Dec. 29, 1931. F. J. RICHARDSON 1,839,052

FOLDING METALLIC AWNING

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Fig. 4.

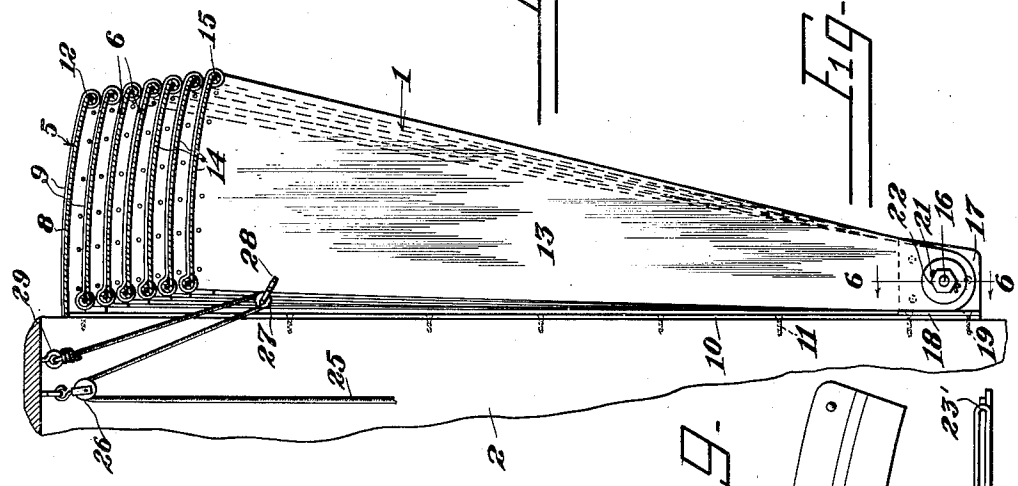


Fig. 5.

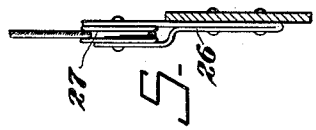


Fig. 1.

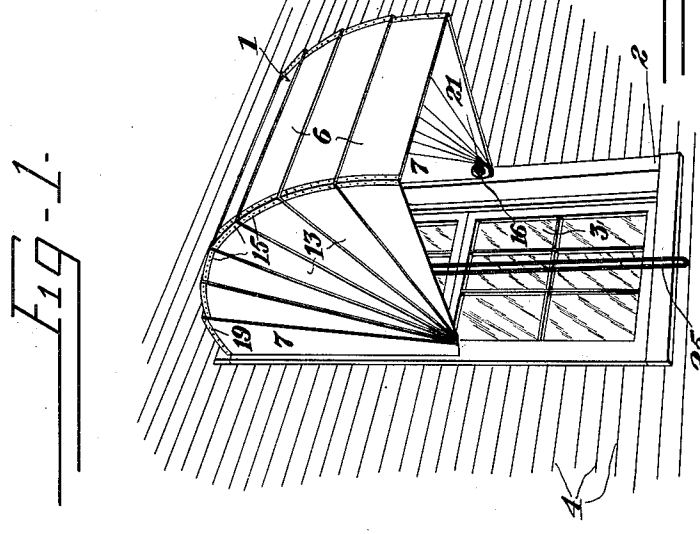


Fig. 9.

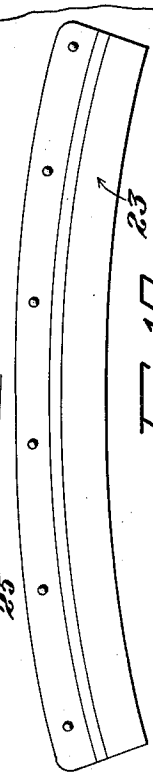


Fig. 10.



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Fig-6-

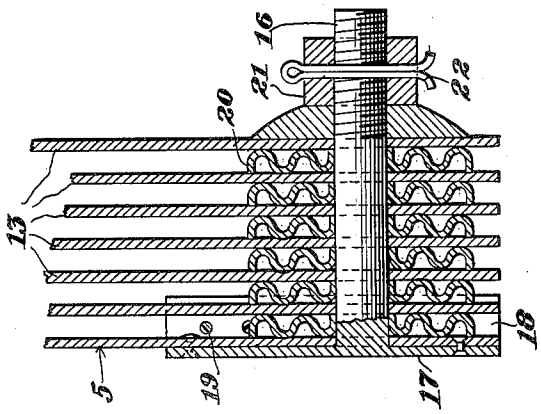


Fig-7-

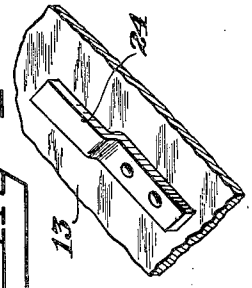
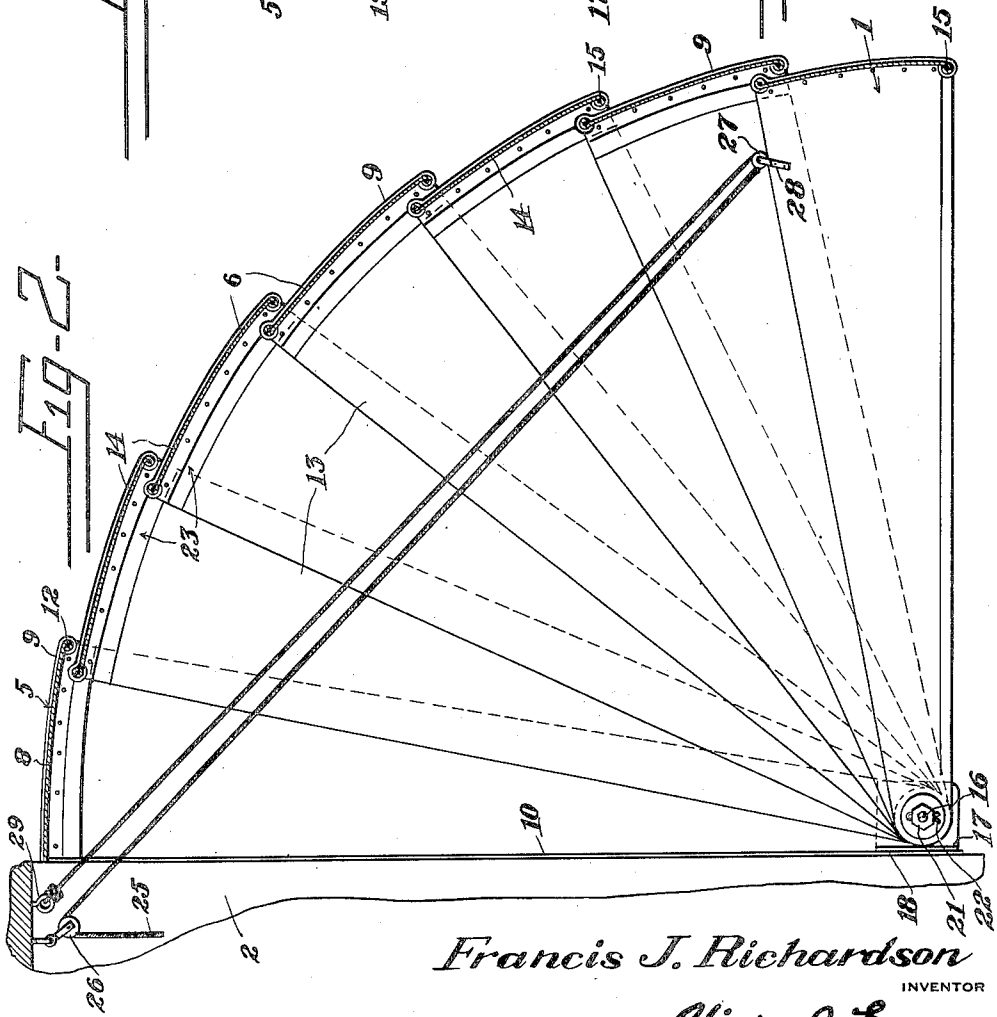


Fig-2-



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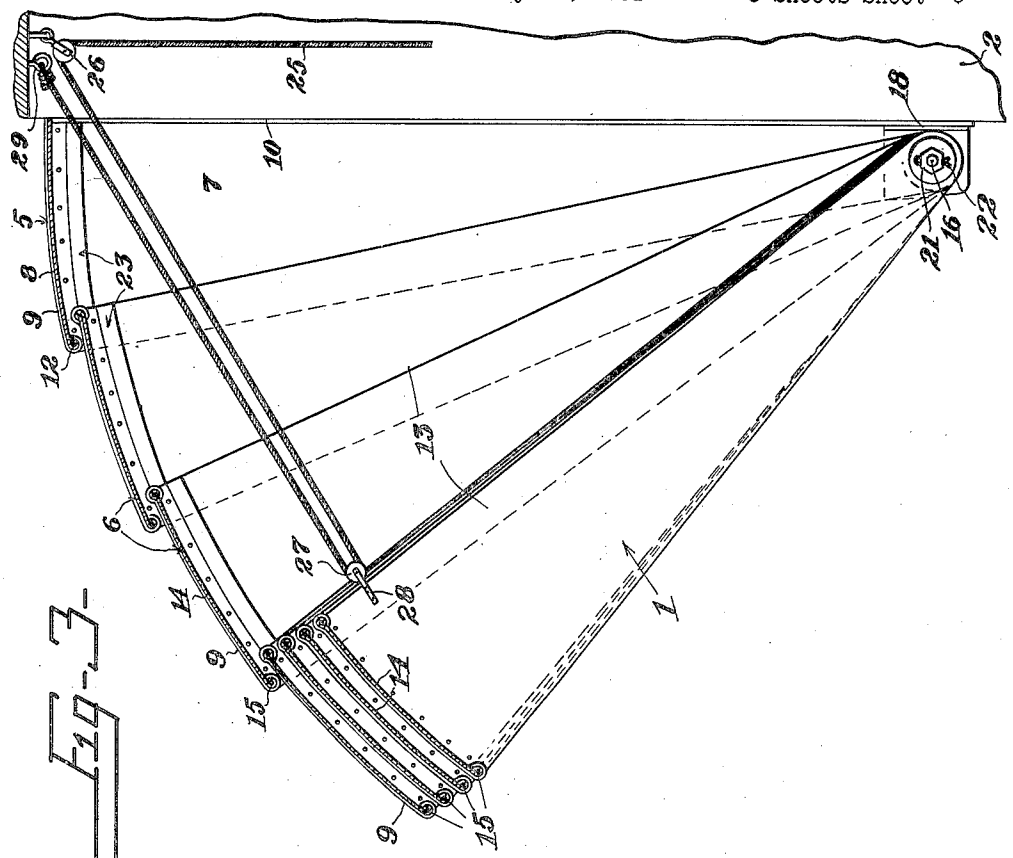


Fig. 7.

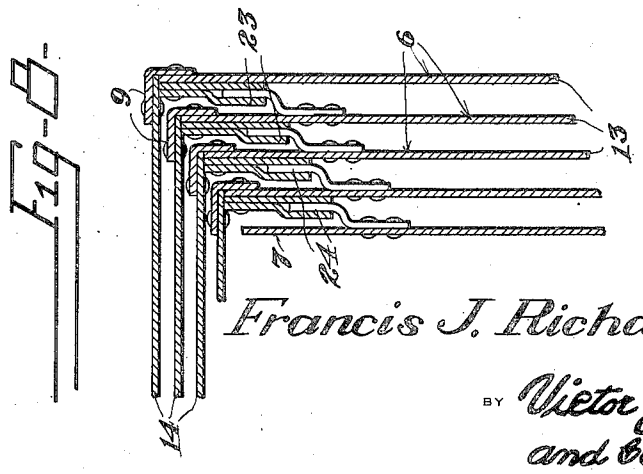


Fig. 8.

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Patented Dec. 29, 1931

1,839,052

UNITED STATES PATENT OFFICE

FRANCIS J. RICHARDSON, OF NEW ORLEANS, LOUISIANA

FOLDING METALLIC AWNING

Application filed May 21, 1931. Serial No. 539,034.

This invention relates to collapsible metallic awnings and has for the primary object, the provision of a plurality of movable sections and a stationary section in which the movable sections may be grouped and extended from when desiring to shade and protect a window to which the device is applied from sun and weather elements.

Another object of this invention is the provision of guide means between the sections that maintain said sections in proper relation to each other and which will permit the sections to have free sliding movement and provide means for limiting or stopping the individual sections with relation to one another when extended and also provides means for raising or collapsing the sections one within the other.

A further object of this invention is the provision of an operating means for the movable sections whereby they may be easily and quickly extended relative to each other and the stationary section or folded entirely within the stationary section or whereby some of said movable sections may be moved within the other movable sections while the latter named movable sections remain in an extended position.

A further object of this invention is the provision of rolled and reinforced edges to certain of the edges of the sections to aid in maintaining said sections in their proper shape.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which

Figure 1 is a perspective view illustrating an awning constructed in accordance with my invention and applied to a window frame of a building.

Figure 2 is a sectional view illustrating the sections of the awning in an extended position.

Figure 3 is a similar view showing the awning in a partially collapsed position.

Figure 4 is a sectional view illustrating the movable sections folded one within the other and grouped within the stationary sections.

Figure 5 is a detail sectional view illustrating the means of attaching a pulley to the section of the awning.

Figure 6 is a fragmentary sectional view taken on the line 6—6 of Figure 4 joining the anti-friction means between the sections.

Figure 7 is a fragmentary perspective view illustrating a guide element secured to one of the sections.

Figure 8 is a fragmentary sectional view illustrating the guide means between the sections.

Figure 9 is an elevational view of the guide track, and

Figure 10 is an edge view of the guide track.

Referring in detail to the drawings, the numeral 1 indicates, in entirety, a folding metallic awning applied to a window frame 2 and disposed over a portion of a window 3 of a building 4. The awning includes a stationary section 5 and a plurality of movable sections 6. The movable sections are receivable one within the other and also capable of being grouped within the section 5 as shown in Figure 4 when the awning is in a non-protective position and the movable sections are capable of being extended relative to each other and the stationary section as shown in Figures 2 and 3 to shield the window against sun and weather elements.

The section 5 includes tapering side members 7 connected by a top member 8 and said members are suitably joined together and strengthened by reinforcing angle irons 9. The side members 7 are provided with marginal flanges 10 apertured to receive fasteners 11 for securing the stationary section to the window frame 2. The front edge of the top member 8 is rolled and reinforced by a wire 12 to form a strengthening medium.

The movable sections 6 include side members 13 connected by top members 14. The members 13 and 14 are connected together in any suitable manner and reinforced by the

angle iron brackets 9. The inner and outer edges of the top members 14 are rolled and reinforced by wires 15.

The side members 13 are tapered similar to the side members 7 and have their lower ends apertured to receive journal bolts 16 carried by plates 17 riveted or otherwise secured to the side members of the stationary section. Angularly disposed flanges 18 are formed on the plates 17 and are secured to the window frame by fasteners 19 cooperating with the flanges 10 in firmly mounting the awning in position on a building.

Interposed between the side members 13 of the movable sections and located upon the journal bolts 16 are frictional washers 20 of the corrugated type to provide the desired tension on the movable sections and prevent them from having undue lateral movement relative to each other. The journal bolts 16 have threaded thereon nuts 21 for maintaining the movable sections in assembled position and are locked to the bolts by cotter keys 22.

The sections of the awning have secured to the side members thereof guide tracks 23 to receive guide elements 24 carried by the adjacent sections whereby said sections during their opening and closing movements will be properly guided relative to each other and provide stops and means for raising the sections to collapsed position as in Figure 4. Each guide track 23 includes parallel members connected together at their ends by an arcuate shaped portion 23′ to form stops at the ends of the tracks and which are engaged by one of the guide elements 24.

The top members of the sections are transversely curved while the side members of said sections are tapered cooperating with each other in providing an awning with a symmetrical appearance both when in a folded position and extended.

An operating means in the form of a flexible element 25 is trained over pulleys 26 carried by the window frame and then over pulleys 27 secured by brackets 28 to the end section of the movable sections and then secured to fasteners 29 secured to the window frame thereby providing double runs to the operating means located adjacent each side of the awning so that on pulling upon the flexible element 25 disposed within the window frame, the movable sections may be telescoped one within the other and within the stationary section as shown in Figure 4 or if desired some of the movable sections may be telescoped within the adjacent movable sections while the latter named sections remain extended for partially shielding or protecting the window.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of my invention, as claimed.

Having thus described my invention, what I claim is:

An awning comprising a stationary section, a plurality of telescopic sections pivoted to the stationary section, guide tracks carried by said sections and each including spaced members joined together at their ends by arcuate shaped portions providing stops, guide elements carried by said telescopic sections and engaging between the spaced members of the tracks and adapted to engage the arcuate shaped portions thereof when said telescopic sections are extended and when collapsed one within the other and within the stationary section, and an operating means for the telescopic sections.

In testimony whereof I affix my signature.

FRANCIS J. RICHARDSON.