J. E. H. CANNON.

WINDOW SCREEN.

APPLICATION FILED MAY 31, 1910.

998,464. Patented July 18, 1911.

Fig. 1.

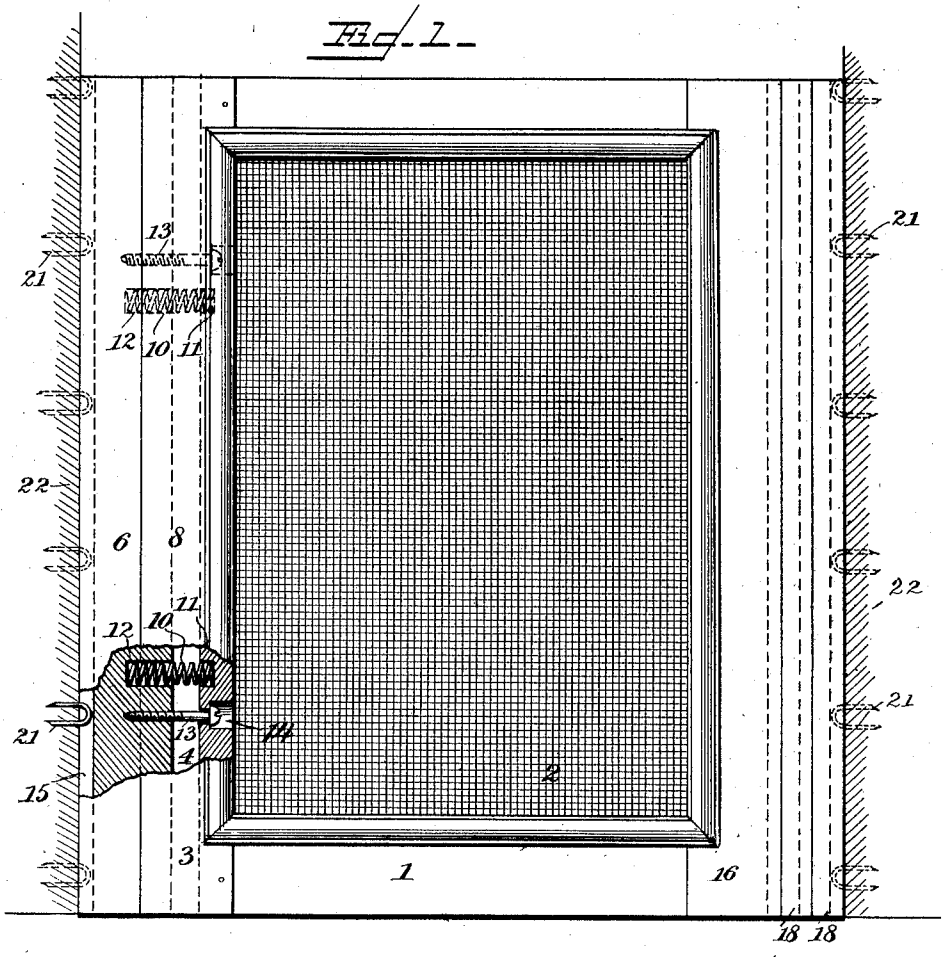

Fig. 2.

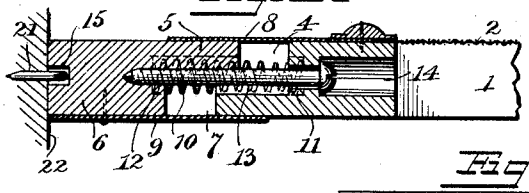

Fig. 3.

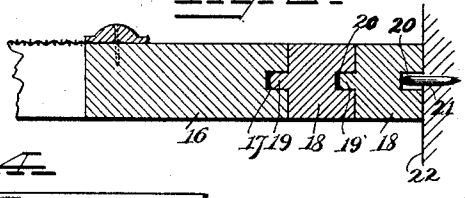

Fig. 4.

Witnesses

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JESSE E. H. CANNON, OF AMERICUS, GEORGIA.

WINDOW-SCREEN.

998,464. Specification of Letters Patent. **Patented July 18, 1911.**

Application filed May 31, 1910. Serial No. 564,170.

To all whom it may concern:

Be it known that I, JESSE E. H. CANNON, a citizen of the United States, residing at Americus, in the county of Sumter and State of Georgia, have invented a new and useful Window-Screen, of which the following is a specification.

The invention relates to improvements in window screens.

The object of the present invention is to improve the construction of window screens, and to provide a simple and comparatively inexpensive window screen, equipped with a yieldable extension section, adapted to enable a window screen to be readily applied to a window and automatically adjust itself to the same and frictionally engage the sides thereof, whereby the screen when raised will remain in its adjusted position.

A further object of the invention is to enable the yieldable extension section to be readily made rigid with the screen, and to provide simple and efficient means for increasing the width of the latter when desired.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claim hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is an elevation, partly in section, of a window screen, constructed in accordance with this invention and shown applied to a window. Fig. 2 is an enlarged horizontal sectional view of one side of the window screen. Fig. 3 is a similar view of the opposite side of the window screen. Fig. 4 is a detail view of the gage.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates a rectangular window screen having a wooden frame composed of rigidly connected top, bottom and side bars and supporting wire gauze 2, which is secured to the screen frame in the usual manner. The side rail or bar 3 of the frame of the screen is provided with a vertical rabbet or recess 4 extending partially through the side bar from one side of the screen to receive a vertical flange or portion 5 of an extension section 6, which is provided with a similar longitudinal rabbet or recess 7 extending partially through the strip from the opposite side of the screen. The rabbeted or recessed portions of the side 3 of the screen frame and the extension section 6 are overlapped and form a slidable joint of uniform thickness. The recessed or cut-away portions of the side 3 and the extension strip 6 are covered by side plates 8 and 9, constructed of sheet metal and secured, respectively, to the opposite faces of the side 3 and to the extension section 6, as clearly shown in Fig. 2 of the drawing. The extension section 6 is yieldably forced outward by means of a plurality of coiled springs 10, disposed horizontally and interposed between the side 3 of the screen frame and the extension section 6. The ends of the horizontal coiled springs are fitted in sockets 11 and 12 of the side 3 and the extension section 6, which is limited in its outward movement by a plurality of screws 13, extending through the side 3 of the screen frame, and having their threaded portions embedded in the extension section 6. The heads of the screws are arranged in recesses or sockets 14, and the screws are adapted to be turned up sufficiently to draw the extension section into contact with the side 3 of the screen frame to form a rigid screen when desired. The sockets 11 are of such a depth that when the screws 13 are turned to draw the extension strip tightly against the recessed side bar of the frame, the springs will fit within the sockets without undue compression and permit the bar and strip to come together. This would not be the case were the springs mounted on the screws. Moreover, the sockets 14 which receive the heads of the screws are open at their outer ends so that a screw driver may be readily inserted to adjust the screen while it is in place. This is a very desirable feature. The screws are arranged in spaced relation with the springs, and any number of springs and screws may be employed. The yieldable spring actuated extension section enables a window screen to be readily sprung into a window, and the screen will automatically adjust itself to the window frame when either or both sides of the same are out of plumb, and the sides of the screen firmly engage the side portions of the window frame with sufficient force to support the screen in an elevated position when the

same is raised. It is not necessary to hold the screen by hand or equip it with fastening means for supporting the screen in an elevated position.

The extension section is provided with a longitudinal groove 15, and the side rail or bar 16 at the opposite side of the window screen is provided with a similar longitudinal groove 17. Should it be desired to increase the width of the screen, one or more tongue and groove strips 18 may be employed. Each strip 18 is provided at the inner side with a longitudinal tongue 19, and at the outer side with a longitudinal groove 20. The tongue of the strip 18 is adapted to fit either in the groove 17 of the adjacent side of the screen frame, or in the groove of a similar strip 18. These strips 18 are adapted to be secured to the screen frame and to each other by glue, nails, or other fastening means.

Guides for the window screen may be easily and economically provided by driving staples 21 into the opposite sides of the window frame 22. The staples project slightly from the window frame and engage the longitudinal grooves at opposite sides of the window screen. These staples may be conveniently alined by means of a gage 23, corresponding in width with the frame of the screen and provided with a longitudinal slot 24, which also corresponds with the grooves of the screen. The slot 24 extends inwardly from one end of the gage and it terminates short of the other end, which forms a convenient handle. The gage is adapted to be fitted against the sash and moved along the side of the window frame, and the staples driven through the slot 24 will be properly alined and will project the desired distance, the thickness of the gage preferably corresponding to the length of the projecting portion of the staples.

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

A window screen comprising a frame composed of rigidly connected top, bottom and side bars and the wire gauze connected to the frame, one of the side bars of the frame being provided with a vertical recess extending from the top to the bottom of the frame and partially through the latter from one side of the screen, an extension strip provided in its side face with a corresponding vertical recess extending partially through the strip from the other side of the screen whereby overlapping flanges are provided between the frame and strip, thin parallel side plates located at the opposite faces of the screen and secured respectively to the recessed side bar and to the extension strip, and covering the said recesses, alined sockets provided in the recessed side bar and the said extension strip, coiled springs fitted at their ends in said sockets and extending across the space between the said recessed side bar and the said extension strip, and screws passing loosely through the recessed side bar and having their threaded ends embedded in the extension strip, sockets being provided in said side bar with their outer ends open, said sockets receiving the heads of the screws and permitting their operation from the inside of the side bar, whereby the screws may be adjusted to draw the extension strip inwardly into close contact with the side bar to form a rigid screen, the sockets for the springs being of a depth to entirely receive the springs when the screen is so adjusted.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JESSE E. H. CANNON.

Witnesses:
P. H. WILLIAMS,
J. S. McGOSWL.