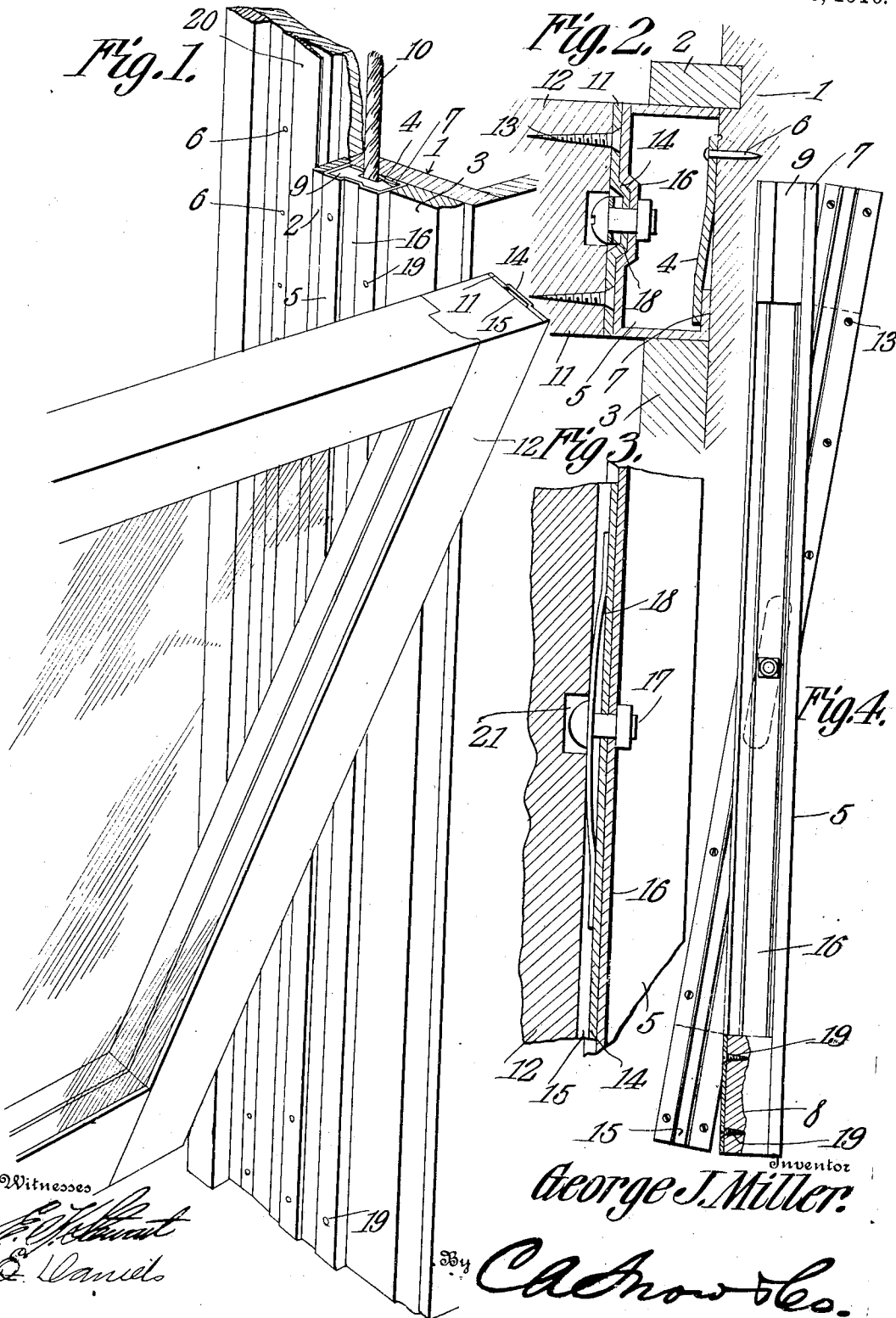


G. J. MILLER.
WINDOW SASH.

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Patented Feb. 8, 1910.



Witnesses

E. J. Miller
E. Daniel

Inventor
George J. Miller

By

Chas. H. Co.
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE J. MILLER, OF FREMONT, OHIO.

WINDOW-SASH.

948,515.

Specification of Letters Patent.

Patented Feb. 8, 1910.

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To all whom it may concern:

Be it known that I, GEORGE J. MILLER, a citizen of the United States, residing at Fremont, in the county of Sandusky and State of Ohio, have invented a new and useful Window-Sash, of which the following is a specification.

The objects of the invention are, generally, the provision, in a merchantable form, of a device of the above mentioned class which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of a sash plate and runner of novel and improved form, of means for assembling the sash plate with the runner, and of a weather strip designed to be assembled with the runner; other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts, hereinafter described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed for certain distinctive and peculiar features of the device, it being understood that within the scope of what hereinafter thus is claimed divers changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 shows my invention in perspective, the sash being tilted and the runner and sash plate being separated from their normally interlocked positions; Fig. 2 is a transverse section passed through the pivotal connection between the sash plate and the runner; Fig. 3 is a vertical longitudinal section, parts being broken away, and Fig. 4 is a rear elevation of the sash plate and the runner, the two members being turned pivotally upon each other.

The numeral 1 denotes the casing of a window provided with the usual guide strips 2 and 3, the said casing being grooved to receive the guide strip 2.

In carrying out my invention I provide a weather strip 4, preferably fashioned from

resilient metal and designed to be mounted longitudinally between the guide strips 2 and 3, the said weather strip 4 being attached to the casing 1 by nails 6 or like devices disposed adjacent to one edge of the weather strip. I further provide a runner denoted generally by the numeral 5 and adapted to fill substantially the space between the guide strips 2 and 3. This runner 5 which, in its preferred form, is fashioned from metal, is open at the back, one of the edges being inbent to form a flange 7 adapted to move between the free edge of the weather strip 4 and the casing 1 of the window. Mounted in the terminals of the runner 5 are bearing blocks 8 and 9 having, as shown in Fig. 1, beveled faces to receive the weather strip 4. The upper bearing block 9 is longitudinally grooved to receive the sash cord 10, the lower terminal of which may be attached to the runner 5 in any suitable manner. The bearing blocks 8 and 9 may be held in place by screws 19 passed through the runner 5 into engagement with the blocks.

The sash plate 11 is mounted upon the edge of the sash 12 by means of screws 13 or the like having their heads countersunk in the sash plate 11 to present a flush surface. The central portion 14 of the sash plate 11 is struck outward to form upon the inner face of the plate, a channel 15 between the said sash plate and the sash 12, and to form upon the outer face of the sash plate, a rib adapted to register in a channel in the runner 5 caused by striking outward, longitudinally, the central portion 16 of the runner. In fashioning the portion 14 of the sash plate and the portion 16 of the runner, the side walls of these portions are caused to assume a bevel, as clearly shown in Fig. 2.

The sash plate 11 is pivoted to the runner 5 by means of a headed member 17 disposed intermediate the ends of these members. The sash 12 may be indented or slightly cut away, as denoted by the numeral 21, to receive the head of the member 17, and between the head of the member 17 and the sash plate 11 is mounted a resilient element preferably a leaf spring 18, the leaf spring 18 being retained intermediate its ends by the headed member 17 and having its terminals in wiping contact with the sash plate 11. The ends of the leaf spring 18 are mounted in the channel 15 of the sash plate, their lateral movement being prevented by the sides of this channel portion 15. It will

be seen that when the leaf spring 18 is thus mounted, it is housed within the contour of the sash plate 11, it being unnecessary to cut away the sash for the reception of said spring.

I have shown and described my invention as being fitted to the lower sash only of a window. However, a weather strip 20 may be mounted upon the casing as shown in Fig. 1, and a sash plate and runner, similar in all respects to those mounted upon the lower sash, may be provided for the upper sash.

The weather strip 4 is fashioned from resilient material and serves to take up any space which may be existing between the sash and the casing, due to the unevenness of either of these members, and it will be seen that when a window is equipped with a runner and weather strip of the sort herein described, the inflow of cold air between the runner and the casing of the window will be prevented.

By the use of the sash plate 11, it becomes unnecessary to tenon the sash since the said sash plate may be mounted easily and securely thereon by the employment of a few screws. The sash may be tilted to an open position in which it will remain without the use of clamping means of any sort, and when thus tilted open, it may be slid bodily upward or downward without changing the angle of its tilt. By beveling the edges of the interlocking elements of the sash plate and the runner, as shown in Fig. 2, these

members may readily be separated when the sash plate is tilted as shown in Fig. 1.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:—

1. In a device of the class described, a longitudinally grooved runner and a sash plate longitudinally depressed to form upon one of its faces a tongue to engage the groove of the runner and to form a channel upon the opposite face of the sash-plate; a headed member pivotally uniting the sash plate with the runner; and a leaf spring retained intermediate its ends by the headed member and having its terminals disposed in the channel of the sash-plate.

2. In a device of the class described, a longitudinally grooved runner and a sash plate longitudinally depressed to form upon one of its faces a tongue to engage the groove of the runner and to form a channel upon the opposite face of the sash-plate; a headed member pivotally uniting the sash plate with the runner; and a leaf spring retained by the headed member and being housed in the channel of the sash plate and within the contour of said sash plate.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE J. MILLER.

Witnesses:

JOSEPH SCHWARTZ,
JOSEPH T. SCHWARTZ.