

S. J. DIXON.
 EXTENSIBLE WINDOW SCREEN.
 APPLICATION FILED MAY 13, 1911.

1,039,911.

Patented Oct. 1, 1912.

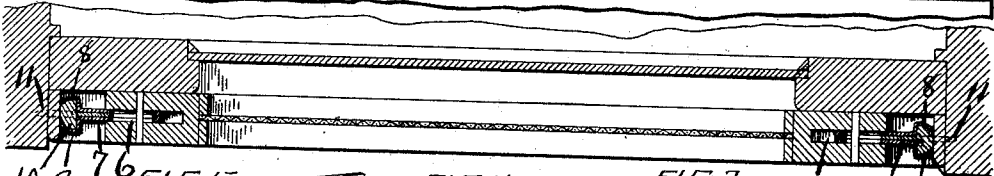
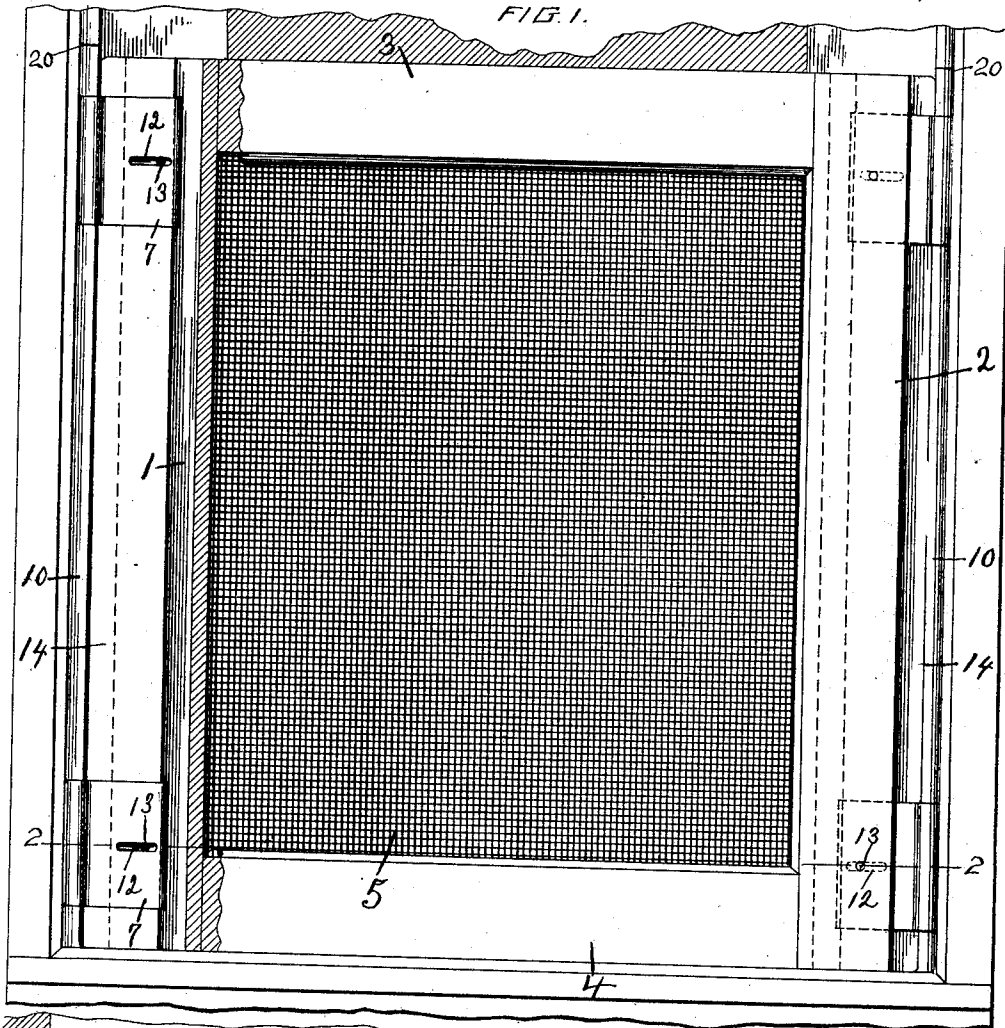
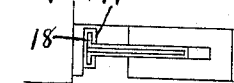


FIG. 5.



WITNESSES:
H. F. Kaye, FIG. 3.
Parker Cook.

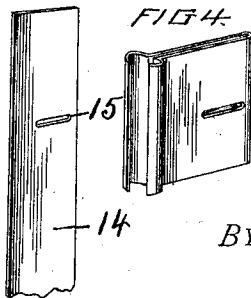


FIG. 4.

FIG. 2.

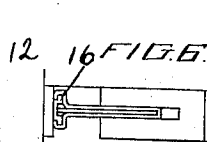


FIG. 6.

FIG. 7.



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EXTENSIBLE WINDOW-SCREEN.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SAMUEL J. DIXON, a citizen of the United States, residing at Littleton, in the county of Halifax, State of North Carolina, have invented certain new and useful Improvements in Extensible Window-Screens, of which the following is a description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to extensible window screens and has for its object to provide means by which a single window screen may be readily adjusted in width so as to fit windows of different width and will automatically operate to fit a window in which the width at different levels may differ to a substantial extent.

With this object in view my invention consists in the construction and combination of elements hereinafter described.

Referring to the drawings: Figure 1 is a front view of a window screen embodying my invention in place in a window frame; Fig. 2 is a horizontal sectional view taken on line 2—2 of Fig. 1; Fig. 3 is a perspective view of the metal strip; Fig. 4 is a perspective view of the preferred form of traveler; and Figs. 5, 6 and 7 are horizontal sectional views of modified forms of the traveler.

In the drawings, 1 and 2 are the stiles or side bars of a window screen here shown as formed of strips of wood suitably joined at their ends to the top bar 3 and bottom bar 4, also shown as formed of strips of wood, though if preferred the stile and top and bottom bar may be of metal either solid or bent up of sheet metal. These stiles and top and bottom bars form a frame of usual form to carry the netting 5 which is secured at its edges in any usual manner. From the outer edges of each of the stiles extends inward a longitudinal slit 6 preferably extending inward nearly to the inner edge of the stile. Into this slit 6 near the top and near the bottom of the stile extends the tongue 7 of a traveler which is provided at its outer end with a pair of recurved arms 8 and 9 which are adapted to inclose the edges of a guide rail 10 which is secured in any convenient manner as by screws 11 to the sides of the window frame. The travelers are each formed from a strip of sheet metal preferably somewhat over an inch wide which is bent at its middle until the two portions are close together, the end por-

tions being each bent outward and then bent inward so that the extreme ends are both directed inward and are separated a short distance. The curve of the arms 8 and 9 will correspond somewhat to the cross section of the guide rail 10 which may be conveniently formed from a half round metal rod preferably slightly flattened where it rests against the side of the window frame. The tongue 7 of the traveler is slotted as shown at 12 about midway between its upper and lower edges the slot extending parallel with the upper and lower edges from a point near its inner end to a point a short distance from the arms 8 and 9. The slot 12 is of just sufficient width to permit of the passage of a pin or nail 13 which is driven into the face of the stile. The traveler is thus held against removal but is permitted to move in or out a distance determined by the length of the slot.

Between the flat portions which form the tongue 7 is arranged a strip of metal 14 extending from top to bottom of the stile and slotted at 15, 15 for the passage of pins or nails 13, 13. As this strip is inclosed on its two sides and its rear edge by the portions of the travelers which form the tongues 7, it will be apparent that as the travelers move outward they will carry the strip with them and as the strip is made of such width that its outer edge will extend between the inner ends of the curved arms 8 and 9 so as to be nearly in contact with the face of the guide strip 10.

In order to place the screen in position in a window the guide rails are first inserted through the travelers, one through the travelers of each stile and the screen with the guide rails is then placed in position in the window frame and the rails screwed or otherwise fastened to the sides of the window frame. Should the window frame be wider than the screen the travelers will be pulled out a greater or less distance depending on the width and if the window is wider at any level than at others the screen as it is slid up or down will cause the travelers to slide in or out. In their outward movement the travelers carry the strip 14 with them thus closing the space between the outer edges of the stiles of the screen and the guide rails.

It will be seen that constructed as above described screens require no planing of their edges or other fitting for windows considerably wider than the width of the screen and

irregularities in the width of windows are compensated for. At the same time no opportunity is afforded for the entrance of flies.

5 Instead of the half round guide rail a sheet metal guide rail having a depressed center as shown at 16 in Fig. 6 may be used, the form of the recurved arms 8 and 9 being modified to fit the rail. If preferred, instead of having the arms 8 and 9 fitting over the edges of the guide rail, the guide rail may have its edges turned inward as shown at 17 in Figs. 5 and 7 in which case the ends of the traveler are not recurved but are merely bent outward as shown at 18.

The precise form of the guide rails and the ends of the traveler are not important provided only that the ends of the travelers engage the guide rail in such a way that they will be drawn outward whenever the guide rails are more than the normal distance apart and that in such movement they carry the filler strip with them.

In order to provide for removing the screen from the window the rails may be made in two parts separated at 20, so that by removing a single screw 11 near the upper end of the lower part of each rail the end of this part of the rail may be sprung inward sufficiently to permit the arms 8 and 9 to pass off when the screen is slipped upward. In this way the screen may be removed and by a reversal of the operation may be put into place provided, of course, that the screen does not exceed in height one-half the height of the window casing.

Having thus described my invention, what I claim is:

1. In a window screen the combination with the stile having a slit extending inward from its outer edge, a guide rail secured to the side of the window frame and a relatively short traveler having a tongue extending into the slit of the stile and having its free end adapted to grip the guide rail and be held against disengagement therefrom.

2. In a window screen the combination with the stile having a slit extending inward from its outer edge, a guide rail secured to the side of the window frame and a relatively short traveler having a slotted tongue extending into the slit of the stile and movable inward and outward therein, a pin extending through the slot of the tongue to limit the movement of the tongue, the free end of the traveler being adapted to grip the guide rail and be held from disengagement therefrom.

3. In a window screen the combination with the stile having a slit extending inward from its outer edge throughout its length, a

guide rail secured to the side of the window frame, a traveler having a tongue extending into the slit of the stile and movable inward and outward therein and having its free end adapted to engage the guide rail and be held against disengagement therefrom and a filler strip extending in the slit of the stile from end to end thereof, and means by which the filler strip is caused to move with the traveler in its outward movement.

4. In a window screen, the combination of a stile having a slit extending inward from its outer edge throughout its length, a guide rail secured to the side of the window frame, a traveler having a slotted tongue extending into the slit of the stile and movable inward and outward therein and having its free end adapted to engage the guide rail and be held against disengagement therefrom, a filler strip extending in the slit of the stile from end to end thereof and having slots corresponding to the slot of the tongue, a pin extending through the slots of the tongue and filler strip to limit the movement of the tongue and filler strip and means by which the filler strip is caused to move with the traveler in its outward movement.

5. In a window screen the combination of a stile having a slit extending inward from its outer edge throughout its length, a guide rail secured to the side of the window frame, a traveler formed from a strip of metal to form a tongue having the outer ends of its side portions adapted to engage the guide rail and be held against disengagement therefrom, the traveler extending into the slit of the stile and movable inward and outward therein, a filler strip extending in the slit of the stile from end to end thereof and arranged between the portions forming the tongue of the traveler.

6. In a window screen the combination of a stile and a slit extending inward from its outer edge throughout its length, a guide rail secured to the side of the window frame and having the portion thereof in contact with the side of the window frame of less width than the opposite face, a relatively short traveler having a tongue extending into the slit of the stile and movable inward and outward therein and having its free end adapted to extend over the side edges of the guide rail and to engage the inner face of the rail.

This specification signed and witnessed this 15th day of April A. D. 1911.

SAMUEL J. DIXON.

In the presence of—
CHAS. E. RIORDON,
PARKER COOK.