No. 860,816. PATENTED JULY 23, 1907.

W. H. H. MARCUM.

SASH LOCK.

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Fig. 1.

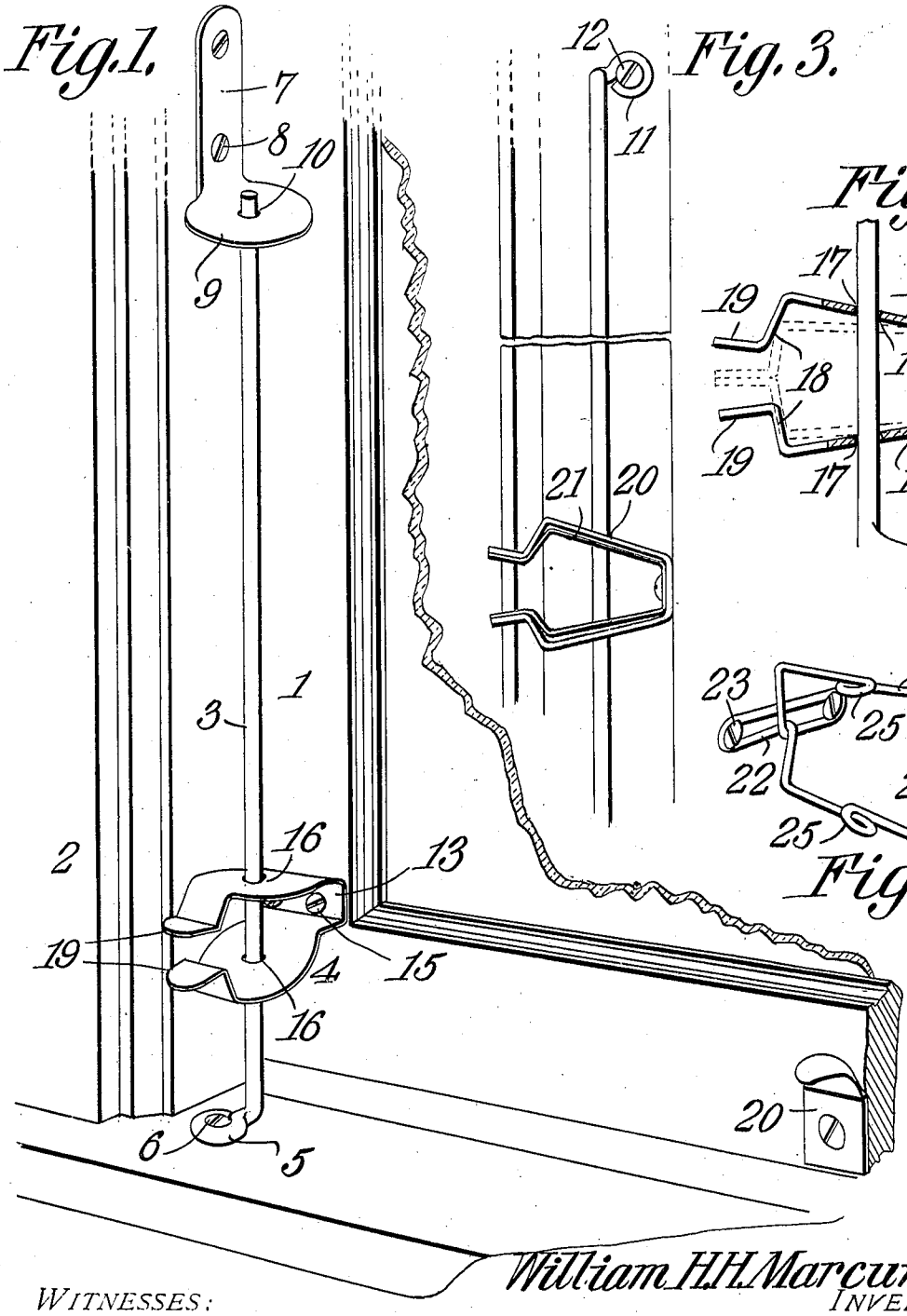

Fig. 3.

Fig. 2.

Fig. 4.

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SASH-LOCK.

No. 860,816. Specification of Letters Patent. Patented July 23, 1907.

Application filed October 11, 1906. Serial No. 338,458.

To all whom it may concern:

Be it known that I, WILLIAM HENRY HARRISON MARCUM, a citizen of the United States, residing at Independence, in the county of Jackson and State of Missouri, have invented a new and useful Sash-Lock, of which the following is a specification.

This invention relates to a sash lock adapted for use in connection with windows, with or without counter-balance weights for the sashes, whereby the sashes can be locked either closed, or opened partially for the purpose of ventilation, without danger of their being opened from the outside by unauthorized persons.

The invention has for one of its objects to provide a sash lock which is of simple and inexpensive construction, easy to apply to ordinary windows, and reliable for holding a sash in any desired position.

A further object of the invention is the provision of a device of this character, which comprises two parts, and which serves as a grip or hand-hold for assisting in raising or lowering the sash.

With these objects in view, and others, as will appear as the nature of the invention is better understood, the invention comprises the various novel features of construction and arrangement of parts, which will be more fully described hereinafter, and set forth with particularity in the claims appended hereto.

In the accompanying drawing, which illustrates certain of the embodiments of the invention, Figure 1 is a fragmentary perspective view of a window showing the sash lock applied thereto. Fig. 2 is a fragmentary side elevation of the sash lock showing the gripping member thereof in its locked position by full lines and in its unlocked position by dotted lines. Fig. 3 is a side elevation, partly broken away, of a modified form of sash lock. Fig. 4 is a perspective view of a modified form of gripping member.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

Referring to the drawing, 1 designates the lower sash and 2 the frame of a window to which the locking device is applied. The locking device comprises a straight, smooth rod 3, suitably fastened at its ends, and a locking member 4. The rod 3 may be attached to the window frame 2 and the locking member 4 to the sash, as shown, or, if desired, this arrangement may be reversed. The lower end of the rod 3 is formed into a forwardly extending eye 5 for securing to the sill of the window frame by means of a screw 6, or equivalent means. The upper end of the rod 3 is held in a bracket 7 which comprises a plate presented to the stile of the window frame and secured thereto by screws 8. One end of the plate is turned laterally in a horizontal plane to form a lug 9 having a central aperture 10 in which the upper end of the rod 3 is held. The rod 3 may thus be of any length and the bracket 7 can be arranged at any desired point, so as to accommodate the sash lock to sashes of various dimensions. The bracket 7 is also adapted to serve as an adjustable stop for limiting the upward movement of the locking device, thereby enabling the parts to be so adjusted that the lower sash cannot be opened beyond a desired point, and this feature adapts the device for use on windows for the purpose of preventing children from opening the windows far enough to fall out. Another manner of securing the upper end of the rod 3 is shown in Fig. 3, wherein the extremity of the rod is formed into an eye 11 for receiving a screw, or equivalent means, 12, whereby the said eye is securely fastened to the stile of the window frame.

The locking member 4 comprises, preferably, though not necessarily, a single piece structure having a base 13 and two forwardly projecting portions 14 forming gripping jaws. The base 13 is presented to the inner face or front of the side rail of the window and secured thereto by screws 15 extending through apertures in the base 13 and screwing into the said side-rail. The jaws or members 14 of the locking device 4 are diverged from the base 13 and are normally under a tension that tends to spread them apart. Each jaw 14 is provided with an aperture 16 through which the rod 3 extends. The edges of the aperture 16 at the point 17 bite the rod 3 and prevent relative movement between the said rod and the locking device 4. The strip of metal from which the locking device 4 is made is of suitable spring material and the jaws 14 are under considerable tension which tends to move them farther apart so that they will grip the rod 3. The ends of the jaws opposite from the base 13 are bent inwardly toward each other at 18, and these inwardly bent portions are themselves bent forwardly and outwardly in the general direction of the jaws and form finger pieces or holds whereby the jaws can be gripped between the thumb and first finger and compressed toward each other, so as to release the biting edges 17 of the jaws from the rod 3 when it is desired to move the sash. In Fig. 2, the full line position of the jaws or members 14 represents the device 4 locked with respect to the rod 3, while the dotted line position represents the device unlocked. It will be noted that in the dotted line position, the finger-holds 19 are in contact and thus they serve as stops for preventing the jaws from being compressed to such an extent as to bite on the rod 3 and thus prevent the sash from moving. When it is desired to adjust the position of the sash, the finger-holds 19 are taken between the thumb and first finger of the left hand and the jaws moved to the dotted line position shown in Fig. 2. While the device 4 is held in this manner, the hand-hold 20 on the sash is gripped in the right hand and then the sash can be raised or lowered by lifting up with both hands or pushing down, as the case may be. While the jaws are held in the dotted line position, the device 4 serves as a hand-hold similar to the hand-hold 20 to assist in raising or lowering the sash.

In Fig. 3, the locking device is composed of two parts 20 and 21 which are of substantially the same construction and arranged one within the other and secured by the same screws to the window sash. This construction is employed where a strong gripping effect is desired, the relatively thin member 21 serving as an auxiliary gripping device and to reinforce the outer member 20. If desired, the construction shown in this figure can be made of one piece, or in two pieces, as illustrated.

The gripping devices heretofore described are made of sheet spring metal, but the said device can be made from spring wire, if desired, as, for instance, as shown in Fig. 4. In this construction, a single piece of wire of suitable length is employed and it is shaped at its middle to form the flat base portion 22 that serves as an eye for receiving screws 23 whereby the device is secured to the window sash. From the flat base portion 22, the wire is bent vertically in opposite directions to a suitable distance, and then forwardly to constitute the jaws 24. The jaws 24 are provided with eyes 25 through which the rod 3 extends, the said eyes taking the place of the biting edges 17 of the construction shown in Fig. 2. The outer ends of the members 24 are turned toward each other and terminate in the finger-holds 26. It will thus be seen that the gripping or locking device can be constructed of wire and obviously other forms than that shown may be employed.

I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, but I desire to have it understood that the apparatus shown is merely illustrative, and that various changes may be made, when desired, as are within the scope of the invention.

What is claimed is:—

1. In a sash lock, the combination with a rod adapted to be attached to one of the parts having suitable securing means at one end and having a locking portion, and a guide for the upper or free end of said rod having a rod receiving portion slidable longitudinally of the rod to permit the guiding bracket to be secured to a suitable support at different distances from the attaching end of the rod and serving as an adjustable stop, of a locking device adapted to be secured to the other part of the window and having a clamping portion adapted to coöperate with said rod and adapted to coöperate with the adjustable guide to limit the opening movement of the sash to different heights.

2. In a lock of the character described, the combination with a locking rod, of a clamping device adapted to coöperate therewith composed of a single piece of wire having an intermediate portion formed into a loop adapted to receive securing screws at opposite ends thereof, the ends of the wire being bent forwardly substantially at right angles to the plane of the securing loop and having convolutions forming clamping portions adapted to coöperate with the said rod.

3. In a lock of the character described, the combination with a rod adapted to be secured to one part, of a coöperating clamping device adapted to be secured to the other part comp sed of a single piece of wire having an intermediate portion bent to form a loop adapted to receive securing screws at opposite ends, the wire being thence crossed and extended in opposite directions parallel to the plane of the loop, thence bent forwardly at an angle to the plane of the loop to form oppositely arranged clamping arms, the latter having convolutions formed therein to receive and coöperate with the locking rod, the forward extensions of said arms serving as operating portions.

4. In a locking device of the character described, the combination with a rod and a guide and stop slidably connected to the rod, of a clamp composed of a single piece of resilient material embodying an intermediate attaching portion adapted to engage a suitable support and to receive securing screws, forwardly extending clamping arms arranged substantially at right angles to the plane of the attaching portion and having portions adapted to frictionally engage the rod, and forwardly arranged inwardly offset finger-pieces on the ends of the clamping arms adapted to coöperate with one another when the clamping arms are proximated to insure releasing of both clamping arms relatively to the rod.

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

WILLIAM HENRY HARRISON MARCUM.

Witnesses:
J. B. Farr,
W. G. Smith.