G. W. STEIN.

WINDOW SCREEN.

APPLICATION FILED JAN. 26, 1911.

1,018,215.

Patented Feb. 20, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

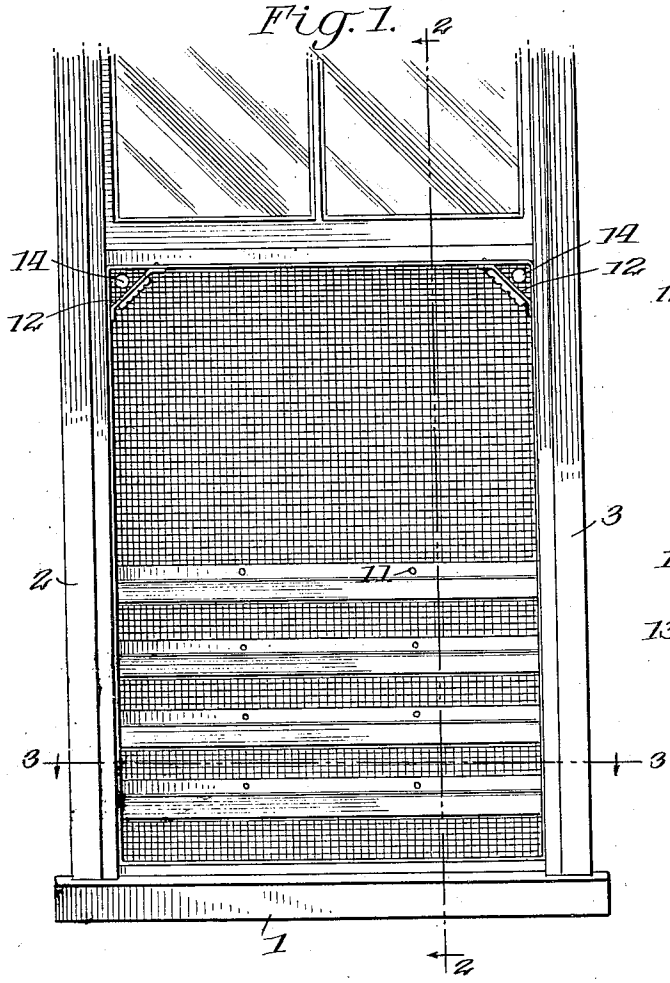


Fig. 2.

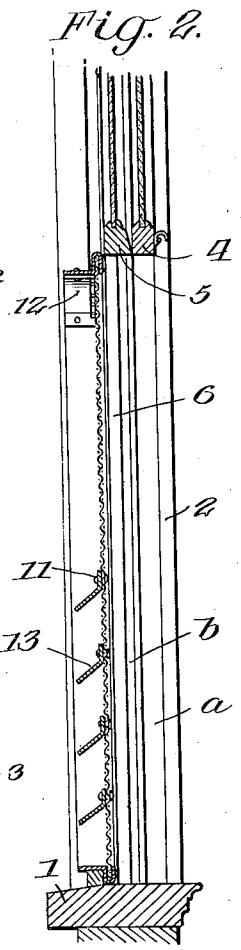
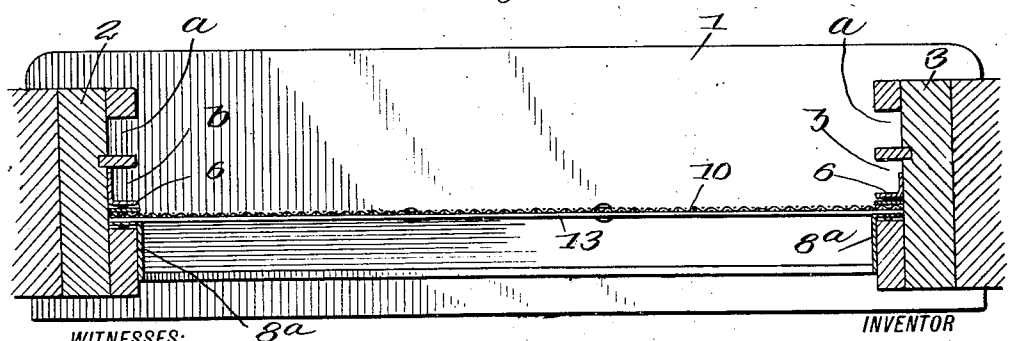


Fig. 3.



WITNESSES:

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2 SHEETS—SHEET 2.

Fig. 6.

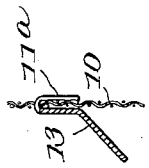


Fig. 8.

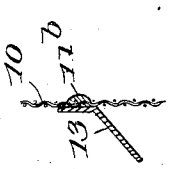


Fig. 5

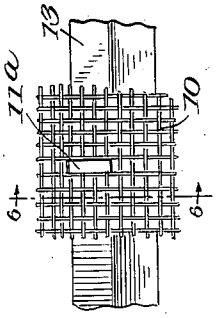


Fig. 7.

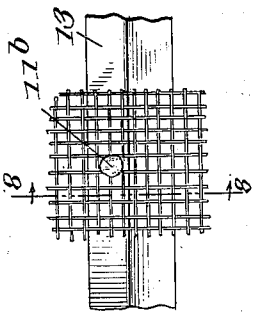
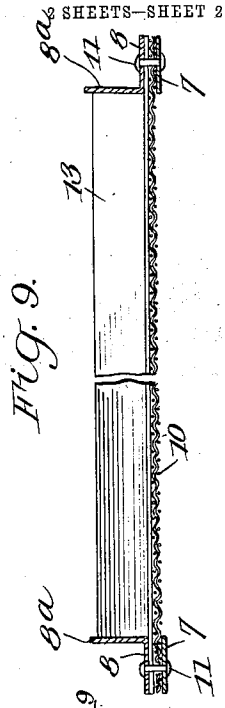


Fig. 9.



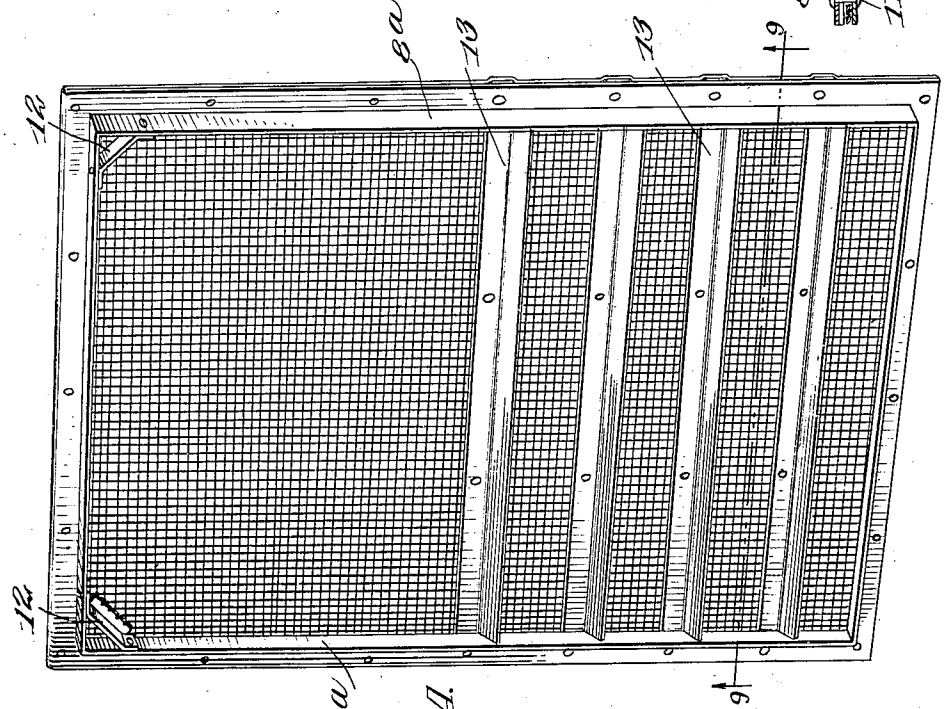


Fig. 4.

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UNITED STATES PATENT OFFICE.

GEORGE W. STEIN, OF CHICAGO, ILLINOIS.

WINDOW-SCREEN.

1,018,215. Specification of Letters Patent. Patented Feb. 20, 1912.

Application filed January 26, 1911. Serial No. 604,789.

To all whom it may concern:

Be it known that I, GEORGE W. STEIN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have made certain new and useful Improvements in Window-Screens, of which the following is a specification.

My invention relates to improvements in window screen constructions, and it consists in the combinations, constructions and arrangements herein described and claimed.

An object of my invention is to provide a screen which will permit the window sash to be raised during a rain storm, without the danger of the rain beating in.

A further object of my invention is to provide a screen which partakes of the nature of a blind so as to keep out the glaring sun light, but which will, nevertheless, permit air to pass through as freely as with the ordinary screen.

A further object of my invention is to provide a slidable screen which may be readily inserted or removed.

A further object of my invention is to provide a combined window screen and fly escape.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming part of this application in which—

Figure 1 is an exterior face view showing a window provided with my improved screen, Fig. 2 is a section along the line 2—2 of Fig. 1, Fig. 3 is an enlarged section along the line 3—3 of Fig. 1, Fig. 4 is a perspective view of the screen proper, Fig. 5 is a detail view showing a modified form of means for attaching the cross wire netting, Fig. 6 is a section along the line 6—6 of Fig. 5, Fig. 7 is a view similar to Fig. 5 showing a further modification of the attaching means, Fig. 8 is a section along the line 8—8 of Fig. 7, and Fig. 9 is a section along the line 9—9 of Fig. 4, looking in the direction of the arrows.

Referring now especially to Figs. 1, 2 and 3 I have shown therein a window provided with the usual sill 1 and the casing sides 2 and 3. The sides of the casing are provided with the usual slide-ways *a* and *b*, the former being the slide-way for the lower sash 4 and the latter for the upper sash 5. Within the run-ways *b* on each side of the window, I secure the L-shaped strips 6 (see Fig. 3) which are preferably made of some strong metal such as steel.

The screen proper is designed to slide in the run-way between the projecting spring strip 6 and the outer side of the run-way *b*, as shown in Fig. 3. The screen proper is shown in Fig. 4. It consists of an inner rectangular metallic frame portion 7 and an outer frame portion 8. The outer frame portion is provided with flanges 8^a, which extend at right angles as shown in Fig. 9. The wire netting 10 is secured between these frame portions by means of rivets 11. The outer flanges 8^a are braced at their upper corners by the braces 12.

On the lower half of the screen, I arrange a series of transverse bars 13. A description of one of these bars will suffice since they are all alike. The bars 13 consist of plates bent as shown in Fig. 2. One of the portions is arranged to be secured to the wire netting and the other extends downwardly at an anglge thereto. The means for securing the bars to the netting may consist of rivets 11, as shown in Figs. 1 and 2, hooks 11^a, as shown in Figs. 5 and 6, or the netting may be secured to the bars by solder 11^b, as shown in Figs. 7 and 8.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The screen, as shown in Fig. 4, is inserted between the spring members 6 and the sides of the run-way *b*, as stated and may be raised or lowered at will. The flanges 8^a abut against the window casing sides 2 and 3, as shown in Fig. 3. As shown in Figs. 1 and 4, the downwardly inclined flanges of the bars 13 will tend to keep the rain from entering through the screen even if the windows are open. It will not, however, shut out the air, which will pass around the bars and enter as usual. The screen to a certain extent will serve the purpose of a blind, because a good portion of the light will be intercepted by the downwardly projecting portion of the bars 13, so that one can sit near the screen without being directly in the sun light.

In Fig. 1, it will be noticed that I have provided two openings 14 at the top of the screen. These I intend as fly escapes. It is well known that flies tend to congregate on windows and will crawl to the corners of the

windows. With an opening at the corner they will tend to crawl out and once being outside will fly away. Thus the room is cleared of flies or other insects without opening the screen far enough to permit any to enter, since the flies are not apt to enter from the outside. Moreover the brace member 12 serves as a barrier to draw the flies away from the opening 14 if they should crawl up the outside of the screen. The metal strip 6 may extend far enough to engage the sides of the sash and they will then act as springs to prevent the rattling of the sash.

I claim:

1. In a window screen construction, a rectangular frame, a strip of wire netting carried by said frame, a series of cross bars, each of said cross bars having a portion parallel with and arranged to abut the netting and being provided with an outwardly and downwardly inclined portion, and means for securing the parallel portion of the bars to the netting.

2. In a window screen construction, a rectangular frame, wire netting carried by said frame, a series of parallel horizontal cross bars, each of said cross bars having a portion arranged to abut the netting and being provided with an outwardly and downwardly inclined integral portion, said parallel horizontal bars being permanently secured to said netting and forming stiffening members for the latter.

GEORGE W. STEIN.

Witnesses:

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HERMAN NEUMANN.