Jan. 19, 1926. 1,570,351

V. K. HULTIN

METHOD AND ARRANGEMENT FOR FASTENING WINDOW AND DOOR FRAMES

Filed Sept. 16, 1924

Fig. 1.

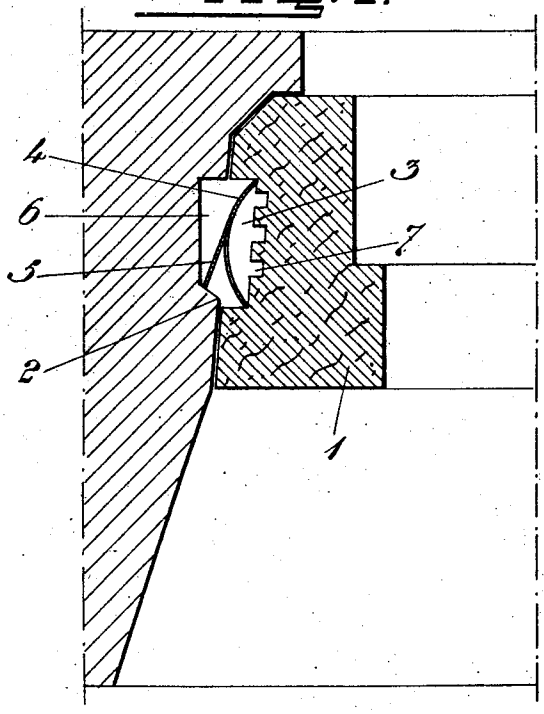



Fig. 2.

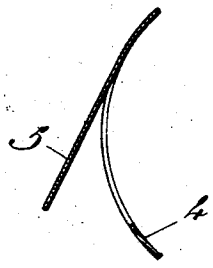
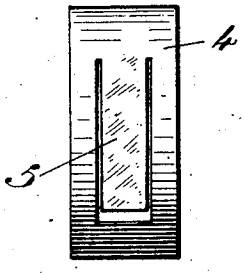



Fig. 3.




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# UNITED STATES PATENT OFFICE.

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## METHOD AND ARRANGEMENT FOR FASTENING WINDOW AND DOOR FRAMES.

Application filed September 16, 1924. Serial No. 737,964.

*To all whom it may concern:*

Be it known that I, VALTER KONSTANTIN HULTIN, a subject of the King of Sweden, residing at Stockholm, Sweden, have invented new and useful Improvements in Methods and Arrangements for Fastening Window and Door Frames, of which the following is a specification.

The present invention refers to a method for fastening window and door frames, which method consists in inserting the frame in the window or door opening, as the case may be, in such a manner that by this means an automatic locking device comes into operation and locks the frame in a definite place in the window or door opening. The invention also refers to an arrangement for carrying into effect this method, and this arrangement consists of spring stops (springs, bolts acted upon by springs, etc.) fitted to the frame or boundary wall of the window or door opening respectively, said spring stops being designed and arranged in such a manner that when the frame is pushed in, they first give way and allow of the frame being pushed in, and after that in the inserted position of the window or door snap into some notches, hooks or such like in the said boundary wall or frame, as the case may be, and lock the window or door respectively.

On the accompanying drawing the present invention is illustrated. In Fig. 1 is shown in horizontal section a portion of a window frame in inserted position. Figs. 2 and 3 show a detail. 1 is the frame and 2 the boundary wall of the window opening, which is shown bevelled like the window frame in order to bring about a better closing-up between them. In the frame there is made a notch 3, in which is fixed or bent a leaf-spring 4, which is shown in detail in Figs. 2 and 3, seen from the one lateral edge and front respectively, in a compressed position. The spring has a tongue 5 which in this compressed position of the spring projects from the latter and is kept in this projected position under spring tension. When the compression on the spring 4 ceases, it naturally stretches and becomes flat and the tongue 5 is then made to rest in the spring 4 on the same level as the latter. It is clear that, if we push in the frame with the spring 4 attached in the notch 3, the tongue 5 will first be pressed in against the frame and permit of pushing in, after which the tongue 5 snaps into notch 6 in the boundary wall 2 and locks the frame 1. Of course, the spring 4 with notches 3 and 6 shown on the drawing can be replaced with other devices operating in a similar manner.

After the frame has been fixed a binding liquid may be poured into channels between the frame and the boundary wall, formed by grooves in the two latter or in one of them, which channels may communicate with notches for housing the spring stops. These channels may occupy the whole or a larger or smaller portion of the circumference of the frame. In the frame 1 are made small notches 7 in which a portion of the binding liquid may enter in order to maintain the tightness when the liquid has stiffened.

In the manner stated and with the arrangement indicated one may rapidly, conveniently and securely fasten the frames and get a good binding and tightening between them and the boundary wall of the window or door opening, as the case may be.

What I claim is:

1. A device of the character described, comprising in combination, a wall having an opening therein, a frame adapted to fit in said opening, said frame and wall having depressions adapted to be brought into alinement when the frame is in position in the opening, and a resilient member distortable into engagement with the two end walls of one of said depressions thereby to retain it in the depression and having a portion extending into the other depression thereby to lock the frame in said wall.

2. A device of the character described, comprising in combination, a wall having an opening therein, a frame adapted to fit in said opening, said frame and wall having depressions adapted to be brought into alinement when the frame is in position in the opening, and a resilient member distortable into engagement with the two end walls of

one of said depressions thereby to retain it in the depression, said resilient member having a portion thereof punched out therefrom to form a tongue adapted to extend into the other depression thereby to lock the frame in said wall.

3. A locking member for window frames, comprising a body formed of spring metal and having its central portion punched out therefrom in parallelism with its side edges and one of its end edges thereby to form a tongue adapted to extend out of the plane of the body when the latter is distorted.

In testimony whereof I have signed my name to this specification.

VALTER KONSTANTIN HULTIN.