E. L. LINT.

LOCK.

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1,093,637. Patented Apr. 21, 1914.

Fig. 1

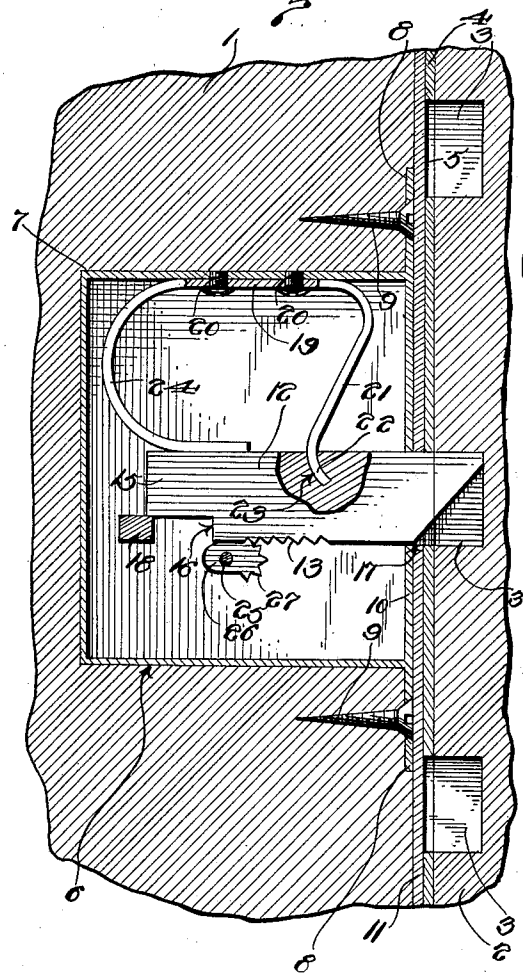


Fig. 2.

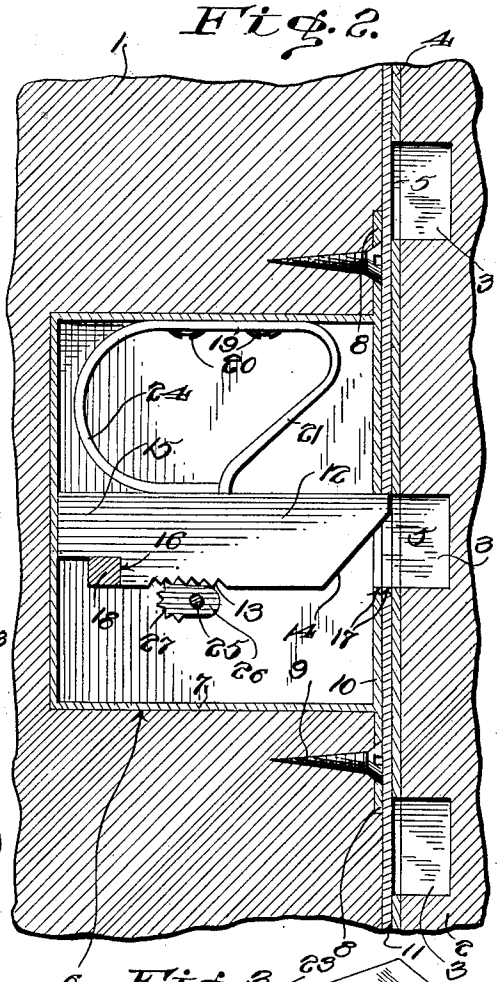


Fig. 4.

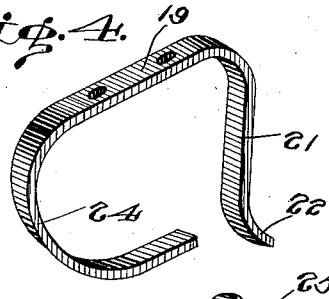


Fig. 3.

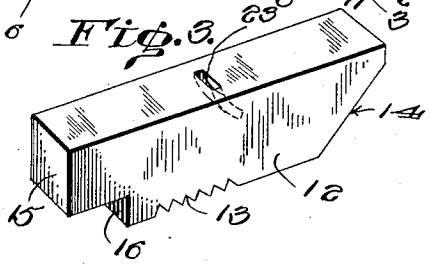
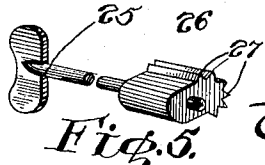


Fig. 5.



Witnesses

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LOCK.

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To all whom it may concern:

Be it known that I, EDWARD L. LINT, a citizen of the United States, residing at Paw Paw, in the county of Van Buren and State of Michigan, have invented certain new and useful Improvements in Locks, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to burglar proof locks and has special reference to a lock which is adapted to be used in combination with a window whereby the window may be easily raised or lowered from the inside but which cannot be raised from the exterior of the house.

Another object of the invention is the production of a spring actuated bolt which is adapted to hold the window in such a position as to allow the same to be lowered from either the inner or outer side but which will prevent the window from being raised from the outside.

With these and other objects in view, this invention consists of certain novel combinations, constructions and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawing: Figure 1 is a vertical section taken through a portion of a window frame and casing showing the lock used in connection therewith, a portion of the same being broken away. Fig. 2 is a central vertical section taken through the supports showing the device in an unlocked position. Fig. 3 is a detailed perspective view of the sliding bolt. Fig. 4 is a detailed perspective view of the spring. Fig. 5 is a perspective view of the thumb turn which is used in connection with this device.

Referring to the accompanying drawing by numerals it will be seen that the device is used in combination with the usual sash 1 and frame 2. The frame 2 is provided with a plurality of sockets 3 and metallic strip 4, this metallic strip being provided with openings 5 which are adapted to register with the sockets 3. The sash 1 is provided with a pocket 6 in which the casing 7 is positioned. This casing 7 is provided with the retaining feet 8 through which the screws 9 are adapted to pass for holding the casing within the pocket 6. A cover plate 10 is positioned at the forward end of the casing to inclose the casing 7 while the wearing strip 11 is placed upon the sides of the sash 1 so as to bear upon the strip 4.

The sliding bolt comprises an elongated body 12 having teeth 13 formed upon its lower side. The forward portion is beveled as indicated at 14 while the rear portion of the bolt 12 is provided with the reduced end 15 and shoulder 16. The cover plate 10 and the wearing strip 11 is provided with registering openings 17 wherethrough passes the forward end of the sliding bolt 12. The casing 7 is provided adjacent its rear portion with a transverse bar 18 upon which the reduced end 15 of the bolt 12 is adapted to rest. In order to normally hold the forward end of the bolt 12 within the opening 17 and one of the sockets 3 there is provided a spring. This spring is formed of a single strip of material and comprises a straight body 19 which is held in engagement with the upper portion of the casing 7 by means of the screws 20. The forward portion of this body 19 is provided with a depending arm 21 terminating in a curved foot 22. The bolt 12 is provided with a curved pocket 23 which is formed upon its upper portion intermediate its ends. The curved foot 22 is adapted to fit within the pocket 23 so as to exert an outward pressure upon the bolt 12, whereby this bolt will be normally held in one of the sockets 3. The rear portion of the body 19 is provided with a curved finger 24 which is adapted to bear upon the upper portion of the bolt 12 whereby the rear portion of the bolt will be normally held in engagement with the bar 18.

From the foregoing description it will be seen that the bolt 12 will normally extend beyond the outer portion of the casing so as to engage the frame 2 within one of the sockets 3. If it is desired to lower the window the bolt may be drawn into the casing by means to be hereinafter described, at which time the window will move freely. If, however, a person should try to raise the window the bolt will prevent the same from moving upwardly as the forward portion will remain in engagement with the frame.

In order to move the bolt 12 into the casing from the inner side of the sash 1, there is provided a thumbturn 25 having an enlarged body 26 formed at its inner end. This enlarged body is mounted upon the

thumbturn so as to form a cam structure having teeth 27 formed thereon. These teeth 27 engage the teeth 13 of the bolt 12. When the bolt 12 is positioned partially within one of the sockets 3, one of the teeth 27 will engage the teeth 13 whereby the bolt will be held in a locked position independently of the arm 21. If it is desired to raise the window by rotating the key 27, the body 27 will also be rotated. Since this body 26 is a substantial cam structure, the rear portion of the bolt 12 will be raised from engagement from the bar 18 while the teeth 27 will move the bolt into the casing 7. As soon as the thumbturn has made one-half of a revolution, the bolt 12 will be positioned entirely within the casing and will rest upon the bar 18 as clearly disclosed in Fig. 2. The thumbturn will hold the device in an unlocked position by engaging the teeth in the manner indicated in Fig. 2, thereby compressing the spring. By rotating the thumbturn again in the opposite direction the bolt will move in engagement with the frame for holding the window in a locked position.

From the foregoing description it will be seen that a simple and efficient lock has been produced whereby the window may be easily lowered when desired, but which cannot be raised except from the inner side thereof.

Having thus described the invention what is claimed as new, is:

1. In a lock of the class described the combination with a casing, a bolt slidably mounted within said casing, said bolt provided with teeth upon its lower side, of a thumb turn carried by said casing, said thumb turn comprising a cam-like body having flat sides, teeth formed upon said body and a tooth extending from each side of said body, said teeth of said thumb turn engaging the teeth of said bolt whereby said bolt may be reciprocated by means of said thumb turn, said bolt adapted to be held in a locked position by means of one of said teeth formed upon said body, one of said flat sides of said cam normally resting snugly against the lower side of said body whereby said thumb turn will be held against accidental rotation, and one of said teeth of said thumb turn will engage said teeth of said bolt by said bolt bearing upon said body.

2. In a lock of the class described, the combination with a casing, a bolt slidably mounted within said casing, and provided with teeth upon its lower side, a thumb turn carried by said casing, said thumb turn comprising a cam-like body having flat sides, teeth formed upon one end of said body and a tooth extending from each of said flat sides, said thumb turn adapted to reciprocate said bolt, one of said teeth extending from one of said flat sides engaging the teeth of said bolt for holding said bolt in a locked position, a flat spring carried within said casing, said spring provided at one end with a depending arm terminating in a curved foot, said bolt provided with a curved pocket adapted to receive said curved foot whereby said bolt is normally urged forwardly by said arm, said spring also provided with a curved finger bearing upon the upper side of said bolt for holding the same in engagement with said thumb turn whereby said thumb turn will be held against accidental rotation since the lower side of said bolt will bear upon one of the flat sides of said cam body.

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

EDWARD L. LINT.

Witnesses:
J. D. McLachlan,
J. E. Hamilton.

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