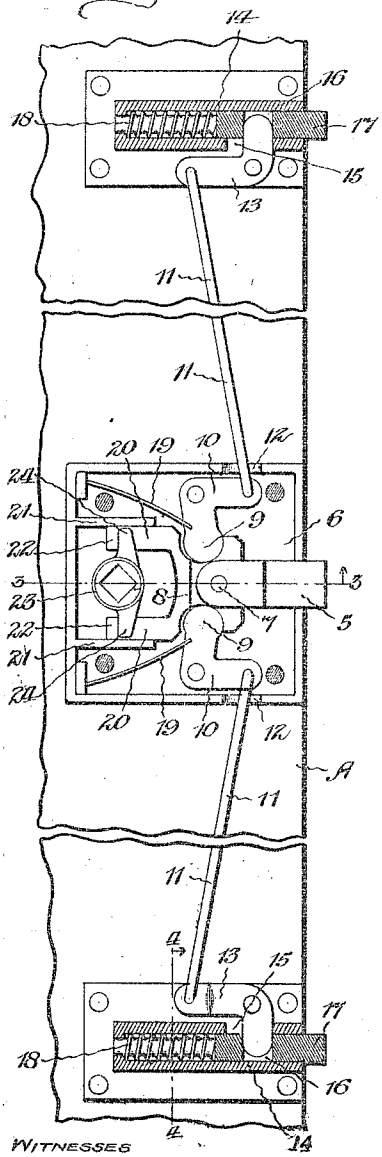


Fig. 3.

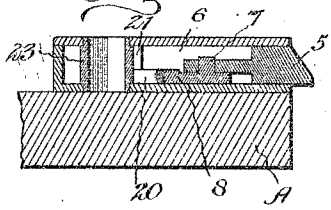


Fig. 4.

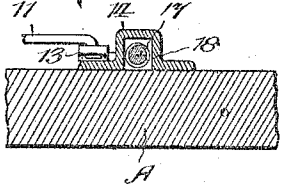
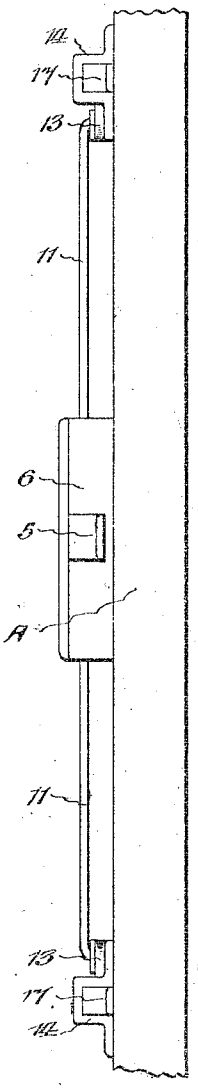


Fig. 2.



WITNESSES

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SCREEN-DOOR LOCK.

1,006,211. Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed April 10, 1911. Serial No. 620,012.

To all whom it may concern:

Be it known that I, JAMES N. HERMON, a citizen of the United States, residing at Dolores, in the county of Montezuma and State of Colorado, have invented certain new and useful Improvements in Screen-Door Locks, of which the following is a specification.

My present invention relates to door locks, and more particularly to a three-bolt lock especially adapted to screen doors for the purpose of preventing the same from warping out of shape. My object is to provide an extremely simple lock of this character which will be both inexpensive and efficient.

With this in mind my invention resides in the features of construction shown in the accompanying drawing, in which—

Figure 1 is a fragmentary inside elevation of the free edge of a screen-door, showing my improved bolts secured thereto, certain parts being removed, and certain other parts being in section, to better illustrate the construction. Fig. 2 is an elevation of the edge thereof. Fig. 3 is a transverse sectional view through the main locking case, taken on the line 3—3 of Fig. 1, and Fig. 4 is a cross-section taken through one of the supplemental locking cases, on the line 4—4 of Fig. 1.

Referring now to these figures, the main bolt 5 is slidably disposed within the main case 6, and is provided with a reduced inner end having an aperture to receive the upstanding pin 7 of the forward reduced end of the bolt mover 8, this bolt mover having semi-circular side recesses in which the enlarged rounded ends 9 of bell crank levers 10 are disposed. These bell crank levers 10 are pivoted, as shown, within the case 6, and to their opposite ends are connected the inner ends of rods 11, which project through openings 12 in the sides of the case 6 and extend upwardly and downwardly along the inner surface of the door A, and are connected to one of the ends of bell crank levers 13.

The bell crank levers 13 are pivoted upon the outside of the upper and lower supplemental lock cases 14, and have their outer ends projecting within said cases 14 through openings 15, and into recesses 16 in the supplemental bolts 17, which bolts are slidably disposed within their cases and have reduced inner portions surrounded by springs 18 which press the bolts outwardly.

The main bolt 5 is pressed outwardly by means of flat springs 19, anchored at one of their ends within the main case 6 and extending into engagement with the bell crank levers 10. The bolt mover 8 has side extensions 20, at its inner end, which are slidably disposed between guide pieces 21 of the case 6, and are provided with inner up-turned ends 22.

Mounted transversely in the main case 6 between the extensions 20 of the bolt mover is a stud 23, which has a squared aperture for the receipt of the usual bolt operating shaft (not shown), and which is provided with oppositely extending side lugs 24 in engagement with the up-turned extension ends 22. Thus when the stud 23 is oscillated in either direction by the bolt operating shaft, the engagement of its lugs 24 against the up-turned extension ends 22, causes inward movement of the bolt mover 8 and bolt 5, thus releasing the main lock. At the same time, inward movement of the bolt mover 8 causes rocking movement of the bell crank levers 10 against the tension of springs 19, the rocking movement of the bell crank levers 10 being communicated to the supplemental bell crank levers 13, through connecting rods 11, which draws the supplemental bolts 17 inwardly against the tension of their springs 18.

I claim:

The combination with the main and supplemental lock cases, of main and supplemental bolts slidably disposed in their respective cases, said supplemental bolts being recessed, bell-crank levers pivoted upon said supplemental cases and having one of their ends extending into the supplemental bolt recesses, means to slide the main bolt embodying a mover connected to the main bolt and having side recesses and inwardly projecting side extensions provided with up-turned ends, an apertured stud rotatably mounted transversely in the case between said legs and having lateral lugs in engagement with the up-turned leg ends, guide pieces within the case, between which said legs are disposed bell-crank levers pivoted in the main case and having one of their ends

extending within the side recesses of said mover, connecting rods extending between and connecting the free ends of said bell-crank levers, and springs engageable with the last-mentioned bell-crank levers and with the supplemental bolts to move the main and supplemental bolts in one direction.

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

JAMES N. HERMON.

Witnesses:
CHARLES W. RUST,
ERASTUS THOMPSON.