O. V. ANDERSON.

DOOR AND WINDOW SCREEN.

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1,227,734. Patented May 29, 1917.

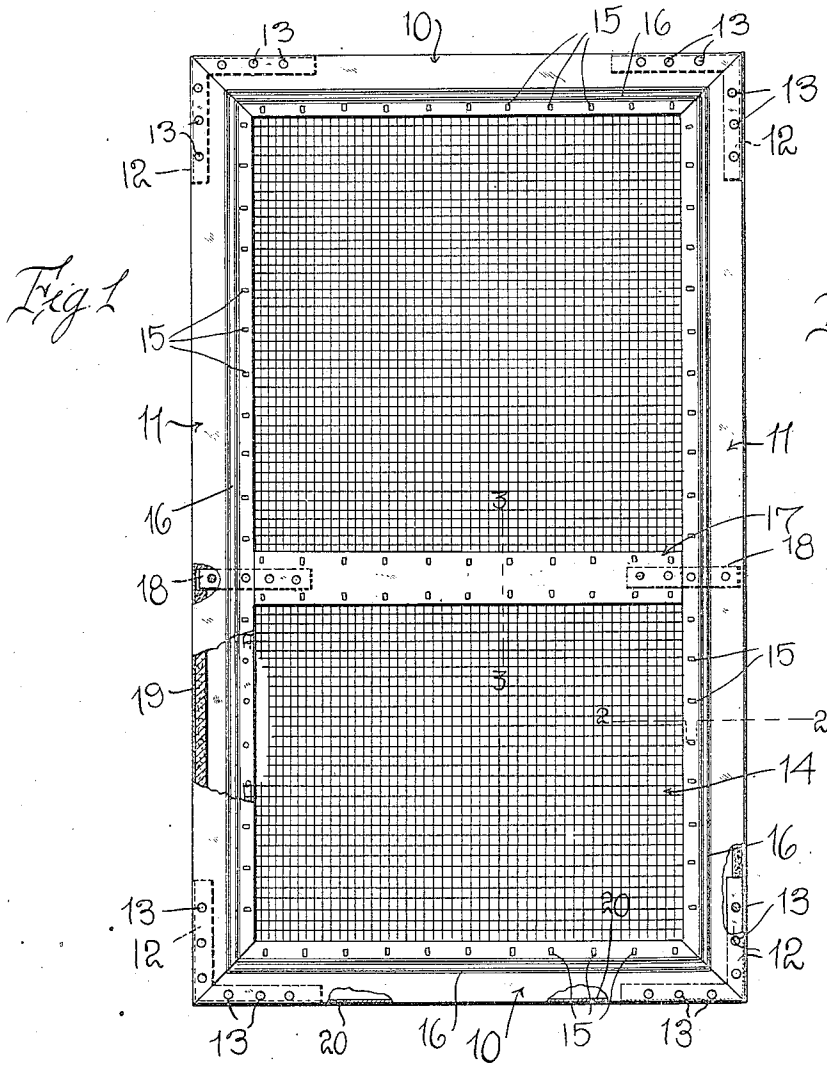

Fig. 1

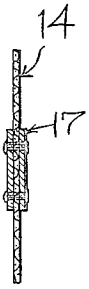

Fig. 3

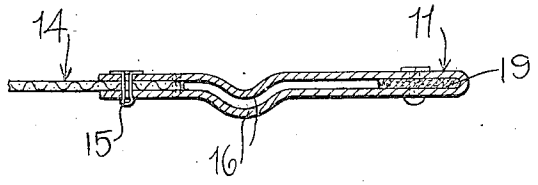

Fig. 2

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DOOR AND WINDOW SCREEN.

1,227,734. Specification of Letters Patent. Patented May 29, 1917.

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To all whom it may concern:

Be it known that I, OTTO V. ANDERSON, a citizen of the United States, residing at Loxley, in the county of Baldwin and State of Alabama, have invented certain new and useful Improvements in Door and Window Screens, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to the construction of screen doors and windows and the general object of the invention is to provide a construction of this character which is very simple, very cheap, and which, being of metal, will not warp, swell or otherwise become distorted under the action of moisture, heat or cold.

A further object is to provide improved means for retaining the screen in place within the frame, said means permitting the removal of the screen from time to time for replacement.

Other objects will appear in the course of the following description.

My invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a face view partly in section of a screen door constructed in accordance with my invention;

Fig. 2 is an enlarged section on the line 2—2 of Fig. 1;

Fig. 3 is a section on the line 3—3 of Fig. 1.

Referring to these figures, it will be seen that my improved screen comprises a frame constituted of end pieces 10 and side pieces 11, each of these pieces 10 and 11 being formed of a sheet metal strip folded longitudinally at its middle line so as to provide two side walls, as they may be termed, spaced from each other. The sections 10 and 11 are cut at their extremities on a miter joint and held together by angle irons 12 through which rivets 13 are passed holding the sections of the frame in rectangular relation. The screen 14 is formed of wire mesh as usual and the margin of the screen is inserted between the two walls of each section 10 and 11 and is therefore embraced by the frame and is held in place by fastening devices comprising split pins 15 which are inserted through perforations 16 in the frame passed through the meshes of the screen and laterally deflected. Preferably the sections 10 and 11 are each longitudinally bent or deflected as at 16 so as to form a more or less ornamental bead which strengthens and stiffens the sections and renders them relatively rigid. The metal of the frame may be braced by cross bars 17 connected to the sections 11 by means of the straps 18 riveted to the sections 11 and to the cross bar, this cross bar 17 also being formed with perforations 15 through which pins may be passed to engage the screen with the cross bar. In order to prevent any rattling of the frame which is liable to be the case if my construction is used in a door frame, I preferably dispose packing material or sound deadening material 19 between the side walls of the frame as indicated clearly in the sectional view in Fig. 2. I have illustrated my construction as applied to a door frame but it will be understood that it is equally applicable to a window frame and that in the latter case the sound deadening material is not so necessary. It will be seen that a frame constructed in accordance with my invention is solid, that the sections which are so composed may be very readily and cheaply made and that it is a relatively easy matter to connect the screen thereto or disconnect it therefrom. Furthermore, it will be noted that as the frame is made of metal the frame will not swell, warp or otherwise become distorted under the action of dampness or the action of the sun.

In order to provide for the drainage of any water which may possibly enter the screen frame, the lower end of the bar 10 is formed with drainage openings 20. The angle irons 12 and the straps 18 are preferably disposed between the sides of the sections 10 and 11 as illustrated clearly in Fig. 1.

Having described my invention, what I claim is:

1. A screen frame formed of a plurality of metallic sections, each section being formed of a strip of sheet metal folded longitudinally upon itself to thereby provide two side walls, the sections having miter joints at their intersections, angle irons disposed at the angles of the screen frame and between said side walls holding the sections in rectangular arrangement and riveted thereto through said side walls, a screen having its margin embraced by said sections, and detachable pins passing

through the sections, through the meshes of the screen and holding said screen detachably in place.

2. A screen frame formed of a plurality of metallic sections, each consisting of a strip of metal bent upon itself along a longitudinal median line, the sections being operatively jointed to each other at their intersections, packing of sound deadening material disposed within the folded strips forming the screen frame, a screen having its margin disposed between the folded strips forming the sections, and detachable means engaging the screen with said sections.

3. A screen frame comprising end and side members, each formed of a strip of sheet metal bent upon itself along a longitudinal median line and operatively connected to each other, a cross bar extending between the side sections of the frame, straps disposed with their ends between the folded strips forming the side sections of a frame and extending out over the cross bar and riveted thereto and to the sections and frame, a screen having its margins disposed between the folded strips forming the screen frame and overlapping the cross bar, and detachable fastening devices passing through the margins of the frame sections and through the cross bar and detachably engaging the screen with the frame.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

OTTO V. ANDERSON.

Witnesses:

J. G. SAXE,

HARRY BYERLY.