O. E. PARSONS.

WINDOW SASH HANGER.

APPLICATION FILED APR. 26, 1909.

952,544.

Patented Mar. 22, 1910.

2 SHEETS—SHEET 1.

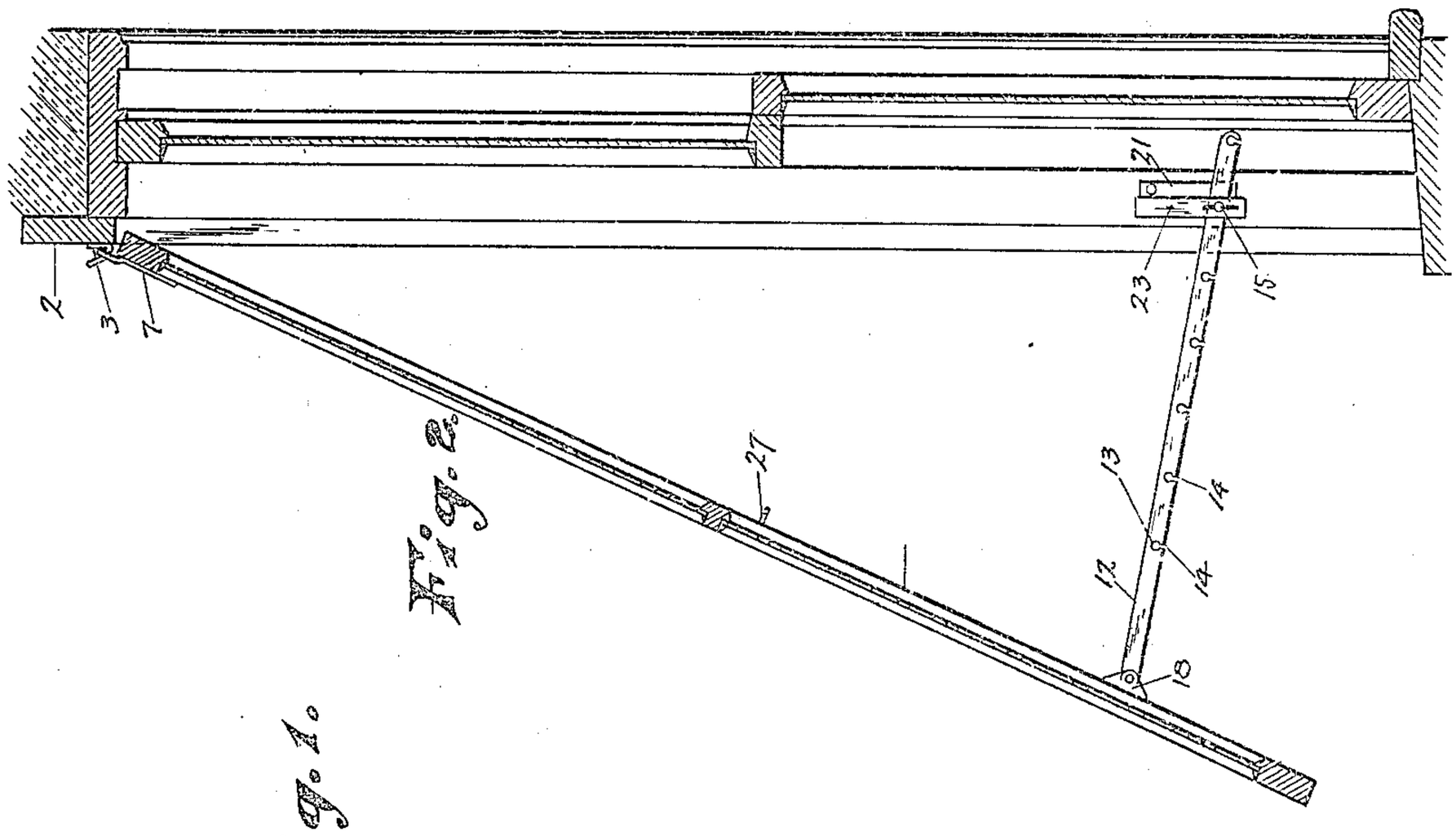

Fig. 2.

Fig. 1.

Witnesses

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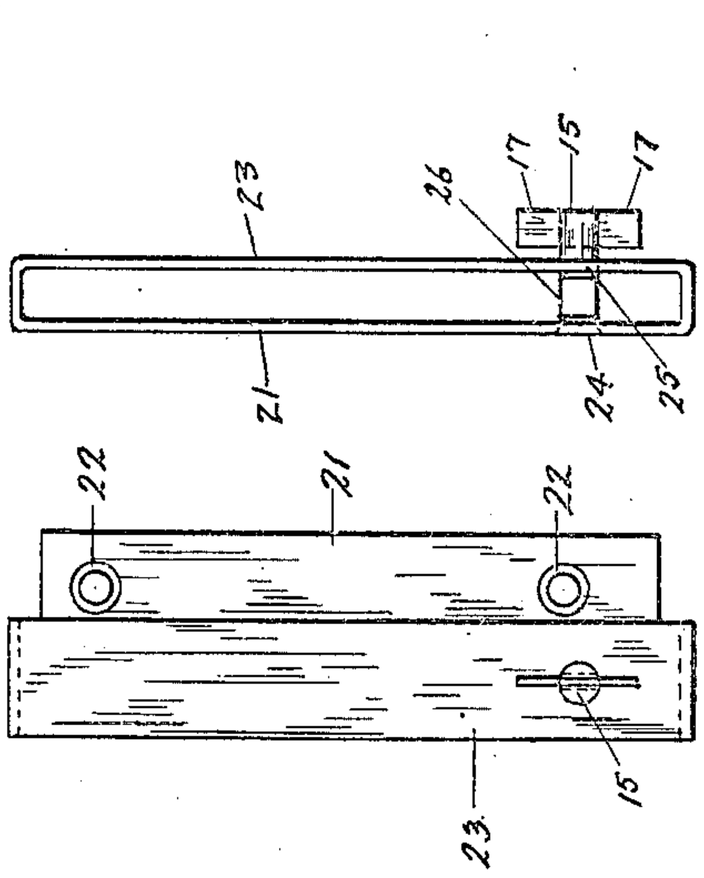

Fig. 7.

Fig. 8.

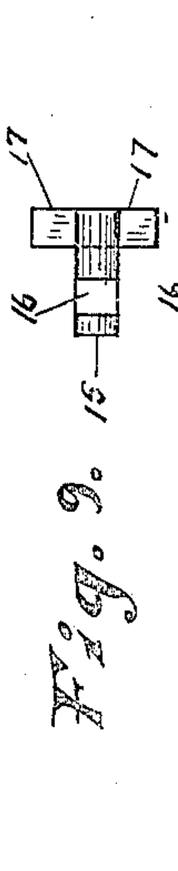

Fig. 9.

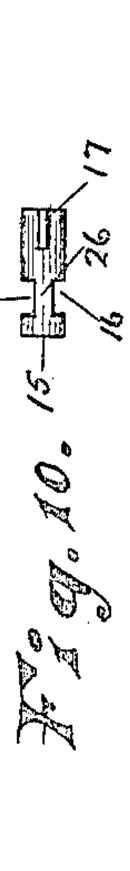

Fig. 10.

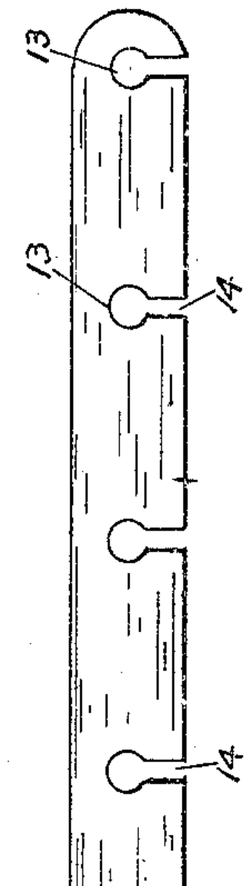

Fig. 12.

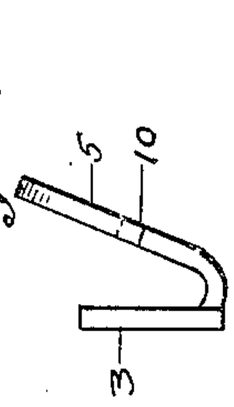

Fig. 4.

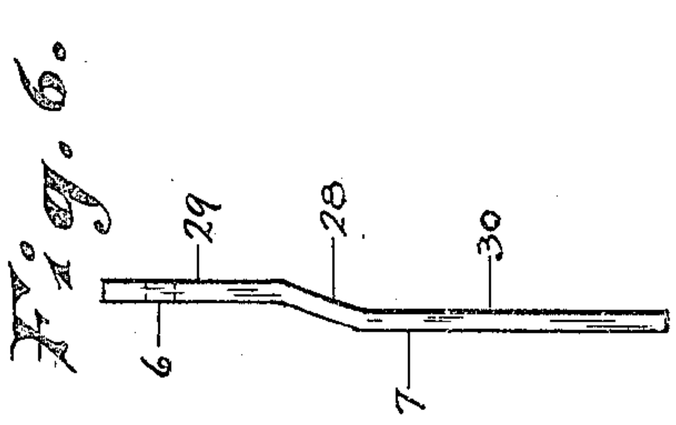

Fig. 6.

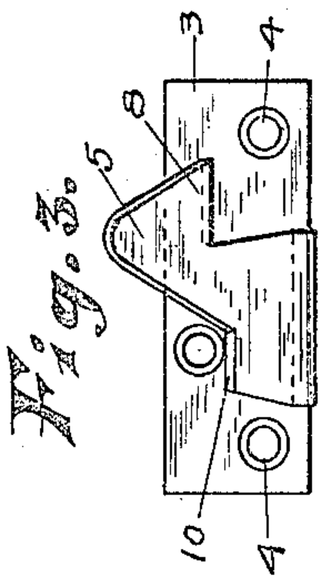

Fig. 5.

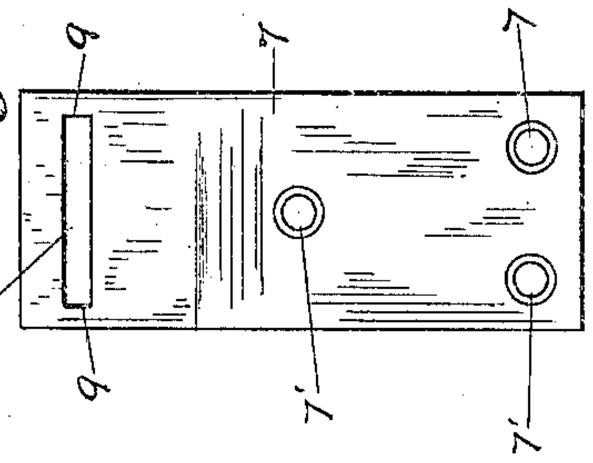

Fig. 7.

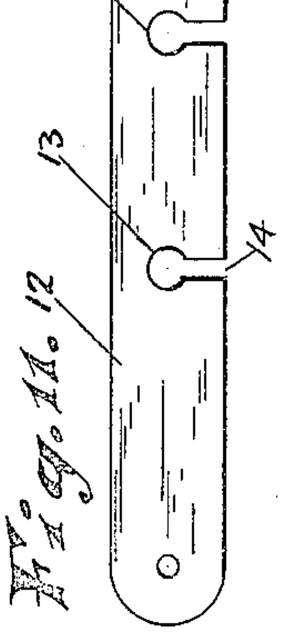

Fig. 11.

Fig. 13.

Fig. 14.

Fig. 15.

Witnesses

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UNITED STATES PATENT OFFICE.

OLIVER E. PARSONS, OF WAUWATOSA, WISCONSIN.

WINDOW-SASH HANGER.

952,544. Specification of Letters Patent. **Patented Mar. 22, 1910.**

Application filed April 26, 1909. Serial No. 492,305.

To all whom it may concern:

Be it known that I, OLIVER E. PARSONS, a citizen of the United States, residing at Wauwatosa, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Window-Sash Hangers, of which the following is a specification.

My invention relates to improvements in window sash hangers for windows, screens and the like and it pertains more especially, among other things, 1st. to the device for detachably connecting the upper end of the sash to the window frame and 2nd. to the device for adjustably holding the sash in its open position, the object of my invention being more especially to so construct the hanger that the liability of the sash becoming accidentally detached from the window frame is avoided.

The construction of my invention is explained by reference to the accompanying drawings, in which—

Figure 1 represents a front view and Fig. 2 is a vertical section of a window provided with my improved hangers. Fig. 3 represents a front view and Fig. 4 a side view of the hooks from which the sashes are suspended when in place in a window frame. Fig. 5 represents a front view and Fig. 6 a side view of the sash plate, which is adapted to be suspended from the hooks shown in Figs. 3 and 4. Fig. 7 is a front view and Fig. 8 is a side view of the fastening key and its supporting bearings by which the lower end of the sash is retained in its open position at any desirable point of adjustment. Fig. 9 is a front and Fig. 10 is a side view of the key shown in Figs. 6 and 7 removed from its supporting bearings. Fig. 11 is a side view and Fig. 12 is a view from the lower edge of the adjusting bar by which the sash is retained in its open position at any desired point of adjustment; and Fig. 13 is a front view and Fig. 14 is a side view of the bracket by which the bar shown in Figs. 11 and 12 is pivotally connected with the sash.

Like parts are identified by the same reference numerals throughout the several views.

1 represents a window sash of an ordinary storm window, which is detachably suspended at its upper end from the upper end of the window frame. 2 by the hooks shown in Figs. 3 and 4. The suspension hooks comprise the fastening plate 3, which is provided with a plurality of screw holes 4 by which it is secured to the window frame and the upwardly curved member 5 which is adapted to be inserted through the aperture 6 of the sash plate 7. The suspension plate 7 is provided with a plurality of apertures 7′ for the reception of fastening screws, by which it is secured to the upper end of the sash.

The hook 5 is provided upon one side with a horizontal angular projection 8, which projection is adapted to extend past the slot 6 and above the side 9 of the suspension plate 7, when the sash is in place as shown in Fig. 1, whereby in case the sash should be raised by the action of the wind or otherwise, the side connecting members 9 of the suspension plates will be brought in contact with the angular projection 8 and prevent the suspension plates from becoming disengaged from the hooks 5. When, however, it is desired to remove the sash from the window frame, the lower end of the sash is raised until the sash is brought into the horizontal position, whereby the sash is free to be moved laterally until the angular projection 8 is brought into alinement with the slot 6 of the hanger plate, when the sash may be readily disengaged from the suspension hooks. In like manner, when suspending the sash from the hooks, the sash is raised to the horizontal position, when the hooks 5 are inserted through the slots 6 until the suspension plates are brought below the lower side of the angular projection 8. When this is done, the sash is moved to the left until the slot 6 is brought past the shoulder 10 of the hook, when the sash may be then brought to the vertical position and the window closed or adjusted in a partially open position, as shown in Fig. 2.

When the window sash has been thus suspended at its upper end from the window frame, the same is moved and adjusted at an angle to the window frame through the bar 12. The bar 12 is provided at its center with a plurality of apertures 13 and a plurality of transversely arranged recesses 14 communicating through the edge of the bar with said apertures, such apertures and recesses being formed for the reception of the key shown in Figs. 9 and 10. The key comprises the cylindrical member 15, provided on its two opposing sides with recesses 16 and transversely arranged lugs 17, by which the same is turned and secured in its locked

position in the bar 12. The bar 12 is adapted to be connected with the sash through the bracket 18 and a pivotal bolt 19. The bracket 18 is provided with one or more apertures 20 by which it is secured to the window sash. The key is connected with the side of the window frame by the fastening plate 21, which is provided with apertures 22 for the reception of fastening screws and a bearing plate 23, which is provided with an aperture 24 for the reception of the cylindrical member 15 on the key.

The fastening plate 21 and bearing plate 23 are preferably formed integral from a single piece of metal. which is bent into the link shape indicated in Fig. 8, when apertures 24 and 25 are formed in alinement with each other through said plates 23 and 21, for the reception of the cylindrical member 15 of the key. The cylindrical member 15 is revolubly supported in its bearings, whereby it may be turned so as to bring one of the sides of the flattened member 26 in alinement with the slots 14, preparatory to securing such cylindrical member in the apertures 15 of the bar. When, however, the cylindrical member has been inserted in the apertures 13, it is secured therein and prevented from being accidentally withdrawn by turning said key a quarter of a revolution in its bearings, whereby said locking parts are securely locked together.

It will now be understood that the window sash may be adjusted in its open position nearer to or farther from the window frame a distance corresponding with the distance between the apertures 13 of the bar 12. When, however, it is desired to close the sash, the key is turned a quarter of a turn so as to permit the flattened member 26 to pass out through the slot 14 of the adjusting bar.

27 is a supporting hook, which is connected to the inner side of the sash and is adapted to engage in one of the slots 14 of the adjusting bar 12, when said bar has been turned back out of engagement with the locking mechanism preparatory to closing the storm window.

While I have shown a single adjustable member 12 connected with one side of the window sash, I preferably employ a similar locking and supporting device at the respective sides of the window sash and frame.

To facilitate connecting the suspension plate 7 with the supporting hooks 5, said suspension plate is preferably made with the central portion 28 at an angle to the respective end portions 29 and 30, whereby the lower portion 30 of the extension plate is brought into alinement with the fastening plate 3 of the hook, when the window sash is in its closed position within the window frame.

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

1. The combination of a window frame, suspension hooks provided with laterally projecting lugs secured to the upper end of said frame, a window sash, suspension plates provided with hook receiving apertures secured to the upper ends of said sash, said hooks being adapted to engage the apertures of said suspension plates and suspend said sash within said frame while the laterally projecting lugs of said hooks are adapted to contact with one side of the suspension plates and prevent the latter from becoming accidentally detached from the hooks.

2. The combination of a window frame, suspension hooks provided with laterally projecting lugs secured to the upper end of said frame, a window sash, suspension plates provided with hook receiving apertures secured to the upper ends of said sash, said hooks being adapted to engage the apertures of said suspension plates and suspend said sash within said frame while the laterally projecting lugs of said hooks are adapted to contact with one side of the suspension plates and prevent the latter from becoming accidentally detached from the hooks and means for holding the lower end of said sash at any desired point of adjustment, all substantially as and for the purpose specified.

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

OLIVER E. PARSONS.

Witnesses:
JAS. B. ERWIN,
O. R. ERWIN.