W. C. ROBINSON. SASH FASTENER.

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THE HORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM C. ROBINSON, OF CAMBRIDGE, MASSACHUSETTS.

SASH-FASTENER.

No. 918,090.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed February 15, 1909. Serial No. 477,980.

To all whom it may concern:

Be it known that I, William C. Robinson, a citizen of the United States, residing in Cambridge, in the county of Middlesex and 5 State of Massachusetts, have invented an Improvement in Sash-Fasteners, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing

10 like parts.

The present invention relates to a sash fastener, and is embodied in a socket member adapted to be secured to the meeting rail of the lower sash, the said member hav-15 ing a recess formed with an inclined surface and two side wings, there being a roller located in said recess and adapted to lie between the inclined surface and the side rail of the upper sash. The roller is provided 20 with a surface portion of yielding material, preferably rubber, and with a lateral middle opening which receives a finger connected with a lever pivotally supported upon the outside of the socket piece so that a move-5 ment of the said lever on its pivot will lift the roller out of engagement with the sash and the inclined surface. The opening of the roller is materially larger than the finger, so that the roller fits loosely and is not preyented from being wedged into position between the sash and the socket. The lever is provided with a spring which tends to act through the finger upon the roller so as to hold the same in contact with the inclined surface and the sash, thereby insuring an initial frictional engagement which is increased by the wedging action due to the movement one sash with relation to the other.

Figure 1 is a perspective view of a sash fastener embodying the invention shown as applied to a window; Fig. 2 is a side elevation, partly in section, showing, in full and dotted lines, the fastening and unfastening positions; Fig. 3 is a transverse section on a

line x^3 of Fig. 2.

The sash fastener embodying the invention comprises the socket member a provided with a base portion a² adapted to be secured to the meeting rail A of the lower sash, as by screws a³. This socket member 's provided with an inclined rear, inner surace at with upwardly projecting walls or langes a⁵ and a⁶ at opposite sides. These valls or flanges serve as lateral confining nembers for a roller b which is preferably the sash, and I do not, therefore, broadly

made of metal and which has a surface of yielding material, preferably rubber, indi-

cated by the reference letter \tilde{b}^2 .

The roller b is loosely supported and by its 60 own weight will settle into contact with the side rail B of the upper sash, and with the inclined surface at of the socket member so that any movement of either sash in the direction to open the window, either at the bot- 65 tom or the top, will tend to wedge the roller firmly into contact with the side rail of the sash and with the socket member a, thereby locking the two sashes firmly together. A closing movement of either sash, on the con- 70 trary, will tend to roll the roller b out of frictional contact with the opposing surfaces, so that the window will close freely. In order to open the window, however, it is necessary to support the roller out of contact with 75 either of the opposing surfaces, and for this purpose the device is provided with a side lever c pivoted at c^2 on the outer surface of the socket piece, the said side lever having a finger c³ which projects laterally into the 80 opening b^3 in the middle of the roller b. This opening is made materially larger than the finger c^3 , so that in the wedging process which locks the sashes together the roller is free to find its final position under the com- \$5 pression of the yielding surface without being opposed by any connection with the lever c. The said lever c is shown provided with a handle or actuating device c^4 by which it can be moved to lift the roller in opening the 90 window. The lever and finger also constitute means for holding the roller, in case the lower sash is pushed above the top of the upper sash, as may sometimes happen, for instance, when the windows are being washed. 95

In order to insure the proper wedging action of the roller to prevent the movement of either sash in a direction to open the window, the lever c is provided with a light spring c^5 which tends to pull the lever down- 100 ward and to bring the finger piece c3 into engagement with the roller in the opening b^3 and hold the same in contact with the upper sash and with the inclined surface a4, so that sufficient friction will be brought to bear to 105 insure the wedging operation upon any attempt to move either sash.

I am aware that sash fasteners have heretofore been constructed with members which are adapted to be frictionally wedged be- 110 tween an inclined surface and the side rail of

claim such a structure. I am not aware, however, of any structure in which a wedging roller with a yielding surface is positively, though loosely supported, and not depend-5 ent upon the upper such to retain it in engagement with the socket piece.

Claim. A sash fastener comprising a socket member having an inclined inner surface with 10 walls or flanges projecting above said surface at opposite sides; a roller provided with a peripheral surface of yielding material contained in the space between said inclined wall and said upwardly projecting flanges, said roller being provided with a lateral opening in the middle; a lever pivotally sup-

ported upon the outside of the socket member and having a finger projecting laterally into the opening in the roller, said finger being smaller than said opening; and a spring 20 connected with said roller and so disposed as to act upon the roller to hold the same in contact with the inclined surface and a surface opposite thereto, substantially as described.

In testimony whereof, I have signed my 25 name to this specification in the presence of

two subscribing witnesses.

WILLIAM C. ROBINSON.

Witnesses: M. E. COVENEN, JAS. J. MALONEY.