

G. E. FERRY.  
 EXTENSION WINDOW SCREEN FRAME.  
 APPLICATION FILED JUNE 6, 1910.

1,001,009.

Patented Aug. 22, 1911.

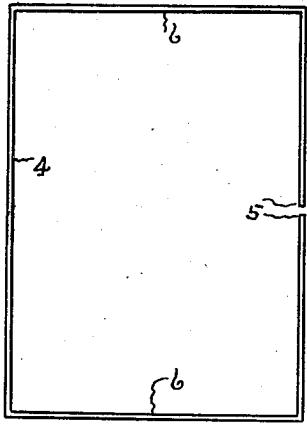


Fig. 1.

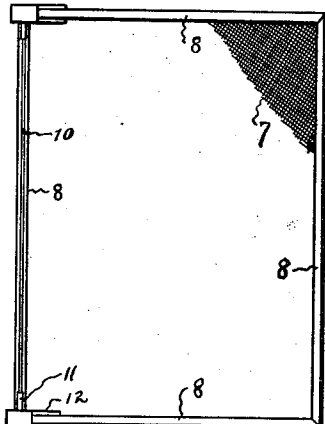


Fig. 2.

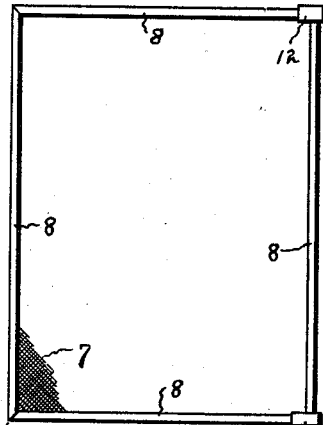


Fig. 3.

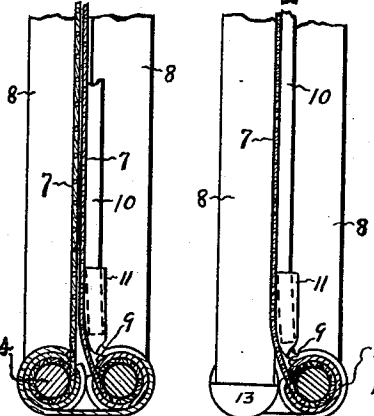
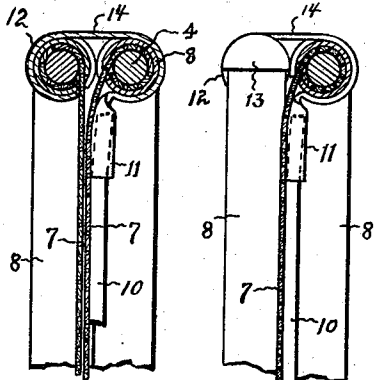


Fig. 5. Fig. 6.

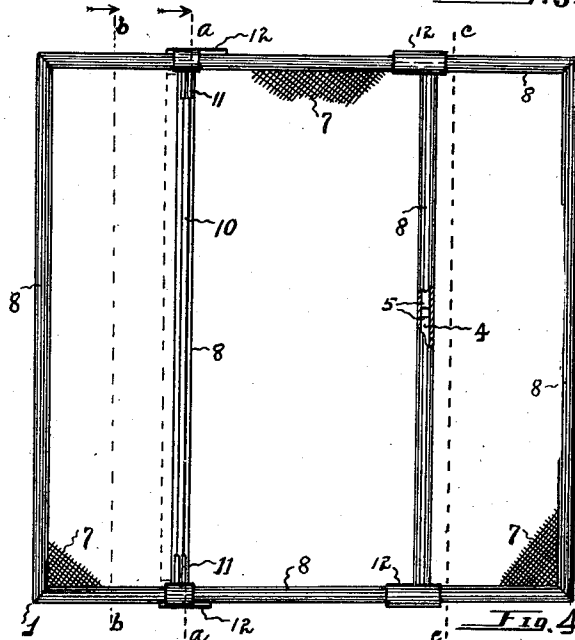


Fig. 4.



Fig. 7.

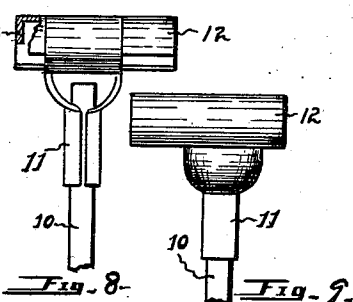


Fig. 8. Fig. 9.

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# UNITED STATES PATENT OFFICE.

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EXTENSION WINDOW-SCREEN FRAME.

1,001,009.

Specification of Letters Patent. Patented Aug. 22, 1911.

Application filed June 6, 1910. Serial No. 565,233.

To all whom it may concern:

Be it known that I, GILBERT E. FERRY, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Extension Window-Screen Frames, of which the following is a specification.

This invention relates to improvements in extension window screen frames, and has for its object, broadly, to provide screen frames of this class which may be economically constructed, will be reliable and convenient in use and of such form that they may be packed and shipped to advantage.

The invention has reference to a pair of connected screen frames which may be disposed vertically to obstruct a window opening and will be horizontally adjustable so that openings varying in widths may be screened; and includes the use of single metallic rods bent to a rectangular form as frames for the support of the borders of the wire cloth, cylindrical clamping plates being mounted upon the frames as a holding means for securing the wire cloth upon the frame rods, compression bars being employed, the same to be disposed longitudinally of and mounted upon the ends of the screen frame to prevent sagging of the wire cloth and to close the passage way between the adjacent webs or sheets of wire cloth, these features tending to provide an article of few structural parts, as well as features relating to convenience in use, durability, and attractiveness in appearance.

The invention consists of the novel construction, combination and arrangement of parts as described herein and claimed, and as illustrated in the drawing, wherein,—

Figure 1 is a vertical side view of a rectangular core or supporting frame which provides a seating for the wire cloth. Figs. 2 and 3 are side views of the two screen members of a pair, clips for sustaining the compression-bars being also shown. Fig. 4 is a vertical, side view of an extension window screen frame embodying my invention. Fig. 5 is a detail relating to Fig. 4, being an enlarged, broken away view between the irregular line *a a* and line *c c* of said figure, and showing the frame rods, wire-cloth, cylindrical clamping plates and clip in section. Fig. 6 is an enlarged, broken away sectional view between lines *b b* and *c c* of Fig. 4. Fig. 7 is a plan view of the ex-

tension window screen frame. Fig. 8 is a partly broken away, side view of the clip, and showing the socket for a mounting therein of the compression bar, an end portion of said bar also being shown. Fig. 9 is a view showing the opposite side of the clip to that shown in Fig. 8, a terminal part of the compression bar being added.

Referring now to the drawing for a more particular description, numeral 1 indicates an extension window screen frame comprising the slidably connected, rectangular frames 2 and 3. In the construction of frames 2 and 3 I employ a core-member or rectangular support, the same preferably consisting of a metallic rod 4 bent to the form mentioned and having adjacent terminals 5 midway between its ends 6. Heavy wire may be used to advantage for this purpose, and if desired the terminals may be united to form an integral structure.

After the wire cloth or gauze 7 has been mounted upon the rectangular core or frame-rod, its border encircling or partly inclosing said frame as shown in Fig. 5, the slotted cylindrical jackets, sleeves, or transversely curved longitudinal clamping-plates 8 are then secured upon that part of the wire gauze which bears upon the surface of frames 4.

Clamping-plates 8 may be constructed to advantage by use of sheet metal; they are cylindrical in form and may have lengths substantially equal to the horizontal or vertical parts of frame-members 2 or 3, and they provide firm holding means for the mounting of the wire cloth upon rods 4, the edges of longitudinal slots 9 of the cylindrical clamping-plates being disposed upon opposite sides of the screen.

Frame members 2 and 3 as thus described may be conveniently manufactured; no riveting or corner pieces are required; terminals 5 of the frame-rods are inclosed or covered by the clamping-plates, and the frame-members present an attractive appearance.

I provide the compression-bar 10, its terminals being seated in holder-members or sockets 11 of clips 12, said clips having one of their ends closed, as indicated at 13. Members 2 and 3 may be disposed vertically adjacent to each other, with parts of their inner sides overlapping, and when one of clips 12 is mounted upon each of the upper and lower ends of these frame-members at

the junction of their horizontal and one of their vertical sleeves 8, sockets 11 of the clips will be disposed adjacent to and in alinement with the vertical sleeve, and clips 5 12 will partly circumscribe and partly inclose the ends of the horizontal sleeves; and the partly closed ends 13 of the clips will prevent said clips from sliding inwardly of the horizontal sleeves.

10 Clips 12 and socket-members 13 are disposed transversely with reference to each other and, preferably, they are constructed integral from a metallic sheet or plate, a curved engaging-plate 14 being provided 15 between the clip and socket and having a less length than the clip.

Members 2 and 3 are always employed in pairs to form an extension window screen frame, and when assembling these members, 20 clips 12 are disposed upon the ends of said members as already described. Outwardly sliding movements of the clips will be prevented for the reason that they embrace the horizontal sleeves of the members; 25 inwardly sliding movements will be prevented since, as above mentioned, the outer ends 13 of the clips are partly closed.

Engaging plates 14, when the clips are mounted, extend transversely from members 30 2 and 3, and they pass over and partly encircle the horizontal sleeve of the adjacent or opposite member, and compression bar 10 is adapted to have a bearing upon the outer surface of the wire cloth of said opposite member, or the member opposite to 35 the one upon which the clip is mounted, whereby the two sheets of wire cloth of frame-members 2 and 3, adjacent to a bar 10, are compressed between said bar and a vertical sleeve; and the compression mentioned prevents sagging of the wire cloth, 40 and prevents the formation of passageways therebetween, this feature being desired to prevent insects from passing between the 45 two adjacent screens.

After the parts are assembled, members 2 and 3 may be adjusted to provide a screen frame of greater or lesser widths, the horizontal sleeves of one member sliding within the curved engaging-plates of the opposite member, and as is obvious, the compression bars of each member will be disposed parallel with and adjacent to one of its vertical sleeves, the wire cloth of the 50 two frame members being disposed therebetween.

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

60 1. In combination with the horizontal strips and one of the vertical strips of a rectangular screen frame; a compression bar mounted upon the horizontal strips and disposed in fixed relation parallel with, outwardly of and adjacent to said vertical

strip; a screen member mounted slidably upon the horizontal strips of the rectangular screen frame with its screen disposed between the vertical strip of said rectangular screen frame and said compression bar. 70

2. An article of the class described comprising, in combination, a first rectangular frame; a second rectangular frame, said frames being disposed adjacent and slidably mounted with reference to each other 75 and each being provided with a screen; a compression bar mounted upon the upper and lower sides and disposed adjacent to one of the ends of each of said frames, the screens of each of said frames being disposed 80 between said end of the adjacent screen frame and the compression bar of said adjacent screen frame.

3. In combination with the horizontal strips and one of the vertical strips of a 85 rectangular screen frame; clips having longitudinal socket members and secured upon the horizontal strips, said socket members extending outwardly of, parallel with and adjacent to said vertical strip; a compression 90 bar extending between and mounted in the socket members; a screen member mounted slidably within the clips of the rectangular screen frame with its screen disposed between the vertical strip of said 95 rectangular screen frame and said compression bar.

4. In combination with the horizontal strips and one of the vertical strips of a 100 rectangular screen frame; curved engaging-plates each having a terminal holder-member, said plates being mounted upon and at one of the ends of the horizontal strips, said holder-members being disposed adjacent to the ends of said vertical strip; a compression 105 bar extending between and mounted in said holder-members; a screen member mounted slidably within the curved engaging-plates of the rectangular screen frame, its screen being disposed between the vertical 110 strip of said rectangular screen frame and said compression bar.

5. A screen frame comprising a pair of slidably connected adjacent frame-members each consisting of a supporting-core formed 115 as connected angularly disposed sections, wire gauze having border portions seated upon the sections of the supporting-core, a plurality of longitudinal jackets each formed with a longitudinal slot seated upon 120 a border portion of the wire gauze inclosingly upon a section of the supporting-core and disposing the edges forming its longitudinal slot upon opposite sides of said wire 125 gauze; and a compression-bar mounted in fixed relation upon one of said connected frame-members of said pair and disposed outwardly of the wire gauze of the adjacent connected frame-member.

6. A screen frame comprising a pair of 130

slidably connected adjacent frame-members  
each consisting of an elongated supporting-  
core formed as connected horizontal and  
vertical sections, wire gauze having border  
5 portions seated upon the sections of the sup-  
porting-core, a plurality of longitudinal  
jackets each formed with a longitudinal slot  
seated upon a border portion of the wire  
gauze inclosingly upon a section of the sup-  
10 porting-core and disposing the edges form-  
ing its longitudinal slot upon opposite  
sides of said wire gauze; and a compression-  
bar mounted upon the jackets of the hori-

zontal sections of one of said connected  
frame-members and disposed substantially 15  
parallel with and adjacent to a vertical sec-  
tion thereof, outwardly of the wire gauze  
of the adjacent slidably connected frame-  
member of said pair.

In testimony whereof I have affixed my 20  
signature in presence of two witnesses.

GILBERT E. FERRY.

Witnesses:

HIRAM A. STURGES,  
M. D. JOHNSON.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
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