Feb. 23, 1932. A. C. HOUGH 1,846,202

SLAT SHADE

Filed Sept. 27, 1930

Fig. 1

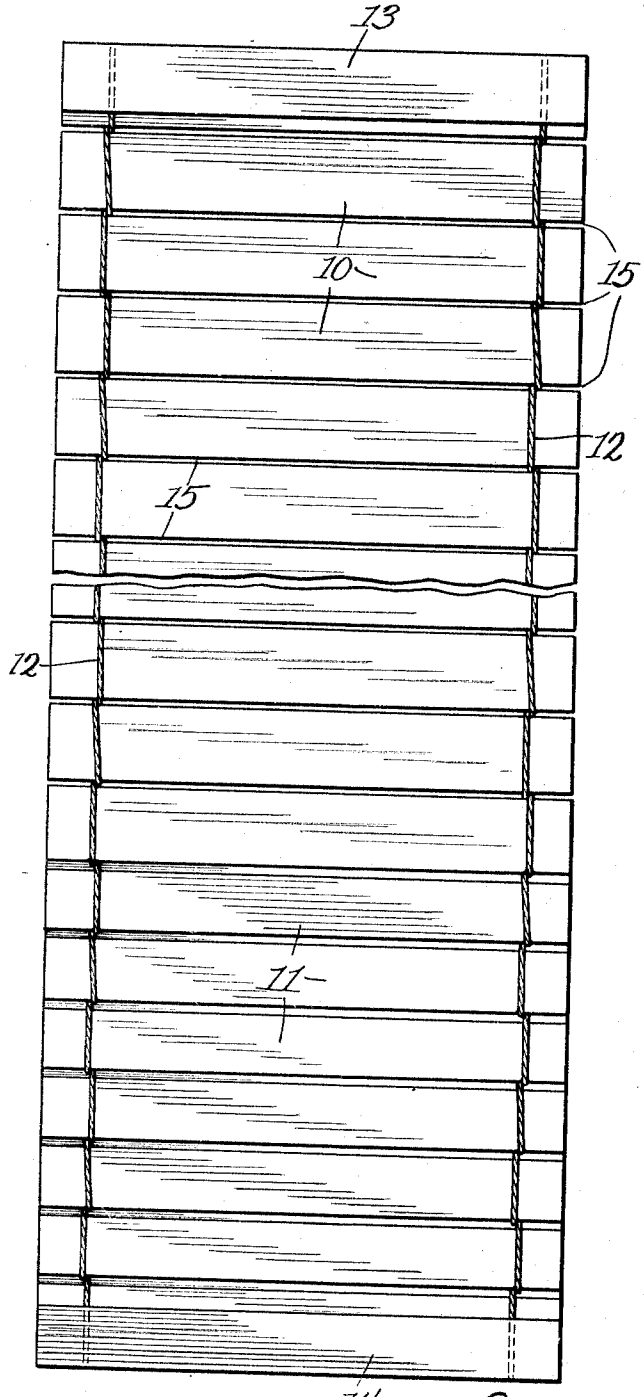


Fig. 2

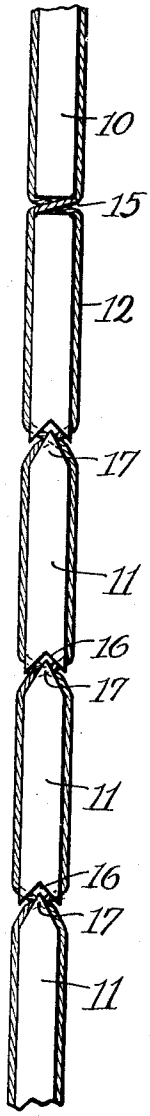
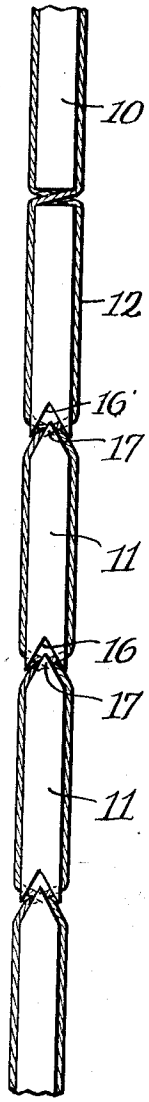


Fig. 3



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UNITED STATES PATENT OFFICE

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SLAT SHADE

Application filed September 27, 1930. Serial No. 484,777.

This invention relates to slat shades, and has for its principal objects to provide circulation of air through the lower portion of the shade while excluding direct glare of the sun and indirect glare from any local medium.

Further objects of the invention will become apparent from the following specification and the appended drawings, in which

Fig. 1 is a front view of the shade as suspended in an opening;

Fig. 2 is an end view of the shade showing the arrangement of the slats and warp cords; and

Fig. 3 is an end view illustrating a slightly modified form of shade.

The shade is a woven fabric in which slats 10, 11, are the weft, and cords 12 are the warp, and the upper and lower ends are finished by attaching heavy slats 13 and 14.

The slats 10 in the upper portion may be, and preferably are, of rectangular cross-section, whereby passages 15 for air and direct transmission of light rays are provided between adjacent slats. However, the form of the slats 10 may be varied to suit individual preference.

The slats 11 in the lower portion each have a V-groove 16 in its lower edge, receiving a tongue 17 on the upper edge of the adjacent slat below. The walls of the groove and the side faces of the tongue overlap so as to provide an indirect air passage and prevent direct transmission of light rays. The grooves 16 are preferably formed by flat faces at an acute angle to the side faces of the slat, and the tongue 17, in the preferred form, has side faces arranged at a sharper angle than that between the walls of the grooves, as shown in Fig. 2. However, as shown in Fig. 3, the faces of the tongue and groove may be arranged at the same angle.

The warp cords indent the edge portions of the slats 11 substantially as illustrated in Figs. 2 and 3.

In both forms the passage between the adjacent slat 11 will correspond to the effective thickness of the cords 12, and will provide ample passages for the circulation of air.

With a shade of either form described, the upper portion thereof will permit the transmission of a desirable quantity of light as well as air, but the lower portion will intercept all direct light and prevent any upward reflection while permitting circulation of air. It will be obvious that these functions of the upper and lower portions of the shade are achieved regardless of which surface of the shade is disposed toward the source of light and air. In other words, the shade may be reversed without impairing the light and air controlling capacities of its two types of slat spaces after the originally outer surface of the shade has become faded or otherwise weathered.

What I claim is—

1. A shade including a plurality of slats forming the weft, certain of the slats having V-shaped tongues and grooves forming their opposite edges, and warp elements woven with the slats securing the slats fixedly together and maintaining the edges of adjacent slats spaced apart in fixed overlapped relation whereby spaces are provided between adjacent slats adapted to admit air and prevent direct transmission of light.

2. A shade including a plurality of slats forming the weft, certain of the slats having V-shaped tongues and grooves forming their opposite edges, and cords woven with the slats and forming the warp of the shade securing the slats fixedly together and maintaining the edges of adjacent slats spaced apart in fixed overlapped relation whereby spaces are provided between adjacent slats adapted to admit air and prevent direct transmission of light.

3. A shade including a plurality of slats forming the weft, certain of the slats having tongues and grooves forming their opposite edges, and means maintaining adjacent slats a fixed spaced distance apart, the vertex of each tongue penetrating the horizontal plane containing the opposite edges of the adjacent groove, whereby a space is defined by said edges adapted to admit air and prevent direct passage of light.

4. A shade including weft slats each of a plurality of which has its opposite edges provided with tongues and grooves disposed respectively adjacent the grooves and tongues

of adjoining slats, the vertices of the tongues of the slats being provided with aligned indentations transversely of the slats, and cords received in said indentations whereby adjacent slats are secured together and spaced apart a distance approximately equal to the thickness of a cord.

5. A shade including weft slats each of a plurality of which has its opposite edges provided with tongues and grooves disposed respectively adjacent the grooves and tongues of adjoining slats, the margins of the grooves being provided with aligned indentations transversely of the slats, and cords received in said indentations whereby adjacent slats are secured together and spaced apart a distance approximately equal to the thickness of a cord.

6. A shade including weft slats each of a plurality of which has its opposite edges provided with tongues and grooves disposed respectively adjacent the grooves and tongues of adjoining slats, the vertices of the tongues and the margins of the grooves being provided with aligned indentations transversely of the slats, and cords received in said indentations whereby adjacent slats are secured together and spaced apart a distance approximately equal to the thickness of a cord.

7. A shade including weft slats each of a plurality of which has its upper edge formed in a sharp, outwardly extending V-tongue and its lower edge formed in a complementary V-groove receiving the tongue of an adjacent slat, the vertices of the tongues and the margins of the grooves being provided with aligned indentations transversely of the slats, and cords received in said indentations whereby adjacent slats are secured together and spaced apart a distance approximately equal to the thickness of a cord.

8. A slat shade having spaced slats in its upper portion and other spaced slats in its lower portion, the spaces between the slats of the upper portion constituting direct horizontal passages for transmission of light and air, and each of the spaces between the slats of the lower portion constituting a passage having an interior portion out of horizontal alignment with the openings of the passage at the opposite surfaces of the slats.

9. A slat shade having spaced slats in its upper portion and other spaced slats in its lower portion, the spaces between the slats of the upper portion constituting direct horizontal passages for transmission of light and air, and each of the spaces between the slats of the lower portion constituting a passage having an interior portion the lowest point of which is higher than the highest point in either of the openings of the passage at the opposite surfaces of the slats.

10. A slat shade having spaced slats in its upper portion and other spaced slats in its lower portion, the spaces between the slats of the upper portion constituting direct horizontal passages for transmission of light and air, and each of the spaces between the slats of the lower portion constituting a ventilating passage for preventing direct transmission of light and air, which passage is substantially of inverted V-shape in cross section.

In testimony whereof I affix my signature.

AZEL C. HOUGH.