Oct. 13, 1925. 1,556,915

A. P. COOLEY

AWNING

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Fig. 1.

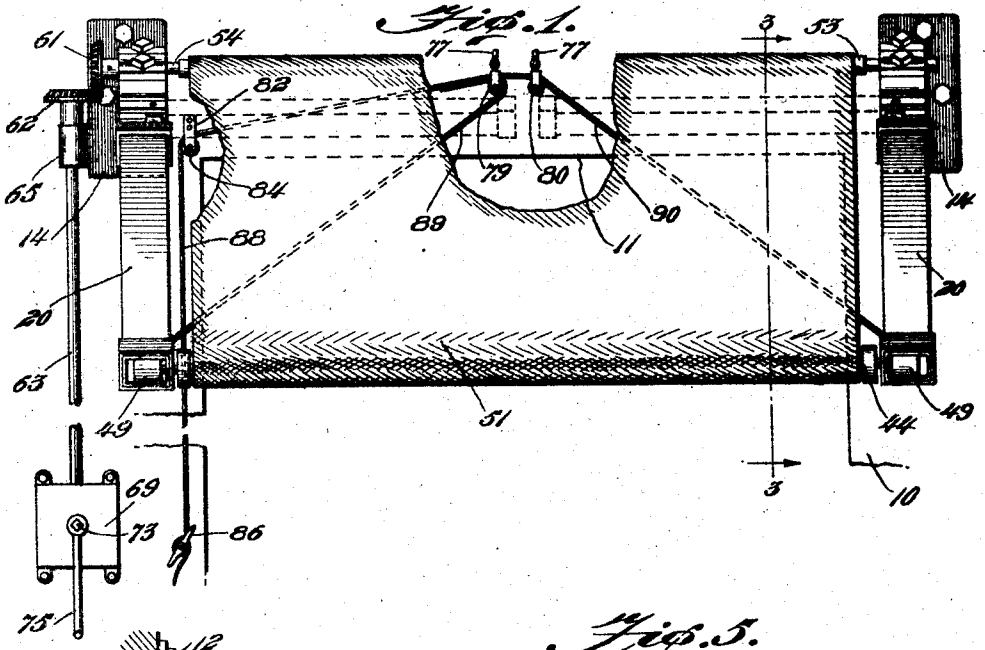


Fig. 5.

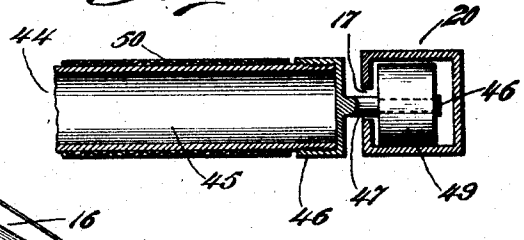


Fig. 2.

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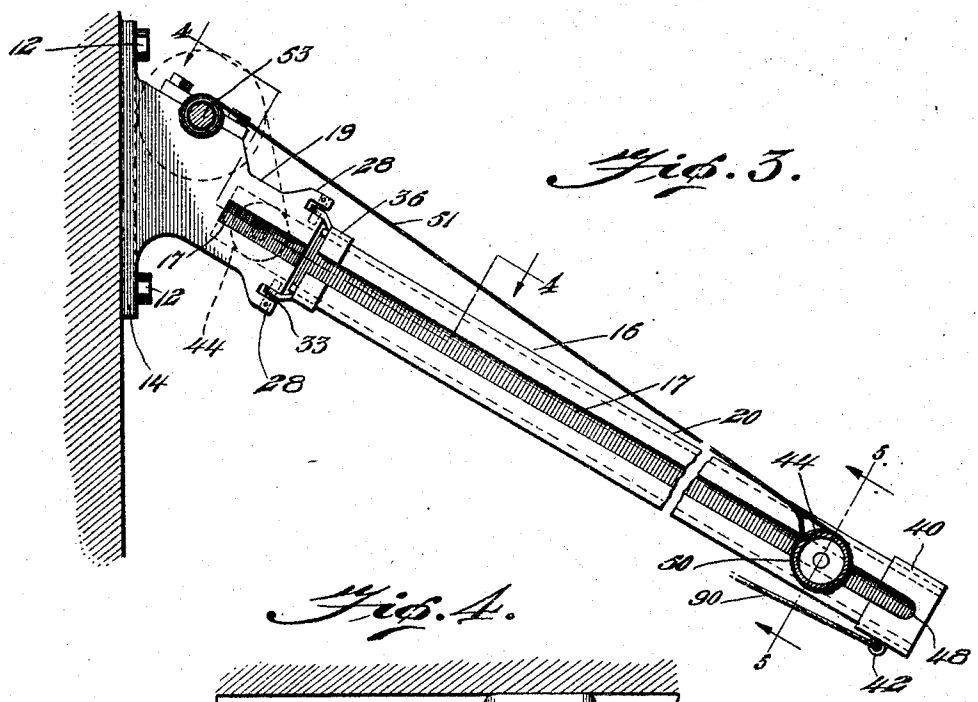
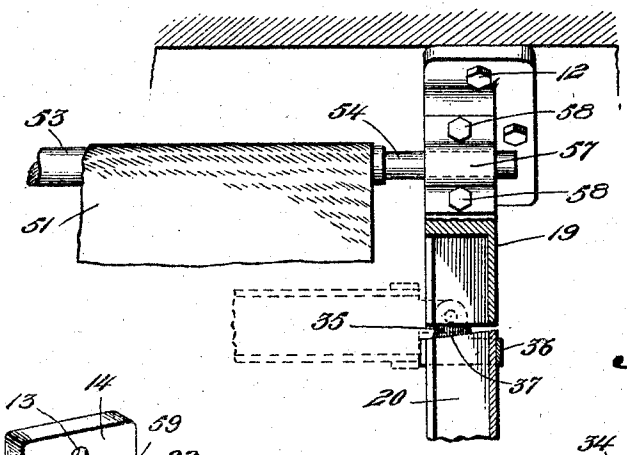


Fig. 3.

Fig. 4.



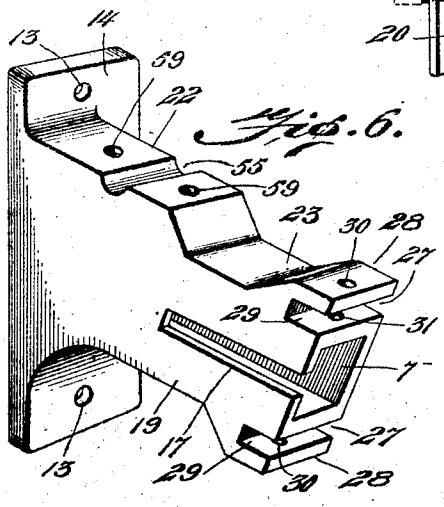
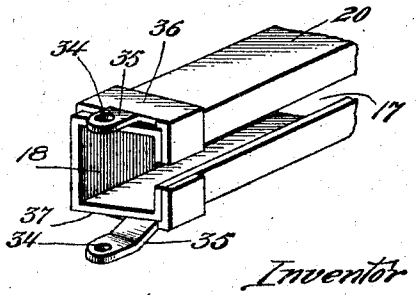


Fig. 6.

Fig. 7.



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UNITED STATES PATENT OFFICE.

ARTHUR P. COOLEY, OF WESTERLY, RHODE ISLAND.

AWNING.

Application filed December 3, 1924. Serial No. 753,599.

To all whom it may concern:

Be it known that I, ARTHUR P. COOLEY, a citizen of the United States, residing at Westerly, in the county of Washington and State of Rhode Island, have invented certain new and useful Improvements in Awnings, of which the following is a specification.

My invention relates to awning fixtures and has for its essential objects the facile spreading and withdrawal of the flexible top or cover; the protection of the operating parts from derangement and from the weather; the effective folding of the supports; and the attainment of these objects in an inexpensive and simple structure.

To the recited ends primarily my invention consists in such parts and in such combinations of parts as fall within the scope of the appended claims.

In the accompanying drawings which form a part of this specification,

Figure 1 is a front elevation of an awning fixture embodying my invention, a portion of the cover and roll being shown broken away,

Figure 2, a side elevation of the same,

Figure 3, a section on line 3—3 of Figure 1,

Figures 4 and 5, sections on lines 4—4 and 5—5 respectively of Figure 3,

Figure 6, a perspective view of the attaching section of a support, and

Figure 7, a like view of the inner end of the outer section of the support.

Like reference characters indicate like parts throughout the views.

In the illustration of my invention herein shown 10 represents the wall of a building and 11 a door or window therein. Above and at each side of the latter are fixed to the wall by screws 12, passing through perforations 13, attaching plates 14. Carried by each plate is a downwardly inclined forwardly directed tubular supporting and guiding arm 16 provided with a lateral longitudinally disposed guide slot 17 opening into the interior 18 of the arm. In the present and preferred embodiment of my invention the arms are rectangular in cross section and are divided intermediate their lengths. Each arm comprises an inner or mounting section 19 and an outer section 20. Each section 19, as shown in Figure 6, consists of an inner portion 22 integral with or attached to its plate 14, and an end portion 23.

Each section 20 is pivoted to its section 19 for inward lateral movement in a substantially horizontal plane. To this end the portion 23 has in its end face, above and below its bore or orifice 18, inwardly extending transverse cavities 27 forming outer ears 28 and seats 29, provided respectively with perforations 30 and 31, adapted to receive pivot pins or screws 33 passing through holes 34 in end ears 35 carried upon the top and bottom of the adjacent end of the section 20. In this case the forwardly projecting ears are formed on a peripheral enlargement or collar 36 upon the section, as shown in Figure 7. The end 37 of the section 20 is, in the construction shown, transversely inclined or beveled. The outer end of each section 20 is in this case strengthened by a peripheral collar 40 integral with or fixed thereto into which the slot 17 extends, and upon the bottom of the collar is an eye 42.

An eave rod 44 is provided comprising a body 45 threaded to whose ends are caps 46 carrying axial projections or pins 47. The pins extend loosely through the slots 17 and normally rest in the lower ends of the latter, as at 48. The rollers are adapted to move upon the bottoms of the arms 16 wherein they are housed against injury and the weather. Fixed to the rod 44 by a loop portion 50 is a flexible awning top or cover 51 of canvas or the like. The upper end of this member is attached to a roll 53 whose shaft 54 rests in half bearings 55 in the tops of the members 19, and are retained therein by straps 57 retained by screws 58 entering apertures 59 in said members. This roller may be operated by any suitable means. Herein the means consists of extending one end of the roll shaft 54 to whose end is fixed a bevel gear 61 meshing with a similar gear 62 upon a vertical shaft 63 journaled in a sleeve 65 upon an arm 66 projecting from one of the attaching plates 14. The lower end of the shaft 63 passes through an opening 68 in the top of a box 69 fixed to the building wall 10, and upon its end in the box is a bevel gear 71 engaging a like gear 72 fast to a shaft 73 journaled in openings 74 in the box, and upon whose extended end is a hand crank 75. By means of this crank the roll may be operated through the described shaft and gear connections. The rotation of the roll 53 in one direction dislodges the rod 44 from its seat at 48 and

overcoming its weight draws it smoothly upward and rearwardly, guided by the arms 16, to a position beyond the joints of the arm sections and immediately below the roll 53, as shown in broken lines in Figure 3. In this figure the rod 44, in full lines, is shown at an intermediate point of travel. The rotation of the roll in an opposite direction permits the rod 44 by gravity to resume its original position at the lower ends of the arms 16, and thus extend the cover 51.

If desired the arms 16 may be temporarily folded by inwardly turning the pivoted sections 20, after the rod 44 has been elevated to the position shown in broken lines in Figure 3. A convenient means for automatically effecting this end is the following. Hooks 77 in the wall 10 in horizontal alignment with each other behind the center of roll 53 have depending therefrom pulley blocks 78 carrying pulleys 79 and 80. Mounted on a plate 82 fixed to the wall near one end of the roll is pivotally supported a sheave or pulley 84. In the wall below the sheave is a cleat 86. A rope 88 adapted to have its outer end tied to the cleat 86 passes over the pulley 84. At the end of this rope are attached two flexible ropes 89 and 90. The rope 89 passes over the pulley 79, and the rope 90, over the pulley 78. Each of the latter two ropes have their ends attached to one of the eyes 42. By pulling downwardly on the rope 88 the arm sections 20 are drawn upwardly and inwardly to a position shown in broken lines in Figure 1.

I claim:—

1. In an awning, attaching plates, downwardly inclined supporting arms comprising sections attached to the plates and sections pivotally connected with the attached sections, both the attached sections and the connected sections being provided with longitudinal guide slots registering with each other, a roll supported by the plates, an eave rod resting in the slots in the connected sections, an awning cover upon the roll attached to the rod, means for rotating the roll to elevate the cover, and means for laterally swinging the attached sections.

2. In an awning, attaching plates, downwardly inclined supporting arms comprising sections fixed to the plates provided upon their upper and lower portion of their free ends with cavities, and outer tubular sections, ears upon the outer sections registering in the cavities and provided with holes, pivot members in the fixed sections passing through the holes, said fixed sections and outer sections being provided with longitudinally disposed lateral guide slots registering with each other, a roll journaled in the fixed sections, an eave rod slidably mounted in the slots of the outer sections, an awning cover on the roll attached to the rod, and means for rotating the roll.

3. In an awning, the combination with a wall of attaching plates fixed to the wall, supporting arms comprising sections fixed to the plates and sections pivotally connected to the fixed sections, both the fixed and the connected sections being provided with continuous longitudinal guide slots, a roll supported by the plates, an eave rod slidably mounted in the slots, an awning cover connecting the roll and rod, means for rotating the rod, pulleys attached to said wall adjacent the middle of the roll, and a flexible member attached to opposite ends of the rod engaging the pulleys.

In testimony whereof I have affixed my signature.

ARTHUR P. COOLEY.