F. M. SHELTON.

VENTILATED DOOR.

APPLICATION FILED NOV. 26, 1913.

1,107,369. Patented Aug. 18, 1914.

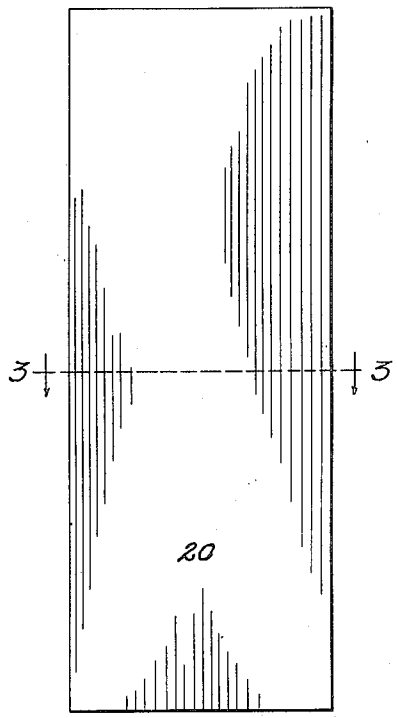


Fig. 1.

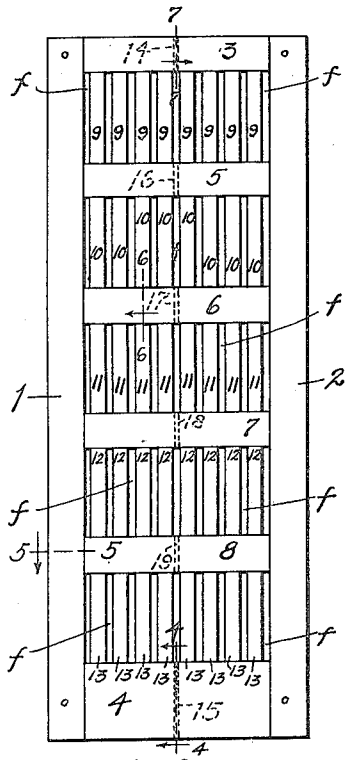


Fig. 2.

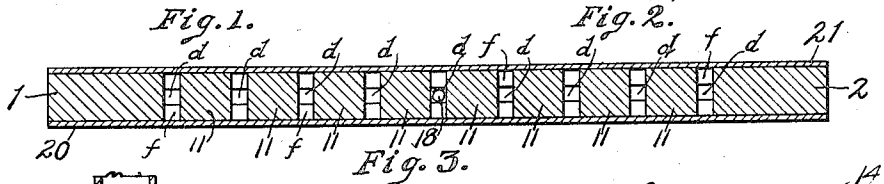


Fig. 3.

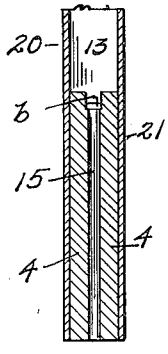


Fig. 4.

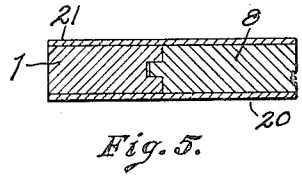


Fig. 5.

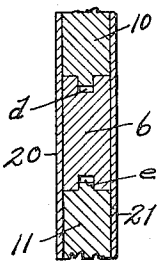


Fig. 6.

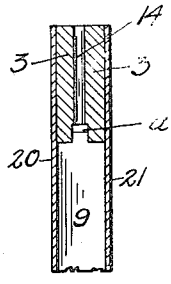


Fig. 7.

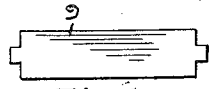


Fig. 8.

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UNITED STATES PATENT OFFICE.

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VENTILATED DOOR.

1,107,369. Specification of Letters Patent. Patented Aug. 18, 1914.

Application filed November 26, 1913. Serial No. 803,325.

To all whom it may concern:

Be it known that I, FRANK M. SHELTON, a citizen of the United States, residing in the city of Richmond, in the county of Wayne and State of Indiana, have invented a new and useful Construction for Ventilated Doors, of which the following is a full, clear, and comprehensive specification, being such as will enable others to construct the same with exactitude.

This invention relates to improvements in doors for houses or other purposes, and the objects thereof, broadly speaking, are to provide a ventilated door which will be strong and durable in construction, light in weight, neat and attractive in appearance, and which can be manufactured and sold at a comparatively low price.

A more particular object is to provide a veneered door the interior of which may be constructed of scraps or small pieces of material, and the whole overlaid with veneer, with air spaces throughout the interior of the door and with means for the air spaces to communicate with the outside air in order to prevent the door from warping and to prevent the veneer from inadvertently becoming detached from the body of the door by reason of changes in climatic condition or otherwise.

Other minor objects and particular advantages of my invention will be suggested in the course of the following description, and that which is new will be set forth in the appended claims.

The preferred manner for carrying out the objects of my invention in a practical manner, is shown in the accompanying drawings, in which—

Figure 1 is a face view of one side of a door constructed in accordance with my invention. Fig. 2 is an introspective view, showing the body of the door before the veneer faces have been applied thereto. Fig. 3 is an enlarged cross section of the door, as taken on line 3—3 of Fig. 1, and looking in the direction indicated by the arrows on said line. Fig. 4 is a vertical section taken through the bottom rail of the door, and taken on line 4—4 of Fig. 2. Fig. 5 is a horizontal section taken through one of the side stiles of the door, as taken on line 5—5 of Fig. 2. Fig. 6 is a vertical section taken through one of the intermediate rails of the door, and taken on line 6—6 of Fig. 2. Fig. 7 is a vertical section taken through the upper rail of the door, and taken on line 7—7 of Fig. 2, and Fig. 8 is a plan view of one of the vertical bars.

Similar indices denote like parts throughout the several views.

In order that the construction of my invention may be better understood, and that the advantages thereof may be better appreciated, I will now take up a detailed description thereof, in which I will set forth the invention as briefly and as comprehensively as I may.

The body of my door is made up as follows: Numerals 1 and 2 denote the two vertical stiles, which are spaced apart, and they are connected at their upper ends by the top-rail 3, and they are connected at their lower ends by the bottom-rail 4. Said parts are secured together in such manner as to form a rigid and true frame. Connecting the stiles 1 and 2, at points between the top and the bottom rails, are a plurality of intermediate rails 5, 6, 7 and 8, which are secured at their ends to the said stiles. Formed in the lower edge of the rail 3, between the stiles 1 and 2 is a channel *a*, shown in Fig. 7. And likewise a channel *b* is formed in the upper edge of the rail 4, which extends between the stiles 1 and 2, said channel *b* being shown in Fig. 4. In the upper edge of each of the intermediate rails there is formed a channel *d*, shown in Figs. 3 and 6; and likewise a channel *e* is formed in the lower edge of each of the intermediate rails, as shown in Fig. 6. The channels *d* and *e* also extend from stile 1 to stile 2.

A plurality of bars 9 extend vertically between the rail 3 and the rail 5. A plurality of bars 10 extend vertically between the rails 5 and 6. A plurality of bars 11 extend vertically between the rails 6 and 7. Also a plurality of bars 12 extend vertically between the rails 7 and 8. And a plurality of bars 13 extend vertically between the rail 8 and the bottom-rail 4. All of the said vertical bars are identical with each other, each being formed with a tongue on each end thereof. Said bars are spaced apart and the tongues thereof are inserted in their respective channels *a*, *b*, *d* and *e*, by which means the bars are secured in position. The width of said bars is equal to the thickness of the stiles and the various rails of the door, as indicated in Fig. 3, and in various other

places in the drawings the spaces between the vertical bars are indicated by the indice *f*. The tongues of said bars are of such length that they will not close the said channels in the rails, that is the length of said tongues is less than the depth of said channels, thereby providing longitudinal air channels extending the full length of said rails after the bars are in position in the door. The said longitudinal air channels being connected with the spaces *f* between the bars.

Formed vertically through the center of each of the rails 3 and 4 is an air aperture, 14 and 15 respectively; and corresponding air apertures 16, 17, 18, and 19 are formed vertically through the center of each of the intermediate rails 5, 6, 7 and 8, respectively, as indicated by dotted lines in Fig. 2.

After all of the parts above specified are connected together, as in Fig. 2, then the two sides of the body are covered over, each with a single sheet of veneering 20 and 21, which are glued or otherwise secured in position whereby they adhere to the various stiles, rails, and bars, thereby completing the construction.

From the above it will be observed that there are two air passages leading into the door, one from the top and one from the bottom, through which air may pass in and out and circulate throughout the interior of the door, passing through the various channels and through all of the spaces between the various bars.

I desire that it be understood that various changes may be made in the details of construction and the various proportions of the parts and in the size, location, and number, of the various apertures, channels, and spaces, without departing from the spirit of my invention and without sacrificing or disclaiming any of the principles thereof.

Having now fully shown and described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A ventilated door comprising a body composed of stiles and rails forming a frame, a plurality of spaced-apart bars connecting the rails, there being air passages formed through the rails and connecting with all of the spaces between the bars, and veneering covering each side of the body of the door.

2. A ventilated door comprising a body composed of stiles and rails, intermediate rails connecting the stiles, a plurality of spaced-apart bars connecting the rails, there being air-channels in and extending longitudinally of the rails, and connecting with the spaces between the bars there also being an air aperture through each of the rails and at right-angles to and intersecting said and veneering covering each side of the door and contacting with all of the rails, stiles, and bars.

In testimony whereof I have hereunto subscribed my name to this specification in the presence of two subscribing witnesses.

FRANK M. SHELTON.

Witnesses:
R. E. RANDLE,
ROBERT W. RANDLE.