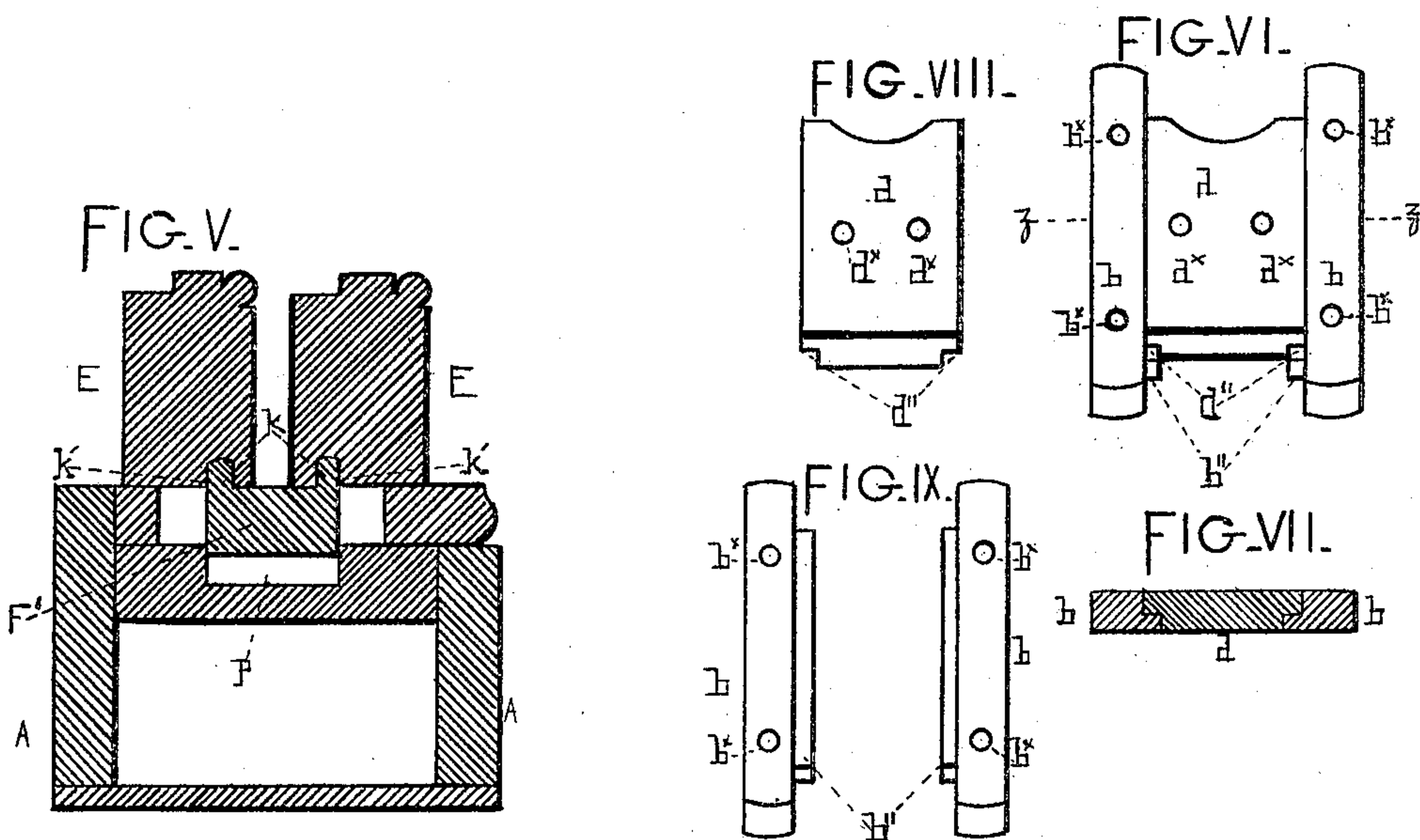
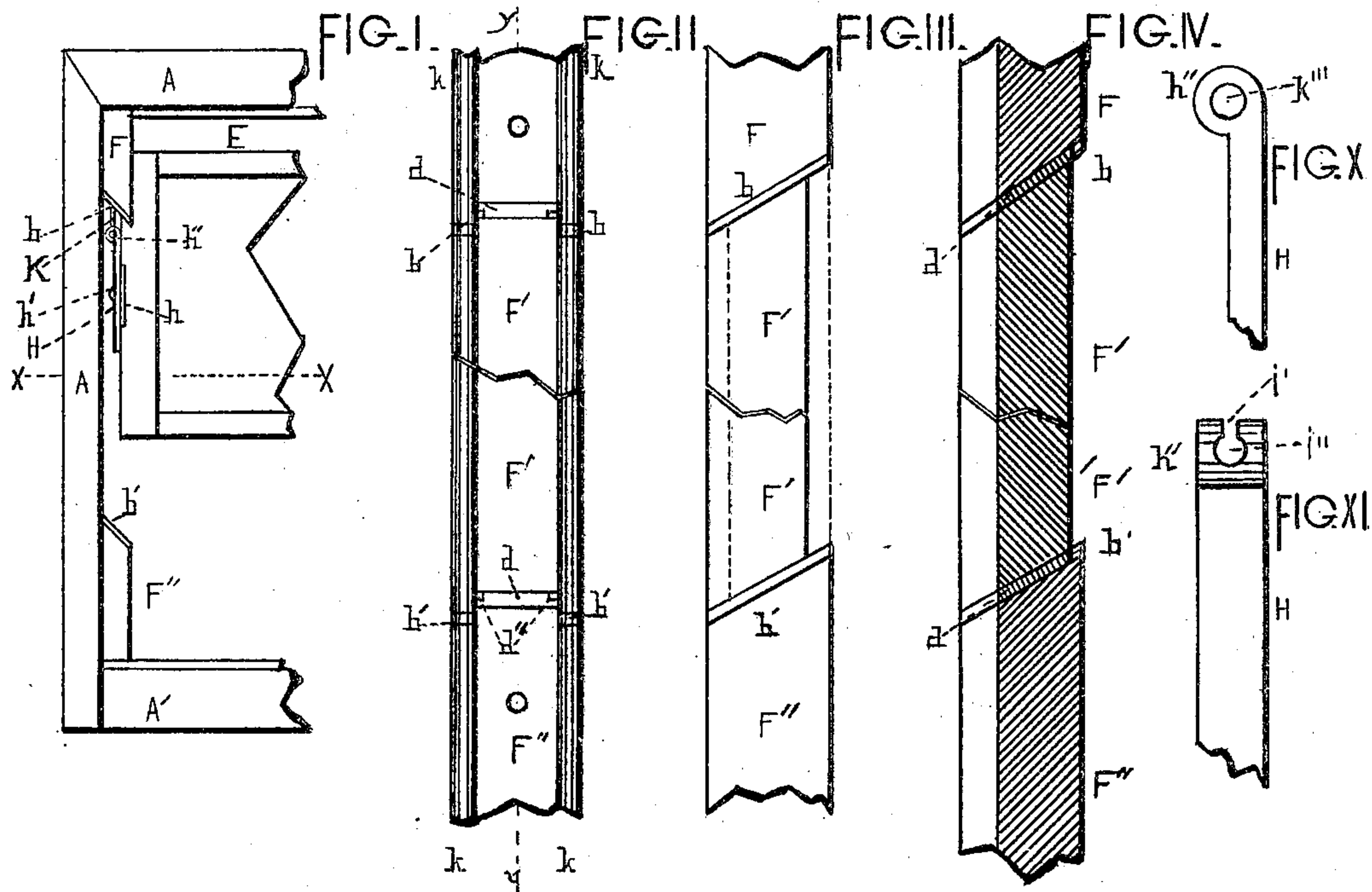


No. 822,785.

PATENTED JUNE 5, 1906.

H. STAIB.
WINDOW FRAME AND SASH.
APPLICATION FILED APR. 15, 1905.



WITNESSES:

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HENRY STAIB, OF OZONE PARK, NEW YORK.

WINDOW FRAME AND SASH.

No. 822,785.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed April 15, 1905. Serial No. 255,689.

To all whom it may concern:

Be it known that I, HENRY STAIB, a citizen of the United States, and a resident of Ozone Park, county of Queens, and State of New York, (whose post-office address is Broadway and Napier avenue, Ozone Park, Long Island, New York,) have invented certain new and useful Improvements in Window Frames and Sashes, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention is an improvement upon my Patent No. 608,084, which was granted to me on the 26th day of July, 1898, for an improvement in window frames and sashes.

The object of the invention is to provide a better and more easily operated connection between the different sections of the sash-stop.

The object of the invention is also to provide an improved mechanism for hanging the sash.

The invention also has divers other objects which will be fully hereinafter set forth.

The nature of the invention will be fully understood from the following general description and the annexed drawings and will be subsequently pointed out in the claims.

In the accompanying drawings, which are hereby made a part of this specification, Figure 1 is a view of part of a window-frame and part of a sash with a part of my improvement attached. Fig. 2 is a front view of the principal part of the sectional stop, more fully hereinafter described. Fig. 3 is an edge view of the same. Fig. 4 is a sectional view of the same, taken on the line *yy* of Fig. 2. Fig. 5 is a sectional view of a part of the frame and sash of a window, showing the relative position of my invention and other parts, more fully hereinafter described. Fig. 6 is a plan view showing my improved slides, more fully hereinafter described. Figs. 2 to 6, inclusive, are on a larger scale than Fig. 1 to more clearly display the mechanism. Fig. 7 is a sectional view taken on the line *zz* of Fig. 6. Figs. 8 and 9 are detail views showing the parts of my improved slide. Figs. 10 and 11 are detail views of different sides of the top of the hanging device, more fully hereinafter described.

A designates the window-frame. Upon

the vertical side of this, to receive and guide the sash, is fixed a vertical stop, which comprises three sections *F F' F''*. The upper and lower sections *F* and *F''* are stationary. The middle section *F'* is movable backward in the groove *p* in the window-frame. (Shown in section in Fig. 5.) In order to facilitate this backward motion, the guides *b b'* are fastened on the upper and lower ends of the stop-section *F'*. These may be fastened by means of screws passing through the holes *b^x* or in any other convenient way. Each of these guides has an extension *b''*, reaching along a part of its side. These extensions are arranged upon contiguous sides of the guides. The ends of the stop-section *F'*, on which these guides are fastened, are inclined, as illustrated. On the ends of the stationary stop-sections *F* and *F''*, which are also inclined, and parallel to the ends of stop-section *F'*, are fastened the plates *d*, which are parallel to the guides *b b'*, which may be fastened by screws passing through the holes *d^x* or in any other convenient and available way, and which are engaged by the extensions *b''*. These extensions move in the notches *d''*. By this arrangement the stop-section *F'* is always held in vertical position. It will, on this account, when at rest and when the sash is in normal position, come to alinement with the sections *F* and *F''*. Otherwise, except as hereinafter described, the sash is hung in the common way, and when the said section *F'* is in its normal position, as illustrated in full lines in Fig. 3, moves up and down in the common and well-known way.

To hang the sash *E*, I gain a plate *h* into the edge thereof. This may be fastened in its place by means of screws or in any other convenient way. In the middle of this plate is an opening. Upon this plate is placed the hanger *H*. A convenient screw *h'*, passing through a hole of the hanger *H* and the hole of the plate *h*, pivots the hanger on the edge of the sash. This is so arranged that it will not interfere with the groove *k'* in the edges of the sash, which run on the beads *k* of the stop. At the upper end of this hanger is an enlargement *h''*, which is pierced through one way with the opening *k'''* and pierced the other way with the opening *i''*, which only extends into the opening *k'''*. This enlargement *h''* is also cleft with a slot *i'*, which extends to the opening *k'''* and communicates

with the opening i'' . A cord K, which is knotted in the opening h'' and is passed over the sash-pulley, is used in connection with a weight to operate the sash in the common and well-known way. Any other available flexible connection may be used for this purpose, the whole device to be substantially as illustrated in the drawings.

To use my invention, the parts are assembled as illustrated. It will then be found that if either sash or both sashes be brought to a position which will clear both the stop-sections F and F' a slight pressure of the fingers will push the stop-sections F' backward and allow the sash turning on the pivot h' to swing into a horizontal position. When the sash is returned to normal position, the stop-section F' will, by reason of its own gravity, return to alinement and contribute its share toward holding the sash in proper position, and the sash may be moved upward and downward in the common and well-known way.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with window-sashes having grooves in their edges, a window-frame, and vertical sash-stops comprising each different sections, a part of which are stationary and a part movable, fastened on said frame, having longitudinal beads, and arranged so that said grooves are in slidable engagement with the said beads, of guides having extensions on contiguous sides, fastened on the ends of said movable stop-sections, and plates having notches slidably engaging the said extensions of said guides, fastened on the ends of said stationary stop-sections, and arranged to afford facility for moving said movable stop-sections, and pivoted pulley connections on the edges of said sashes.

2. The combination with window-sashes having grooves in their edges, a window-frame, and vertical sash-stops therein, comprising each different sections, part of which are stationary and part movable, arranged so said parts are end to end in triplets, and having their adjacent ends so inclined as to be parallel to each other, of guides having side extensions on adjacent sides fastened on the said inclined ends of said movable stop-sections and parallel to each other, plates having notches engaged by said side extensions, fastened parallel to said guides on the ends of said stationary stop-sections, and together with said guides affording facility for moving said movable stop-sections, and pivoted pulley connections on the edges of said sashes.

3. The combination with window-sashes having grooves in their edges, a window-frame and vertical stops fastened therein, comprising each different sections, a part of which are stationary and a part movable, arranged so that such stop-sections are end to

end in triplets, and have their adjacent ends inclined so as to be parallel to each other, and having longitudinal beads slidably engaged by said grooves in said sash edges, plates pivoted on said sash edges and flexible pulley connections attached thereto for moving said sashes upon said beads, of guides having side extensions on contiguous sides parallel to each other and fastened on the inclined ends of said movable stop-sections, plates having notches parallel to said guides, engaged by the side extensions thereof, fastened on the ends of said stationary stop-sections, and together with said guides affording facility for moving said movable stop-sections.

4. The combination with window-sashes having grooves in their edges, a window-frame, vertical stops fastened therein and comprising each different sections, part of which are stationary and a part movable, arranged so that such stop-sections are end to end in triplets, and having their adjacent ends inclined and arranged so as to be parallel to each other, and having longitudinal beads slidably engaged by said grooves in said sash edges, and elongated plates, each having an end enlargement in which flexible pulley connections are fastened, pivoted on said sashes and affording facility, together with said connections, for moving said sashes on said beads, of guides having side extensions on contiguous sides, fastened on the inclined ends of said movable stop-sections parallel to each other, plates having notches parallel to said guides, engaged by the side extensions thereof, fastened on the inclined ends of said stationary stop-sections, and together with said guides affording facility for moving said stop-sections out of alinement with said stationary stop-sections and for allowing such movable sections by reason of their own weight to return to such alinement with said stationary stop-sections.

5. The combination with window-sashes having grooves in their edges, a window-frame, vertical stops comprising different sections fastened therein, a part of which sections are stationary and a part movable, arranged so that such stop-sections are end to end in triplets, the end sections being stationary, the middle sections movable and having their end surfaces inclined and parallel to each other, having longitudinal beads slidably engaged by said grooves in said sash edges, and elongated plates having end enlargements pierced with openings at right angles to each other and to the said plate, and cleft in said enlargement with slots, pivoted on said sashes and affording a pivotal connection between said sashes and flexible pulley connections, of guides having side extensions on contiguous sides fastened on the inclined ends of said movable stop-sections, parallel to each other, plates having notches parallel

to said guides engaged by the side extensions
thereof and fastened on the inclined ends of
said stationary stop-sections and together
with said guides affording facility for moving
5 said movable stop-section, substantially as
set forth.

In testimony that I claim the foregoing as

my invention I have signed my name, in
presence of two witnesses, this 1st day of
April, 1905.

HENRY STAIB.

Witnesses:

R. F. HUBER,

N. L. HILTAWSKI.