May 27, 1958 H. BALDWIN 2,836,238

LINKS FOR SLAT SHADES

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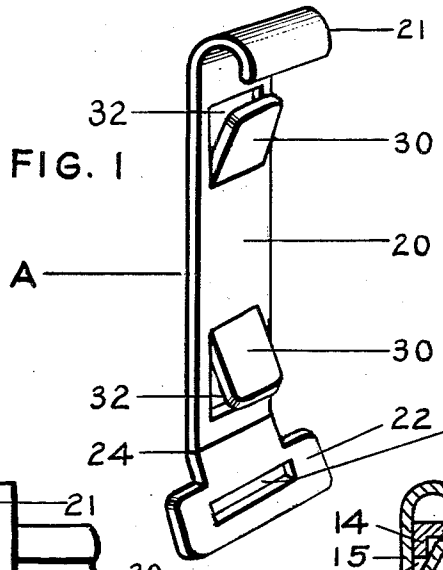


FIG. 1

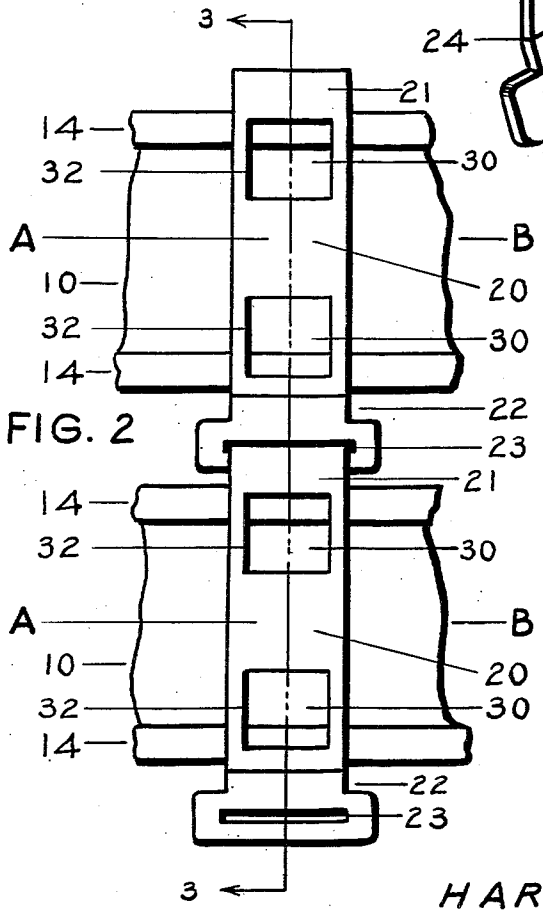


FIG. 2

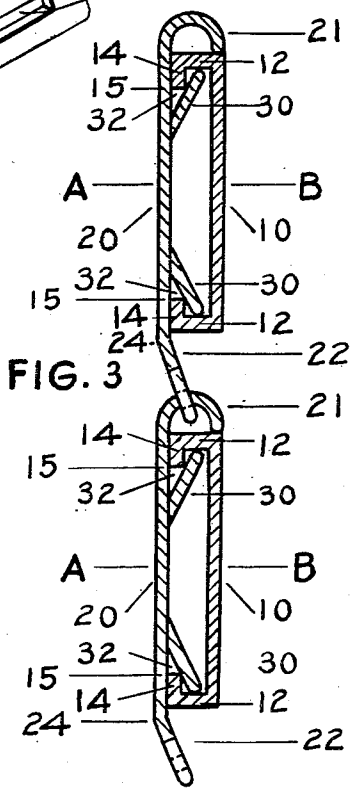


FIG. 3

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LINKS FOR SLAT SHADES

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2 Claims. (Cl. 160—229)

This invention relates to link for slat shades employing metal slats of channel cross-section reinforced by longitudinal inwardly turned lips.

Slat shades are formed of a number of parallel slats hingedly connected by links enabling the shades to be rolled and unrolled, and are used on greenhouses and other horticultural structures, porches and for other screening purposes.

Aluminum slats of channel cross-section reinforced by longitudinal inwardly turned lips are now replacing the former commonly used wooden slats of strip form. Links for such wooden slats cannot be used advantageously for said metal slats.

The link of this invention comprises a strap, one end of which is formed into a loop, and the other end is widened and has a transverse slot formed therein which is wider than the loop, the loop and slot furnishing the means whereby the successive links are hingedly connected, and means for securing the link to the slat comprising a pair of opposed tongues respectively extending from the strap in opposite directions, over and in engagement with the reinforcing lips of the slat, thereby wedging the reinforcing lips between the tongues and the strap.

In the drawings:

Fig. 1 is an isometric view of the link.

Fig. 2 is a fragmentary plan view of two assembled slats and links.

Fig. 3 is a transverse vertical sectional view of two assembled slats and links taken at line 3—3 of Fig. 2.

Referring to the drawings:

A designates the links in general, which are made from metal strips in the form of a strap. B designates the slats, in general.

10 designates the web of slat B, **12** its walls, **14** the inwardly turned longitudinal reinforcing lips, and **15** the inner edges of lips **14**.

20 designates the strap, one end of which is turned into a loop **21**, the opposite end **22** is widened and has a transverse slot **23** formed therein which is wider than loop **21** to receive the corresponding loop **21** of the next succeeding link. The widened end **22** of strap **20** is inclined upwardly at **24** in order to keep the successive links A in alignment. A pair of tongues **30** are formed by slotting strap **20** at two places **32** as shown in Fig. 1.

Tongues **30** respectively extend angularly outwardly in opposite directions, and upwardly, from strap **20** over the adjacent reinforcing lips **14** and in engagement therewith, to the respective walls **12** of slab B, reinforcing lips **14** being thereby wedged between tongues **30** and strap **20**.

The word "upwardly" as used herein and in the appended claims, relates to the relative position of slats B and links A as assembled and in place, in which position the web **10** of slat B is uppermost, straps **20** being beneath lips **14** of slats B.

Slats B made of aluminum, generally are approximately

eight feet in length, one inch in width, and with a metal thickness of three thirty-seconds of an inch. Straps **20** may be made from aluminum stock; a thickness of three thirty-seconds of an inch suffices for use with slats of the foregoing dimensions, or they may be made of other suitable metal.

The links are mounted upon the slats, transverse thereof at regular intervals, governed by the rigidity of the slats. For slats of the aforesaid width and thickness, an interval of twenty and five-eighths inches suffices.

The slats and links may be conveniently assembled by inserting the slats through the links. This may be accomplished by a single operator in groups of up to ten slats and their links at one time. For this purpose, an assembly bench is desirable, which for eight foot slats should be about eighteen feet in length and three and one-half feet in width. Iron bars, grooved lengthwise to provide a recess of a width equal to the width of the flat portion of strap **20**, and a depth equal to the thickness of strap **20**, are secured across the bench for a length equal to the length of the slat, spaced at the desired intervals. Between the iron bars, a wooden strip of the same height as the bars is secured across the bench and one or more of such strips are also similarly placed across the bench in the area of approach to the iron bars. The purpose of the wooden strips is to keep in alignment the undersides of lips **14** of slats B and the upper surfaces of the bars and straps **20**.

A set of ten links, connected by passing loops **21** through slots **23**, is placed in the recess of each of the bars. Ten slats are arranged on the bench, with their forward ends facing the links in a position where lips **14** of slats B will pass between tongues **30** and straps **20** when the slats are thrust forward. The slats may be forced forward by manual pressure or preferably air pressure, exerted against a bar placed across the bench, spanning the rear ends of the ten slats. The slats are so moved forward until the links are located in their proper positions on the slats. After ten slats and their links are so assembled, another set of ten slats and their links are united to the first set and assembled. After twenty slats and links are assembled, they are hung over the side of the bench, and other sets are added in the same manner until the shade is completed.

The construction of the links herein disclosed, after assembly of links and slats, prevents dislodgement by any stress or force which may be encountered in the use or operation of the shades.

I claim:

1. A connecting link for slat shades formed of metal slats of channel cross-section reinforced along their longitudinal edges by inwardly turned lips, comprising a metal strap extending transversely of said slat underneath said inwardly turned lips, having a loop at one end of said strap and a transverse slot at the other end thereof receiving the corresponding loop of the adjacent link, said strap protruding from the sides of said slat, and means for fastening said link to said slat comprising a pair of opposed tongues integral with said strap respectively extending from positions relatively intermediate of said inwardly turned lips of said slat, outwardly towards said inwardly turned lips, respectively, at an upward inclination to said strap, said inclination and the length of said tongues being such as to enable said tongues to pass over said inwardly turned lips in engagement therewith to thereby secure said inwardly turned lips between said tongues and said strap, when said link is applied to said slat.

2. A connecting link for slat shades formed of metal slats of channel cross-section reinforced along their longitudinal edges by inwardly turned lips, comprising a metal strap extending transversely of said slat underneath

said inwardly turned lips, having a loop at one end of said strap and a transverse slot at the other end thereof receiving the corresponding loop of the adjacent link, said strap protruding from the sides of said slat, and means for fastening said link to said slat comprising a pair of opposed, diverging tongues integral with said strap, respectively extending from said strap from positions thereon relatively intermediate of said inwardly turned lips of said slat, outwardly toward said inwardly turned lips, respectively, at an upward inclination to said strap, said inclination and the length of said tongues being such as to enable said tongues to pass over said

inwardly turned lips in engagement therewith and to contact the inner walls of said slat, when said link is applied to said slat.

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