Dec. 1, 1931. D. B. YEATES 1,834,669

AWNING ROLLER

Filed Dec. 9, 1930

Fig. 1.

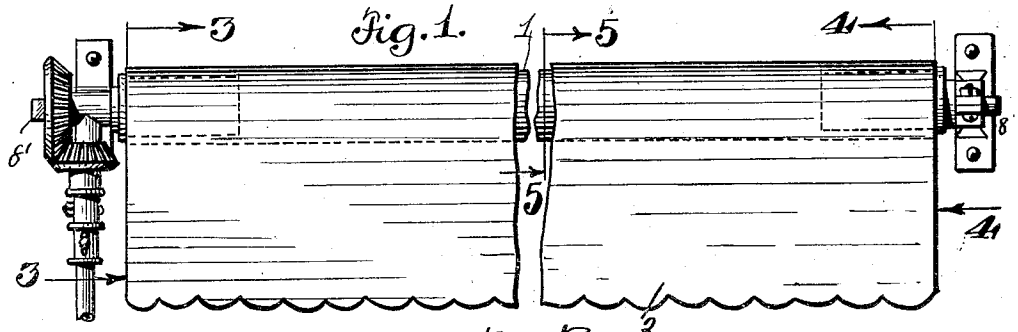


Fig. 2.

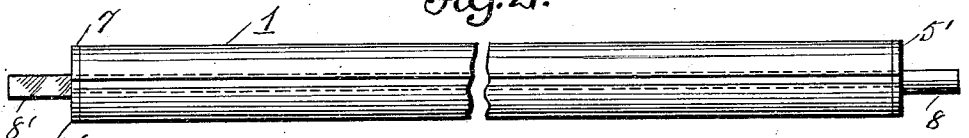


Fig. 3.

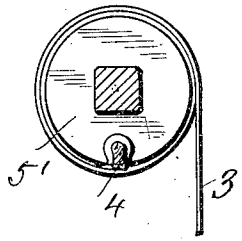


Fig. 5.

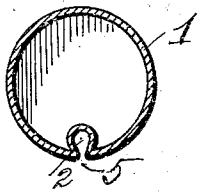


Fig. 4.

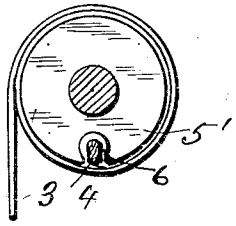


Fig. 6.

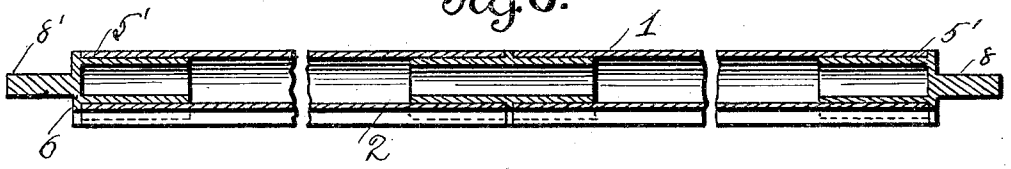
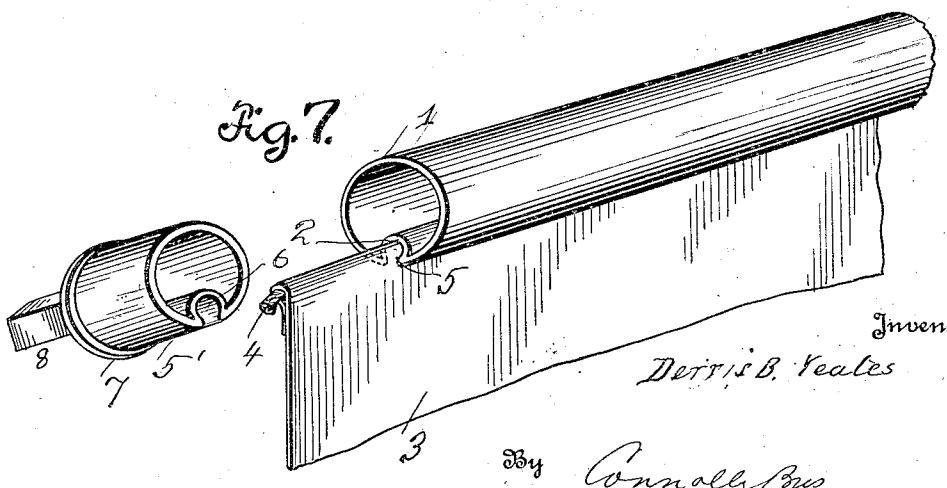


Fig. 7.



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Patented Dec. 1, 1931 1,834,669

UNITED STATES PATENT OFFICE

DERRIS B. YEATES, OF PORTSMOUTH, VIRGINIA, ASSIGNOR OF ONE-HALF TO J. S. GROOME, T. H. GROOME, AND J. D. FENTRESS, TRADING AS CAROLINA AWNING AND TENT MANUFACTURING COMPANY, OF ROCKY MOUNT, NORTH CAROLINA

AWNING ROLLER

Application filed December 9, 1930. Serial No. 501,109.

This invention has relation to rollers for awnings, and has for its object the provision of a tubular metallic roller, of novel construction to be rotated by any suitable means, and of such a character that it may be conveniently and expeditiously installed in position on its supporting brackets without the necessity of skilled labor and without the use of nails, rivets or like permanent fastenings, and to which the awning cloth or canopy, may be securely attached and held in position, without liability of becoming displaced or disarranged.

A further object is to provide an awning roller of the character referred to with means for extending its length when required, by the use of connection members introduced between separate sections of the roller.

A further object of the invention is to provide a roller which may be readily and economically installed in its working position and taken down for the purpose of renewal of the awning cloth and replaced in position without the necessity of removing the fastening devices.

In carrying my invention into effect I construct the awning roller of thin metallic tubing, of generally cylindrical shape and form thereon a longitudinal socket or trough, for the reception of the upper edge of the canvas or other material constituting the body of the awning. This socket or trough, is produced by an inward depression or bending of the roller tubing so as to produce on the inner surface of the roller a longitudinal ridge, projecting inwardly of the tubing.

The awning canvas with its marginal cord or rope is passed into and through this trough or socket, from one end of the tube and is held in place by the edges of the trough or socket which are contracted so as to prevent the awning cloth and rope from being pulled out of position.

The end pieces or gudgeons of the roller are of cylindrical form and adapted to fit inside the ends of the roller and are prevented from turning in their seats by being channeled lengthwise so as to embrace the ridge formed in the roller tubing.

No drilling or riveting is required as the roller and gudgeons become interlocked circumferentially, by being simply telescoped together.

The gudgeons or end pieces are formed with the usual stems for attachment to the supporting brackets, one of the stems being rounded to turn in its bracket bearing and the other squared or rounded to engage with the awning rolling devices, of which any known or suitable kind may be used.

The invention consists in the novel combination of parts constituting the awning roller as hereinafter more particularly described, and as recited by the claims.

In the drawings:—

Fig. 1 is a front view of an awning and roller, mounted on brackets.

Fig. 2 is a side view of the roller with attached gudgeon.

Figs. 3, 4 and 5 are cross sectional views on the lines 3, 5 and 4, respectively.

Fig. 6 is a longitudinal sectional view of the roller with inserted gudgeon.

Fig. 7 is a perspective view showing the tubular roller and one of the gudgeons, separated from each other.

In the drawings, 1 designates the cylindrical roller, composed of a section of relatively thin metallic tubing, folded or corrugated lengthwise to produce a trough 2, constituting a pocket for the reception of the upper end of the canvas or other awning cloth, 3, which has a cord or rope 4, stitched within a fold or hem thereof, with the ends of the cord or rope, projecting therefrom.

The mouth or side opening 5, of the trough is contracted so as to hold the corded end of the awning in a position preventing its withdrawal or displacement, the end of the awning being inserted in the trough from either of its open ends.

The trough 2 is so formed as to project inwardly of the roller tube and form a spline, which, when the gudgeons 5′ are inserted in the ends of the tube, engage with the kerfs 6, formed in the gudgeons and lock the parts together, thus preventing the roller from being turned independently of the gudgeons. The latter are fitted to the ends of the roller

tube after insertion of the corded end of the awning cloth.

7 are flanges formed on the gudgeons to abut against the ends of the roller tubing.

The gudgeons are provided with spindles or shafts, 8, 8′, respectively for mounting in brackets, the spindle 8 being rounded so as to rotate in a bracket bearing, while the spindle 8′ is squared to engage with the hub of an operating gear, or other awning operating device.

As will be seen the roller with the attached awning cloth is capable of being easily and expeditiously installed and the roller and end gudgeon can be connected together without the necessity of drilling any of the parts or the use of any equipment devices requiring the employment of skilled labor.

When removal of the roller from its connections is required it is only necessary to withdraw the end gudgeon from the ends of the tube.

When it is desired, or becomes necessary, to install an awning of more than ordinary width, the roller tube may be made in separate sections spliced together by a connection piece as shown in Fig. 6.

This connection piece is similar in character to one of the gudgeons, in that it is a cylindrical device fitting the ends of two adjacent tube sections and formed with a longitudinal groove to interlock with the trough of the roller tube or tube sections.

While I have described and illustrated a preferred embodiment of my invention, I do not limit myself to the precise specific structure disclosed, but include such modifications as may be made by those skilled in the art, without departing from the principles involved.

I claim:—

1. An awning roller consisting of a seamless metallic tube having an external longitudinal groove in its wall, and a complementary ridge on its interior, adapted respectively to receive the upper edge of an awning cloth and to form an interlocking key for end gudgeons.

2. An awning roller as claimed in claim 1, formed of separate sections and provided with a tubular coupling element, having a longitudinal groove interlocking with the internal ridges of the sections.

In testimony whereof I affix my signature.

DERRIS B. YEATES.