(No Model.)

J. GREENBERG.

AWNING.

No. 356,833. Patented Feb. 1, 1887.

Fig. 1.

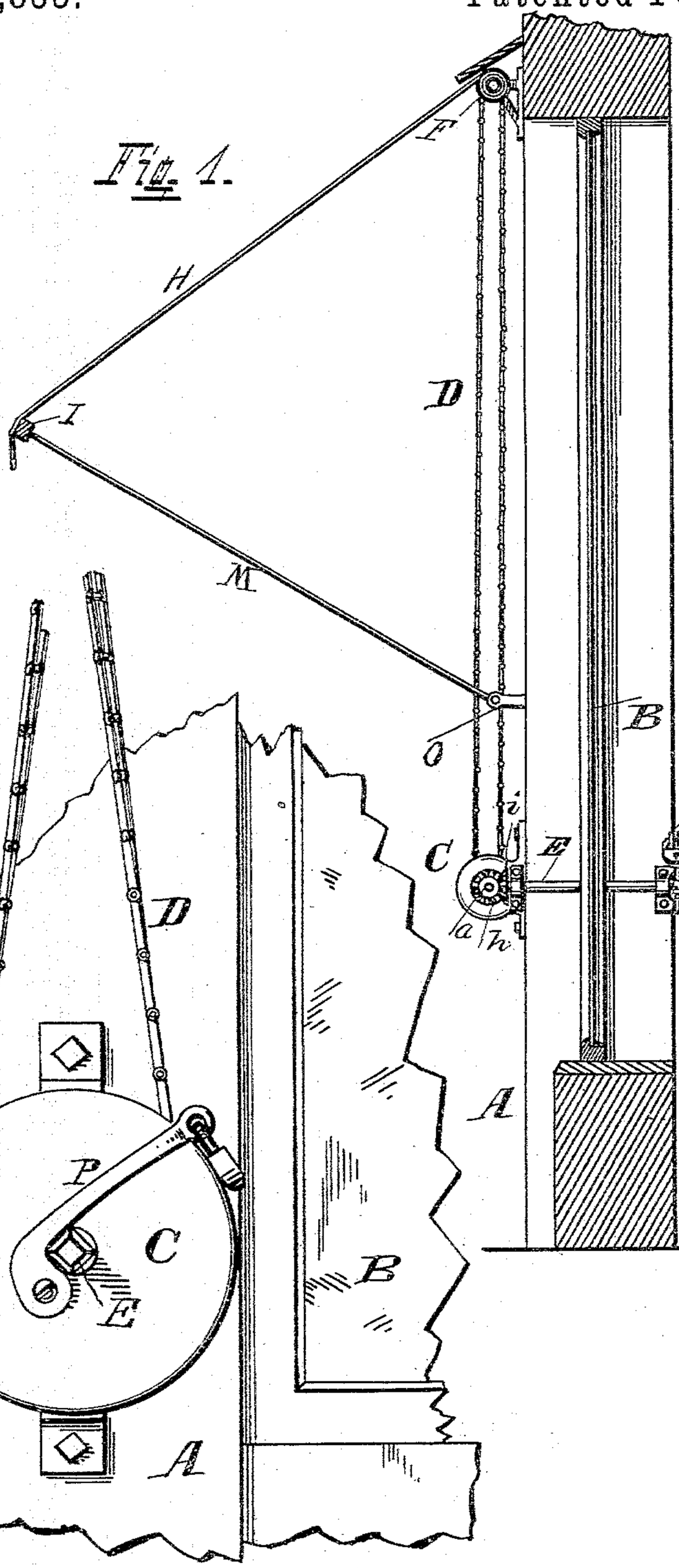


Fig. 4.

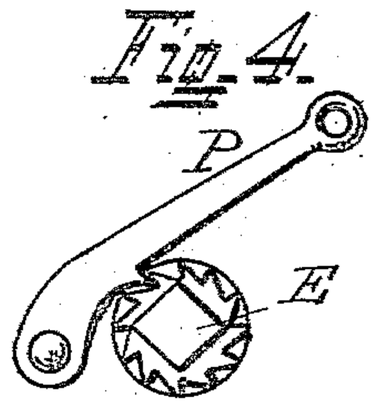
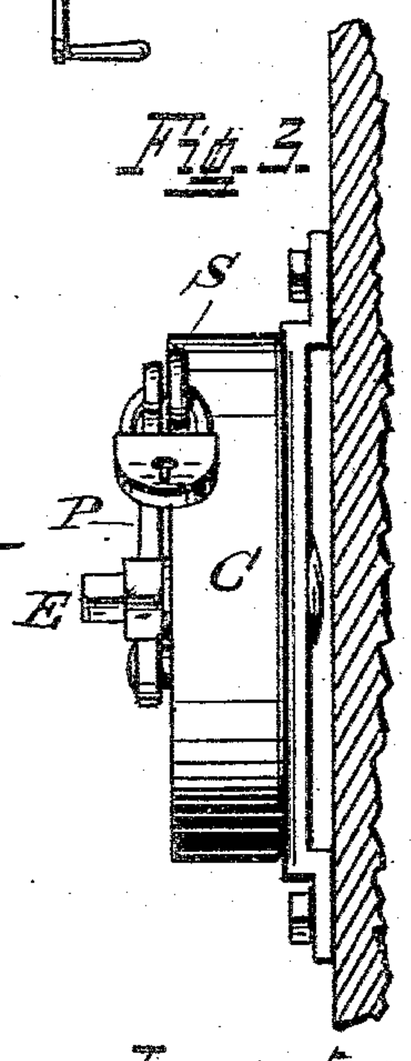


Fig. 2.

Fig. 3.



Attest
Robert C. Pugh
Charles Dehmer

Inventor
Jacob Greenberg,
by Geo. H. Graham Atty.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JACOB GREENBERG, OF CINCINNATI, OHIO.

AWNING.

SPECIFICATION forming part of Letters Patent No. 356,833, dated February 1, 1887.

Application filed March 23, 1886. Serial No. 196,203. (No model.)

To all whom it may concern:

Be it known that I, JACOB GREENBERG, of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Awnings, of which the following is a specification.

The object of my invention is to provide means whereby the mechanism for raising and lowering an awning can be made secure and fast, so that meddlers or those evilly disposed may be prevented from tampering with the fixtures, and at the same time permitting the drop of the awning to be at any desired point and fastening it thereat.

My invention will be readily understood from the hereinafter description, and the accompanying drawings, forming part of my application, in which—

Figure 1 is a side elevation of an awning, showing the mechanism for raising and lowering, arranged so as to be manipulated from the interior and having attached my retaining device. Fig. 2 is a front view of same, showing the retaining-link in position and locked. Constructions of this kind are employed when the awning is raised or lowered from the outside. Fig. 3 is a side view of Fig. 2. Fig. 4 represents a modification of the retaining-link and the way the operating-axle is made.

A represents the house to which the awning and its proper fixtures are attached.

B is the show-window.

C is the casing or drum containing the lower sprocket-wheel, on and between which and a corresponding upper wheel the endless chain D is carried and operated. This lower wheel is mounted on the shaft or axle *a*, which carries also the beveled gear *h*. *i* is a corresponding bevel-gear mounted upon the end of the shaft E, the latter being supported in proper bearings and running through the wall into the interior, where a crank or other suitable device can be attached for operating it. The gears *h i* are arranged so as to mesh into each other, as shown.

The end to which the crank is attached is squared or otherwise formed, so that it will not be round, but angular-shaped—in other words, polygonal. To any convenient portion of the premises, and in a line with this polygonal portion, is pivoted a retaining link or pawl, P, (seen more clearly in Fig. 2,) so that it can be brought into contact with said angular portion or polygon.

F is the roller on which the canvas H or other awning material is wound and unwound.

I is the longitudinal rod to which the lower portion of the canvas is secured. M is one of the side bars, rigidly secured at one end to said longitudinal rod, the other end being pivoted to an arm, O, attached to the side of the house. This frame or support, consisting of the side bars, M, and the longitudinal bar I, rises and falls proportionately with the canvas. The free end of the retaining-link is provided with an eye, through which and a staple, S, affixed to the casing or other convenient place, the bow of a padlock is inserted, and by means whereof the link is held rigidly in position, as shown. Constructions of this kind, as shown by Fig. 1, are used when the awning is to be operated from the interior; but where it is desired to raise and lower from the outside I arrange the devices as shown in Figs. 2 and 3. In the latter case the boxing or drum C is attached in any convenient way to the side of the house, and the end of the axle E, being polygonal, as before stated, extends out beyond the face of the casing, so as to permit of the attachment of the crank.

To the face of the casing is fastened the retaining-link P. It will be noticed that this retaining-link is provided with a heel which has a degree of curvature. When the link is drawn over the shaft E and locked, as shown in Figs. 2 and 3, it holds the shaft permanently and prevents its being turned; for, should an attempt be made to unwind, or the awning by its own weight should have a tendency to unwind, the link would check it, for any backward movement would cause the shaft E to bind or wedge into the heel of the link P, thereby stopping all further progress and accomplishing the desired result. The link performs the same service in constructions such as are shown in Fig. 1.

Instead of having the axle or shaft E angular or polygonal, as just described, and the heel of the link constructed so that it will wedge the axle, I may provide the axle with a ratchet and the link with a tooth to operate in the

ratchet, as seen in Fig. 4. This modification accomplishes just the same functions as the construction first described—viz., of stopping the axle at any desired point—so that the "reach" of the canvas can be proportionally large or small.

Another modification which is within the scope of my invention is to provide the link P at about the point where the tooth is, as seen in Fig, 4, with a notch or slot and the axle with teeth to engage and disengage with the slot in the link. This would be but practically reversing the mode as illustrated in Fig. 4, for then the axle would be provided with a series of pawls to engage with the notch in the link, instead of using one pawl to engage with the ratchet-teeth. It will be seen that I have thus provided means for holding the axle, and through it the awning itself, at any desired point, which means are simple, cheap, and effective.

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

1. In a device for operating awnings, the combination, with a shaft provided with teeth or angular projections and with means for rotating the shaft, of a link or bar pivoted at one end and adapted to engage with the shaft, and a locking device adapted to be applied to the free end of the link or bar and to a fixed eye or loop, substantially as shown.

2. In a device for operating awnings, the combination of an operating-shaft having an angular periphery, a fixed eye or staple, a pivoted bar adapted to engage with the operating-shaft, and a device, substantially such as shown, to lock the pivoted bar to the eye or staple and thereby hold the bar in engagement with the shaft.

3. In a device for operating awnings, in combination with a framing, a shaft journaled therein, a link or bar pivoted to the frame-work and adapted to engage with the shaft, and a locking device, substantially such as shown, to lock the link or bar to an eye or to the frame-work and thereby hold the bar in engagement with the shaft.

4. In a device for raising and lowering awnings, the combination of an operating-axle provided with teeth, and a retaining-link to engage with same, the link having on its free end an eye by means of which and a properly-affixed ring or staple means are afforded for securing the link, substantially as shown and described, and for the purposes noted.

5. In combination with an awning, a roller upon which said awning is wound, a shaft below the roller provided with a gear-wheel, an endless band connecting the shaft and roller, a second shaft at an angle to the first one provided with a gear-wheel to mesh with the gear on the first shaft and provided with a handle, a pivoted link or bar adapted to engage with the second shaft, and a lock applied to the link or bar and to an eye secured to the frame-work to hold the bar in engagement with the second shaft.

JACOB GREENBERG.

Witnesses:
W. ELLWOOD WYNNE,
GEORGE KENDRICK.