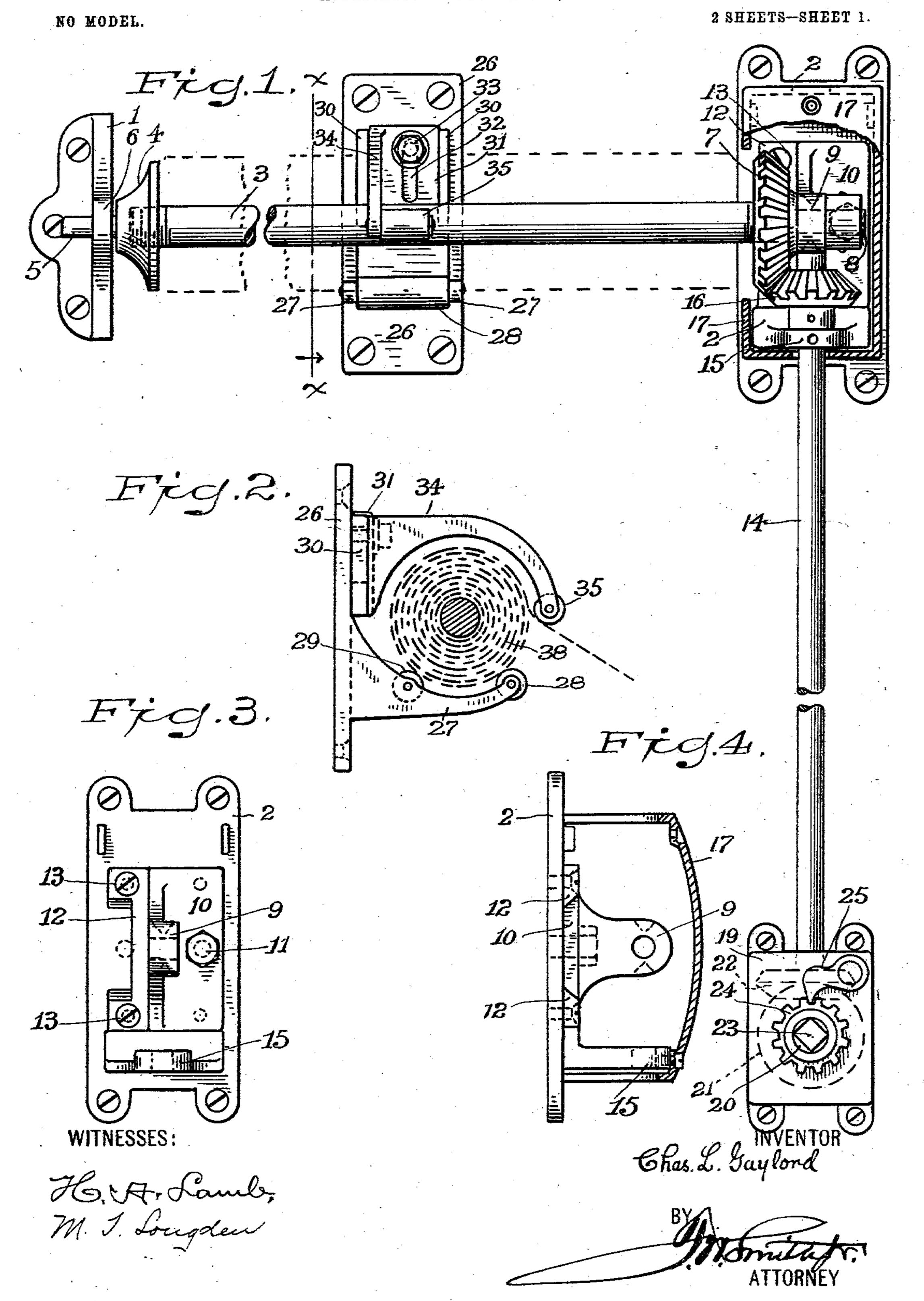
C. L. GAYLORD. AWNING.

APPLICATION FILED MAR. 31, 1903.

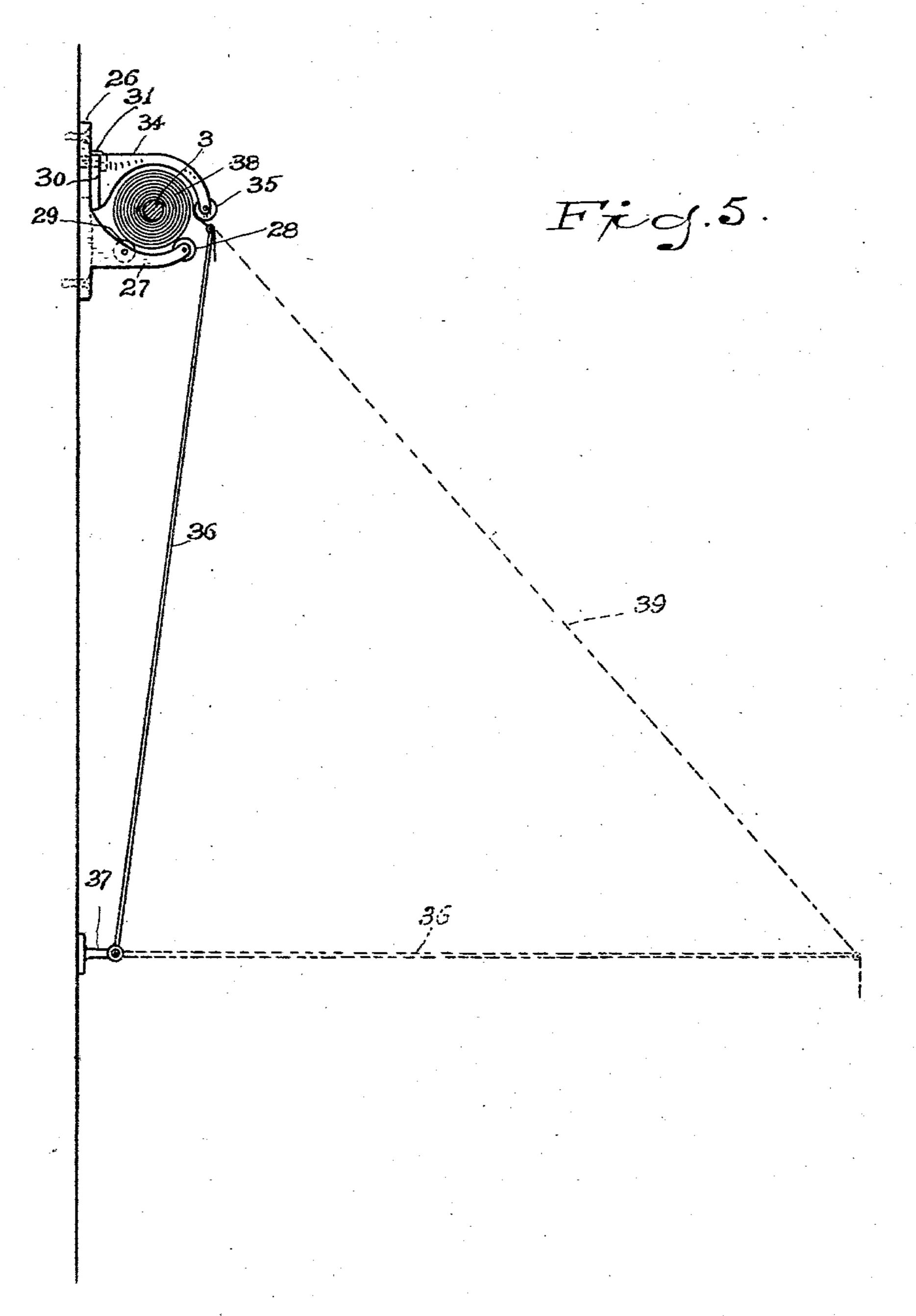


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APPLICATION FILED MAR. 31, 1903.

NO MODEL.

2 SHEETS-SHEET 2.



WITNESSES:

H. A. Samb. M. J. Lougden Chas. Lo. Saylord

BY ATTORNEY

United States Patent Office.

CHARLES L. GAYLORD, OF BRIDGEPORT, CONNECTICUT.

AWNING.

SPECIFICATION forming part of Letters Patent No. 743,711, dated November 10, 1903.

Application filed March 31, 1903. Serial No. 150,415. (No model.)

To all whom it may concern:

Beitknown that I, CHARLES L. GAYLORD, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of 5 Connecticut, have invented certain new and useful Improvements in Awnings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which to it appertains to make and use the same.

My invention relates to certain improvements in awnings, but more particularly to that class of such devices which are known as "rolling awnings," and has for its object to 15 provide a construction which is exceedingly simple, readily manipulated, and not likely to get out of order; and with these ends in view my invention consists in certain details of construction and combination of parts, such 20 as will be hereinafter fully set forth and then specifically designated by the claims.

In the accompanying drawings, which form a part of this application, Figure 1 is an elevation showing the position of the parts of 25 my improvement when they are assembled and ready for use; Fig. 2, a section at the line x x of Fig. 1; Fig. 3, a detail elevation of the gear-bracket; Fig. 4, a detail sectional elevation of the lower box which contains the pri-30 mary gearing; and Fig. 5, a sectional elevation showing the manner in which my improvement is utilized in connection with ordinary brace-rods, the parts in solid lines being in the position which they assume when 35 the awning is up, while the dotted lines show the position of the brace-rod and awning when the latter is down.

Similar numbers of reference denote like parts in the several figures of the drawings. 1 2 are the brackets which support the roller-bar 3, said brackets being secured in any ordinary manner to any suitable framework of a building.

The roller-bar 3 at one end is tapped within 45 a cheek-piece 4, which latter is provided with a trunnion 5, which is supported within a bearing 6 on the bracket 1, while the other extremity of said bar is tapped within a bevelgear 7, provided with an outer hub 8, which 50 is journaled within a bearing 9, that projects from a plate 10, which latter is secured to the bracket 2 by means of a bolt 11.

12 is a plate which is secured to the bracket 2 by means of screws 13, said plate abutting closely against the plate 10, so as to steady 55 the latter.

14 is a vertically-disposed rod whose upper extremity projects through a bearing 15, that extends from the bracket 2, the extreme upper end of said rod having secured thereto a 60 bevel-gear 16, which meshes with the gear 7.

17 is any suitable cover which incloses the

gears 7 16 and the bearings 9 15.

19 is a box secured in any suitable manner to the framework of the building within con- 65 venient reach of an operator, and 20 is a short shaft journaled within said box and carrying a bevel-gear 21, (shown in dotted lines,) which meshes with a bevel-gear 22, (shown in dotted lines,) secured to the lower extremity of the 70 rod 14, said rod near its lower end passing through any suitable journal (not shown) in the box. This shaft projects outside the box and is provided with a suitable wrench-hold 23 and also carries a ratchet-wheel 24, which 75 is engaged by a pawl 25, pivoted to the box.

From the foregoing description it will be readily understood that when a crank has been attached to the wrench-hold 23 the turning of said crank will effect the revolution 8c of the roller-bar 3, to which latter is secured the inner edge of the awning, so that the revolution of the crank in one direction will cause the awning to be rolled up on said bar, while the turning of the crank in the reverse 85 direction will effect the lowering of the awning.

The ratchet 24 and pawl 25 are not absolutely necessary, since they merely cooperate to prevent any accidental lowering of the 90 awning, although the possibility of such lowering is exceedingly remote.

26 is a bracket secured to the building in the rear of the roller-bar 3, the lower portion of said bracket being provided with arms 27, 95 between which are journaled rollers 28 29, while the upper portion of said bracket is provided with vertical ways 30, within which is contained a plate 31, capable of a vertical sliding movement. This plate is provided ito with an elongated vertically-disposed slot 32, and 33 is a set-screw passed loosely through said slot into the bracket 26, so that it will be readily understood that said plate may be

adjusted up and down and secured by means of this set-screw in any suitable adjustment, for the purpose presently to be explained.

If the bar 3 is quite long, so as to carry a 5 wide awning, it becomes necessary to afford this bar some support when the awning is rolled thereon, because at that time said bar must sustain considerable weight, and therefore I have provided this bracket 26, and the to weight of the rod and awning will be supported directly upon the rollers 28 29, while from the plate 31 extends an arm 34, which is curved, so that its extremity depends in close proximity to the outer roll 28, and to 15 the end of this arm 34 is secured a roller 35. It will thus be seen that these arms will practically encircle the awning when it is rolled upon the bar 3, and therefore it will be clear that any outward thrust of this bar during 20 the manipulation of the awning will be resisted by the rollers at the ends of these arms.

The arm 34 may be adjusted up or down according to the size of the awning-roll contained upon the bar 3, and if said bar is quite long several of these brackets may of course

be employed.

36 represents one of the brace-rods, whose lower end is hinged to any suitable bracket 37, secured to the side of the building, and whose upper extremity is secured to the awning 38 near its outer edge, as shown at Fig. 5. Several of these brace-rods are of course employed and are connected with the awning at certain intervals throughout its width, and when any ordinary crank is applied to the wrench-hold 23 and is turned in the proper direction the awning will be unrolled and the brace-rods will drop until they assume the horizontal position shown in dotted lines at 40 Fig. 5, the position of the awning being shown by the dotted line 39.

The plates 10 and 12 are made separate from the bracket 2, so that it will not be necessary to take down the bracket whenever the roller-bar 3 is to be removed or replaced. The plate 12 is secured to the bracket 2 by means of the two screws 13, and this plate is ordinarily never disturbed. The plate 10 abuts against the edge of the plate 12 and is secured to the bracket 2 by means of a single bolt 11, and as this plate 10 carries the bearing 9 for the roller-bar it will be clear that in order to remove the roller-bar it is merely necessary to withdraw this single bolt 11, so as to permit of the withdrawal of this plate

10 itself.

Should the bearing 9 become worn or broken, it is merely necessary to substitute a new plate 10 without disturbing the bracket 60 2 in the least.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

bolt to the plate 2, the keeper-plate 12 abutting against the plate 10 and secured to the bracket 2, the roller-bar 3 journaled within said bearings and carrying near one end and 70 in proximity to the bearing 9 the bevel-gear 7, the vertical rod 14 whose upper extremity is guided within a suitable bearing on the bracket 2 and is provided with a bevel-gear 16 which meshes with the gear 7, the box 19 75 within which the lower extremity of the rod 14 extends, the bevel-gear 22 carried by the lower end of said rod 14, the short shaft 20 journaled within said box and provided with a wrench-hold and carrying a ratchet-wheel, 80 the pawl pivoted to said box and adapted to engage said ratchet-wheel, the bevel-gear mounted on said short shaft within said box and meshing with the gear 22, the awning whose inner edge is secured to the bearing 3, 85 and the brace-rods whose lower ends are hinged to a stationary element while their upper ends are fastened to the outer edge of the awning, substantially as set forth.

2. The combination of the bracket 1 having 99 the bearing 6, the bracket 2, the plate 10 provided with bearing 9 and secured by a single bolt to the plate 2, the keeper-plate 12 abutting against the plate 10 and secured to the bracket 2, the roller-bar 3 journaled within said bear- 95 ings and carrying near one end and in proximity to the bearing 9 the bevel-gear 7, the vertical rod 14 whose upper extremity is guided within a suitable bearing on the bracket 2 and is provided with a bevel-gear 16 which meshes 100 with the gear 7, the box 19 within which the lower extremity of the rod 14 extends, the bevel-gear 22 carried by the lower end of said rod 14, the short shaft 20 journaled within said box and provided with a wrench-hold and car- 105 rying a ratchet-wheel, the pawl pivoted to said box and adapted to engage with said ratchetwheel, the bevel-gear mounted on said short shaft within said box and meshing with the gear 22, the awning whose inner edge is se- 110 cured to the bearing 3, the bracket 26 in the rear of the bar 3 and provided at its upper portion with vertical ways 30 and having arms 27 projecting outwardly from its lower portion, the rollers 28, 29, journaled between said 115 arms, the plate 31 having therein an elongated vertical slot and guided between the ways 30 and provided with an outwardly and downwardly extending arm 34, the roller 35 secured to the end of said arm, the set-screw 12. extending through said slot into the bracket 26, and the brace-rods whose lower ends are hinged to a stationary element and to whose upper ends the outer edge of the awning is secured, substantially as and for the purpose 125 specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES L. GAYLORD.

Witnesses:

F. W. SMITH, Jr., M. T. LONGDEN.