D. McG. HENRY.

WINDOW SCREEN.

APPLICATION FILED DEC. 12, 1908.

931,421. Patented Aug. 17, 1909.

Fig. 1.

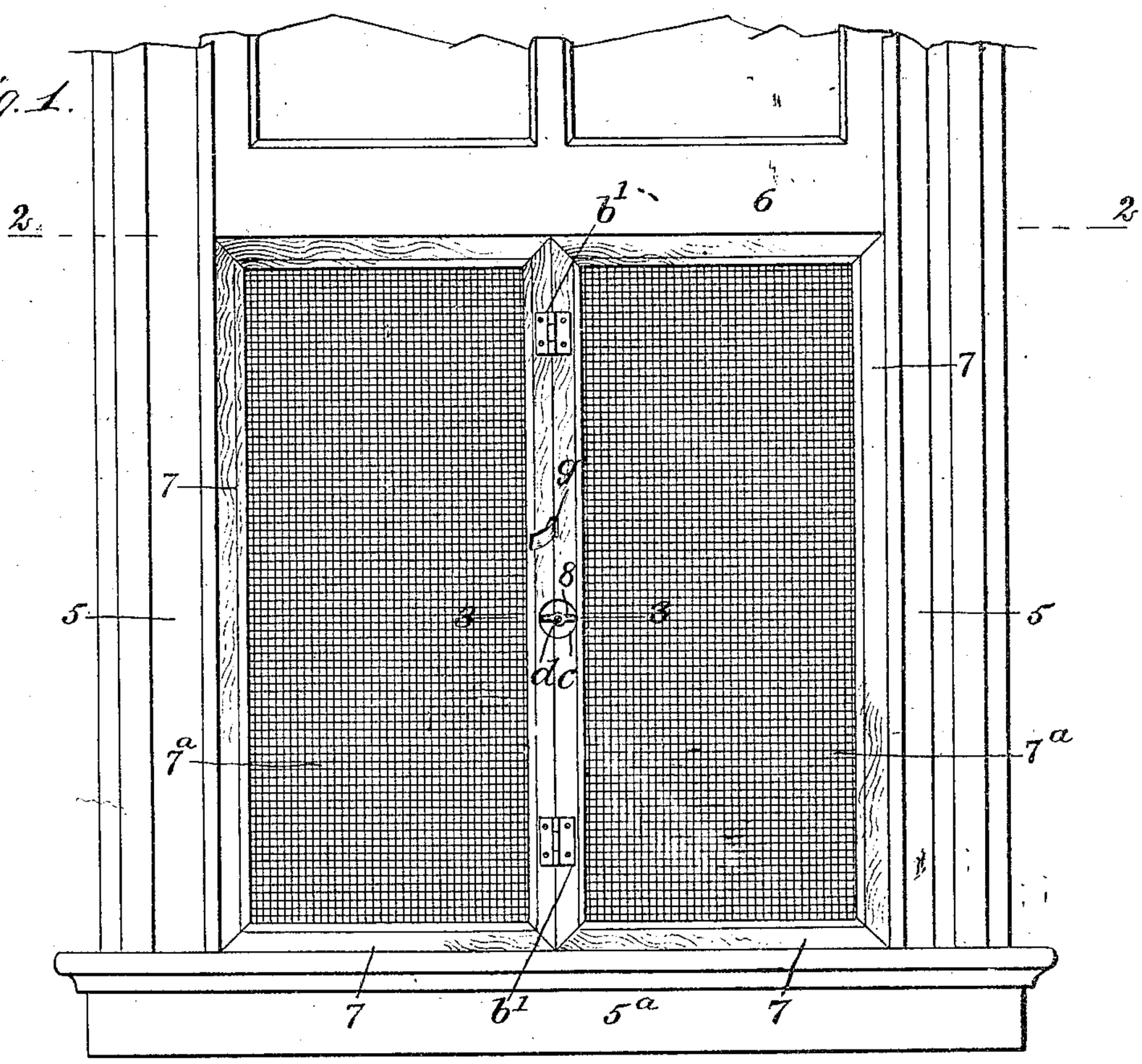


Fig. 2.

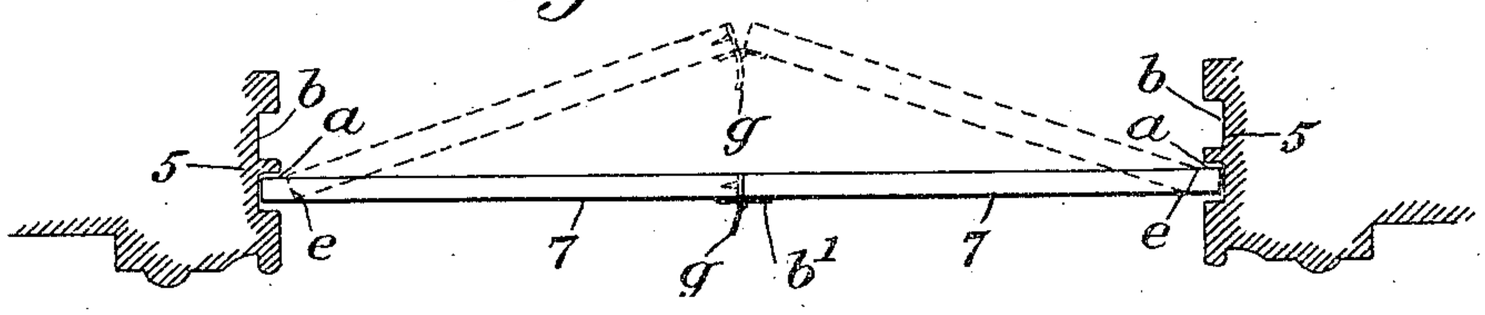
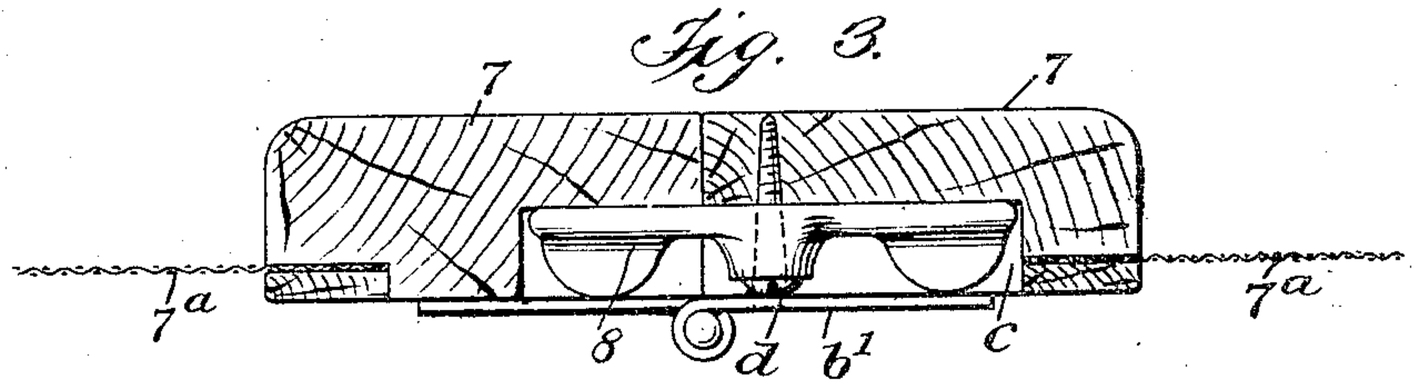


Fig. 3.



WITNESSES

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DANIEL McGOVERN HENRY, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO WILKIN M. TOWLE, OF SOUTH BROOKLYN, CLEVELAND, OHIO.

WINDOW-SCREEN.

No. 931,421. Specification of Letters Patent. Patented Aug. 17, 1909.

Application filed December 12, 1908. Serial No. 467,165.

To all whom it may concern:

Be it known that I, DANIEL MCGOVERN HENRY, a citizen of the United States, and a resident of South Brooklyn, city of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Window-Screen, of which the following is a full, clear, and exact description.

This invention relates to a class of window screens in which two half sections for the screen are provided, which are hinged together at two vertical edges thereof and at their opposite edges enter grooves in the window casement when the screen sections are fully diverged so as to occupy the same vertical plane.

The invention consists in novel details of construction, combined with a window screen of the character specified, which afford convenient and reliable means for securing the fully extended screen in two opposite grooves in the stiles of the window casement, and permit the convenient removal thereof when this is desired.

The invention further consists in the specific novel construction of co-acting details, as is hereinafter described and defined in the appended claim.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an inner side view of a window casement in part, showing the lower sash raised and the improved window screen secured in place within opposite vertical grooves in the side stiles of the window casement; Fig. 2 is a sectional plan view on the line 2—2 of Fig. 1, of the stiles for a window casement and an upper edge view of the improved window screen, shown locked within the grooves in the casement stiles by full lines and adjusted for removal by dotted lines; and Fig. 3 is an enlarged transverse sectional view on the line 3—3 of Fig. 1, showing the adjacent side bars of the frame of the window screen in closed condition and secured together.

In the drawings, the window casement shown to illustrate the application of the improved screen to a window, is of usual form, mainly consisting of two vertical stiles 5, 5, spaced apart by a sill 5^a and a cap piece, not shown.

The stiles 5 are vertically grooved, as shown at *a*, *b*, for the reception of the lower and the upper window sashes. The lower sash 6, shown elevated, when closed occupies the opposite grooves *a* that are nearest the inner side of the window casement, and said grooves are adapted to receive the side edges of a window screen of the improved construction as will be explained.

A screen having features of the improvement, consists of two similar sections, each section comprising a rectangular border frame 7 that supports screen wire cloth 7^a stretched taut and secured thereon by any suitable means, and the thickness of the similar frames 7 is such, that a side edge of each frame section may be readily introduced into an appropriate groove *a*.

The width of the pair of screen frames 7 is nearly equal to that between the bottom surfaces of the grooves *a*, *a*, in the casement stiles 5, 5, when said frames have the corresponding side edges thereof impinged upon each other.

To adapt the screen sections for coöperative service, two side edges thereof are rockably secured together by a pair of hinges *b'*, *b'*, which are respectively attached to similar sides of the border frames 7 respectively near the upper and lower transverse edges thereof by screws, as is shown in Fig. 1. In the sides of the frame members that are hinged together, and that are faced toward an operator within the room having the window, when the screen is placed in the window casement, a recess *c* is formed which is flat on the bottom and preferably has a circular side wall.

As shown in Fig. 3, the recess *c* is formed partially in the side bar of each frame section 7, the center thereof being located in one portion of said recess that is of greater width than the remaining portion, and at said central point, a turn button 8 is pivoted, as shown at *d* in said view.

In applying the window screen to an opened window, the two frame sections 7 are flexed so as to bow outwardly, as shown by dotted lines in Fig. 2. This bowed adjustment of the screen sections will reduce the width between the outer side edges of the frame sections 7, as is represented at *e* in Fig. 2, which will permit the free location of said side edges opposite the respective grooves *a*. Upon the inner surface of the side bar of one frame section 7, that is hinged to the similar

side bar of the other frame section, a grip piece *g* of any suitable form and material is secured. Now, by taking hold of this projection or grip piece with one hand, and holding the screen frames while bowed in proper position so that their outer side edges are disposed opposite the grooves *a*, an inward pull on the grip piece will rock the screen frames on their hinges and render them level. This adjustment of the screen frames 7 will project their outer edges into the grooves *a*, and the screen frames may be firmly secured against flexure of their hinges *b'* by turning the pivoted button 8, across the impinged side bars of the frame sections 7 into a horizontal position, so that it bears upon each frame section. For a removal of the window screen, the turn button 8 is turned into a vertical position, and thus is removed from the frame section at the left in Fig. 3; the hinges *b'* may now be flexed, so as to bow the frame sections 7 outwardly, and thus detach them from the window casement.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A window screen, comprising two rectangular frames, reticulated coverings for said frames, hinges secured on the adjacent side members of the frames, and a turn button pivoted on one side member of one frame seated in a recess formed in both side members, and thus adapted for holding the frames disposed in the same plane when turned crosswise of both frame members.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL McGOVERN HENRY.

Witnesses:

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