

J. MAYR.  
 DOUBLE SLIDING SASH WINDOW.  
 APPLICATION FILED OCT. 9, 1909.

961,726.

Patented June 14, 1910.

Fig. 1

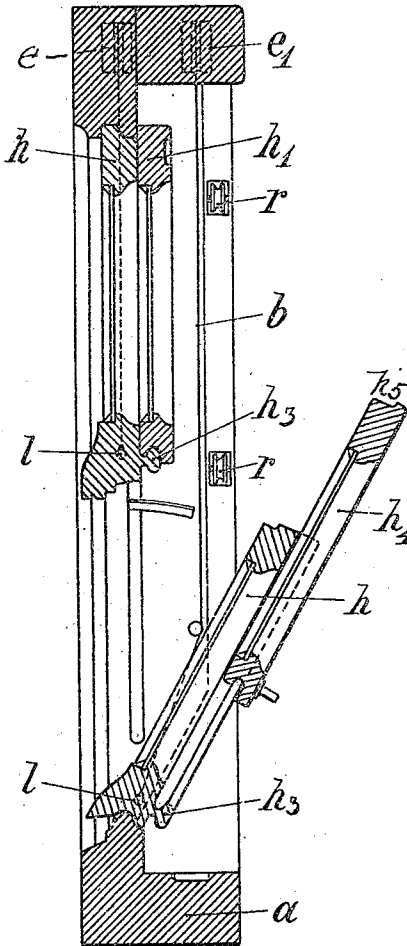


Fig. 3

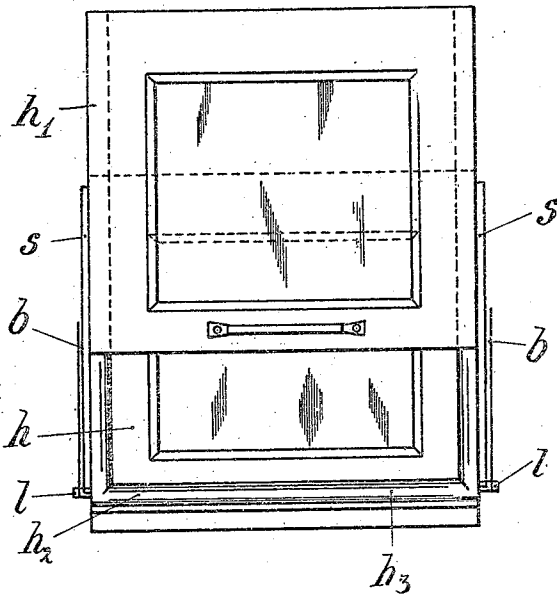
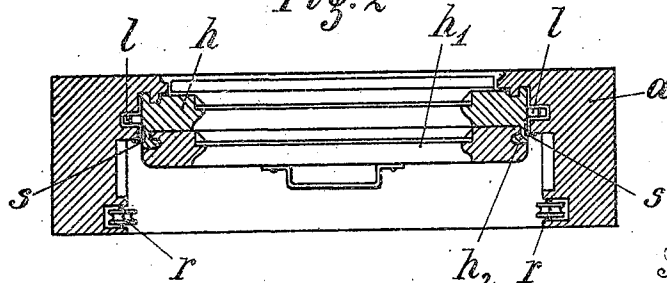


Fig. 2



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHANN MAYR, OF DRÖSSLING, POST SEEFELD, GERMANY.

## DOUBLE-SLIDING-SASH WINDOW.

961,726.

Specification of Letters Patent. Patented June 14, 1910.

Application filed October 9, 1909. Serial No. 521,869.

To all whom it may concern:

Be it known that I, JOHANN MAYR, a subject of the German Emperor, and residing at Drössling, Post Seefeld, Bavaria, German Empire, have invented certain new and useful Improvements in Double-Sliding-Sash Windows, of which the following is a specification.

My invention relates to an improved double sliding sash window, which is of particularly strong construction and whose joints are thoroughly tight.

According to my invention each sash of the inside set on three sides makes a tongue and groove joint with the members of the outer set of sash, whereby the inner set is extremely firmly held and warping of the two sets of sash prevented.

A practical embodiment of the invention is illustrated in the accompanying drawing, in which—

Figure 1 is a vertical section, the two lower sash members being shown tilted inward, with the inner one of said lower sashes partially drawn up on the outer one. Fig. 2 is a horizontal section. Fig. 3 is a front elevation of the two lower sash members in the same position relatively to each other as that shown in Fig. 1, looking at the inside.

The outer sashes  $h$ ,  $h$ , of both the upper and lower sets slide in the frame  $a$ ,  $b$  being the cords, running over spring pulleys  $e'$ ,  $l$  laterally projecting pins,  $s$  lateral rails, and  $r$  rollers on the casings. These sashes  $h$ ,  $h$  are furnished on each stile with a rounded tongue or bead  $h^2$  and also on the bottom rail with a rounded tongue or bead  $h^3$ . The inner sashes  $h'$ ,  $h^4$  of both the upper and lower sets are correspondingly grooved on each stile and on each bottom rail, to engage the upper sides of the said beads  $h^3$ , whereby the two sets of sashes are united with capability of sliding on each other, and of forming an air-tight joint when closed. The top rail of the lower inner sash is pro-

vided with a groove  $h^5$  which engages the under side of the bead  $h^2$  on the bottom rail of the top outer sash, in which manner a weather-tight joint is made at this point. This latter bead  $h^3$ , moreover, on the removal of the inner sash constitutes a convenient handle for sliding the sash in its frame, so that a special metal handle for the purpose is unnecessary.

When the two sets of sashes have to be separated in order that the glass may be cleaned, it is sufficient in the case of the lower sash members to tilt the same inward and draw out the inner sash; while in the case of the upper sash members the outer sash must be pulled down, whereupon the inner sash can be readily pulled out.

Having thus described my invention, I declare that what I claim as new and desire to secure by Letters Patent of the United States is—

In a double sliding sash window, the combination with a frame, of an upper and a lower outer sash slidable in the frame, and an upper and a lower inner sash slidable on the outer sashes, the stiles of the outer and inner sashes being provided with interlocking tongue and groove joints on their edges to permit of their sliding upon each other, and the lower rails of the outer sashes being provided on their inner faces with handle-shaped tongues, the lower rails of the inner sashes being provided with grooves to fit over the upper sides of said handle-shaped tongues and the upper rail of the inner sash being provided with a groove to fit upon the lower side of the handle-shaped tongue of the upper outer sash, all substantially as described.

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

JOHANN MAYR.

Witnesses:

LOUIS I. MUELLER,  
MATHILDE K. HELD.