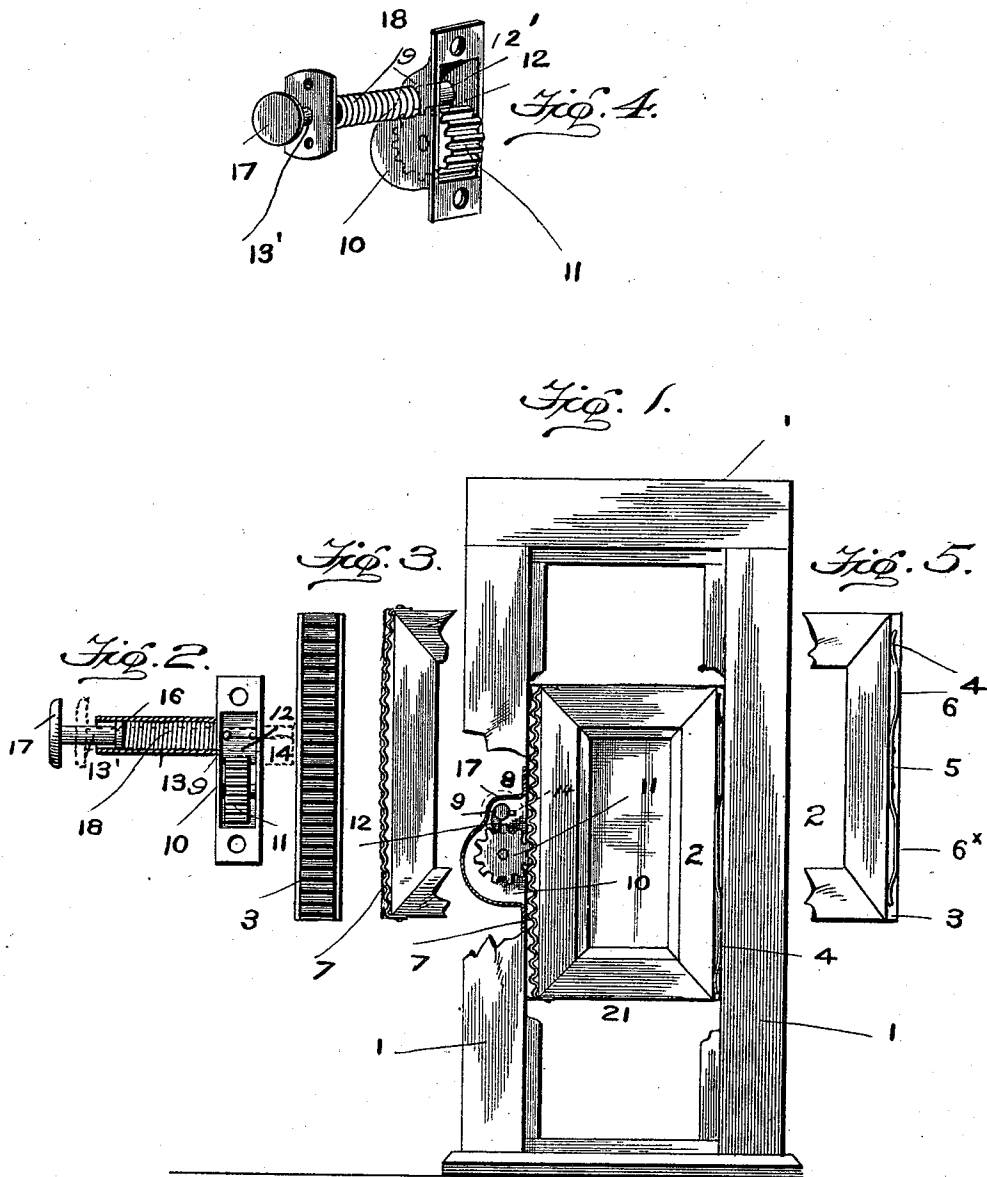


(No Model.)

J. F. MILTONBERGER, J. S. WYNANT & C. SCHOTT.
SASH FASTENER.

No. 519,476.

Patented May 8, 1894.



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John S. Wynant and
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Inventors

Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN F. MILTONBERGER, JOHN S. WYNANT, AND CYRUS SCHOTT, OF
WARSAW, INDIANA, ASSIGNORS TO SAID WYNANT AND SCHOTT, AND
T. J. SHACKLEFORD AND CHARLES KIRKPATRICK, OF SAME PLACE.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 519,476, dated May 8, 1894.

Application filed April 12, 1893. Serial No. 470,031. (No model.)

To all whom it may concern:

Be it known that we, JOHN F. MILTONBERGER, JOHN S. WYNANT, and CYRUS SCHOTT, citizens of the United States, residing at Warsaw, in the county of Kosciusko and State of Indiana, have invented certain new and useful Improvements in Sash Fasteners or Locks; and we 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in sash fasteners or locks, and one object of our invention is the provision of a fastener or lock which will be very simple in construction and which will dispense with springs and small parts usually employed in such devices and thereby provide a device which will withstand the hard usage and not get out of repair.

Another object of our invention is the provision of means which will not materially add to the weight of the sashes and enable said sashes to be raised and lowered with little force or labor and which will dispense with the sash cords.

Another object of our invention is the provision of means which will not prevent the sashes from fitting comparatively air tight in the casing and thereby prevent cold air, rain or the like from passing between the sashes and casing.

Another object of our invention is the provision of a sash fastener which will secure the sashes at any desired point; which will cause the sashes to bear evenly at all points in the casing and move smoothly and free from binding, and which will be simple and durable in construction, easy of application and capable of production at a low price.

To attain the desired objects and such others as belong to an invention of this character the invention consists in certain improvements in the details of construction, combination and arrangement of parts substantially as shown, described and claimed herein.

In order that the details of construction

may be readily understood and the advantages gained thereby be appreciated we have illustrated our improvements in the accompanying drawings, in which—

Figure 1 represents an elevation of a window frame or casing and sashes with our improvements applied, the parts being broken away to clearly disclose details of construction. Figs. 2, 3, 4 and 5 represent detail views of various parts of our device.

Referring by numerals to the drawings, the numeral 1 designates a window frame in which is mounted a sash 2, and we have shown our improvements as applied to only one sash, as the same devices are used when applied to both sashes. The sides or edges of the sash 2 are provided with channels or grooves 3, in one of which is mounted the flat spring 4, which is depressed at 5 and secured and has the elevated or bearing portions 6 and 6'; and in the other groove or channel is placed the corrugated strip 7 which serves as a rack and being of thin sheet metal is very light and also acts as a spring, and in connection with the flat spring 4 the sash is retained smoothly in the frame and can be freely moved but will not stick or bind. This is a feature of paramount importance as by reason of the elastic rack strip and the spring bearing at each end the sash is partially retained and the strain is removed from the fastening devices, and furthermore the weight of the sashes is not materially increased and allows said sashes to be moved with ease by a child or adult.

The window frame is provided with a recess or socket 8 opening into the way or groove of the window frame and in said recess is fitted a case 10 having a passage 9 extending through the case. Adjacent to the passage 9 and in the case 10 is mounted a gear wheel 11 normally engaging the gear or rack plate 7, and arranged in the passage 9 is the stem 13' having a lug or finger 12 for engaging the gear wheel 11. The inner end of stem 13' passes entirely through the case 10 and has the outer end arranged in and guided by the sleeve 13, and said stem also has the stop 14 for limiting the movement of said stem. The said lug or finger 12 is moved into and out of the case to

engage the teeth of the gear wheel or to permit the wheel to rotate. Arranged in the sleeve 13 is the operating stem 13', having a shoulder 16 and a button or handle 17, and arranged around the stem and bearing at one end against the case 10 and at the other end against the shoulder 16 of the stem is a coiled spring 18, the sole purpose of which is to return the stem to its initial position. In Fig. 2 in dotted lines the stem is shown as pushed in and the lug 12 is pushed out of engagement with the gear wheel 11, (said lug and inner end of the stem being allowed the proper inward movement by a recess in the casing) and the sash can then be moved.

It will thus be seen that the parts of the fastener which are subjected to strain are simple and strong and that no small spring or other details are used which are likely to break or get out of order and thus destroy the efficiency of the device. This is an important feature of our improvement. It will also be seen that the stop bar on the stem prevents the detent or finger from moving only the desired and proper distance. It will also be noticed that the coiled spring is so placed that whenever a new one is desired the same can be applied without removing any of the operative mechanism which is a very important feature as it saves time and labor and is very convenient. It will also be seen that the sash may be retained at any

point by pushing in the stem, sliding the sash to the desired point and allowing the stem to return and cause the finger or detent to engage the gear wheel and retain the sash. It will also be seen that the rack and spring on the sash act to partially hold the sash but do not interfere with the free movement thereof in the casing; and that the device is simple, durable, cheap and thoroughly efficient.

We claim as our invention—

The combination with a sash having a groove in its side, of an elastic or spring rack bar arranged in said groove, a casing secured in the window frame and having a horizontal sleeve, a toothed wheel rotatively mounted in said casing in position to engage the rack bar on the sash, a headed stem slidingly mounted in the sleeve of the casing and having a detent adapted to engage the toothed wheel in the same, a stop to limit the movement of said stem and a coil spring arranged between the head of the stem and the casing and adapted to return said stem to its normal position, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN F. MILTONBERGER.

JOHN S. WYNANT.

CYRUS SCHOTT.

Witnesses:

AMOS T. S. KIST,

THOS. C. STUART.