

April 15, 1952

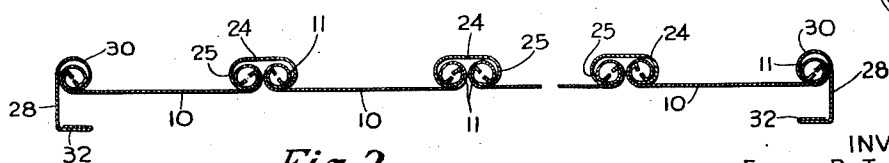
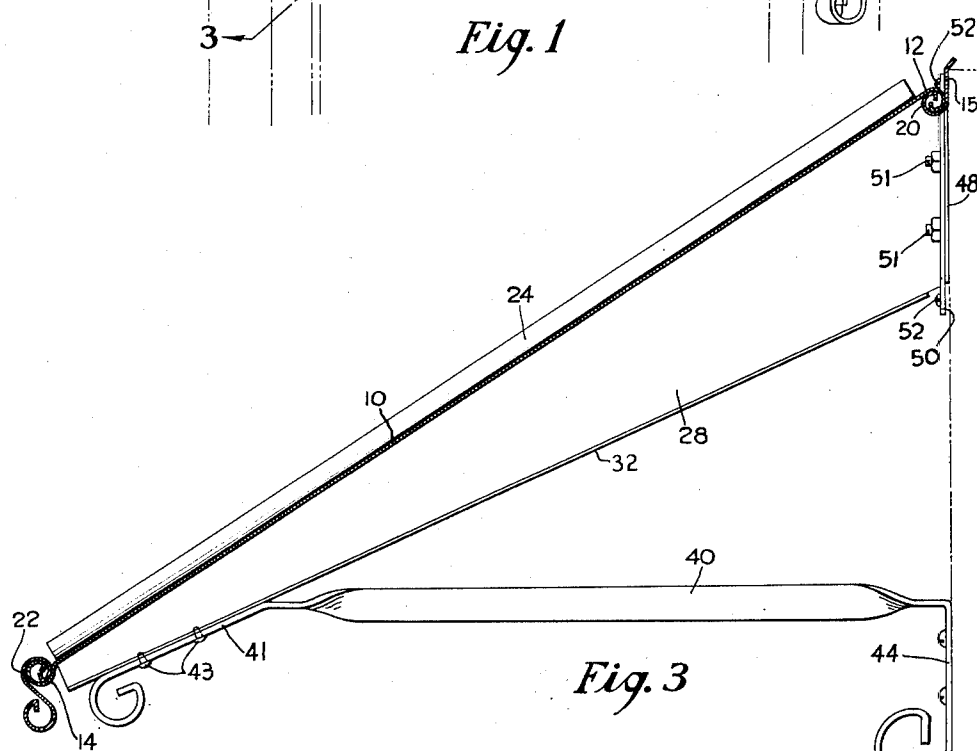
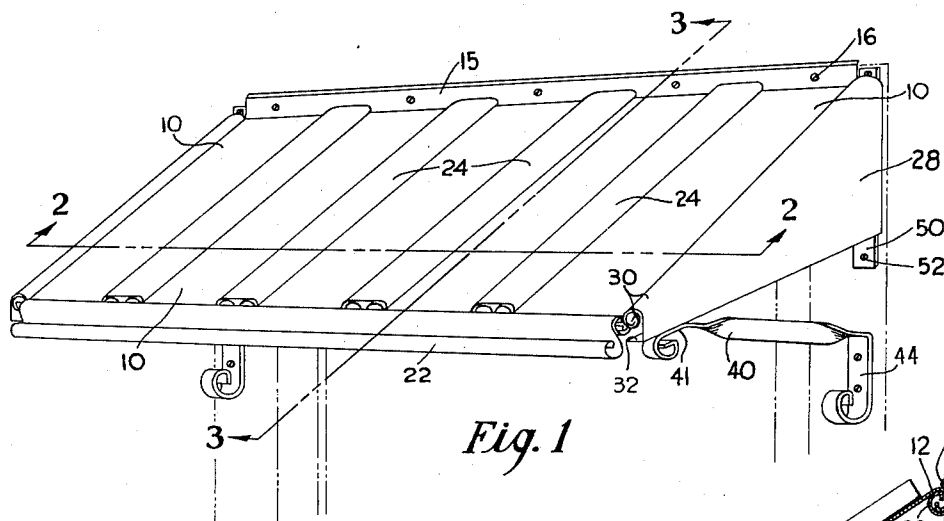
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2,593,221

CANOPY CONSTRUCTION

Filed Nov. 16, 1948

3 Sheets-Sheet 1



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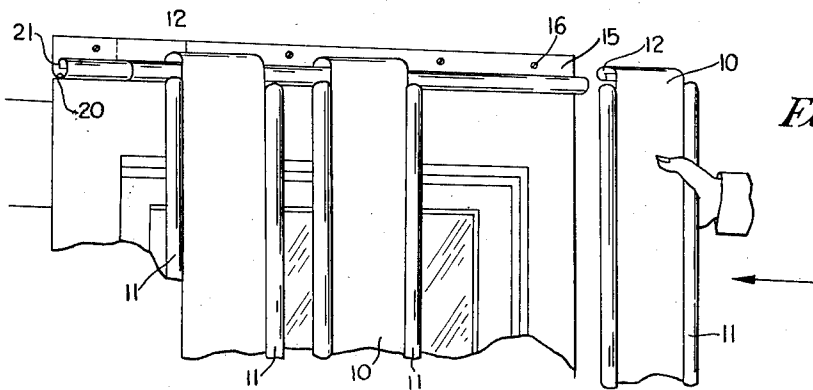


Fig. 4

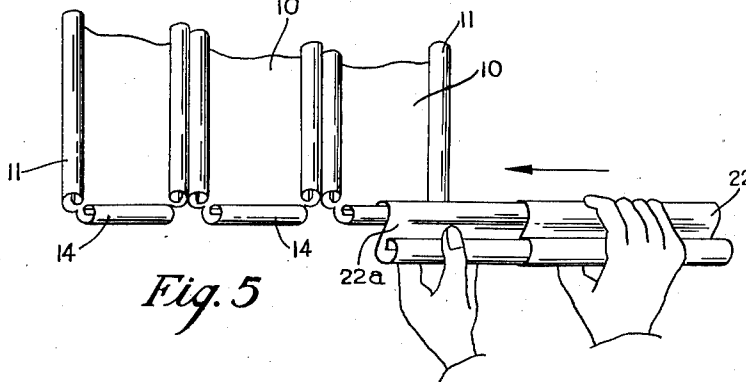


Fig. 5

Fig. 7

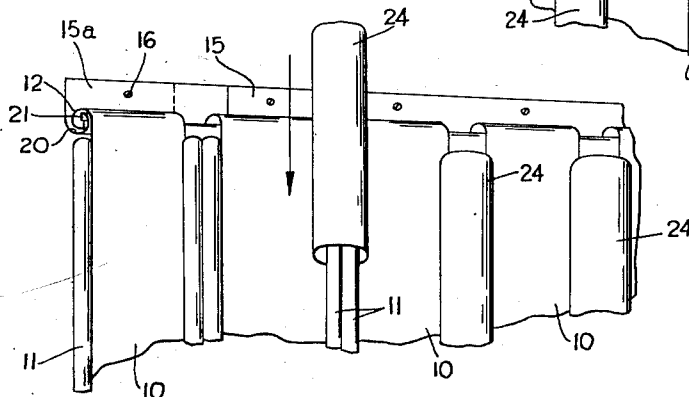
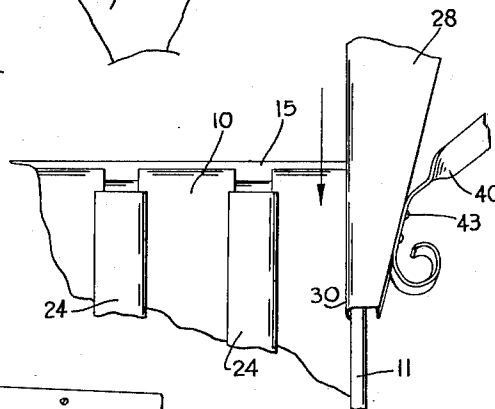


Fig. 6

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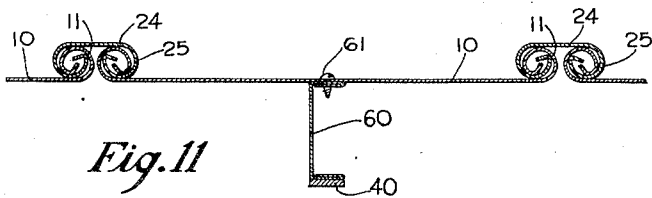
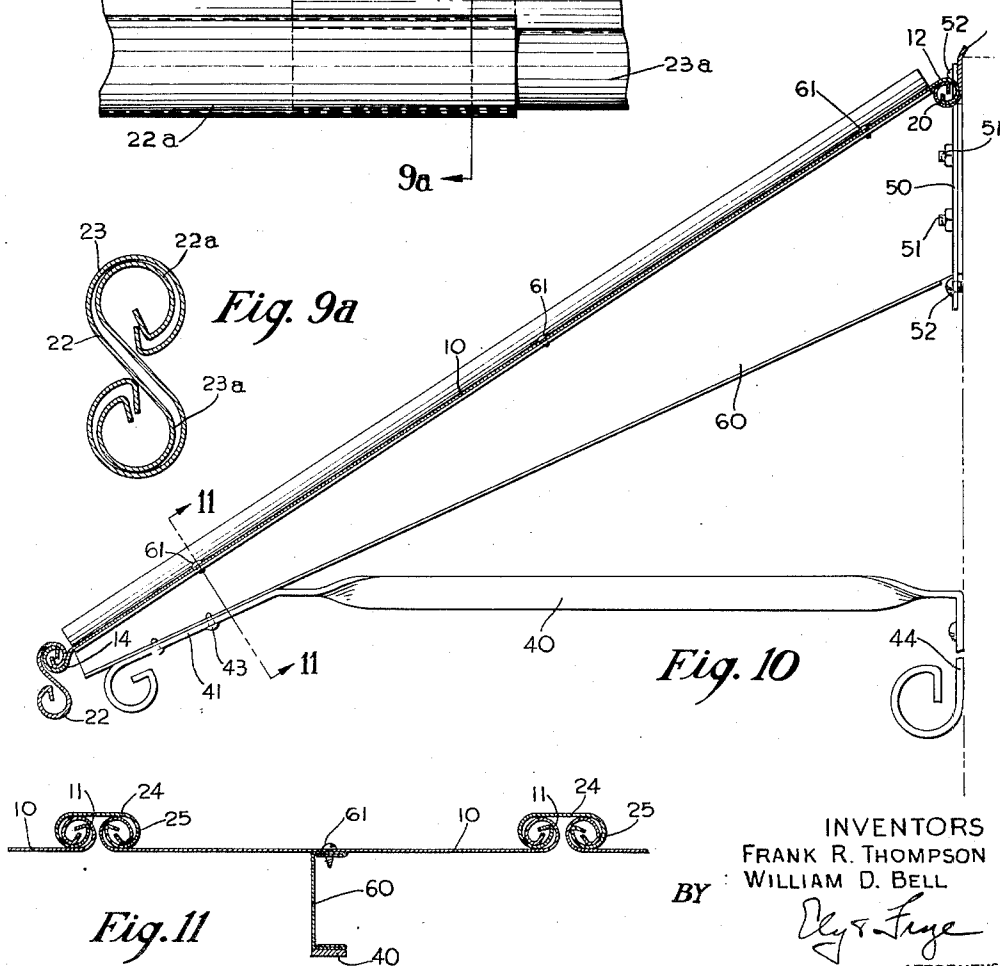
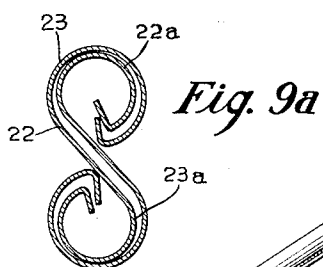
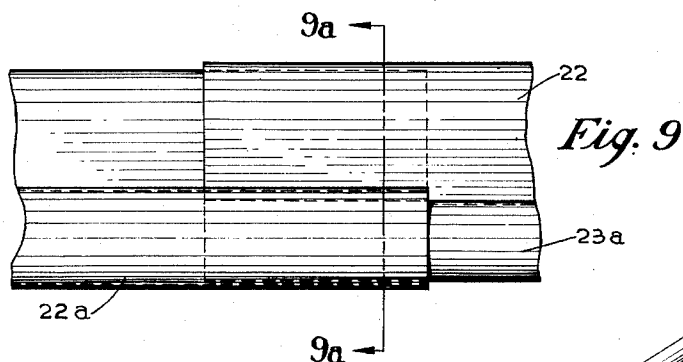
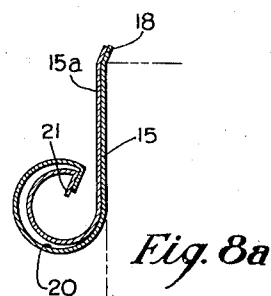
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CANOPY CONSTRUCTION

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15 Claims. (Cl. 160—57)

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The present invention has for its object the design and construction of canopies, awnings or the like which are made of metal and are supplied to the houseowner in such form that he may easily assemble and install them. One of the features of the invention is to provide a construction of this type in knockdown form which may be easily assembled and which is made in relatively small units so that a canopy or awning may be readily erected over any size door or window opening. By making awnings of this type, a complete set of parts for a single awning may be sold in package form.

It is a further object of the invention to devise an awning or canopy which is attractive and ornamental, and is permanent. The various parts which comprise the awning are readily assembled and are so designed that the complete awning or canopy makes a very attractive and useful addition to a dwelling or over a store window.

In the drawings:

Figure 1 is a view in perspective showing a complete awning made in a single unit of length.

Figure 2 is a section on the line 2—2 of Figure 1.

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

Figures 4 to 7, inclusive, show the several steps of assembling a canopy or awning.

Figures 8 and 8a are an elevation and sectional view respectively of an adjustable hanger strip which is used when the awning or canopy exceeds the unit size.

Figures 9 and 9a are similar views of an adjustable edging strip which is used along the outer forward edge of the canopy and is adapted for awnings which exceed the unit width.

Figure 10 is a view showing the use of a supplemental support which is used when the awning or canopy is extended to a degree where an intermediate support is required.

Figure 11 is a section on the line 11—11 of Figure 10.

The structure is comprised of a plurality of main plates or units which are indicated by the numeral 10. These units are made of a standard length such as is adapted for canopies or awnings. Each unit is made of a selected width which will adapt itself to the construction of varying sizes of awnings or canopies which will generally be encountered. For convenience we have selected six inches as the standard width of a main plate 10 so that awnings of any desired

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size may be constructed in widths which are multiples of six inches.

By way of example we have shown in Figure 1 five of these unitary plates assembled to make a thirty-inch awning or canopy which is representative of a small canopy unit. Each plate is provided along each longitudinal edge with an upwardly rolled or curled edge 11 and across the rear or upper edge is a downwardly curled or rolled edge 12. Across the lower or outer edge is an upwardly curled or rolled edge 14.

In the form shown in Figure 1 a single flashing strip or hanger 15 is shown, but for larger installations two or more of these strips 15 and 15a will be provided so that the householder may, by adding more of the main plates, secure any width of awning which he may desire. One strip is the length which has been selected for a unit canopy, in this case thirty inches. The main portion of each strip 15 or 15a is flattened so that it may be fastened to the upper portion of the casement or to the side of the building by nails or screws 16. The upper edges of the strips may be formed with an inwardly turned flange 18 to make a weather-tight seal with the side of the building. The lower edge of each strip is formed with a curled or rolled gutter 20, the edge of which terminates in the reinforcing flange 21. In the case of the hanger strips the curl 20 in the strip 15 is made on a greater radius than the curl on the strip 15a so that two strips may be telescopically adjusted to the width desired for awnings over the unitary length.

Serving to hold the unit plates 10 together and to provide an ornamental lower edge or valance on the awning, there is provided a transverse locking or edging strip 22 which is in the form of the letter S with two curled or rolled edges 23 and 23a. In this case the two curled edges are made in different radii so that in case the canopy is over the thirty-inch length two or more of these strips 22 and 22a are employed and are telescoped by reversing the strips so that the small and large curled portions on the strips are nested as shown in Figure 9a.

There are also provided a plurality of splicing or connecting strips 24 which span the meeting edges of a pair of plates 10 and serve to hold them in parallel fixed relationship. Each of these connecting strips is formed with a central flat portion and two downwardly extending curled edges 25 which slidably interlock with the longitudinal curled edge portions 11 on the plates 10. While the edges of the plates 10 are

shown in contact this is not essential as the plates may be spaced apart to any desired degree. Also the connecting strips may be of any width and while they are preferably placed above the plates this is not essential.

For each awning are provided two triangular end plates 28 which are formed on the angle which the awning or canopy is to assume. The upper edge of each end plate is provided with a rolled or curled edge portion 30 adapted to slidably interlock with the upwardly curled portion 11 on the end unit plate 10. The lower edge of each end plate 28 is provided with an inturned flange 32 which is for the purpose of reinforcing the plate and for receiving the outer end of a brace 40 which is shown in the form of an ornamental strap twisted so that its flat outer portion 41 parallels the underside of the flange 32 to which it is fastened by bolts 43. The rear end of each brace is turned vertically, as at 44, so that it may be attached to the side of the building. To further support the canopy by the end pieces the rear or vertical edge of the end pieces 28 are provided with inturned vertical flanges 48 to which are attached flat holding plates 50 by bolts 51. Screws 52 fasten the plates 50 to the building.

Should the canopy be extended much beyond the unit length of thirty inches (or whatever length is selected) it is desirable to provide an auxiliary support in the form of a plate 60, which may be fastened to the underside of one of the intermediate plates 10 by bolts 61. A supplemental brace member 40 may be used at this point if the formation of the building permits or if not a single plate 50 used on the inner side of the support 60 will usually afford a sufficient support for the awning at a midway point.

Figures 4 to 7 illustrate the manner in which an awning is assembled and erected in place over a window or door. In the illustration the awning is somewhat wider than the unit width which has been selected.

The first operation is to attach the upper hanger strip 15 over the top of the door or window which is to be protected by the awning. The several plates 10 are then placed over the strip 15 by slidably interlocking the curled portion 12 on the units with the curled portion 20 on the hanger strip. The several plates are moved into abutting edge-to-edge relation and then the front edging strip 22 is telescoped over the lower edges of the plates by slidably interlocking one of the curled edges of a strip 22 with the curled transverse edges 14 of the plates 10.

While the plates 10, now connected along their lower edges by the strip 22 (or 22 and 22a), are hanging in a vertical position as shown in Figure 6, the splicing or connecting strips 24 are telescoped downwardly over the edges of the plates 10. The nesting of the curled edges 11 on the plates 10 and the curled edges 25 on the strips 24 serves to draw the plates 10 together so that the top of the awning is firm.

The next step is the attachment of the end plates 28 with the braces 40 attached. The end plates are first telescoped over the edges of the outside plates 10 with the curled portions 11 and 30 in engagement as shown in Figure 7. The awning is then raised, the curled portion 12 and 20 on the plates 10 and the hanger 15 permitting the awning to rock. The end pieces 28 are now brought to vertical position and the awning is firmly mounted in position by fastening the braces 40 in position and securing the plates 50

to the wall of the building. If the awning requires it, the supplemental support 60 may now be added.

It will be seen that the houseowner may easily set up one of these awnings or canopies in any desired size and that the operations are simple and do not require the use of skilled labor. The awning is attractive and adds to the appearance of the building. It is so designed that it can be shipped and sold in knockdown condition and is adaptable for all sizes of windows or doorways.

While the description herein has been detailed so that the best known and preferred form of the invention will have been described, it is possible to embody the invention in other forms than that specifically described and shown. Improvements and changes may be made without departing from the scope and purview of the invention as set forth in the appended claims.

What is claimed is:

1. A construction for use as an awning with a top surface having in combination a plurality of elongated plates arranged in parallel relationship, each of said plates having its longitudinal edges provided with upwardly directed curled formations, a plurality of strips located over the longitudinal edges of said plates and having downwardly directed curled formations in sliding interlocking engagement with the formations on the underlying plates, and means extending across the awning and slidably attached to the lower edges of said plates to hold them in fixed relation to one another.

2. A construction for use as an awning having a top surface comprising a plurality of plates arranged in parallel relation with the longitudinal edges of successive plates in contact, each of said plates having along its longitudinal edges upwardly turned curled formations, a strip spanning the abutting edges of two of said plates, said strip having downwardly turned curled formations in sliding interlocking engagement with the formations on the underlying plates, and means slidably secured to the lower edges of said plates to hold said plates and strips in rigid relation.

3. A multiple piece top construction for awnings having a roof surface comprising a plurality of similar elongated plates arranged longitudinally of the top, each of said plates having its longitudinal edges provided with interlocking formations, strips spanning the adjacent edges of pairs of plates and having interlocking formations complementary to and fitting the interlocking formations on the plates, the lower transverse edges of said plates having interlocking formations in alignment, and an edging strip across the lower edges of said plates having a sliding interlocking fit with the formations on the lower transverse edges of said plates.

4. A multiple piece top construction for awnings having a roof surface comprising a plurality of similar elongated plates arranged longitudinally of the top, each of said plates having its longitudinal edges provided with interlocking formations, strips spanning the adjacent edges of pairs of plates and having interlocking formations complementary to and fitting the interlocking formations on the plates, the lower transverse edges of said plates having interlocking formations in alignment, an edging strip across the lower edges of said plates having a sliding interlocking fit with the formations on the lower transverse edges of said plates, and a

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hanger strip adapted to be attached to a building, said hanger strip having a sliding interlocking fit with the upper transverse edges of said plates.

5. A multiple piece roof construction for awnings having a roof surface comprising a plurality of similar plates arranged longitudinally of the roof, a plurality of strips respectively arranged parallel to said plates and having a sliding interlocking fit with adjacent ones of said plates, and an edging strip across the lower edge of the roof and having a sliding interlocking fit with the lower transverse edges of the plates.

6. A multiple piece roof construction for awnings having a roof surface comprising a plurality of similar plates respectively arranged longitudinally of the roof, a plurality of strips arranged parallel to said plates and having a sliding interlocking fit with adjacent ones of said plates, an edging strip across the lower edge of the roof and having a sliding interlocking fit with the lower transverse edges of the plates, and a supporting strip having a sliding interlocking fit with the upper transverse edges of the plates.

7. In an awning construction for attachment to a building in which the top of the awning is composed of a plurality of elongated plates, each of said plates having upwardly directed curled formations along its longitudinal edges, a downwardly directed curled formation across one of its ends, an upwardly directed curled formation across its other end, and strips in interlocking sliding engagement with the respective formations to hold the said plates together and supported from a building.

8. In an awning construction for attachment to a building in which the top of the awning is composed of a plurality of elongated plates, each of said plates having upwardly directed curled formations along its longitudinal edges, a downwardly directed curled formation across one of its ends, an upwardly directed curled formation across its other end, locking strips having downwardly directed curled formations along their longitudinal edges in sliding interlocking engagement with the curled formations on the longitudinal edges of adjacent ones of said plates, and a supporting strip adapted to be attached to the building and having a formation along one edge in sliding interlocking engagement with the said downwardly directed curled formations on said strip.

9. In an awning construction for attachment to a building in which the top of the awning is composed of a plurality of elongated plates, each of said plates having upwardly directed curled formations along its longitudinal edges, a downwardly directed curled formation across one of its ends, an upwardly directed curled formation across its other end, locking strips having downwardly directed curled formations along their longitudinal edges in sliding interlocking engagement with the curled formations on the longitudinal edges of adjacent ones of said plates, a supporting strip adapted to be attached to the building and having a formation along one edge in sliding interlocking engagement with the said downwardly directed curled formations on said strip, and an edging strip having a formation in sliding interlocking engagement with the said curled formation across the other ends of the plates.

10. An awning, the top of which is comprised of a plurality of elongated plates arranged in parallel relation, each of said plates having each

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of its edges provided with an interlocking formation, locking strips arranged over the adjacent edges of said plates and other locking strips across their ends to hold the plates together, each of said strips being in sliding interlocking engagement with formations on the plates, and means to support the awning so that it projects outwardly from a building.

11. An awning, the top of which is comprised of a plurality of elongated plates arranged in parallel relation, each of said plates having each of its edges provided with an interlocking formation, locking strips arranged over the adjacent edges of said plates and other locking strips across their ends to hold the plates together, each of said strips being in sliding interlocking engagement with formations on the plates, and means to support the awning so that it projects outwardly from a building, said last named means comprising end plates having sliding interlocking engagement with the longitudinal edges of the plates at the lateral sides of the awning.

12. A construction for use as an awning having a top surface comprising a plurality of plates arranged in parallel relation, with the longitudinal edges of the plates extending transversely of the lower outer edge of the awning, each of said plates having along its longitudinal edges upwardly turned curled formations, a plurality of strips spanning the edges of adjacent plates and having downwardly directed curled formations in sliding interlocking engagement with the formations on the underlying plates, and a transverse member slidably connected to the lower outer edge of the awning and holding the plates and strips in rigid relation.

13. A construction for use as an awning having a top surface comprising a plurality of plates arranged in parallel relation, with the longitudinal edges of the plates extending transversely of the lower outer edge of the awning, each of said plates having along its longitudinal edges upwardly turned curled formations, a plurality of strips spanning the edges of adjacent plates and having downwardly directed curled formations in sliding interlocking engagement with the formations on the underlying plates, and transverse members attached to the upper and lower horizontal edges of the awning and holding the plates and strips in rigid relation.

14. A construction for use as an awning having a top surface comprising a plurality of plates arranged in parallel relation, with the longitudinal edges of the plates extending transversely of the lower outer edge of the awning, each of said plates having along its longitudinal edges upwardly turned curled formations, a plurality of strips spanning the edges of adjacent plates and having downwardly directed curled formations in sliding interlocking engagement with the formations on the underlying plates, a transverse member attached to the upper horizontal edge of the awning and serving to hold the plates and strips in rigid relation and to support the awning on the building.

15. A construction for use as an awning having a top surface comprising a plurality of plates arranged in parallel relation, with the longitudinal edges of the plates extending transversely of the lower outer edge of the awning, each of said plates having along its longitudinal edges upwardly turned curled formations, a plurality of strips spanning the edges of adjacent plates and having downwardly directed curled forma-

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tions in sliding interlocking engagement with the formations on the underlying plates, and a transverse member attached to the lower horizontal edge of the awning constituting a valance and serving to hold the plates and strips in rigid relation.

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