C. J. BARKER.

WINDOW SCREEN.

APPLICATION FILED APR. 16, 1920.

1,351,733.

Patented Sept. 7, 1920.

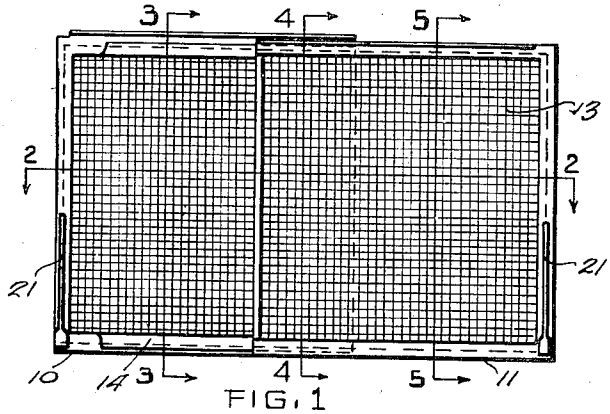


FIG. 1

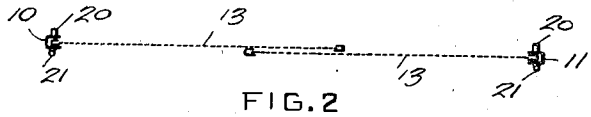


FIG. 2

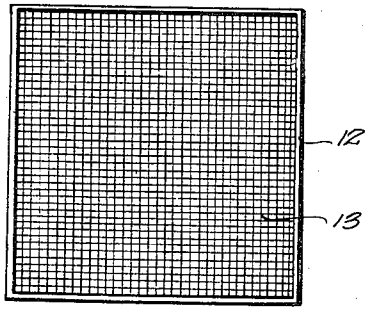


FIG. 6

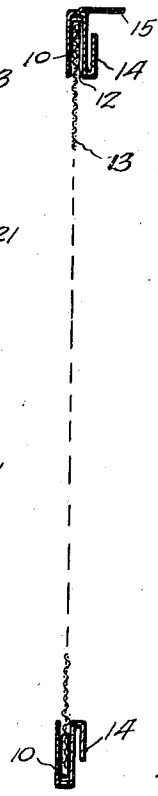


FIG. 3

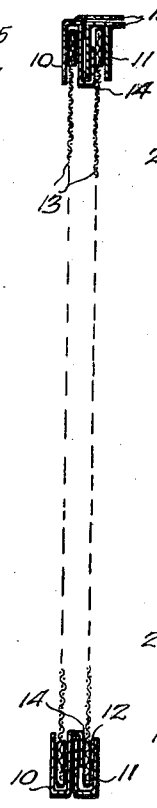


FIG. 4

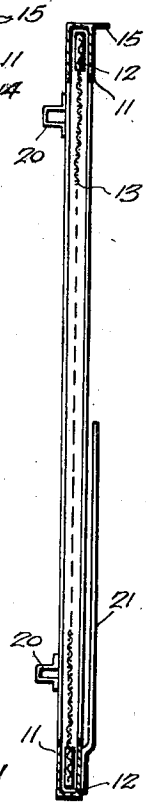


FIG. 5

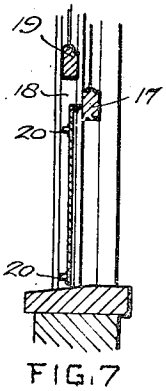


FIG. 7

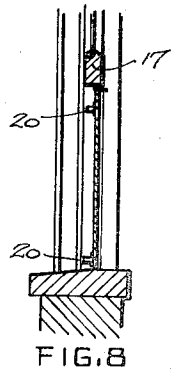


FIG. 8

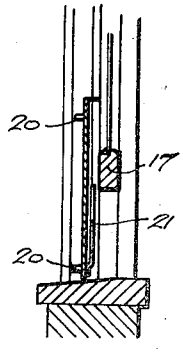


FIG. 9

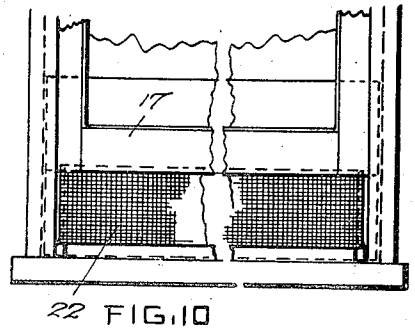


FIG. 10

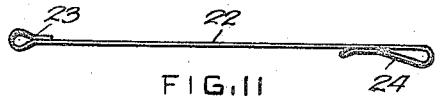


FIG. 11

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WINDOW-SCREEN.

1,351,733. Specification of Letters Patent. Patented Sept. 7, 1920.

Application filed April 16, 1920. Serial No. 374,386.

To all whom it may concern:

Be it known that I, CHARLES J. BARKER, a citizen of the United States of America, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

My present invention relates generally to window screens, and more particularly to that type of screen including expansible and contractible sections whose relative movement admits of adjustment to windows of different widths, within a considerable range, and is more especially a lasting durable metallic screen in which provision is made for the ready renewal of the screen mesh which as well known soon rusts and wears out requiring the frame to be discarded along with the worn out mesh under ordinary circumstances. The object of my invention is therefore the provision of a screen which includes a frame so formed as to be capable of effective use and to receive renewed sections of screen mesh, and a further object is the provision of a frame which may be held against rattling in a window casing and adapted to various positions, as well as one having means for supporting and holding fabric to form a ventilating device.

In the accompanying drawing illustrating my invention and forming a part of this specification,

Figure 1 is an elevation of my improved window screen looking from the inside,

Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1,

Figs. 3, 4 and 5 are vertical cross sections taken respectively on lines 3—3, 4—4 and 5—5 of Fig. 1,

Fig. 6 is a side view of one of the screen mesh sections,

Figs. 7, 8 and 9 are vertical sections, more or less diagrammatic, illustrating the practical application of my invention,

Fig. 10 is an elevation showing the use of the device as a ventilator, and

Fig. 11 is an edge view of the fabric strip used in Fig. 10.

Referring now to these figures my invention proposes a window screen including a pair of relatively shiftable U-shaped frame sections 10 and 11, each of which has upper and lower bars and an outer upright bar in the form of channels opening inwardly to receive the reinforced edges 12 of a rectangular section 13 of screen mesh. The upper and lower bars of the frame section 10 have flanges 14 extending outwardly from their inner edges and in offset parallel relation to their inner surfaces, adapted to slide in the channels of the upper and lower bars of the frame section 11 as seen particularly in Figs. 3, and 4 so that the two sections may thus be readily shifted with respect to one another and the screen as a whole expanded and collapsed in this manner to fit window casings of varying widths.

Along their upper cross bars the two frame sections 10 and 11 have overlapping laterally projecting flanges 15 so as to adapt the same for contact with the outer surface of an inner sash as at 17 in Fig. 7 when the outer vertical bars of the screen frames are disposed in the lower portion of the casing guide 18 of the upper sash 19.

The vertical bars of the two frame sections 10 and 11 have vertically spaced projections 20 upon their outer surfaces so as to adapt the screen frame to the width of the window guide 18 and prevent rattling of the screen, and these vertical bars are also provided with upwardly extending and inwardly offset upright rods or standards 21 upon their inner surfaces adapted, when the screen frame is utilized as in Fig. 9, to receive and support the ends of a fabric strip 22 in order to form a ventilator beneath the inner sash 17. For this purpose the strip of fabric 22 may have one end turned back and secured upon itself as at 23 to receive one of the upright rods or standards 21, and may have its other end 24 turned back around the other rod and pinned or otherwise fastened.

As seen in Fig. 4 there is sufficient room within the upper and lower channel bars of the frame section 11 to receive the upper and lower reinforced edges 12 of its respective screen mesh section 13, and also the flanges 14 of the frame section 10 so that it is obvious it is simply necessary to pull the two frame sections free of one another in order to remove either or both of the mesh sections therefrom and substitute others, and in this respect and in respect to its formation of a fabric covered window ventilator as in Figs. 9 and 10 my invention

thus presents improvements which are practical in their nature and will be effective and efficient in use.

I claim:

1. A window screen including a frame having a pair of oppositely and inwardly opening U-shaped frame sections movable relatively to one another and each comprising upper, lower and outer side channel bars, and screen mesh sections having reinforced edges and removably disposed in the channel bars of the said frame sections, the inner reinforced edge of each mesh section forming a brace between the inner free ends of the upper and lower bars of its respective frame, as described.

2. A window screen including a frame having a pair of oppositely and inwardly opening U-shaped frame sections movable relatively to one another and each comprising upper, lower and outer side channel bars, screen mesh sections having reinforced edges and removably disposed in the channel bars of the said frame sections and acting as braces therefor, one of said frame sections having its upper and lower bars provided with out turned flanges offset therefrom at one side to movably extend into the channels of the side bars of the other frame section.

3. A window screen including a frame having a pair of oppositely and inwardly opening U-shaped frame sections movable relatively to one another and each comprising upper, lower and outer side channel bars, screen mesh sections having reinforced edges and removably disposed in the channel bars of the said frame sections and acting as braces therefor, one of said frame sections having its upper and lower bars provided with out turned flanges offset therefrom at one side to movably extend into the channels of the side bars of the other frame section, and said frame sections having lapping angular flanges extending along the major portions of their upper bars as described.

4. A window screen including a pair of relatively movable U-shaped frame sections, each including upper and lower bars and outer vertical side bars, screen mesh sections having reinforced edges disposed in said sections, the inner edges of which form braces between the free ends of the upper and lower frame bars, said side bars being provided with vertically spaced laterally extending projections at one side adapting the frame to snugly interfit a window guide as described.

5. A window screen comprising a frame including vertical side bars, and supporting uprights secured in spaced relation to the inner surfaces of the said side bars for the reception of ventilating fabric.

6. A window screen including a frame having vertical side bars, supporting uprights secured to the lower portions of the inner surfaces of said side bars in spaced relation thereto, and a strip of ventilating fabric having its ends secured around the said uprights, for the purpose described.

In testimony whereof I have affixed my signature.

CHARLES J. BARKER.