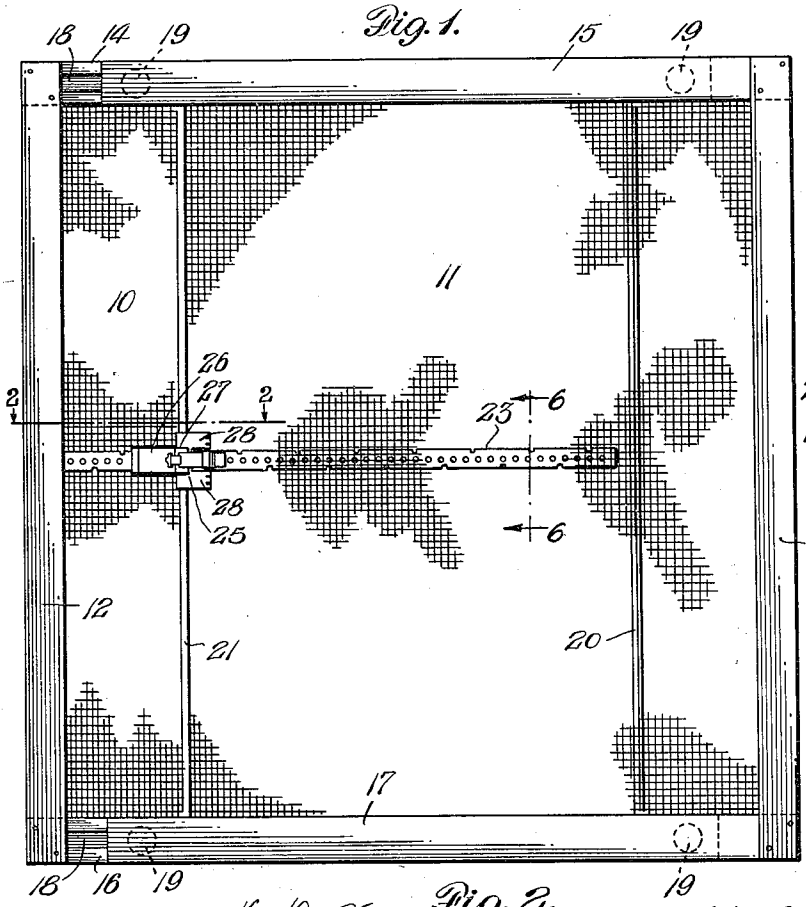
Sept. 3, 1935. C. T. JONES 2,013,494

WINDOW SCREEN

Filed Feb. 11, 1935

Fig. 1.



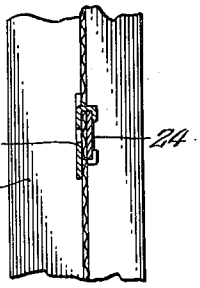
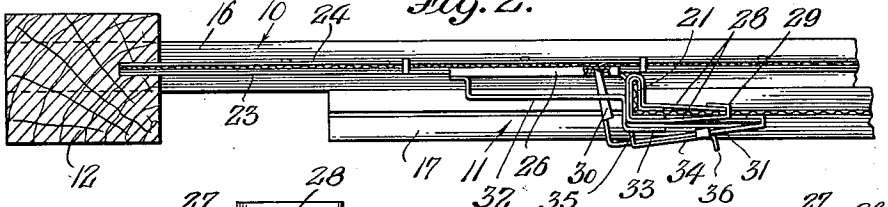


Fig. 6

Fig. 2.



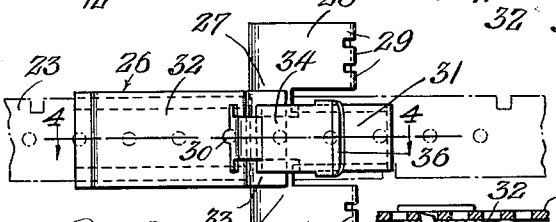


Fig. 3.

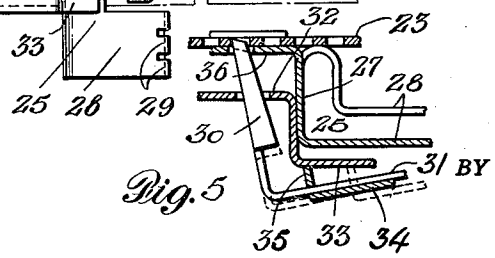


Fig. 5

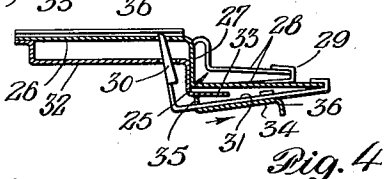


Fig. 4

INVENTOR
Charles T. Jones
BY
A. M. Dunn
ATTORNEY

Patented Sept. 3, 1935

2,013,494

UNITED STATES PATENT OFFICE

2,013,494

WINDOW SCREEN

Charles T. Jones, Kinston, N. C.

Application February 11, 1935, Serial No. 6,103

5 Claims. (Cl. 156—38)

This invention relates to window screens and particularly to that type commonly called "extension screens", which are adapted for insertion in window frames of various widths.

An object of the invention is the installation of extension screens in such a manner as to permit free movement of the sections in either direction, namely extended and contracted from the inner side, and to prevent retraction or the moving together of the screen sections from the opposite or outer side of the window, after the screen has been properly adjusted and positioned between the window casements.

A further object of the invention is the provision of an adjustable window screen having means to strengthen the same along its central portion, and to prevent bowing or springing of the two sections, which would form an undesirable space therebetween.

This application is an improvement over my prior Patent No. 1,981,319, issued November 20, 1934, and embodies differences and improvements which, when combined with the structures illustrated and claimed in the aforesaid prior patent, will constitute a much improved article of manufacture.

With the foregoing objects in mind, together with others which will appear as the description proceeds, the invention resides in the novel combination and arrangement of parts, all as will be described more fully hereinafter, and claimed and illustrated in the accompanying drawing, in which:

Fig. 1 is a plan view of the double screen assembly.

Fig. 2 is an enlarged cross-section taken on the line 2—2 of Fig. 1.

Fig. 3 is a top plan view of the clamping and locking members.

Fig. 4 is a cross-section taken on the line 4—4 of Fig. 3.

Fig. 5 is an enlarged fragmentary cross-section showing the locking detent in operative position, in full lines, and released in dotted lines.

Fig. 6 is an enlarged cross-section on the line 6—6 of Fig. 1.

Referring now more particularly to the accompanying drawing forming a part of this invention, in which like reference characters indicate like parts throughout the several views, an extension window screen is shown, comprising two slidable sections 10 and 11, each section being provided with side members 12 and 13, top members 14 and 15, and bottom members 16 and 17 respectively. The top member 14 and the bottom member 16 of the section 10 are provided with longitudinally-extending, centrally-positioned slots 18. These slots 18 are undercut for the purpose of retaining anti-friction devices 19, carried by the top and bottom members 15 and 17 of the section 11. The screen sections 10 and 11 are provided adjacent their inner ends with metallic strengthening bars 20 and 21, secured to the top and bottom members within grooves wherein is secured the wire screen mesh.

Inserted within a groove on the inner side of the end member 12, I position a perforated metal bar 23 notched along its upper and lower edges, forming prongs, said prongs being inserted through the wire screen mesh, and, for the purpose of preventing the prongs from tearing the mesh, I provide a metal bar 24 (of lesser width than that of the bar 23), which is placed on the opposite side of the said mesh, and between the said prongs. Said prongs are then bent over and clamp the wire mesh between the bars 23 and 24, thereby fastening the said bar 23 to the screen section 10.

For the purpose of clamping the two screen sections 10 and 11 together I provide a clip 25 equipped with a portion 26 (of C-shape in cross-section), which slidably engages the perforated bar 23, and provided with a body portion 27 and horizontally projecting fingers 28, one of which is equipped with a plurality of spur fingers 29, which are extended through the screen meshes and then bent backwardly, whereby to provide means for securely retaining the clip 25 in position, one side portion of the clip 25 being extended over the strengthening bar 21, and rigidly clamped in such position.

A locking dog or detent 30, having a body portion 31 of spring steel, is securely fastened to the slidable clip 25, said detent passing through an opening formed in the portion 26, and registering with the perforations in the bar 23, thereby operating to lock the two sections in their proper adjusted positions. It has been found advisable to form the detent 30 with a beveled web, so as to allow the sections to be adjusted to extended positions without releasing the same. A member 32 is soldered or fastened suitably to the portions 26 and 27 of the clip 25, and terminates with an extended portion 33, for the purpose of acting as a cam for releasing the detent 30 which, in turn, has slidably mounted thereon a member 34, having an inturned projection 35, engageable with the extended portion 33, and a finger-engaging member 36. It will be readily seen that any movement of the member 34 in the direction

of the arrow will bring the detent 30 out of engagement with the perforated bar 23.

From the foregoing description of the device, and its method of operation, it will be obvious that, when the screen sections 10 and 11 are relatively moved or adjusted, the anti-friction members 19, located in the grooves or slots, will eliminate any binding or sticking action, and with the locking detent 30 working and engaging with the perforated bar 23, will lock the two sections against retraction from the outside and also from the inside, unless the locking dog is released, and will permit extension of the section. It will also be apparent that the provision of the bars 20, 21 and 23 will not only lend rigidity to the entire screen assembly, but will greatly facilitate the operation of inserting the screen sections within the window casements.

Modifications of the structure herein described may be suggested to those skilled in the art to which the invention pertains, but it is to be understood that my invention includes all embodiments falling fairly within the scope of the appended claims.

I claim:

1. A window screen installation including two relatively slidable screen sections, a centrally disposed bar secured directly to the screen meshes of one section, and a locking detent secured to the second section and engageable with said centrally disposed bar.

2. A window screen assembly including two relatively slidable screen sections, a bar extending transversely of one section, and provided with means for securing it to the screen mesh, a rigid rod carried by the top and bottom of each section, a metallic clip secured to the other section, and provided with a housing embracing said bar, and a locking detent carried by said clip and engageable with said transversely extending bar.

3. A window screen installation including two relatively slidable screen sections, a bar extending transversely of one section and secured to the screen meshes by spur clips formed thereon and adapted to be extended through the interstices in the mesh and be pressed around a second bar positioned on the opposite side of the screen mesh, whereby to retain said first named bar in operative position, a metal clip secured to the second screen section, and a manually-operable locking detent carried by said clip and engageable with said transversely extended bar.

4. A window screen installation including two relatively slidable screen sections, a centrally disposed bar secured directly to the screen meshes of one section, a metallic clip secured to the other section, a locking detent carried by said metallic clip and engageable with said centrally disposed bar, and a manually-operable releasing member slidably fastened to the locking detent.

5. A window screen installation including two relatively slidable screen sections, a centrally disposed perforated bar secured to the screen meshes of one section, a metallic clip secured to the other screen section and having slidable engagement with the perforated bar, and a manually-operable locking detent carried by said metallic clip, and adapted for engagement with said perforations of the centrally disposed perforated bar.

CHARLES T. JONES.