No. 866,070. PATENTED SEPT. 17, 1907.

C. ROSENHEIM.

SKYLIGHT FASTENING.

APPLICATION FILED NOV. 12, 1906.

2 SHEETS—SHEET 1.

Fig. 1

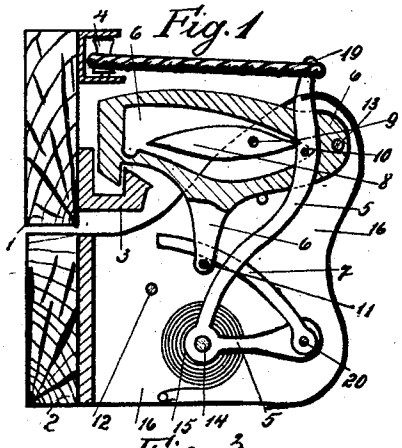


Fig. 2

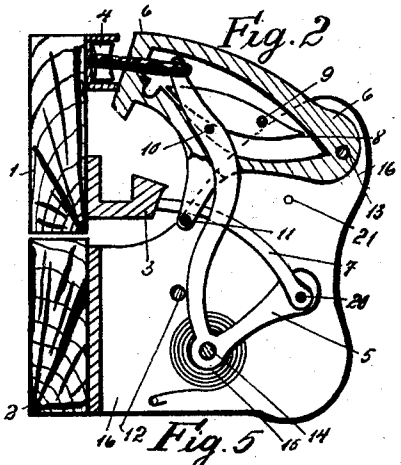


Fig. 3

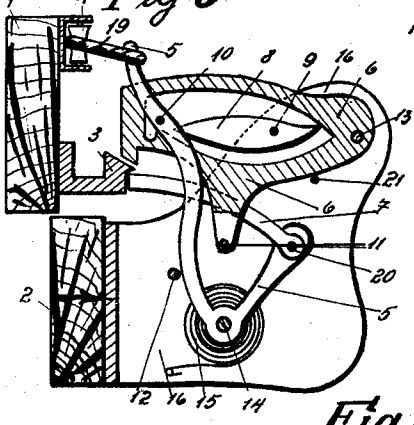


Fig. 5

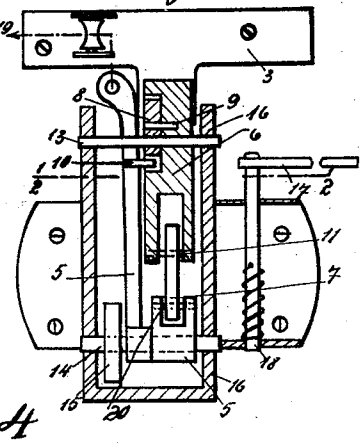
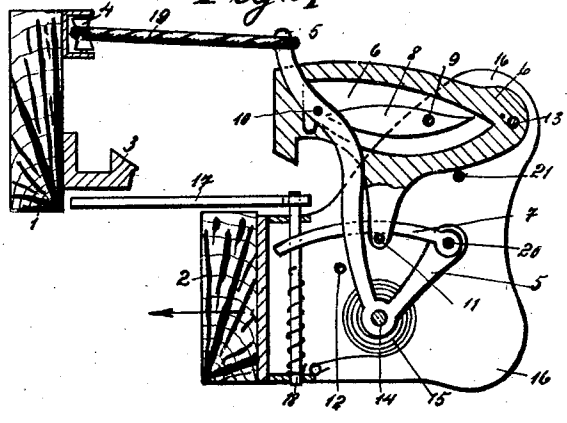


Fig. 4



Witnesses:

Inventor:

Carl Rosenheim

THE NORRIS PETERS CO., WASHINGTON, D. C.

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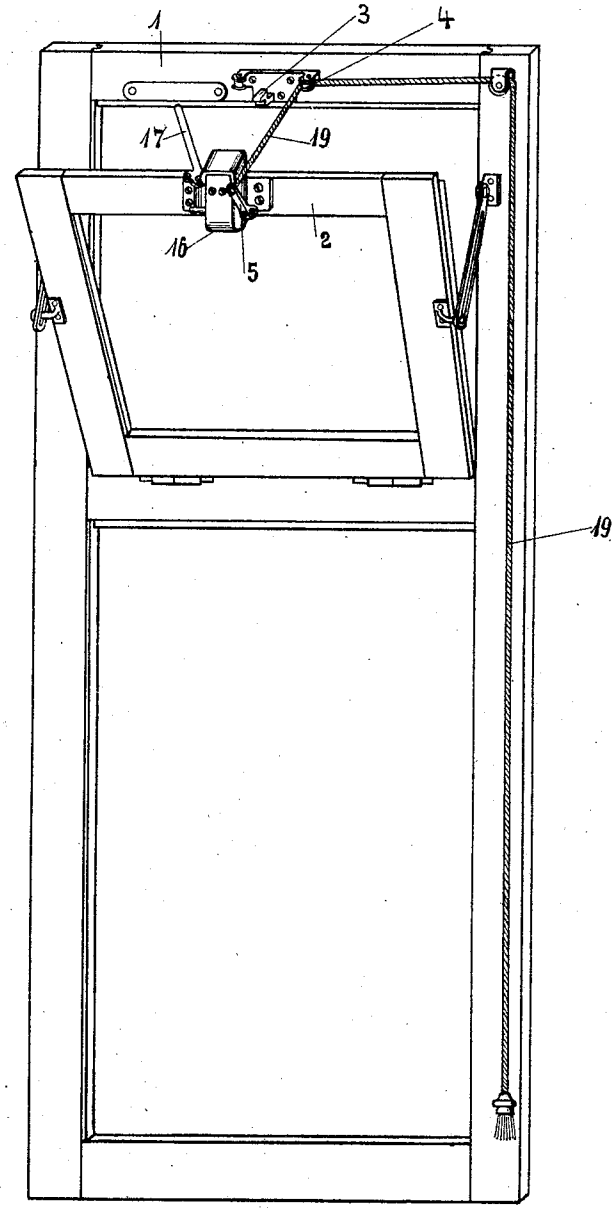
C. ROSENHEIM.

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2 SHEETS—SHEET 2.

Fig. 6.



Witnesses:
Wilh. Baumann
F. Schramm.

Inventor:
Carl Rosenheim

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CARL ROSENHEIM, OF BRUSSELS, BELGIUM.

SKYLIGHT-FASTENING.

No. 866,070. Specification of Letters Patent. Patented Sept. 17, 1907.

Application filed November 12, 1906. Serial No. 343,153.

To all whom it may concern:

Be it known that I, CARL ROSENHEIM, a subject of the King of Belgium, and a resident of Brussels, in Belgium, have invented a new and Improved Skylight-Fastening, of which the following is a specification.

The object of my invention is to produce an apparatus for fastening and opening sky-lights. This apparatus is actuated by means of a single cord attached to a lever which controls the said apparatus.

In order that my invention may be more clearly understood, I have appended hereunto a sheet of drawings.

Figures 1, 2, 3 and 4 are side views partly in section showing the positions of the parts at different stages of operation. Fig. 5 is a front view partly in section, and Fig. 6 is a diagram of the window.

The frame or case 16 containing the mechanism is fixed to the top of the sky-light casement 2. Fixed in such a manner that it may rotate round its pivot pin 14, is the angular lever 5, the said pivot pin 14 is secured at each extremity in the two side plates of the frame or case 16. Fixed to one end of said lever is the rope 19 which as hereinbefore stated is used as a means for actuating the mechanism. This rope passes over the roller 4, the latter being fixed in a bracket attached to the window casement 1.

To the short arm of the lever 5 is pivoted the thrust lever 7 by the pivot pin 20. The latch 6 is also provided and may rotate round its pivot pin 13, said pin being secured at each end in the frame 16. Approximately in the center and underneath the said latch, a fork is formed, the ends of which are connected by the pin 11, on which rests the lever 7. The latch 6 is recessed and is designed to hold the cam piece 8 secured to the said latch by means of a pin 9 on which said cam piece may move. It will be noticed that the pin 9 is nearer one end of the said cam piece 8, thus one end is heavier than the other so that one end will rest on the lower surface and the other end on the upper surface of the recess in the latch 6. The upper part of the lever 5 is furnished with a lateral pin 10 which projects into the recess in the latch 6. The two stopping pins 12 and 21 are fixed in the case 16, the former being designed to stop the lever 5 when it has reached the full extent of its stroke and the latter for the latch 6 to rest on.

Rigidly fixed to the window casement 1, is the socket 3, designed to hold the latch when the sky-light is closed as shown in Fig. 1.

The spring 15 is fixed to the lever 5, and is designed to bring the lever 5 back to its original position when the cord is relaxed thus bringing back the entire mechanism into its position of rest as shown in Fig. 1.

Now Fig. 1, shows the sky-light closed, but when the sky-light is to be opened, the rope is pulled, thereby pulling the lever 5 towards the casement 1, thus the pin 10 projecting from the said lever 5 is caused to travel in an arc and to press against the underside of the cam piece 8, thus forcing this latter up, and as the said cam piece is attached to the latch 6, the latter must also move up. It is obvious also that the lifting movement must stop immediately the pin 10 of the lever 5 passes the pin 9 of the cam piece 8. As the latch 6 has been lifted, the lever 7 is also lifted and is brought into contact with the front of the socket 3 which serves the purpose of a thrust surface as shown in Fig. 2, and pushes the casement 2 away from the casement 1 so that when the latch 6 falls it cannot fall back into the socket 3.

Fig. 3 shows the further result of the first pull on the rope. After the pin 10 has passed the pin 9 of the cam piece 8 the latter is able to move without restriction. The latch 6 then falls on account of its own weight or by means of a spring. The pin 10 is stopped in its advancing movement by the lever 5 striking against the pin 12 of the frame 16. The lever 7 has hereby pressed up against the thrust surface 3, and thus removed the casement 2 by leverage so far out of the window sash that the latch 6 does not fall again in the socket 3, but outside the same. A special spring back thrusting lever 17 and 18, (Figs. 4 and 5) of the usual type, then presses against the casement 1 thus pressing the casement 2 wholly away from the casement 1, and thus completes the falling of the casement (those parts resting on the frame 1 not being shown in Fig. 4). If the tension of the cord is then released, then the spring 15 which was wound up when the cord was tensioned, forces the lever 5 back into its original position, and the lever 7 falls back on to the pin 11. As the lever 5 moves back into its original position, the pin 10 projecting therefrom travels over the top of the cam piece 8, so that no action of the latch 6 takes place. In order to close the casement 2, the cord is again pulled, and as the casement 2 approaches the casement 1, the lever 5 with the pin 10 immediately passes under the whole length of the latch 6, partly owing to the weight of the casement 2 and partly owing to the resistance caused by the lever 17 coming in contact with casement 1. Simultaneously the latch 6 has been lifted up and has fallen again, while the latch 6 lies on the pin 11 with its free end pointing down. In this position the latch 6 approaches the socket 3 and snaps into the latter. The cord is now released and the spring 15 brings the lever 5 back to its original position, the pin 10 traveling back over the top of the cam piece 8, thus all parts are brought back to their original position as shown in Fig. 1.

Having fully described my invention, what I claim and desire to secure by Letters Patent is:

In a sky-light fastener of the character described, the combination with a casement, a skylight hinged thereto, pulleys mounted on said casement and a socketed catch

secured thereto; of a frame secured to said sky-light, a latch pivotally mounted in said frame and having a recess and slotted downwardly projecting forked portion, a cam piece pivotally seated in said recess, a forked lever pivotally mounted in the lower portion of said frame, one arm thereof provided with a pin to engage said cam, a lever pivoted to the other arm, its free end seated in the slotted portion of the latch to freely move therein, spring and stop mechanism for controlling the movements of said lever 5 in one direction, and a cord connected to said lever and passing over said pulley to control the movement of the lever in the opposite direction, substantially as described and shown and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CARL ROSENHEIM.

Witnesses:

HENRY V. KRAUS,

D. MADDISON.