(No Model.) 2 Sheets—Sheet 1.

L. A. CROCKER.

SASH LOCK.

No. 593,875. Patented Nov. 16, 1897.

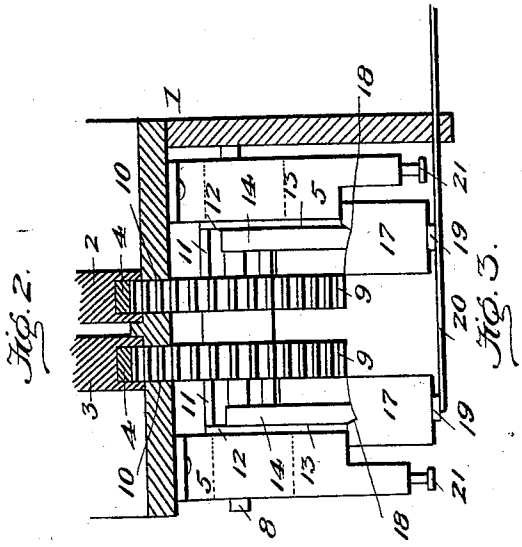

Fig. 2.

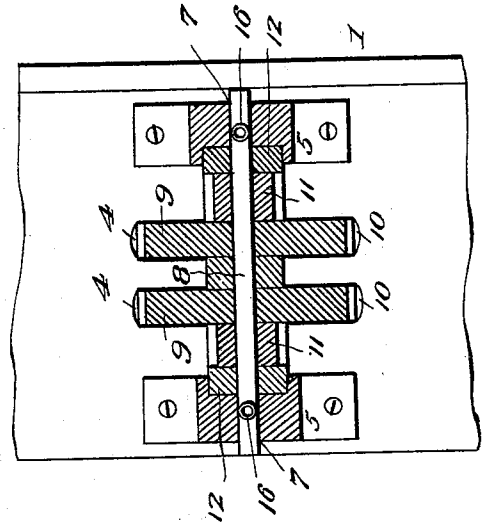

Fig. 3.

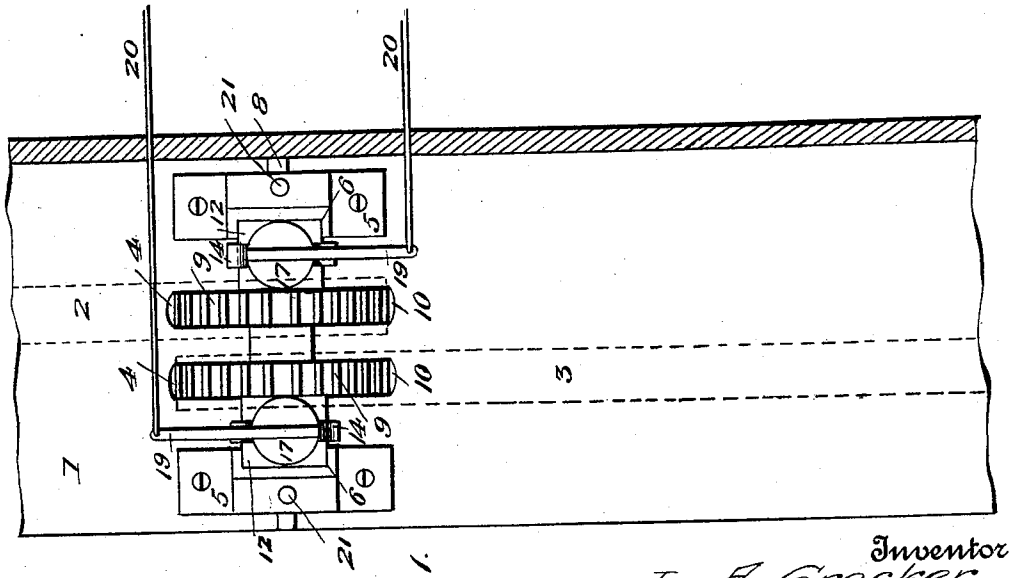

Fig. 1.

Witnesses

J. A. Wilson

Inventor

L. A. Crocker

By A. B. Wilson

Attorney

(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

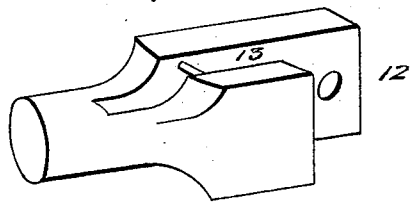


Fig. 5.

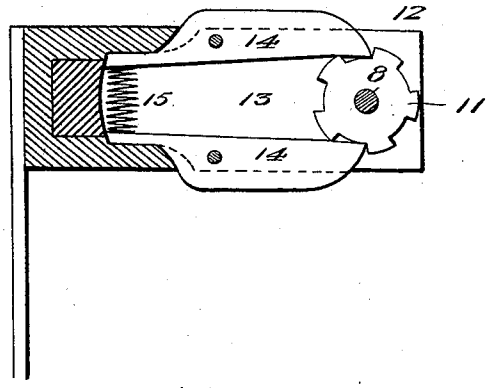
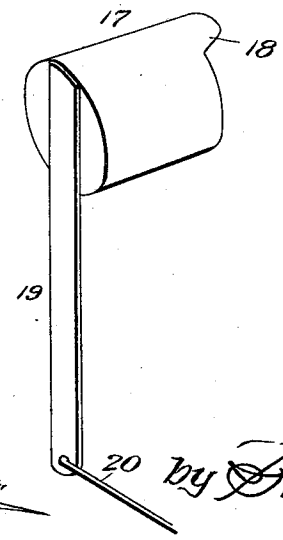


Fig. 6.



Witnesses
J. A. Wilson

Inventor
L. A. Crocker
by A. B. Wilson
Attorney

UNITED STATES PATENT OFFICE.

LAUREN A. CROCKER, OF LEXINGTON, TEXAS.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 593,875, dated November 16, 1897.

Application filed February 27, 1897. Serial No. 625,377. (No model.)

To all whom it may concern:

Be it known that I, LAUREN A. CROCKER, a citizen of the United States, residing at Lexington, in the county of Lee and State of Texas, have invented certain new and useful Improvements in Sash-Locks; and I do 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.

My invention relates to an automatic sash-lock.

The object of the invention is to provide a device of this character whereby the sash will be automatically locked in all its adjusted positions, thereby dispensing with the employment of sash cords and weights.

With this object in view the invention consists of certain features of construction and combinations of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a window-frame with portions broken away to more clearly illustrate the application of my invention. Fig. 2 is a top view. Fig. 3 is a longitudinal sectional view taken through the shaft and its connected parts. Fig. 4 is a detail perspective view of the pawl-supporting slide. Fig. 5 is a transverse sectional view through said slide to illustrate the spring and the manner in which it engages the pawls, and Fig. 6 is a detail perspective of a pawl-actuating cam.

In the drawings, 1 denotes a window-frame, and 2 and 3 the top and lower sashes, respectively, which are adapted to slide in the frame in the usual manner, one edge of which sash is provided with a groove or vertical recess in which is secured a rack-bar 4.

5 denotes two brackets secured to the window-frame and provided in their adjacent faces with guides 6 and also provided with longitudinal slots 7. 8 denotes a shaft the ends of which are adapted to slide laterally into the said slot. 9 denotes the two gear-wheels, which are loosely mounted on said shaft and project through apertures 10 in the window-frame and engage the racks of the respective sashes. Secured to or integral with each gear-wheel is a ratchet-wheel 11.

12 denotes two sliding blocks which are mounted on the shaft 8 to slide laterally in the guides of the bracket with said shaft and which are formed with recesses 13, in which are pivoted pawls 14, the inner ends of which are forced into locking engagement with the ratchet-wheels by means of spring 15, located in the recesses of the sliding block between the outer ends of the pawls and exerting their energy to spread said ends.

16 denotes springs that are secured in the slots of the bracket and exert their energy to keep the gear-wheels in mesh with the racks of the sash, so that when the sash is raised it will be held in position simply by the energy of the springs, which maintains a sufficient friction between the gear-wheels and the rack to support the weight of the sash.

17 denotes a pawl-actuating cam, which in the present case consists of a sleeve pivoted on the outer end of the sliding block and provided with cam-faces 18, that engage the outer ends of the pawls and compress them so as to move their inner ends from engagement with the ratchet-wheels to permit of the adjustment of the sash. When the cam is turned so as to release the outer ends of the pawls, it is evident that the springs will exert their energy to force the inner ends of the pawls into locking engagement with the ratchet-wheels, thereby firmly locking the sash in the desired adjustment.

19 denotes arms which are connected with the cams, and 20 denotes links or rods which extend through the window-frame casing into the room and by means of which the cams are operated.

21 denotes set-screws which work through the ends of the brackets and serve to adjust the tension of the springs.

Having thus described my invention, what I desire to secure by Letters Patent of the United States is—

1. The combination with a sliding window-sash provided with a rack-bar of a spring-actuating gear-wheel, a ratchet-wheel secured to said gear-wheel, a spring-actuating pawl pivoted in a sliding block, a cam for throwing the pawl out of engagement with the ratchet.

2. The combination with a window-frame of a sliding sash, brackets secured to the window-frame and provided with slots and guides, a sash having its ends projected through said slots, springs for forcing the shaft inward,

gear-wheels loosely journaled on said shaft and engaging rack-bars with said sash and provided with integral ratchet-wheels, and blocks seated to slide in the recesses of said brackets, pawls pivoted in said recesses and having their inner ends in locking engagement with the rack-bars of the sash, and cams consisting of a sleeve provided with inclined faces, said cam journaled to the outer ends of the sliding blocks and adapted to press the outer ends of the pawls together to remove their inner ends from locking engagement with the ratchets, springs located in the recesses of the sliding block and adapted to force the outer ends of the pawls apart, arms secured to said cams and links or rods connected to said arms, substantially as set forth.

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

LAUREN A. CROCKER.

Witnesses:
A. A. WHEATLEY,
J. L. EPHRAIM.