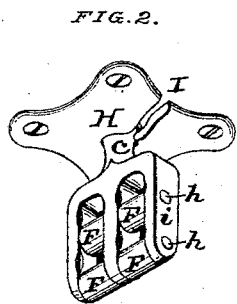
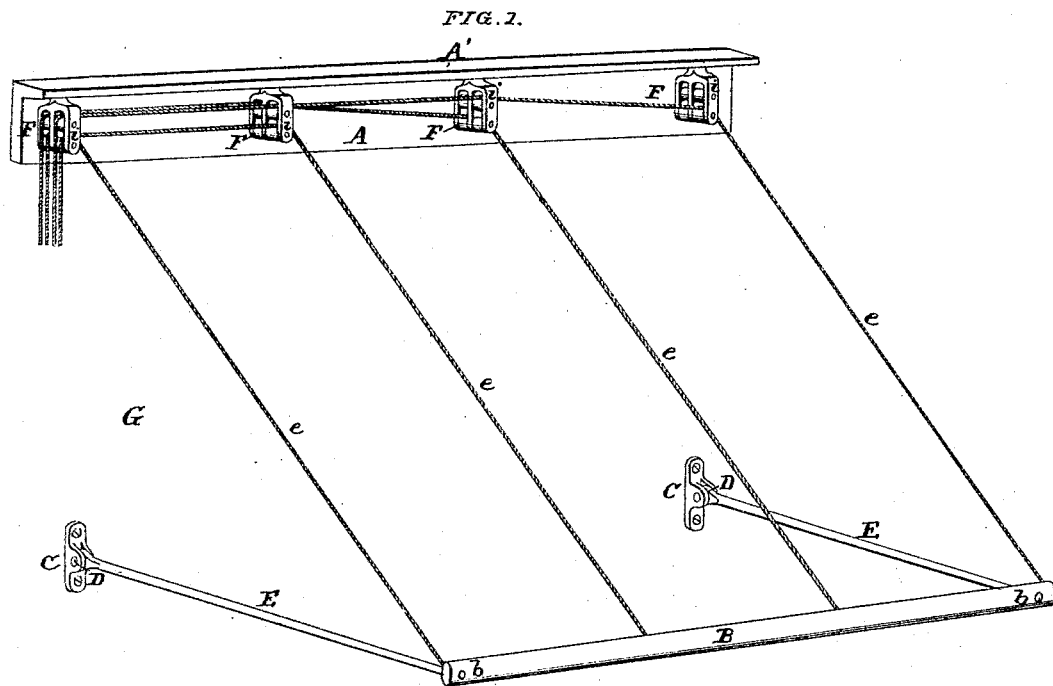


D. JANNOPOULO.  
Pulleys for Awnings.

No. 210,855.

Patented Dec. 17, 1878.



ATTEST:

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# UNITED STATES PATENT OFFICE.

DEMETRIUS JANNOPOULO, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN PULLEYS FOR AWNINGS.

Specification forming part of Letters Patent No. **210,855**, dated December 17, 1878; application filed March 29, 1878.

*To all whom it may concern:*

Be it known that I, DEMETRIUS JANNOPOULO, of the city of St. Louis, and State of Missouri, have invented certain new and useful Improvements in Pulleys for Awnings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention refers to an improved pulley for the lowering or raising of store or other awnings.

The use of glass eyelets or rings for this purpose where many elevating-cords are required continually expose the cloth to being drawn into the eyelet with the cord, thus causing the passage of the cord to be stopped by jamming or a frictional burning of holes in the cloth. To provide a better device, I make a metallic swivel-pulley which perfectly protects the cloth, and is also a reliever of friction, and also obviates entanglement of the cords and sagging together.

A twenty-foot awning requires five to six cords with which to raise or lower it. The device which I have provided is a pulley of peculiar construction. Its frame is adapted to the reception of several sheaves in a tier, and one or more tiers in depth, each sheave in each tier being separated from its adjunct by a rounded bar in the metallic frame, to prevent the chafing of the cords. To the pulley is formed a swivel-head. On the upper end I cast a swivel-plate, having a slot, into which the swivel-shank can enter, and which allows a perfect swivel action to the pulley. The attachment of this swivel-plate is for overhead suspension, particularly when the draft and weight points are at adverse angles.

In the accompanying drawings, Figure 1 is

a skeleton perspective of an awning-frame, which shows the manner of application of my improved pulley. Fig. 2 is an enlarged perspective view of the pulley with reference to the general manner of its attachment to a facing, and the entrance-slot for the swivel-neck.

Specifically described, the facing A may be a long piece of 3×2 stuff, and be spiked to the wall G or a projecting mantel, A', to protect the folded awning. The awning-pole B may be attached to the hinged extension-rods E by the screws and nuts *b*. The said extension-rods are attached to the house-front by hinged jaw-plates C D. The hoisting and lowering cords *e* pass, respectively, from the said awning-pole B over the said pulley F, the more distant cords being intermediately supported to the point from which they are led down to the belaying-pins.

The pulley-frame *i* may be so cast as to vary in the number of tiers and sheaves, since a single sheave serves for the most distant cord.

It will be observed that the said pulley-frame *i* prevents the drawing of the awning-cloth into the sheaves.

The hanging plate H has passing beyond its center the slot I, for the reception of and in which the neck *c* can freely turn.

What I claim as my invention is—

In store or other awnings, the swivel-hung and many-sheaved pulley, composed of pulley-frame *i*, pins *h*, sheaves F, shank and button *c*, with overhanging slotted plate H, and its slot I, as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

DEMETRIUS JANNOPOULO.

Witnesses:

ALEX. J. THOMSON,  
W. F. DALY.