

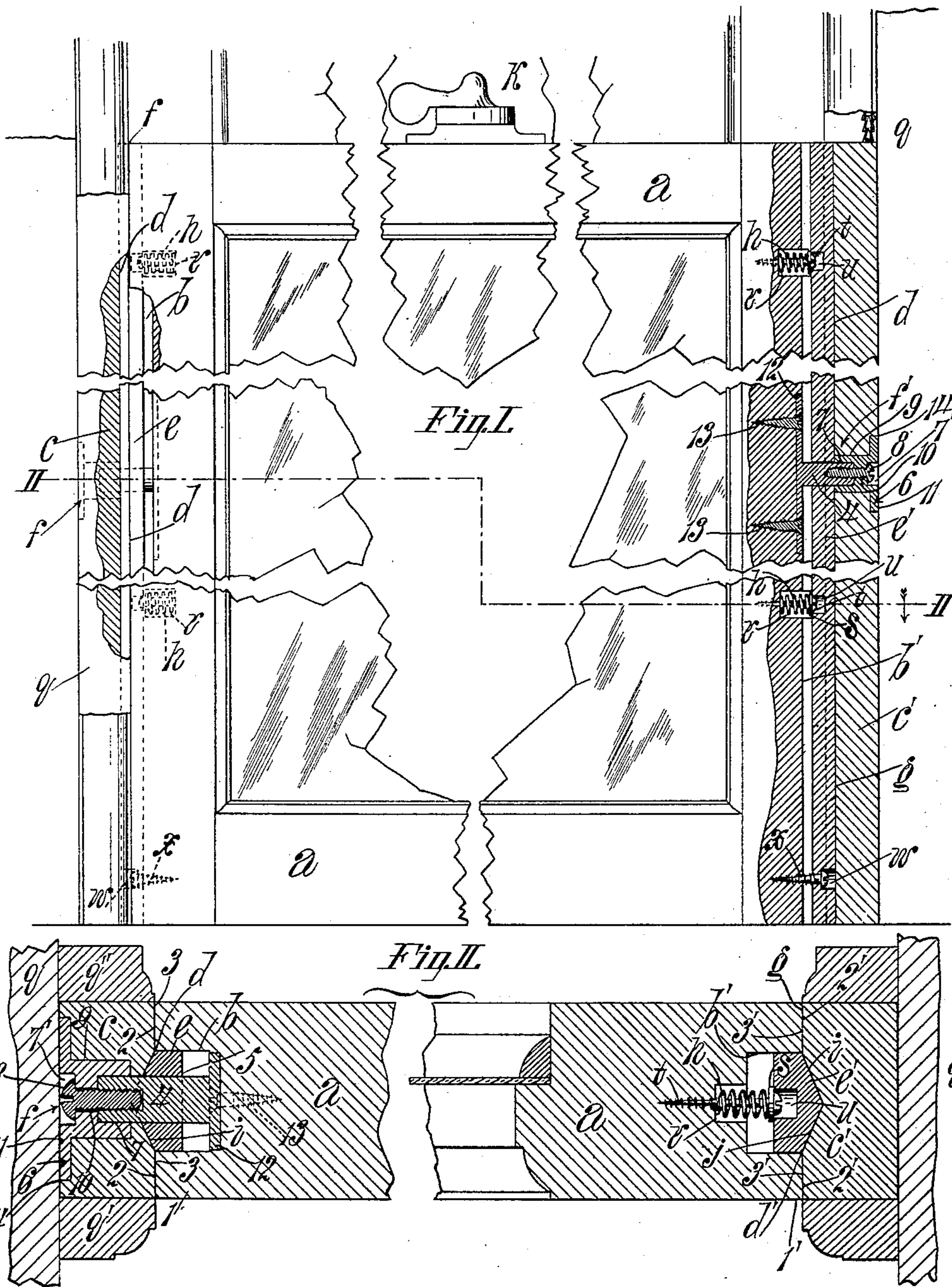
No. 677,544.

Patented July 2, 1901.

E. HIPOLITO.
PIVOTED WINDOW.

(Application filed May 29, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ESPIRIDION HIPOLITO, OF LOS ANGELES, CALIFORNIA.

PIVOTED WINDOW.

SPECIFICATION forming part of Letters Patent No. 677,544, dated July 2, 1901.

Application filed May 29, 1900. Serial No. 18,459. (No model.)

To all whom it may concern:

Be it known that I, ESPIRIDION HIPOLITO, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Pivoted Windows, of which the following is a specification.

The object of my present invention is to provide a pivoted window of cheaper and more convenient construction and assemblage and of more convenient operation than pivoted windows heretofore known.

My newly-invented pivoted window comprises the combination of a window-sash body furnished with grooves in two opposite edges, two grooved bars, one for each of the grooved edges of the sash-body and mounted with the grooves of each bar facing the groove of the edge to which such bar is applied, tongues at the opposite grooved edges of the sash-body, respectively, in the conjoined grooves of the edge of the sash-body and the bar to which the tongue is applied, two coaxial pivots extending through the tongues, respectively, and pivoting the sash and bars together, and means for moving said tongues to extend them respectively across and retract them from across the planes of the contacting faces of the bars and the sash-body.

My invention is applicable to windows in which the sash can be raised or lowered and also to windows in which the sash moves horizontally, and may be applied as well to windows in which the sash does not move vertically or horizontally, but is stationary, excepting that it is pivoted.

The invention may be variously applied.

In the accompanying drawings I have shown the invention as applied to a sash which slides vertically.

My invention includes the several parts and combinations herein described and claimed.

The accompanying drawings illustrate my invention.

Figure I is a fragmental elevation of a window embodying my invention. Parts are broken to expose interior parts. Fig. II is a section on irregular line II II, Fig. I, cutting through a pivot on one side of the window and exposing one of the springs which throws the tongue on the other side of the window.

a indicates a window-sash body furnished

with grooves *b b'*, respectively, in two opposite edges of said body.

c indicates a grooved bar the grooved face of which is applied to one of the grooved edges of the body *a*. The grooved bar *c* is mounted with its groove *d* facing the groove *b* of the sash-body edge to which said bar is applied. *e* indicates a tongue for the way, formed by the conjoined grooves *d* and *b* of the grooved edge 1 and the bar *c*. In a general way *f* indicates a pivot through the tongue *e* and pivoting the bar *c* and the grooved edge 1 together. Suitable means are provided for throwing said tongue to alternately fully chamber it in one of the grooves—viz., the groove *b*—and to project it across the plane of the contacting faces 2 3 of said sash-body edge and bar. *c'* indicates another grooved bar the grooved face of which is applied to the other of said grooved edges 1'. *e'* indicates a tongue for the channel formed by the conjoined grooves *d'* and *b'* of said other edge 1' and bar *c'*. *f'* indicates a pivot through said other tongue *e'* and pivoting said other bar *c'* and grooved edge 1' together. Means are provided for throwing said other tongue *e'* to alternately fully chamber it in one of said other grooves—viz., the groove *b'*—and to project it across the plane of the contacting faces 2' 3' of the grooved edge and bar to which the tongue *e'* pertains.

In the drawings I have shown two kinds of means for throwing the tongues *e* and *e'*. In the drawings I have shown the bars *c* and *c'* provided with grooves *d d'*, having beveled faces, and the tongues *e e'* each have a beveled face *i* to correspond with the beveled faces of the groove in the bar. Springs *h* are arranged to throw the tongues *e e'*, respectively, to bring their beveled faces, respectively, into the beveled grooves of their respective bars *c c'*. With this construction the person desiring to turn the window on its pivot will unlock the lock *k* of the sash and will pull forward upon the top of the sash-body *a*, and the pressure upon the beveled faces of the tongues will force the tongues back into the grooves *b b'*, thus allowing the window to be turned on the pivots *f f'*.

It is desirable that the tongues should have a regulated pressure applied to throw them against the bars *c c'*, so that the friction will

not be too great when the sash is slid up and down in the window-frame *q*. For this purpose the grooved edges of the sash-body are provided with a socket *r* in the bottom of the groove, a spiral spring *h*, seated in the socket, a washer *s* on the outer end of the spring, and a screw *t*, inserted through the washer and spiral spring and screwed into the sash-body. The perforation in the washer is not large enough to admit the head of the screw, and the tongue *e* or *e'*, as the case may be, is provided with a socket *u* large enough to admit the head of the screw *t*, but not to admit the washer, so that the washer will hold the spring in the socket and will intercept the bar *u*; but as the spring yields and said tongue is pressed in the socket *u* will chamber the head of the screw *t*. The outer limit of the movement of the washer *s* will be determined by the depth to which the screw *t* is screwed into the sash-body. In ordinary practice the screw will be screwed in far enough to hold the spring so that it will throw the tongue just far enough to allow the faces *i* and *j* of the tongue and the pivoted bar to come into engagement with each other with the requisite pressure. By this adjustable means the friction of the tongues in the bar can be accurately adjusted by turning the screws *t*. By this means all danger of excessive friction, tightness, or looseness of the window can be done away with by adjusting the screws.

Preferably an adjusting-screw and spring are placed at the upper end of each tongue, and another adjusting-screw and spring are placed below the pivot at some distance from the lower end of the tongue. It then becomes desirable to hold the lower end of the tongue in place when the pivoted window is turned to bring the lower end of the sash-body out of the window-frame. For this purpose the lower end of each tongue is provided with a countersunk hole *w*, through which a screw *x* is screwed into the sash-body *a*. The screw can be set to the appropriate depth. The head of the screw must be wholly within the groove in the sash-body, so that it will not contact with the face of the pivoted bar when the sash-body is turned on the pivot and will prevent the tongue from being thrown out too far.

I will now describe the means for pivoting the parts together.

4 indicates a pivot member fastened to the sash-body *a* and extending outward from the bottom of the groove *b*. The tongue *e* is provided with a hole 5 and is fitted to slide upon the stem of the pivot member 4.

6 indicates a socket member fastened to the pivoted bar and provided with a socket 7 to receive the stem of the pivot member 4.

8 indicates a screw screwed through the socket member 6 and into the stem of the pivot member 4. The socket member 6 preferably has a cylindrical stem 9, provided with the socket 7 and with a countersink 7' opposite the socket 7, a perforation 10 being pro-

vided between the countersink and the socket to receive the screw.

11 indicates a circular flange extending laterally beyond the socket-stem, so that the socket-piece 6, with its stem 9 and the flange 11, can be inserted into a countersunk hole 14 in the bar *c*, and then the screw 8 will be inserted through the perforation 10 and screwed into the stem of the pivot member 4. The pivot member 4 is provided with a flange 12, which is fastened in place on the sash-body by screws 13.

In order to assemble the parts, the springs *h* *h'* will be inserted in the socket *r* and the washer *s* placed on top, and the screw *t* will then be screwed into place. This will be done with each of the springs *h*. Then the pivot member 4 will be seated in the groove *b* and secured by the screws 13. Then the tongue *e* will be placed in position with the stem of the pivot member 4 inserted through the hole 5 in the tongue. The socket member 6 will be inserted through the bar *c* and will be fitted upon the end of the stem of the pivot member 4. Then the screw 8 will be screwed into place, thus pivoting the bar *c* to the sash-body *a*, with an interposed tongue *e* between them and in the grooves therefor. The window-sash is readily locked in position with any of the effectual locks for that purpose.

The socket member 6 can be clamped more or less tightly upon the pivot member 4 by seating the screw 8 more or less forcibly. The screw 8 thus affords adjustable means for securing the bar friction-tight upon the edge of the sash-body. It is to be understood that a rivet extending from the pivot member 4 in the manner of the screw (not shown) might be employed and the rivet be riveted to hold the member 6 on the stem 4; but while such construction would not avoid my invention it is not deemed desirable and no illustration of it has been made.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination of a sash-body provided in its edge with a groove; a pivot member fastened to the sash-body and extending outward from the bottom of the groove; a tongue mounted in the groove and provided with a hole fitted upon the stem of the pivot member; a bar on the grooved edge of the sash-body and provided with a groove to face the groove of the sash-body; a socket member fastened to the bar and provided with a socket to receive the stem of the pivot member; a screw screwed through the socket member and into the pivot member; and means for moving the tongue across and retracting it from the plane of the contacting faces of the bar and the sash-body.

2. The combination of the grooved sash-body provided with a socket in the groove; a spiral spring in the socket; a washer on the spiral spring; a screw through the washer and spiral spring and screwed into the sash-body; a tongue to play in the groove and pro-

vided with a socket large enough to admit the head of the screw, but not to admit the washer; and a bar pivoted to the sash-body and provided with a groove to receive the
5 outer edge of the tongue.

3. In a window, a pivoting device for pivoting a bar to the sash-body comprising a pivot member to be fastened to the sash-body and furnished with a stem having a screw-threaded socket in its end; a socket member
10 having a cylindrical stem provided with a socket to fit the stem of the pivot member, and with a countersink opposite the socket, a perforation between the countersink and
15 the socket to receive a screw; a flange extending laterally beyond the socket-stem; and a screw inserted through the perforation and screwed into the pivot member.

4. In a window, a pivoting device for piv-

oting a bar to the sash-body comprising a 20 pivot member to be fastened to the sash-body and furnished with a stem; a socket member having a cylindrical stem provided with a socket to fit the stem of the pivot member, and provided with a perforation opening into
25 said socket; a flange extending laterally beyond the socket-stem; and means extending through the hole and fastening the stem to the pivot member in said socket.

In testimony whereof I have signed my 30 name to this specification, in the presence of two subscribing witnesses, at Los Angeles, California, this 23d day of May, 1900.

ESPIRIDION HIPOLITO.

Witnesses:

JAMES R. TOWNSEND,
JULIA TOWNSEND.