Nov. 26, 1957 H. L. BARTHOLOMEW 2,814,456

AWNING HEADROD CLAMP

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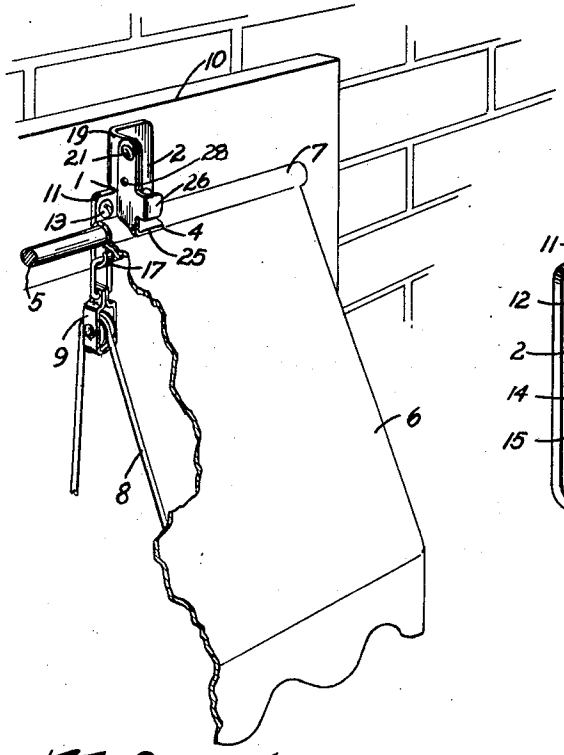



Fig. 1.

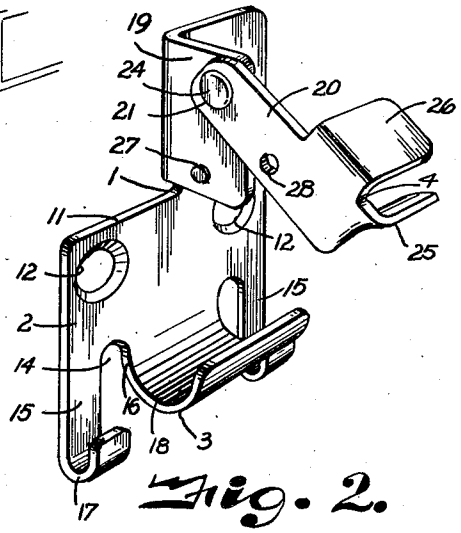



Fig. 2.

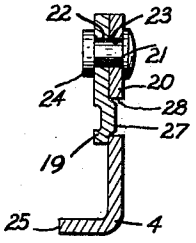



Fig. 5.

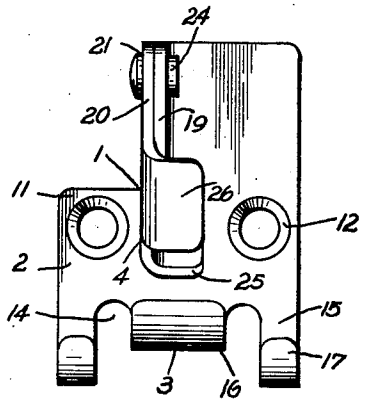



Fig. 3.

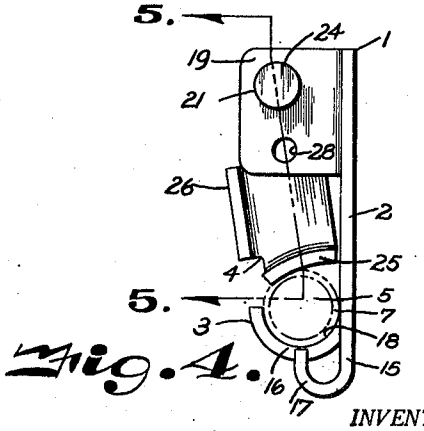



Fig. 4.

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# AWNING HEADROD CLAMP

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2 Claims. (Cl. 248—273)

This invention relates to awning fixtures and more particularly to a clamp for supporting the top or head-rod of an awning in the attachment of same to a building, for example, to the window frames thereof.

Most present day canvas awnings are provided with a hem at the upper portion and a metal member or rod extends through the loop formed by the hem. It is common practice to use clamps to secure the headrod of the awning to the building, said clamps having a member fixed to the building and a removable member drawn toward the fixed member by means of wing nuts, bolts or the like to clamp the headrod between said members. It is very difficult to hold an awning in place, particularly large awnings, while tightening the conventional type clamp members and it is also difficult to remove the wing nuts and removable clamp members and hold the awning while it is being removed from a building.

The objects of the present invention are to provide an awning headrod clamp in which all of the parts remain assembled at all times and may be operated by one hand in installing or removing an awning; to provide an awning headrod clamp having a bracket adapted to be secured to a window frame and a trough member on the bracket for supporting the awning rod and a locking member hingedly mounted on the bracket and adapted to be moved into clamping engagement with the rod to hold same in the trough, to provide such a clamp in which the locking member and trough are arranged whereby when in clamping position, pull on the awning tends to tighten the clamp; and to provide such a clamp which is economical to manufacture, easily and quickly operated for installing or removing awnings, and that obviates the difficulty that has previously been experienced in turning screws and operating clamps having separate pieces.

In accomplishing these and other objects of the present invention, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawings wherein:

Fig. 1 is a partial perspective view of the awning headrod clamp applied to an awning on a building.

Fig. 2 is a perspective view of the awning headrod clamp.

Fig. 3 is a front elevation of the awning headrod clamp.

Fig. 4 is a side elevation of the awning headrod clamp with the lock member in rod-clamping position.

Fig. 5 is a vertical sectional view through the headrod clamp on the line 5—5, Fig. 4.

Referring more in detail to the drawings:

1 designates an awning headrod clamp generally consisting of a bracket 2 having a trough member 3 thereon and a lock member 4 pivotally mounted for clamping engagement to hold an awning rod 5 between the lock member 4 and trough member 3. In conventional awnings formed of cloth, such as canvas, the awning 6 is provided with a loop 7 at the upper end thereof formed by a hem in the cloth and the rod 5 extends through said loop. Also the awning has various ropes 8 which extend through pulleys 9, or the like, for raising and lowering the awning.



The clamp 1 is designed to be mounted on a building, for example, the upper portion of a window frame 10, to secure the upper portion of the awning and the rod 5 therein to the building above the window.

The bracket 2 is preferably formed of a single piece of relatively heavy sheet metal to provide a base plate 11 having spaced countersunk holes 12 through which fastening devices 13 extend in securing the bracket to the building. In the structure illustrated, the base plate has spaced slots 14 extending upwardly from the lower edge thereof to define spaced legs 15 and an intermediate member or arm 16 therebetween. The leg members 15 are turned outwardly and upwardly to form hooks 17 on the lower ends thereof adapted to support the pulleys 9.

The intermediate portion or arm 16 is turned upwardly and outwardly to form the trough member 3 wherein the trough 18 therein is formed on a radius whereby the rod 5 and awning material therearound will fit into the trough, the trough being preferably upwardly opening and substantially semi-cylindrical in shape. The base plate is cut horizontally above one of the openings 12 and the portion thereabove turned outwardly to form an ear 19 which extends from the base plate 11 above the trough member 3. While the bracket is such that it may easily be formed of sheet metal, it may be cast or molded of metal or other suitable material.

The locking member 4 includes an arm 20 pivotally mounted on a pin 21 which extends through aligned openings 22 and 23 in the arm 20 and ear 19 respectively. Heads or collars 24 are arranged on each end of the pin 22 in engagement with the arm and ear whereby the arm has hinging movement relative to the ear but the adjacent faces thereof are held substantially in engagement. The mounting of the locking member is such that it has swinging movement in a plane at right angles to the bracket and rod.

The lower end of the arm 20 is turned laterally and formed to provide an arcuate jaw 25 of suitable size and shape and positioned for clamping engagement with the upper portion of the rod 5 and awning material therearound when the rod is arranged in the trough 18. The arm 20 also has a laterally extending finger 26 for facilitating manipulation of the locking member.

When the locking member jaw is engaged with the rod 5 in the trough 18, the parts are positioned whereby pull on the awning 6 tends to tighten the clamping engagement, however, to further hold the parts in clamping position, the bracket and arm 20 have interengaging latch members. In the structure illustrated, a lug or boss 27 extends from the face of the ear 19 adjacent the arm 20 and is adapted to be engaged in a recess or aperture 28 in the arm 20. The lug and aperture are positioned for interengagement only when the arm is in clamping position.

In utilizing an awning headrod clamp constructed as described, two or more of the clamps are arranged on the building with the trough members 3 thereof in longitudinal alignment whereby a rod 5 positioned in the trough members will be supported as desired on the building. Then the fastening devices 13 are extended through the holes 12 into the building to secure the bracket members to the selected positions, the trough member 3, hook 17 and ear 19 of each clamp member extending outwardly from the building. Then the finger 26 of the locking member is grasped and pulled to swing the arm 20 outwardly away from the base plate 11 to a position as illustrated in Fig. 2. The upper end of the awning 6 and the rod therein is laid in the trough 18 and moved laterally to the desired position of the awning relative to the window frame. Then pressure is applied to the finger 26 to swing the arm 20 of the locking member on the pivot pin 21 to engage the jaw 25

with the canvas on the rod **5**, and further pressure applied to move the arm until the lug **27** engages in the aperture or recess **28** to retain the locking member in clamping position as illustrated in Fig. 4. When in locking position, the angle of the arm relative to the pivot pin **21** and the rod **5** is such that substantial pull on the awning **6** will not release the clamp members. When it is desired to remove the awning, a screw driver or other bar member, may be inserted behind the finger **26** and pressure applied outwardly thereon to swing the locking member outwardly and release the clamping engagement of same onto the rod. Then the locking member may be swung to the position shown in Fig. 2 and the rod lifted from the trough **18**.

It is believed obvious I have provided an awning headrod clamp on which the parts are inseparable and which may be easily operated, even when corrosion, ice, or the like, tend to hold the locking member against movement, and in which the operation of the locking member may be performed by one hand while the other hand is being utilized in manipulating the awning rod or aiding in supporting the installer of the awning.

What I claim and desire to secure by Letters Patent is:

1. An awning headrod clamp comprising, a bracket formed of sheet metal and having a relatively flat portion adapted to be secured to a building, an outwardly and upwardly curved portion at the lower end of the base plate portion defining an upwardly opening semi-cylindrical trough for removably receiving and supporting an awning headrod, an ear on the upper portion of the base plate portion and extending outwardly therefrom above the trough forming portion, said ear having a flat side face thereon, a locking arm formed of sheet metal and having a flat side face engaging the flat side face of the ear whereby said arm is edgewise relative to the base plate portion, means hingedly connecting one end of the locking arm to the ear above the trough forming portion for swinging movement of said locking arm toward and away from the base plate portion, a finger on the locking arm and extending laterally from the outer edge thereof intermediate the ends of said locking arm, a jaw member on the locking arm remote from the hinge means and extending substantially longitudinally of and above the trough forming portion for engaging the top of a headrod and holding the same in the trough when the locking arm is swung toward the base plate portion, and a lug extending from one of the engaging flat side faces of the ear and locking arm and a lug receiving recess in the other of said flat side faces whereby the lug and recess are inter-engaged when the locking arm is swung toward the base plate portion for retaining the locking arm in position for clamping engagement of the jaw with the headrod.



2. An awning headrod clamp comprising, a bracket formed of sheet metal and having a relatively flat base plate portion adapted to be secured to a building, downwardly extending spaced legs on the bracket base plate, hooks on the lower ends of said legs, a downwardly extending arm on the bracket base plate intermediate said legs, said downwardly extending arm having an outwardly and upwardly curved portion at the lower end thereof and above the hooks on said legs and defining an upwardly opening semi-cylindrical trough for removably receiving and supporting an awning headrod, an ear on the upper portion of the base plate portion and extending outwardly therefrom above the trough forming portion, said ear having a flat side face thereon, a locking arm formed of sheet metal and having a flat side face engaging the flat side face of the ear whereby said arm is edgewise relative to the base plate portion, means hingedly connecting one end of the locking arm to the ear above the trough forming portion for swinging movement of the locking arm toward and away from the base plate portion and in a plane at right angles to the base plate portion and rod, a finger on the locking arm and extending laterally from the outer edge thereof intermediate the ends of said locking arm, an arcuate jaw on the lower end of the locking arm and extending laterally therefrom substantially longitudinally of and above the trough forming portion for engaging the top of a headrod and holding same in the trough when the locking arm is swung toward the base plate portion, and a laterally extending lug on one and a lug receiving recess on the other of the bracket ear and locking arm and positioned for inter-engagement when the locking arm and jaw thereon are in headrod clamping position for retaining said locking arm in said headrod clamping position.


References Cited in the file of this patent

UNITED STATES PATENTS

| | | |
|---|---|---|
| 806,265 | Kesler et al. | Dec. 5, 1905 |
| 855,529 | Raymond et al. | June 4, 1907 |
| 923,892 | Robinson | June 8, 1909 |
| 1,095,201 | Franz | May 5, 1914 |
| 1,190,437 | Manassa | July 11, 1916 |
| 1,735,382 | Etkins | Nov. 12, 1929 |
| 1,805,611 | Burns | May 19, 1931 |
| 2,157,717 | Munson | May 9, 1939 |
| 2,292,170 | Starkloff | Aug. 4, 1942 |