W. M. BONNEY.

AWNING.

APPLICATION FILED MAY 27, 1911.

1,028,321.

Patented June 4, 1912.

2 SHEETS—SHEET 1.

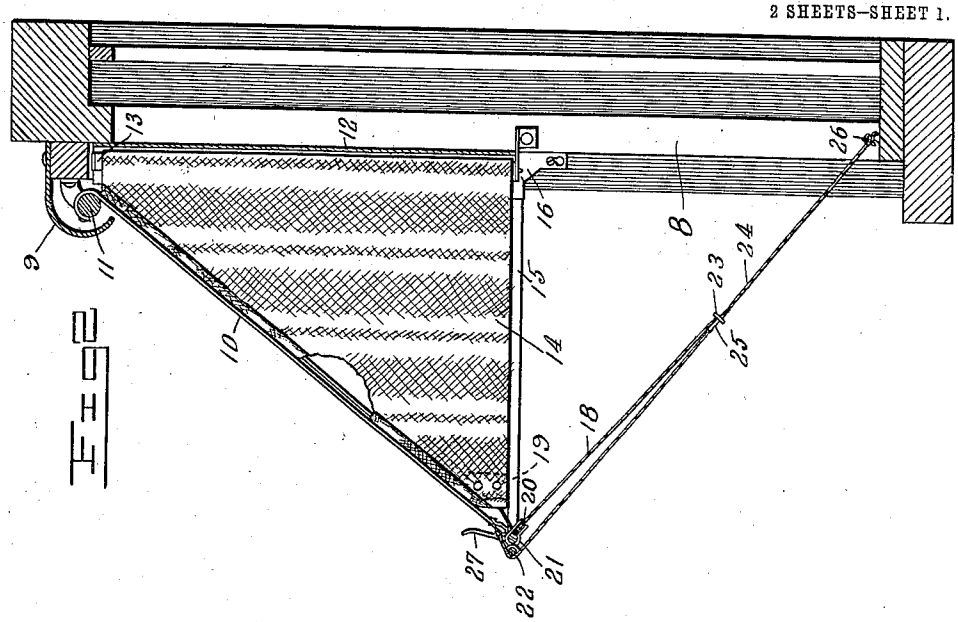


FIG. 2.

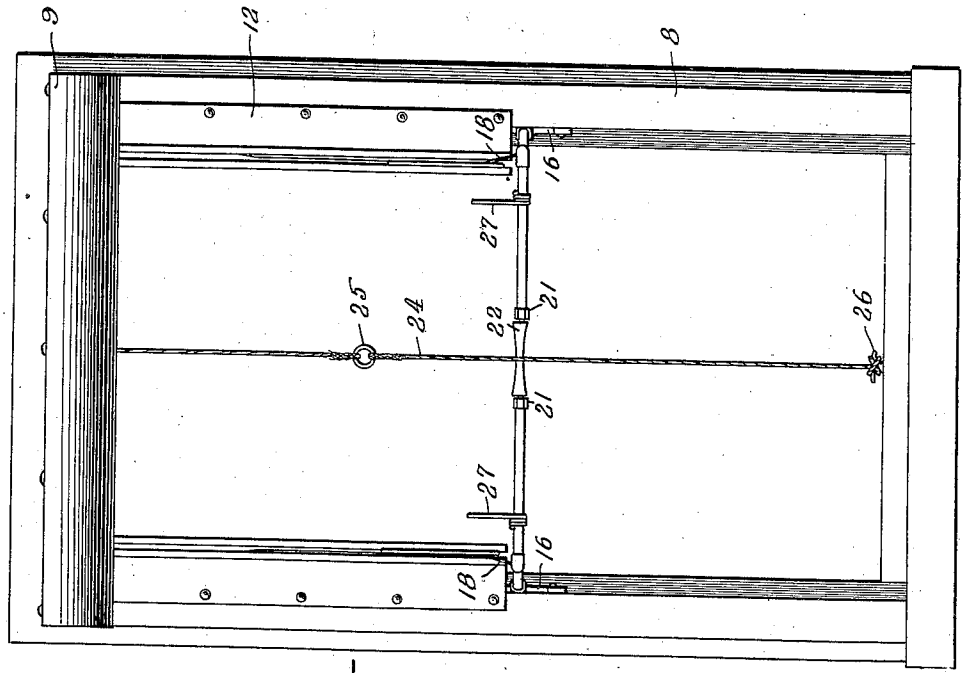


FIG. 1.

Witnesses

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2 SHEETS—SHEET 2.

Fig 3

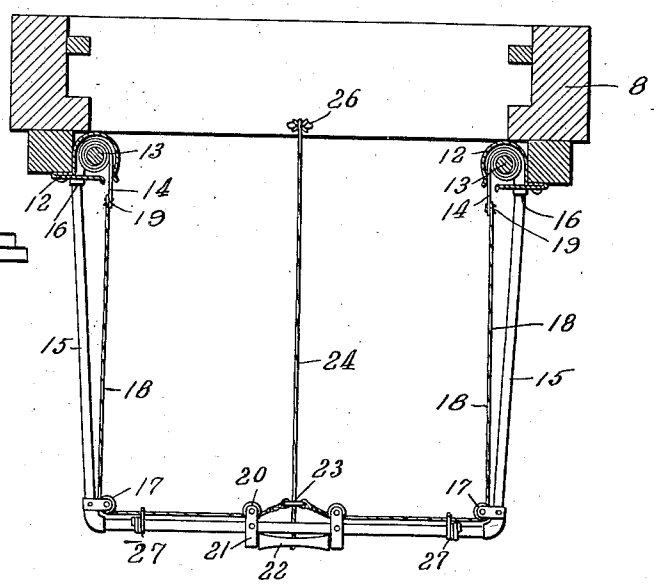
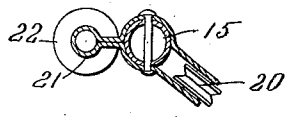


Fig 4



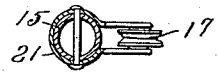
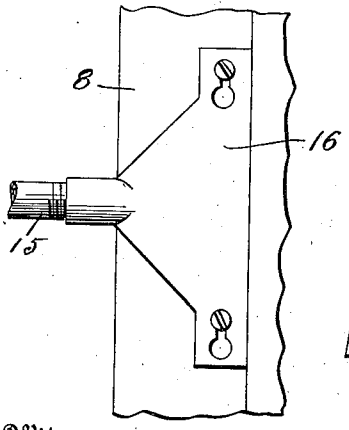


Fig 5

Fig 6



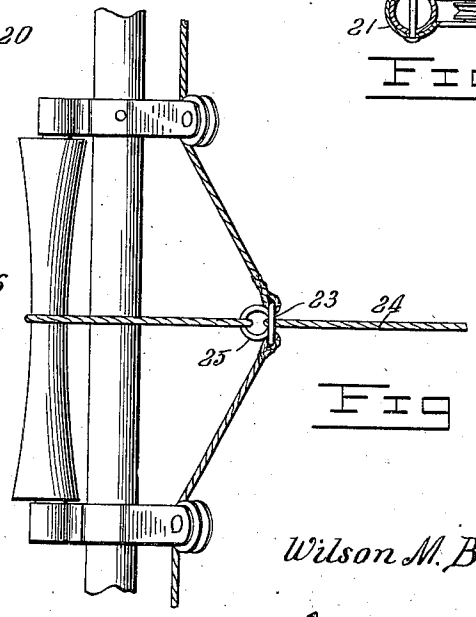


Fig 7

Witnesses

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UNITED STATES PATENT OFFICE.

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AWNING.

1,028,321. Specification of Letters Patent. Patented June 4, 1912.

Application filed May 27, 1911. Serial No. 629,827.

To all whom it may concern:

Be it known that I, WILSON M. BONNEY, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented new and useful Improvements in Awnings, of which the following is a specification.

The present invention relates to awnings, and particularly to that type designed to be completely housed when not in use, as distinguished from the ordinary folding type.

It has for its object to provide top and side curtains, with housings for the same, which may be readily secured in place, and within which housings the awning sheets are normally retracted, but which may be readily drawn out so as to be brought into proper relation to effectually shade the window, a suitable outrigger or support being provided over which the operating cord runs.

The invention contemplates further the provision of pull-cords so arranged with relation to each other and to the awning sheets as that a single cord will serve to extend the sheets and bring them to proper position.

Other features of construction adapted to make the device convenient and efficient in operation, but more in the nature of details of construction will be pointed out hereinafter.

In order that the invention may be clear to those skilled in the art I have illustrated in the accompanying drawings one embodiment thereof, in which drawings—

Figure 1 is a front view of a window frame (conventionally shown) with my awning secured thereto. Fig. 2 is a vertical section of the frame showing the awning sheets extended. Fig. 3 is a horizontal sectional view of the window frame taken above the outrigger or support. Figs. 4 and 5 are details of the supporting pulleys for the pull-cords. Fig. 6 is a detail to show the outrigger or support. Fig. 7 is a bottom view of the front bar of the outrigger, showing the pulley for the central pull-cord, and the pulleys for the side pull-cords.

Referring to the drawings by numbers, like numbers indicating like parts in the several views, 8 denotes the window frame, which may be of any desired construction, the awning being adapted to operate with any frame so long as the matter of size and proportion is observed. Secured to the top of the said frame 8 is the housing 9 for the top sheet 10 of the awning, this top sheet being mounted on a suitable spring roller 11, mounted in suitable brackets within the housing 9, said roller serving to retract the top sheet 10 and normally keep it within the top housing.

At each side of the window frame is secured a side housing 12 within which are mounted spring rollers 13, each of which carries the side sheets or curtains 14 of substantially triangular shape, the inclined leg of the curtain being corded, as shown in Fig. 2, with a suitable stiffening cord, so as to give body to the edge of the curtain and eliminate the flapping and enable it to maintain a close seat against the top sheet 10, the spring rollers serving to retract the side curtains within the housing 12 through a suitable slot or mouth therein, in the same manner that the top sheet 10 is retracted by its spring roller.

Just below the edge of the side curtains, I provide an outrigger or support 15 which is substantially U-shape and has at its inner ends the supporting brackets 16, best shown in Fig. 6, these brackets 16 having a socket into which the legs of the U-shaped outrigger 15 are threaded, and being provided with key-hole slots by means of which the bracket and outrigger may be secured to the window frame by suitable screws, as shown.

The outrigger or support 15 carries adjacent each outer corner a clip provided with a sheave or pulley 17 over which pass pull-cords 18 running to the corners of the side curtains, the said side curtains being provided, if desired, with plates 19, indicated in dotted lines in Fig. 2, to which a pull-cord may be secured and which firmly anchor the cord and prevent tearing of the side curtains in operation. The pull-cords 18 pass from the sheaves 17 to similar sheaves 20 placed one on either side of the center of the front bar of the outrigger, these sheaves 20 being mounted in clips secured to the front bar of the outrigger, which clips preferably extend outside the bar and are there provided with trunnion seats 21 in which are mounted the trunnions of a roller 22. The inner ends of the pull-cords 18 are joined by a ring 23 through which passes the central pull-cord 24, which runs over the roller 22 and is se-

cured at its end to a suitable curtain stick in the top sheet or curtain 10. At the proper point in its length the central pull-cord 24 is provided with an enlargement, shown in the present case as a ring 25, so that while the pull-cord 24 will draw freely through the ring 23 for a short distance without any draft on the pull-cords 18, immediately the ring 25 engages the ring 23 the draft on the central pull-cord 24 will become effective on the side pull-cords 18. This free shifting of the pull-cord 24 through the ring 23 is desirable for the reason that the travel of the top sheet or curtain 10 is greater than the travel of the side curtains and by the present arrangement a lead is given the top curtain over the side curtains, this arrangement bringing the curtains simultaneously to their full shading position. Any suitable securing means, as 26, on the sill of the window may be provided for the pull-cord 24, so that when the curtains are extended and the pull-cord secured, the awning will stay in shading position, the curtains returning automatically to their housings upon releasing the pull-cord 24.

In order that the top sheet or curtain 10 may be more securely held against flapping or twisting, I provide outstanding fingers 27 on either side of the center of the front bar of the outrigger, these fingers inclining inwardly slightly so that the curtain stick at the lower end of the top sheet or curtain 10 will take its bearing against these fingers 27, held securely under the tension of the pull-cord 24, and danger of lifting of the top sheet or ballooning under the effect of wind gusts will be eliminated. Preferably these fingers 27, as shown in Figs. 1 and 3, are yielding or springy so that as the stick at the lower end of the top sheet 10 is drawn downward against them they will yield and hold the stick with a slight gripping action, so as to insure its being held firmly in position.

It is believed that the operation of the device will be obvious from the description heretofore given, and it will be apparent that the awning provided by my invention, which is simple and cheap in construction; may be made in various sizes to accommodate the different sizes of windows and conveniently installed; and it may very conveniently and quickly be stretched and furled, and when in its closed condition it leaves the window entirely unobstructed and does not cover and limit the entrance of light through the upper sash, which is a very important and desirable feature. Its construction is such that it is not unsightly and furthermore, by housing the curtains from the effect of the weather the life and appearance of these awning sheets may be prolonged.

While I have shown a particular embodiment of my invention and that the best now known to me, it will be understood that as to its mechanical details it may be widely varied without departing from the spirit of my invention and I do not, therefore, limit myself to the exact details set forth.

I claim:—

1. In an awning, the combination with an outrigger, of spring retracted top and side curtains, a pull cord for said top curtain, and connections between said pull cord and said side curtains whereby operation of said pull cord to extend said top curtain will effect the extension of said side curtains.

2. In an awning, the combination with an outrigger, of spring retracted top and side curtains, a pull cord for said top curtain, and connections between said pull cord and said side curtains effective after the top curtain has been partially extended to extend said side curtains.

3. In an awning, the combination with an outrigger, of spring retracted top and side curtains, means for extending said curtains, and fingers on said outrigger to engage the extended end of said top curtain and maintain it in place.

4. In an awning, the combination with an outrigger, of spring retracted top and side curtains, means for extending said curtains, and spring fingers on either side of the center of said outrigger to engage the extended end of said top curtain and maintain it in place.

5. In an awning, the combination with an outrigger, of spring retracted top and side curtains, a pull cord for said top curtain, pull cords for said side curtains, and a connection between said top and side curtain pull cords to effect the extension of said curtains.

6. In an awning, the combination with an outrigger, of spring retracted top and side curtains, a pull cord for said top curtain, pull cords for said side curtains, and a connection between said side curtain pull cords and said top curtain pull cord effective to extend the side curtains only after the top curtain has been partially extended.

7. In an awning, the combination with an outrigger, of spring retracted top and side curtains, a pull cord for said top curtain having an enlargement at a predetermined point therein, pull cords for said side curtains, and a loop or ring connecting said side curtain pull cords through which said top curtain pull cord passes.

8. In an awning, the combination with an outrigger, of spring retracted top and side curtains, a pull cord for said top curtain, a sheave or pulley on said outrigger over which said pull cord runs, pull cords for said side curtains having supporting sheaves on said outrigger, a loop or ring connecting

said side curtain pull cords, and an enlargement on said top curtain pull cord to engage said loop or ring at a predetermined point in the travel of the top curtain.

9. In an awning, the combination with an outrigger, of top and side housings adapted to be secured to a window frame, spring retracted curtains in said housings, a top curtain pull cord traversing a sheave on said outrigger, pull cords for each of said side curtains, supporting sheaves on said outrigger for said side curtains, a centrally placed loop or ring connecting said side curtain pull cords, and an enlargement on said top curtain pull cord to engage said loop or ring after a predetermined travel of said top curtain pull cord.

10. In an awning, the combination with an outrigger, of top and side housings adapted to be secured to a window frame, spring retracted curtains in said housings, a pull cord for said top curtain, sheave-supporting brackets on the front bar of said outrigger carrying at their outer ends a sheave over which said pull cord runs, pull cords for said side curtains, corner sheaves on said outrigger over which said side curtain pull cords run, a second set of sheaves mounted in said brackets over which said pull cords run, a ring connecting the inner ends of said pull cords and through which said top curtain pull cord passes, and an enlargement on said top curtain pull cord to engage said ring at a predetermined time.

11. In an awning, the combination with an outrigger, of spring retracted top and side curtains, means for extending said curtains, and stiffening cords in the inclined abutting edges of said side curtains to insure a proper relation of said inclined edges to the top curtain when the curtains are extended.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILSON M. BONNEY.

Witnesses:
W. B. AYDELOTTE,
M. E. UNDERWOOD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."