

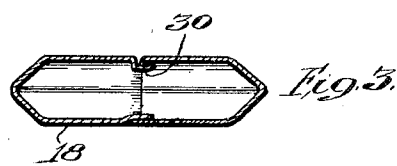
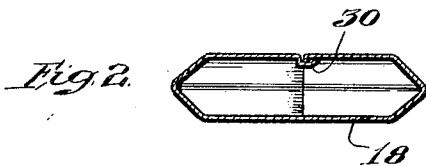
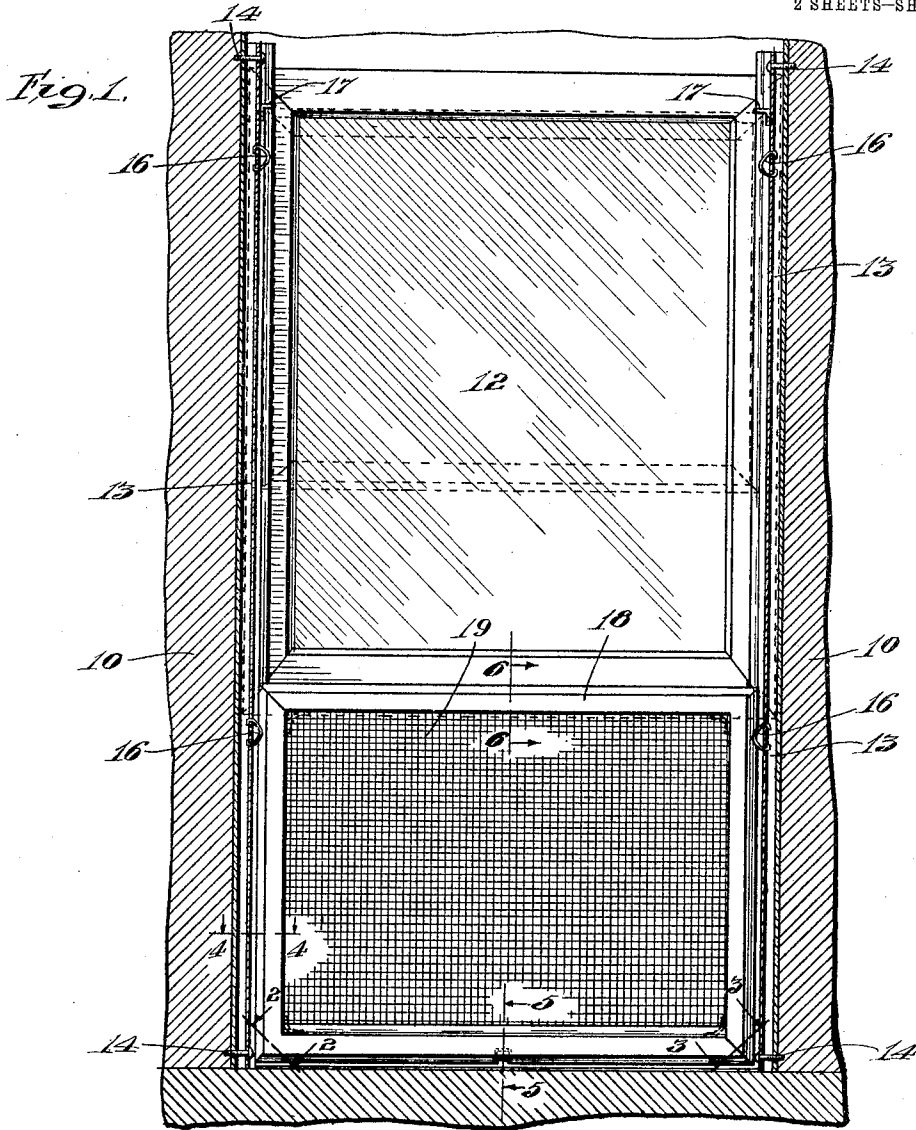
F. AHLSTROM & J. F. OELERICH.
WINDOW SCREEN.

APPLICATION FILED SEPT. 29, 1913.

1,102,995.

Patented July 7, 1914.

2 SHEETS-SHEET 1.



Witnesses:
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T. Colson.

Inventors:
Frederick Ahlstrom.
Joseph F. Oelerich.
By Joshua H. Jones
Their Attorney.

F. AHLSTROM & J. F. OELERICH.

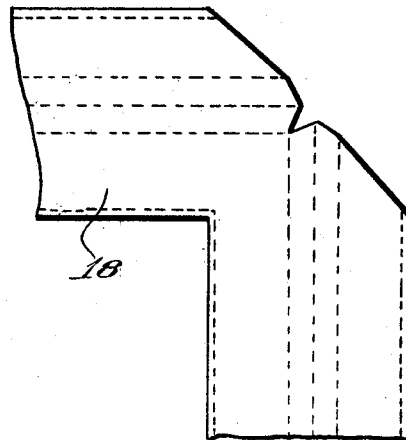
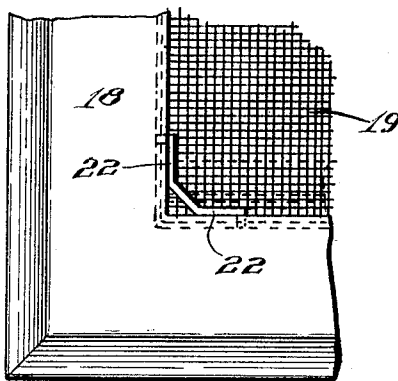
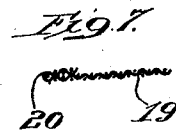
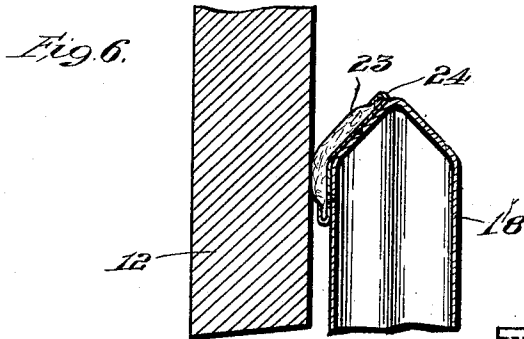
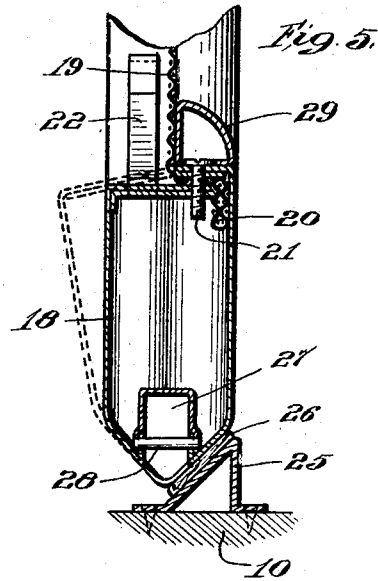
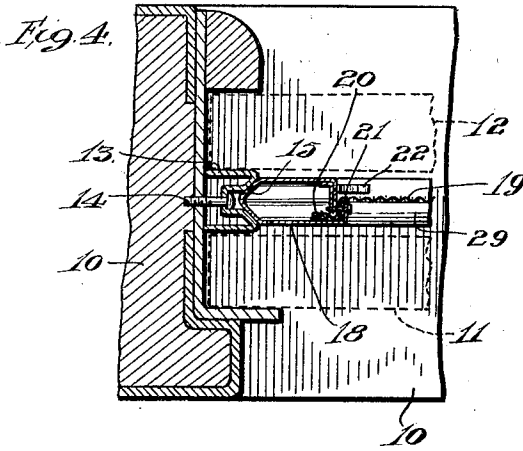
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2 SHEETS—SHEET 2.



Witnesses:

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Fig. 8.

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UNITED STATES PATENT OFFICE.

FREDERICK AHLSTROM AND JOSEPH F. OELERICH, OF CHICAGO, ILLINOIS.

WINDOW-SCREEN.

1,102,995.

Specification of Letters Patent.

Patented July 7, 1914.

Application filed September 29, 1913. Serial No. 792,316.

To all whom it may concern:

Be it known that we, FREDERICK AHLSTROM and JOSEPH F. OELERICH, citizens of the United States, and residents of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

Our invention relates to screens and more particularly to screens for use in railway trains and the like.

The object of this improvement is to provide a simple and effective screen which is mounted in the parting strip between the two conventional window sashes in railway cars and the like, said screen being adapted to be moved upwardly out of view between the window sashes when not in use, and brought downwardly into operative position when desired for use.

A further object is to provide means for resiliently locking the screen in both operative and inoperative positions.

A still further object is to provide a shield on the lower inner edge of the frame to protect the screen fabric in lowering the screen to operative position.

Other objects will appear hereinafter.

With these objects in view our invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of our invention, and in which,

Figure 1 is a vertical section of a window casing showing one window sash mounted therein and equipped with a screen embodying our invention, Figs. 2, 3, 4, 5 and 6 are enlarged sections taken on lines 2-2, 3-3, 4-4, 5-5 and 6-6 respectively of Fig. 1, Fig. 7 is an enlarged fragmental section of an edge of the screen fabric used in the construction, Fig. 8 is an enlarged fragmental side view of a corner of the screen, and Fig. 9 is an enlarged fragmental view of a corner of the blank used in forming the screen frame.

The preferred form of construction as illustrated in the accompanying drawings comprises a window casing 10 adapted for the mounting of window sashes 11 and 12 having a parting strip 13 secured to the casing 10 between said window sashes. The

parting strips 13 are secured to the casing 10 by means of screws 14. The outer faces 15 of parting strips 13 are preferably angular in cross section forming guide ways in which is mounted the screen. Near the top of parting strips 13 and near the central portion thereof are curved leaf springs 16 adapted to engage recesses near the upper vertical edges of the screen to maintain the screen in operative position, as indicated by full lines in Fig. 1 and in inoperative position, as indicated by dotted lines of the screen in this figure. Near the top of parting strips 13 are stops 17 adapted to limit the upward movement of the screen when in inoperative position.

The screen frame is made up of two blanks 18 cut out and struck up from sheet metal each being angular or L-shaped and mitered to fit together at the ends thereof forming a substantially rectangular screen frame. The angular portions of each blank 18 are cut substantially as indicated in Fig. 9 so that when the blanks are bent or folded to their finished form the outer edge of the frame will present an angular surface in cross section, substantially as shown. The inner edge of the frame when bent to this finished form provides a means for holding the screen fabric by the overlapping edges of the blanks 18. The longitudinal edge portions of said blanks 18 are rebent so that the inner edge of the finished frame will be of a double thickness as indicated. This gives more rigidity to the frame and provides a more substantial means for locking the screen fabric 19 in position.

The screen fabric 19 is rebent at its edge portions and such rebent portions are soldered or otherwise secured rigidly so that when placed in position in the screen frame the rebent edge portions 20 thereof will prevent the screen fabric from slipping or becoming loose in the frame. To further secure the screen fabric between the overlapped edge portions of the frame, screws 21 are threaded through overlapping portions of said edge and the screen fabric, as clearly illustrated in Fig. 5. At the corners of the frame on the side designed for the outside of the frame are provided braces 22 angularly formed, as clearly illustrated in Fig. 8. Such braces are soldered or otherwise secured to the frame and adapted to give rigidity thereto. Carried at the up-

per edge of the frame is a felt weather strip 23 having its edges clamped in a holder 24 which is secured to the frame substantially as indicated in Fig. 6. When in operative condition the outer edge of the weather strip 23 engages the lower edge of window sash 11 preventing the passage of air or dust between the upper edge of the frame and the window sash. At the lower side of the window casing 10 is secured an angular metallic strip 25 carrying a weather strip 26 formed of felt or other suitable substance adapted to engage the lower edge of the screen frame when in operative condition preventing air or dust to pass between the lower edge of the screen frame and the window casing, as will be readily understood.

Formed in the lower edge of the window frame is a recess 27 struck up in the blank 18 substantially as indicated in Figs. 1 and 5. Arranged horizontally in the recess 27 is a pin 28 by means of which the screen frame is engaged by a suitable tool to move said frame from its inoperative to its operative position in the casing. On the inner edge of the screen frame on the side designed for use as the inner side of the frame is a curved strip 29 secured thereto by means of solder, welding or the like and adapted to present a surface on which a tool or instrument would slip off, should one be applied thereto in moving the frame downwardly to operative position. In frames where the inner edge is horizontal the screen fabric is often injured by a tool being thrust therethrough in the operation of lowering the screen. We have therefore provided a surface which prevents the use of a tool when applied thereto, to lower the screen and provided a pin in a recess in the bottom of the frame for engagement in lowering the screen to operative position.

The metal from which the blanks 18 are made is of a yieldable quality so that upon removing screws 21, the same may be bent so that the screen fabric will be free therefrom if it is desired to replace the fabric with new as will be readily understood. The corner portions of the frame when completed are provided with overlapping edges, as indicated at 30 in Figs. 2 and 3 in order to form rigid joints at the corners of the frame.

While we have illustrated and described the preferred form of construction for carrying our invention into effect, this is capable of variation and modification without departing from the spirit of the invention. We, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail ourselves of such varia-

tions and modifications as come within the scope of the appended claims.

Having described our invention what we claim as new and desire to secure by Letters Patent is:

1. A device of the kind described comprising a screen frame made up of sheet metal sections secured together at adjacent ends, said sections being bent to substantially rectangular form in cross section with their edge portions overlapped at the inner side of the frame; and a screen fabric stretched across said frame with its edge portions held between said overlapping edge portions, the edge portions of said screen fabric being rebent to prevent slipping in the frame, substantially as described.

2. A device of the kind described comprising two angular sections of sheet metal secured together at adjacent ends forming a rectangular frame, said sections being substantially rectangular in cross section with their longitudinal edges overlapped; and a screen fabric in said frame with its edge portions between said overlapping edges, the edge portions of said screen fabric being rebent and such rebent portions soldered together, substantially as described.

3. A device of the kind described comprising a screen frame formed of sheet metal sections secured together, the lateral edges of each section being overlapped; and a screen fabric in said frame with its edge portions between the overlapping edges of said frame sections, the edge portions of said screen fabric being rebent and soldered thereby locking them between said overlapping edges of the frame sections, substantially as described.

4. A device of the kind described comprising two angular sections of sheet metal secured together at adjacent ends forming a rectangular frame, said sections being substantially rectangular in cross section with their longitudinal edges overlapped; a screen fabric in said frame with its edge portions held between said overlapping edges, the edges of said screen fabric being rebent and soldered to prevent slipping in said overlapping portions of the frame; and screws threaded through said overlapping edges and screen fabric, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

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JOSEPH F. OELERICH.

Witnesses:

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HELEN F. LILLIS.