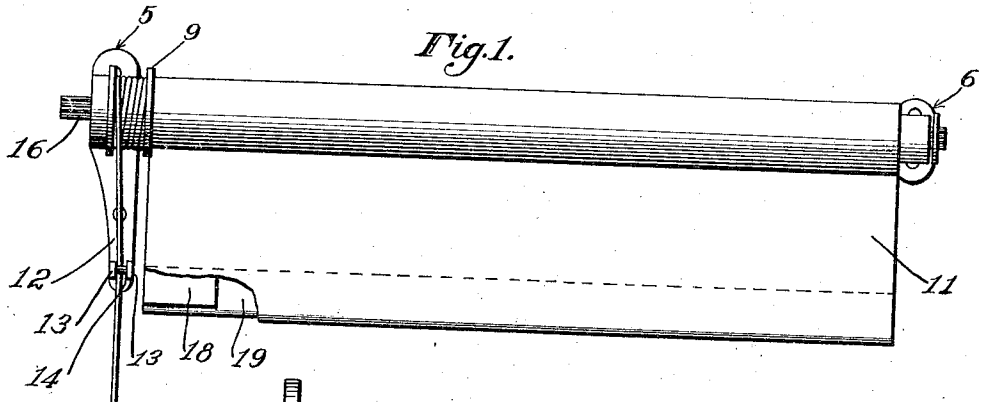
Oct. 9, 1923. 1,469,842

T. P. LIVINGSTON

AUTOMATIC WINDOW SHADE

Filed Jan. 5, 1922

Fig.1.



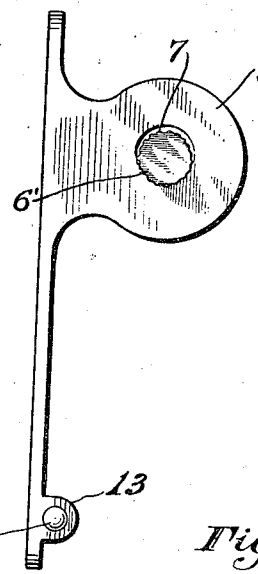


Fig.2.

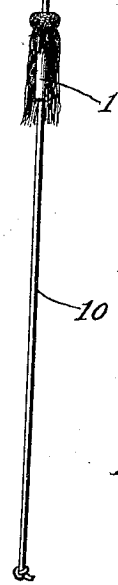
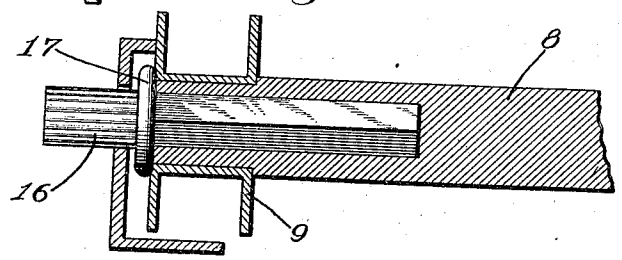


Fig.3.



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Attorney

Patented Oct. 9, 1923.

1,469,842

UNITED STATES PATENT OFFICE.

THOMAS POSTELL LIVINGSTON, OF NORTH AUGUSTA, SOUTH CAROLINA.

AUTOMATIC WINDOW SHADE.

Application filed January 5, 1922. Serial No. 527,143.

To all whom it may concern:

Be it known that I, THOMAS P. LIVINGSTON, a citizen of the United States, residing at North Augusta, in the county of Aiken and State of South Carolina, have invented a new and useful Automatic Window Shade, of which the following is a specification.

This invention relates to shade roller constructions, the primary object of the invention being to provide novel means for controlling the movement of a window shade roller, eliminating the use of springs to accomplish the operation thereof.

Another object of the invention is to provide novel means for holding the shade roller in various positions of adjustment.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described, and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is an elevational view disclosing a shade and a bracket constructed in accordance with the present invention.

Figure 2 is an end elevational view disclosing the bracket and shade pintle supported therein, and

Figure 3 is a fragmental sectional view through a bracket and shade roller.

Referring to the drawing in detail, the device is shown as embodying bracket members 5 and 6, each bracket member being provided with a pintle receiving opening, the wall thereof being formed with irregular portions indicated at 6′, which cooperate with the ribs 7 formed on the pintles of the roller for normally holding the shade roller in its positions of adjustment.

As shown by Figure 3 of the drawing, the roller which is indicated at 8 is supplied with a drum 9 disposed at one end thereof, which drum accommodates the flexible member 10, employed in manipulating the shade proper. This flexible member 10 has one end secured to the drum so that upon one movement of the roller 8, the flexible member 10 will be wound on the drum. It follows that when the flexible member 10 is pulled to unwind the same from the drum, the roller is moved in the opposite direction to wind the shade 11 on the roller.

The bracket 5 is formed with a depending portion 12 having ears 13 which are connected by the pin 14 and under which the flexible member moves, the pin being provided to hold the flexible member 10 against movement laterally of the drum, to cause the flexible member to run off of its drum while the same is being wound. The pin also provides a stop to eliminate any possibility of the entire length of the flexible member 10 being wound on the drum, it being obvious that as the weight 15 moves to a position adjacent to the lower end of the extension 12, the same will contact with the pin and ears to restrict movement of the flexible member.

Forming a part of the pintle, which is indicated at 16, is a circular flange 17 adapted to contact with the drum 9 when the pintle is positioned in one end of the roller, to secure the drum against movement.

A weight indicated at 18 is secured to the shade stick 19 to counterbalance the weight 15, but it is to be understood that either weight is sufficiently heavy to cause the operation of the roller, should the shade or flexible member be relieved of its weight, as by lifting either weight.

The operation of the shade is as follows:

Assuming that the shade is in a position as disclosed by Figure 1 of the drawing, and it is desired to move the shade to its active or closing position. It is only necessary to lift the weight 15 to relieve the flexible member 10 of this weight, whereupon the weight 18 will overcome the tendency of the ribs 7 and irregular portions of the brackets holding the shade in its normal position, to the end that the shade will unroll. It is obvious that when the shade has reached its proper position, the person lifting the weight 15 releases the same, whereupon the curtain is held in its position of adjustment.

Having thus described the invention, what is claimed as new is:—

A device of the character described comprising in combination, a shade bracket having an opening, teeth formed on the wall of the opening throughout a portion of the length of the wall, a roller, pintles in the ends of the roller, the pintle at one end of the roller having ribs formed thereon, the

ribs adapted to normally engage the teeth of the wall of the opening to restrict movement of the roller, means for moving the roller, a curtain wound on the roller, and one end of the curtain being weighted to normally hold the same in an extended position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THOMAS POSTELL LIVINGSTON.

Witnesses:
L. R. SCOGGINS,
J. F. EUBANKS.