April 21, 1925. 1,534,664

H. J. SAUNDERS

AWNING

Filed Oct. 8, 1923

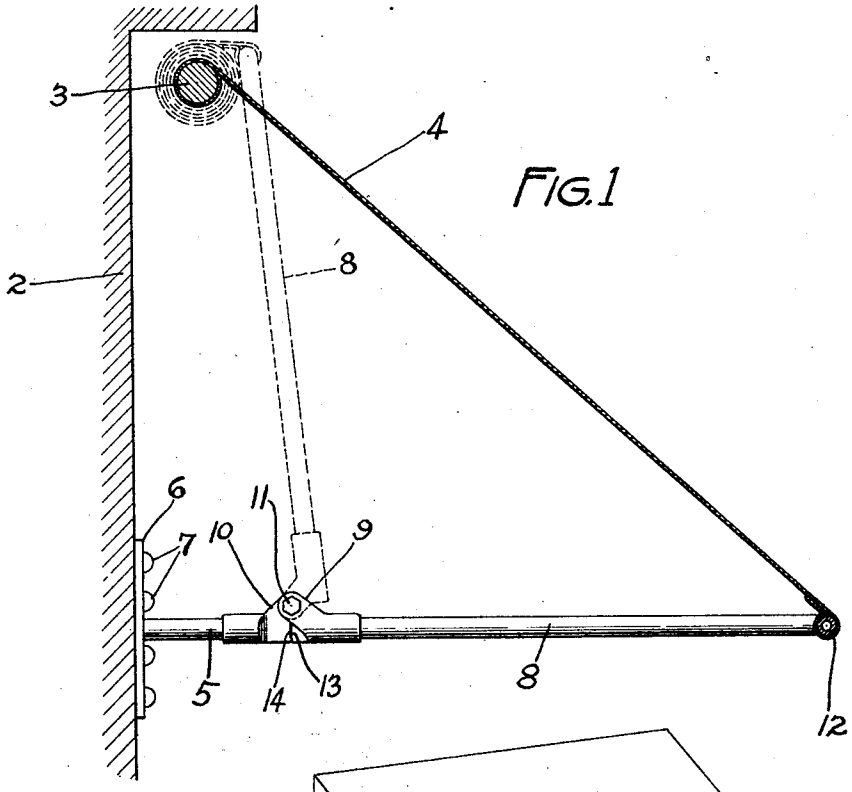


FIG. 1

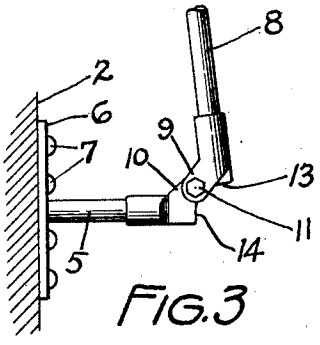


FIG. 3

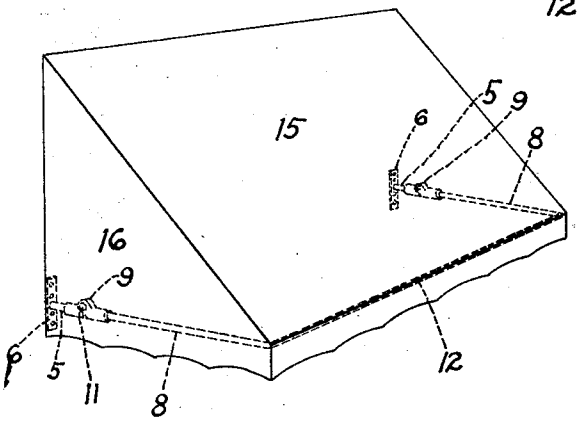


FIG. 2

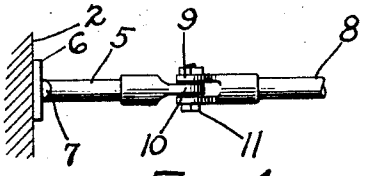


FIG. 4

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UNITED STATES PATENT OFFICE.

HENRY J. SAUNDERS, OF MINNEAPOLIS, MINNESOTA.

AWNING.

Application filed October 8, 1923. Serial No. 667,302.

To all whom it may concern:

Be it known that I, HENRY J. SAUNDERS, citizen of the United States, resident of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Awnings, of which the following is a specification.

Generally when an awning, either of the roller or rope pull type, is lowered, the weight of the frame and fabric is sustained by the front or side walls or curtains and frequently the fabric is torn and damaged, particularly when the awning is lowered hastily and stopped with a sudden pull or jerk, the strain at such time falling upon the fabric with damaging results, especially when the fabric has become weakened by continued exposure to the weather.

The object, therefore, of my invention is to provide means for taking up the weight or load of the awning when it is lowered and preventing the fabric from being torn or damaged, thereby adding greatly to the life of the fabric and reducing the cost of repairs or upkeep.

The invention consists generally in the various constructions and combinations hereinafter specified and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification,

Figure 1 is a sectional view of a roller type of awning with my invention applied thereto;

Figure 2 is a perspective view of the rope or pull type of the awning;

Figure 3 is a detail view showing the awning arm in its raised position, illustrating the shoulders or stops which support the load of the awning when the arm is lowered.

Figure 4 is a plan view showing the arm lowered.

In the drawing, 2 represents the wall of a building, and 3 is a roller mounted thereon and 4 the awning fabric that is wound on the roller by the usual mechanism provided for this purpose, and which I have not thought necessary to illustrate herein as it forms no part of my present invention. 5 is a stud, one of which is provided at each end of the awning and 6 is a base plate for the stud secured to the building wall by suitable means such as screws 7. 8 represents an arm, one of which is provided at each end of the awning 9 and is an off-set lug at the inner end of the arm that is pivotally connected with a similar lug 10 on the stud 5 by a suitable bolt 11, the lugs and the bolt being off-set from the longitudinal axis of the stud and arm, and forms a hinge on which the arm may swing through an arc of ninety degrees substantially from an upright position, when the awning is closed, to a substantially horizontal position when it is lowered. The outer ends of the arms 8 are connected by a rail 12 to which the lower ends of the fabric 4 is connected. Below the lug 9 I provide a square shoulder 13 opposing a similar shoulder 14 beneath the lug 10 and formed on the outer end of the stud 5. These shoulders are so positioned that when the arms 8 reach a horizontal position the shoulders will contact and the arms will support the full weight of the awning fabric and there will be no pull or drag on the fabric that would tend to tear or damage it. These shoulders will contact under all conditions whether the awning is lowered slowly or hastily, and it will be immaterial whether the awning is lowered carefully or not, or by an inexperienced person. There will be no danger of tearing or damaging the fabric by throwing the weight of the awning thereon.

In Figure 2 I have shown the invention applied to a rope type of awning in which 15 represents the front wall and 16 the end wall or sections, which, in the ordinary rope type of awning are very frequently torn and damaged by having the weight of the frame and the fabric thrown thereon when the awning is hastily lowered. Of course, it is possible to fasten the rope so that it will sustain the load of the awning and the pull when the frame is lowered, but this is rarely ever done. The rope is loosened and the awning allowed to drop of its own weight as far as the fabric will allow it to fall and while a new awning will stand up under the strain, one that has been continually exposed to climatic conditions will soon become torn or damaged and require repairs.

With my device the engagement of the shoulders on the inner ends of the arms with the corresponding shoulders on the studs will positively stop downward movement of the arms and take up the shock or strain resulting from the sudden stopping of the awning so that none of the pull or strain

will be transmitted to the fabric itself, and the fabric will, therefore, never become torn or damaged through hasty or careless lowering of the awning. The studs 5 will vary in length depending upon their position on the building wall and the distance necessary to project beyond a window frame or cornice or other projections. The arms too will vary in length according to the size of the awning but the shoulders or stops may be substantially the same under all conditions and types of awnings.

In various ways the details of the construction herein shown and described may be modified and still be within the scope of my invention.

I claim as my invention:

1. An awning having arms and supports for pivotally mounting said arms on a building wall, said arms and supports having surfaces adapted to abut one against the other when the awning is lowered and form stops for checking downward movement of said arms to prevent strain upon the awning fabric.

2. An awning having studs provided with means for securing them to a building wall in a substantially horizontal position when the awning is lowered and arms forming horizontal extensions to said studs when the awning is let down, said studs and arms having off-set lugs formed thereon and bolts passing therethrough for pivotally connecting said arms with said studs, said arms and studs having shoulders with flat opposing faces formed below said lugs, the shoulders of said arms contacting with those of said studs when said arms are lowered to a substantially horizontal position and forming stops to support the awning and prevent pull or strain on the fabric from the weight of the frame and awning when it is lowered.

In witness whereof, I have hereunto set my hand this 3rd day of October 1923.

HENRY J. SAUNDERS.