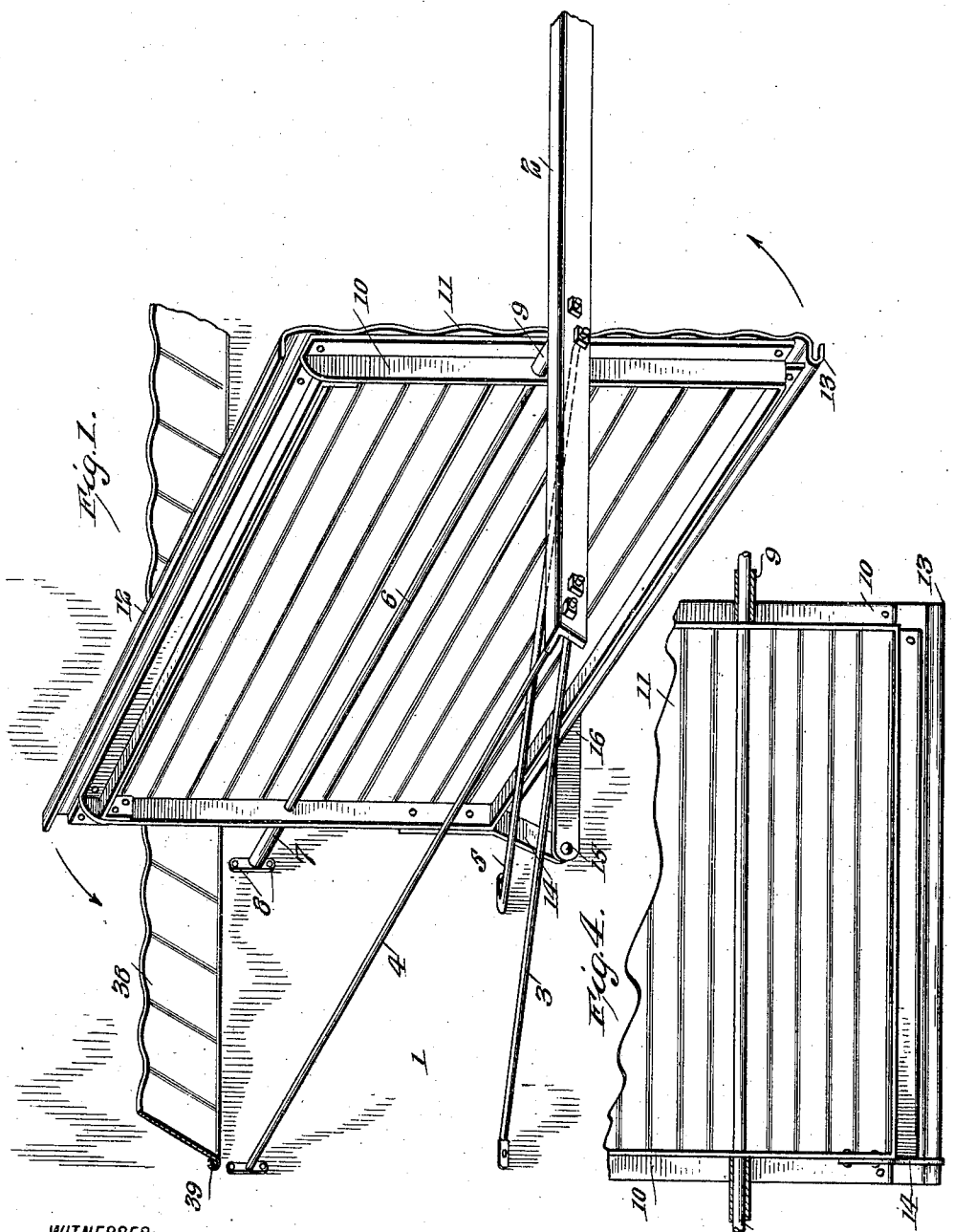
S. L. PARO & S. B. HADSELL.

AWNING.

APPLICATION FILED APR. 9, 1910.

**986,852.** **Patented Mar. 14, 1911.**

2 SHEETS—SHEET 1.

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2 SHEETS—SHEET 2.

Fig. 3.

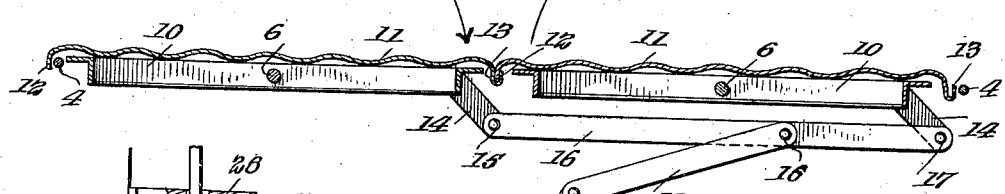
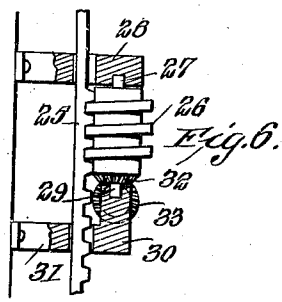



Fig. 6.



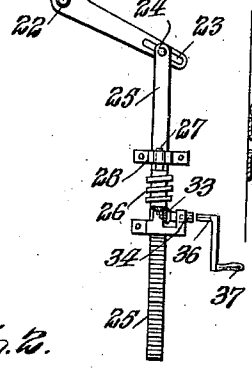




Fig. 5.

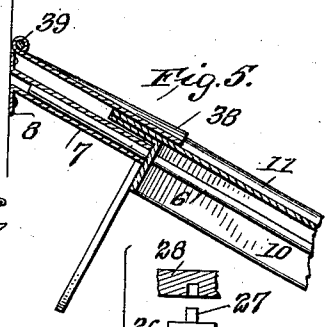



Fig. 2.




Fig. 7.

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# UNITED STATES PATENT OFFICE.

SIMON LOUIS PARO, OF ANNAPOLIS, AND STEPHEN B. HADSELL, OF BALTIMORE, MARYLAND.

## AWNING.

986,852. Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed April 9, 1910. Serial No. 554,455.

*To all whom it may concern:*

Be it known that we, SIMON LOUIS PARO and STEPHEN B. HADSELL, citizens of the United States of America, residing at Annapolis and Baltimore, respectively, in the State of Maryland, have invented certain new and useful Improvements in Awnings, of which the following is a specification.

This invention relates to certain new and useful improvements in awnings, and it has for its objects among others to provide a simple, yet efficient and durable awning constructed to form a strong and water-tight awning when in operative position, and movable in sections to be thrown into a substantially vertical position to permit of the snow or rain falling to the ground practically unobstructed. We provide in some instances a covering flap to cover the edge of the awning adjacent the building and when the awning sections are of corrugated material, we form this cover flap of like material with the corrugations coincident, the lower edge of the cover flap overlying the upper edge of the awning sections. Simple and easily operated means are provided for raising and lowering the awning sections. The sections are light yet strong, being well braced and are centrally pivoted so as to swing easily.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view showing one section of an awning in its open position. Fig. 2 is a vertical section from front to rear with the awning down and the cover flap also down. Fig. 3 is a section on the line 3—3 of Fig. 2 looking in the direction of the arrows. Fig. 4 is a view looking at the under side of an awning section with portions broken away and parts in section. Fig. 5 is an enlarged detail partly in section and partly in side elevation. Fig. 6 is an enlarged detail partly in section and partly in elevation, showing the worm and its bearings. Fig. 7 is a detail in elevation showing the supports of the worm before the upper support or bracket is secured in position.

Like numerals of reference indicate like parts in the several views.

The invention is capable of embodiment in a variety of forms, the preferred one of which is herein illustrated, but it is evident that the same is subject to changes, variations, and modifications in details, proportion of parts, etc., without departing from the spirit of the invention or sacrificing any of its advantages. We, therefore, do not intend to restrict ourselves to the exact construction now to be described, but reserve the right to make such changes, variations and modifications as come properly within the scope of the protection prayed.

Referring to the details of the construction as herein illustrated, 1 designates the side of a building or other support against which the awning is to be applied.

2 is a rail or member, preferably of angle form, as seen in Figs. 1 and 2, suitably supported and braced by suitable means, as the horizontal rods 3 and inclined rods 4, additional brace rods 5 being sometimes employed, as seen in Fig. 1, or sometimes the rod 4 may be omitted and the member 2 supported by the rods 3 and 5. This member 2 is affixed in position parallel with the upright 1.

6 is a rod which constitutes the pivot on which the awning section moves. As all sections are alike and mounted in a similar manner, a description of one will suffice for all. The rod 6 is mounted at its ends to turn in suitable bearings. As seen in Fig. 5, the upper bearing 7 comprises a tubular member having flanges 8 secured in any convenient manner to the support 1 and within this tubular bearing the upper end of the rod 6 freely turns. The lower bearing consists of a similar sleeve 9 held to the support 2 in any convenient manner.

On each rod 6 is centrally mounted an awning section which comprises a rectangular frame 10 of angle iron, as seen clearly in Fig. 1, securely riveted at the corners and upon which frame is secured in any suitable manner the top or cover portion 11 of suitable material as metal, preferably corrugated, as shown, one edge being formed with a depending lip or flange 12 and the other

edge with a downwardly turned portion bent to form a substantially U-shaped member adapted to receive the down turned lip 12 of the adjacent section, as seen in Fig. 3, so as to form a water-tight joint at the junction of two adjacent sections when the same are placed in their closed or operative positions.

The awning sections normally stand vertically, as seen in Fig. 1. They are designed to be moved from this position into that in which they are seen in Fig. 3, by suitable means which also serves to restore them to their normal position. In this instance, this means comprises an arm 14 extending angularly from the normally lower corner of the frame adjacent the upright 1 and to this arm is pivotally connected, as at 15, a rod 16, the other end of which is connected, as at 17, with the adjacent arm 14 of the adjacent awning section. Pivotally connected with the arm 16 adjacent its ends, as at 18, is a link 19, the other end of which is pivotally connected, as at 20, with the arm 21 of a bell crank lever pivotally mounted at its angle, as at 22, the free end of its other arm being provided with an elongated slot 23 in which is loosely engaged a stud or pin 24 secured to the vertically disposed rack 25 mounted for movement in suitable guides, as shown, and with which is adapted to mesh a worm 26, the upper pintle 27 of which is engaged in a suitable bearing in a bracket 28, the lower pintle 29 thereof being engaged in a suitable bearing in a vertical portion 30 of the lower bracket 31, the said brackets being secured to the upright 1 in any well-known manner. Rigid with the worm 26 is a bevel pinion 32 which meshes with a bevel pinion 33 on a transverse shaft 34 mounted in a suitable upright portion 35 of the bracket 31. This shaft has a socket adapted to receive the crank portion 36 of a handle 37, by which the shaft 34 may be revolved. In assembling these parts, the shaft 34 is first placed in position, the worm 26 is then put in place with its lower pintle 29 engaging its bearing in the bracket 30 and then the upper bracket 28 is put in position to receive the upper pintle of the worm and when the upper bracket is secured in place, the said parts are thereby retained in operative position.

38 is a cover flap which, when the covering of the awning sections is made of corrugated metal, is corrugated, as seen in Fig. 1, so that when closed down over the adjacent edge of the awning sections, as seen in Fig. 2, the corrugations thereof will coincide. This cover flap is pivotally mounted, as at 39, in any suitable manner to the upright 1. When the awning sections are turned into their vertical position as seen in Fig. 1, the cover flap being engaged thereby is automatically thrown into its raised position. As the awning sections assume their closed position, as seen in Fig. 2, the cover flap automatically drops into position with its free edge overlapping the adjacent edges of the awning sections, covering the joints therebetween and forming a water-tight joint therewith.

The parts being assembled as shown and the awning sections standing vertically, as seen in Fig. 1, if it be desired to place the sections so as to cover the space therebeneath, the crank 36 is engaged in its socket and by turning the same, motion is imparted to the worm, which, by reason of its engagement with the rack, serves to move the same vertically, drawing on the rod 16 and throwing the awning sections from their vertical to their horizontal positions. The worm and rack in addition to forming a means for actuating the sections constitute a means for locking the parts in their adjusted position. When the awning sections are thrown into their closed position, the depending lips 12 drop into the sockets 13 and, fitting closely therein as seen in Fig. 3, form a tight joint between the sections.

As seen in Figs. 2 and 5, the horizontal portions of the angle members of the frames overlap the joints between the vertical members thereof and the adjacent ends of the bearings 7 and 9 of the rod 6, so as to protect the same from the weather.

By making the parts of metal or fire-proof material, we provide an awning that is fire-proof and lasting and one that serves to effectually shed the snow and rain and one that does not require to be rolled. Simple turning of the shaft 34 throws the sections from the one position to the other, and these sections being locked in both their open and closed positions, they are not in danger of being slammed or blown by the wind and hence are not likely to be damaged in any way.

What is claimed as new is:—

1. An awning comprising a plurality of sections, each section pivotally mounted substantially centrally to turn into a vertical position in a plane at right angles to the plane of the support of the awning, and a cover flap pivotally mounted on an axis at right angles to the axes of said sections.

2. An awning support, and an awning comprising a plurality of sections, each section pivotally mounted centrally to turn into a vertical position in a plane at right angles to the plane of said support, and a cover flap pivotally mounted on an axis at right angles to the axes of the sections.

3. An awning support, an awning comprising a plurality of sections each section pivotally mounted centrally to turn into a vertical position in a plane at right angles to the plane of said support, and a cover flap pivotally mounted on an axis at right

angles to the axes of the sections and moved upward by engagement of the sections therewith.

4. An awning support, an awning in sections, each section pivotally mounted to move into a vertical position at right angles to the plane of said support, a bar at right angles to the pivot of the sections, means pivotally connecting said bar with adjoining sections, a bell crank lever, a link pivotally connecting one arm thereof with said connecting means, vertically movable means connected with the other arm of said lever, and means for actuating said vertically movable means, there being a limited loose connection between said vertical means and the adjacent arm of the bell crank lever.

5. An awning in pivotally mounted sections, means connecting the sections, a bell crank lever, a link pivotally connecting one arm of said bell crank lever with said connecting means, a vertically movable rack having limited loose connection with the other arm of said lever, and a worm meshing with said rack to move it vertically to move the awning sections on their pivots.

6. An awning support, an awning comprising a plurality of sections of corrugated metal, each section pivotally mounted centrally to turn into a vertical position in a plane at right angles to the plane of said support, and a cover flap of corrugated metal pivotally mounted on an axis at right angles to the axes of the sections and having its corrugations arranged to coincide with those of the said sections.

In testimony whereof we affix our signatures in presence of witnesses.

SIMON LOUIS PARO.
STEPHEN B. HADSELL.

Witnesses for S. L. Paro:
STEPHEN B. HADSELL,
W. B. HAMMOND.

Witnesses for S. B. Hadsell:
SIMON LOUIS PARO,
W. B. HAMMOND.