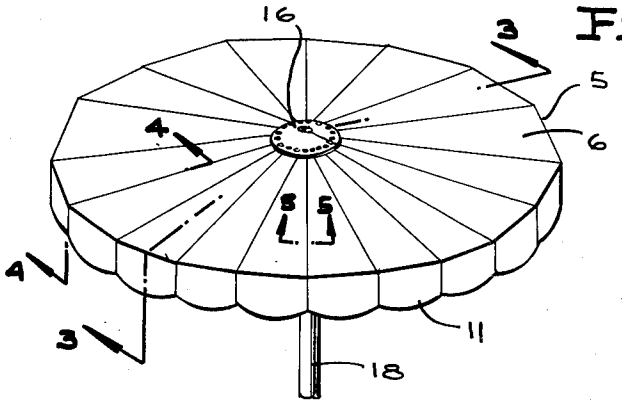
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METAL UMBRELLA

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FIG. 1



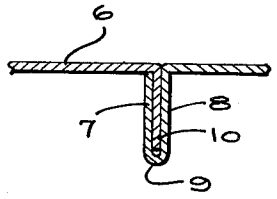


FIG. 5

FIG. 2

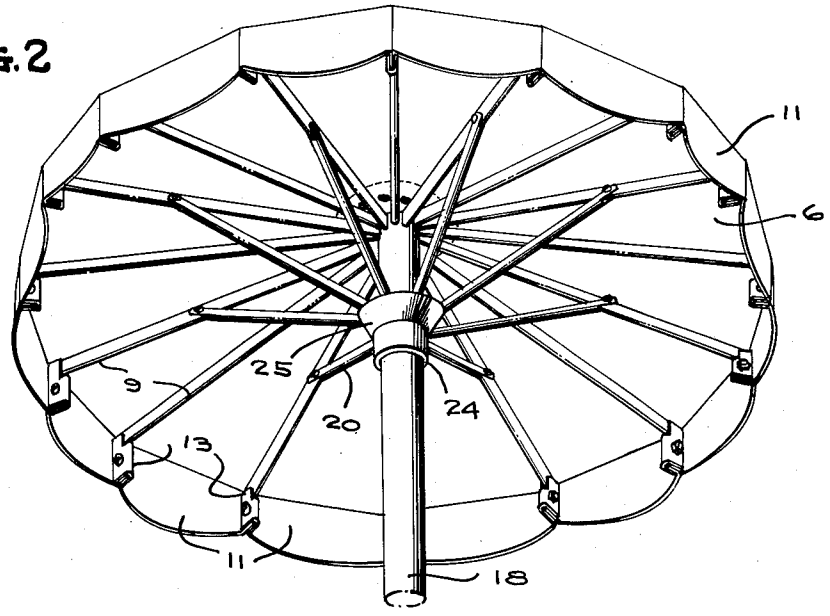
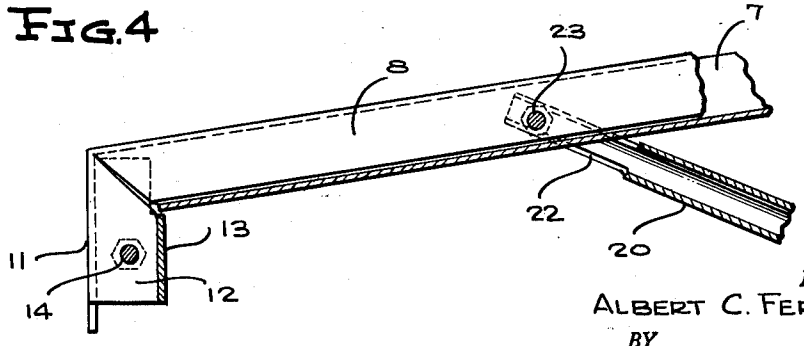


FIG. 4



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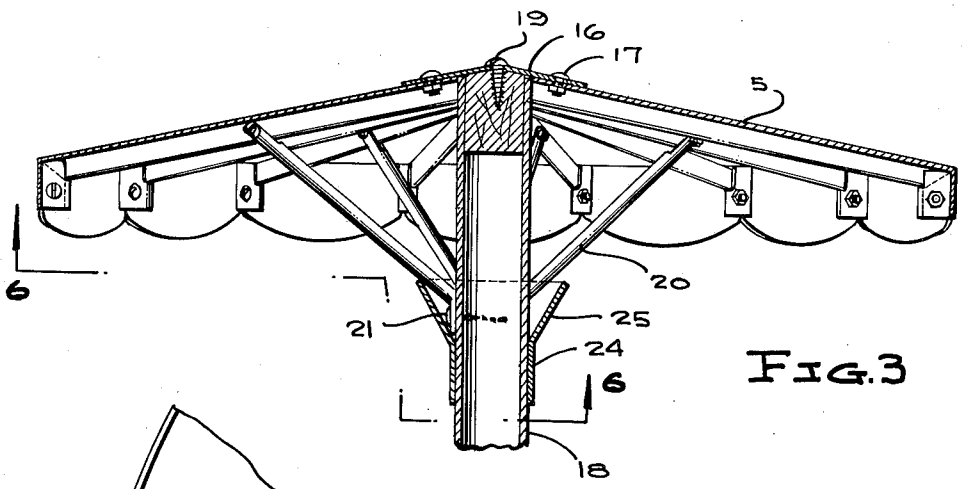


FIG. 3

FIG. 6

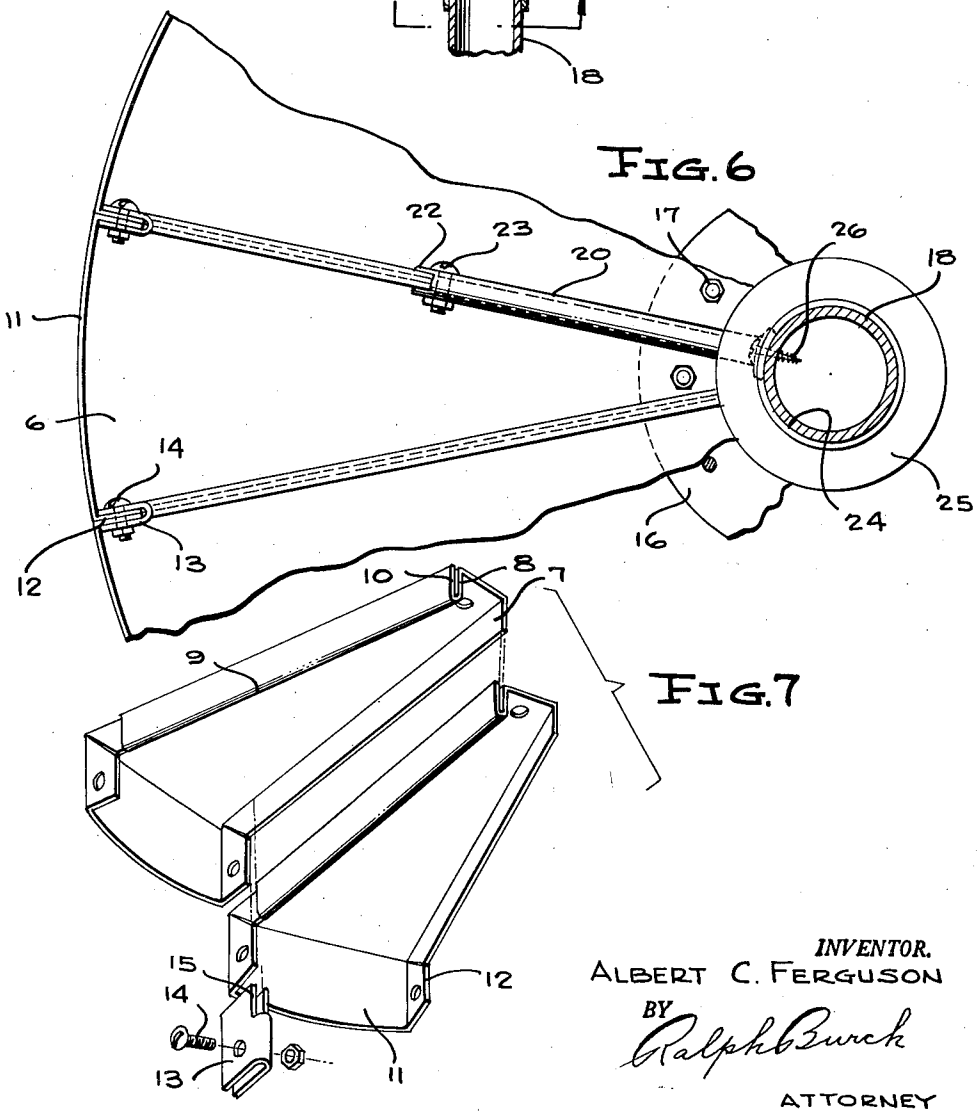


FIG. 7

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METAL UMBRELLA

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Filed Nov. 23, 1959, Ser. No. 854,723
3 Claims. (Cl. 50—49)

This invention relates to metal umbrellas particularly designed for use as a lawn or patio umbrella.

It is an object of the invention to provide a metal umbrella formed of light thin gauge metal which may be easily assembled and when assembled possesses the necessary strength to withstand the elements of the weather.

A further object of the invention resides in forming the top of the umbrella from sheet metal segments having flanges and grooves for interfitting engagement to secure the segments in close tight engagement with bracing means between the segments and supporting post to provide a rigid structure.

A still further object of the invention resides in providing an umbrella top formed of sheet metal segments with each segment having its outer end bent downwardly, the bent ends of the segments being joined together by removable clips to form a valance surrounding the top.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

FIG. 1 is a perspective view of the umbrella viewed from the top,

FIG. 2 is a perspective view of the umbrella viewed from the bottom,

FIG. 3 is a sectional view taken on line 3—3 of FIG. 1.

FIG. 4 is a fragmentary sectional view taken on line 4—4 of FIG. 1,

FIG. 5 is a sectional view taken on line 5—5 of FIG. 1,

FIG. 6 is a sectional view taken on line 6—6 of FIG. 3, and,

FIG. 7 is a detail perspective view of the segments in separate relation.

Referring to the drawings, the numeral 5 denotes the top of the umbrella which, as shown, is circular in shape but if desired the shape may be varied to produce different ornamental effects. The top is formed of a plurality of segments 6 formed of light sheet metal which are tapered so their outer ends are wider than the inner ends. The longitudinal edges of the segments are bent downwardly to form depending flanges 7 and 8, with the flange 8 of greater width and reversely bent, as at 9, to form a groove 10 along one side of the segment adapted to receive the flange 7 of an adjacent segment to establish a fixed connection and tight joint between the segments. The outer end of each segment is bent downwardly to form a valance 11 having inturned flanges 12, at its sides, and a U-shape clip 13 holds the abutting flanges 12 of adjoining segments together being held in place by a bolt 14 passing through the clip and flanges. The bight of clip 13 is bifurcated, as at 15, to slidably engage over the flange 8 to provide a rigid connection. The outer ends of the segment flanges

and upper ends of the valance flanges are beveled and in abutting engagement, as shown in FIG. 4.

A conical disk 16 covers the inner ends of the segments and is conected to the segments by bolts 17. A post 18 for supporting the umbrella is connected at its upper end to the disk 16 by a screw 19, and radiating from the post beneath the top are a series of brace tubes 20 connected at one end to the post by screws 21. The tubes extend upwardly and outwardly from the post and are bifurcated, as at 22, at their upper ends to receive the flanges 7 and 8 of the segments to which they are connected by bolts 23. A collar 24 is slidably mounted on post 18 having a conical upper end 25 to cover the lower ends of the brace tubes, the collar being secured to the post by screws 26.

All parts of the umbrella are made of thin gauge metal such as aluminum with the parts designed to provide easy assembly with the maximum strength. The segments forming the top may be painted the same or different colors to give the desired ornamental appearance.

Having thus described my invention, I claim:

1. An umbrella comprising a plurality of thin sheet metal segments radially disposed with their longitudinal edges in abutting relation to form a circular cover, the abutting edges of said segments having depending flanges, with one flange of each segment being reversely bent to form a groove to receive the adjacent flange of the adjoining segment to establish a fixed and tight connection between the flanges, valence portions bent downwardly from the outer ends of said segments having inturned flanges at their side edges, the upper ends of the valence flanges and the outer ends of the segment flanges being beveled and in abutting engagement, U-shaped clips straddling the flanges of adjacent valence portions, the bight of said clips being bifurcated and straddling the flanges of said segments, and means securing said clips to the flanges of the valence portions.

2. An umbrella as described in claim 1 including a post connected at its upper end to the inner ends of said segments, brace members extending upwardly and outwardly from said post having their outer ends bifurcated and straddling the flanges of said segments, and means fixedly securing the bifurcated ends of the brace members to said flanges.

3. An umbrella as described in claim 1 including a collar mounted on said post beneath said brace members, said collar having a flared upper end extending over the inner ends of said brace members.

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