# United States Patent [19]

**Johnson et al.**

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## [54] AWNING FIXTURE


[76] Inventors: **Wilbur D. Johnson; Edna F. Johnson,** both of 639 Sartori Avenue, Torrance, Calif. 90501



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[52] **U.S. Cl.**.....**296/23 R,** 135/5 AT, 160/46

[51] **Int. Cl.**.....**B60p 3/32**

[58] **Field of Search**...296/23, 92; 135/5 AT; 160/47, 160/46, 370, 313, 380



[56] **References Cited**

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| | | | |
|---|---|---|---|
| 2,423,402 | 7/1947 | Olsen | 160/46 X |
| 1,941,382 | 12/1933 | Beck | 160/402 |
| 3,001,577 | 9/1961 | Anderson | 160/67 X |



*Primary Examiner*—Philip Goodman

*Attorney*—J. Calvin Brown



[57] **ABSTRACT**

The awning for a camper or trailer or similar vehicle is provided along one edge with a fixture for reception in a rail usually attached to this type of vehicle. The fixture comprises two tubular members joined by a webbing, one tubular member is receivable within the rail connected to the camper or trailer and the other tubular member is provided with a longitudinal slot adapted to receive the pocket formed on the awning along the upper edge thereof. This pocket usually receives a rope and the awning body extends outwardly through the slot in said tubular member of the fixture with the lower edge of said awning provided with a pocket to receive a bar or tube with supporting posts to maintain the awning in position of service. The construction allows a single workman to attach the awning to the rail or to disassemble the awning from the rail for storage purposes. When the awning is erected, winds will not effect the same in a manner to dislodge the awning from the rail and will likewise assure that rain and other inclement weather will not cause leakage between the awning and the rail.


**3 Claims, 5 Drawing Figures**

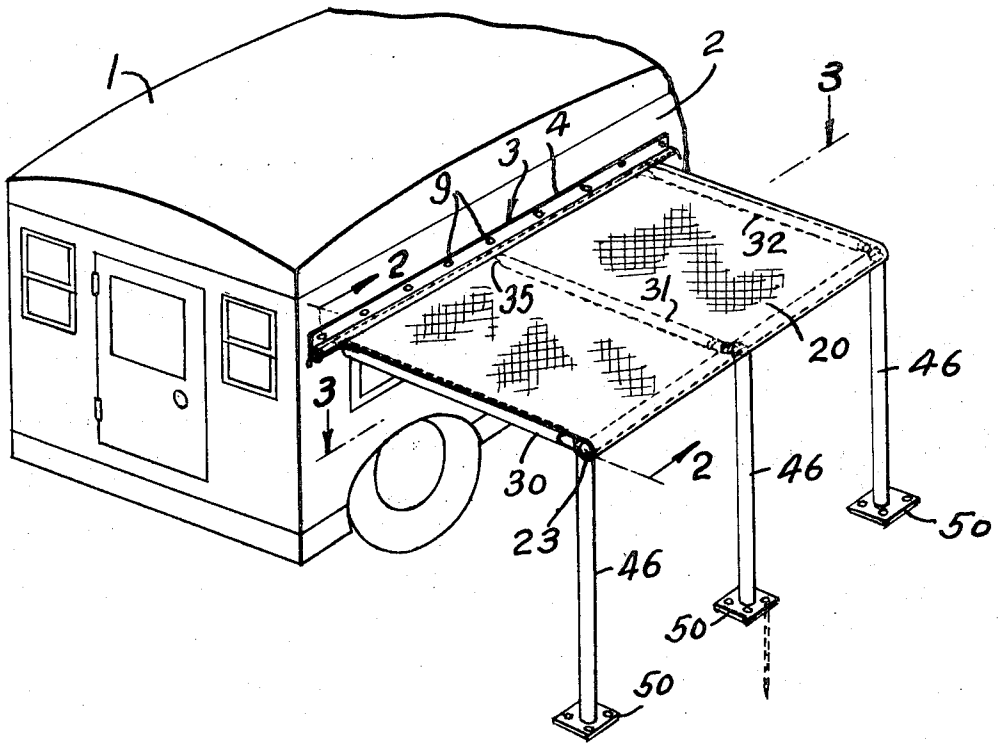
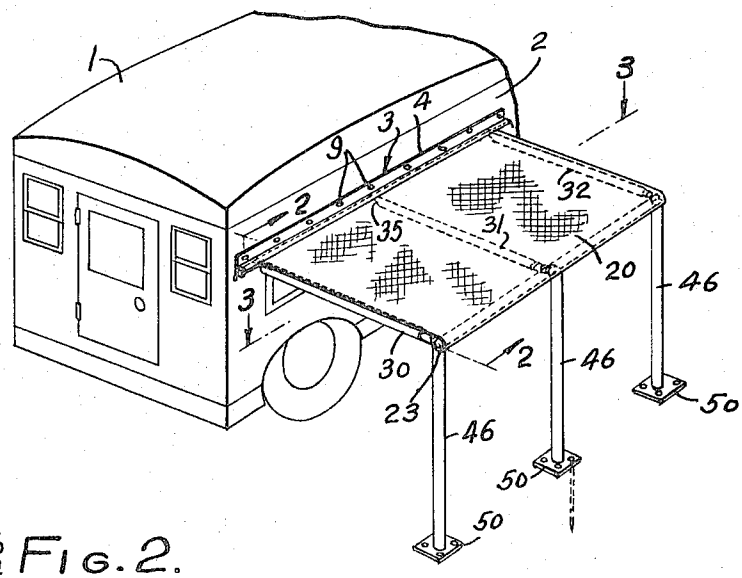


FIG. 1.



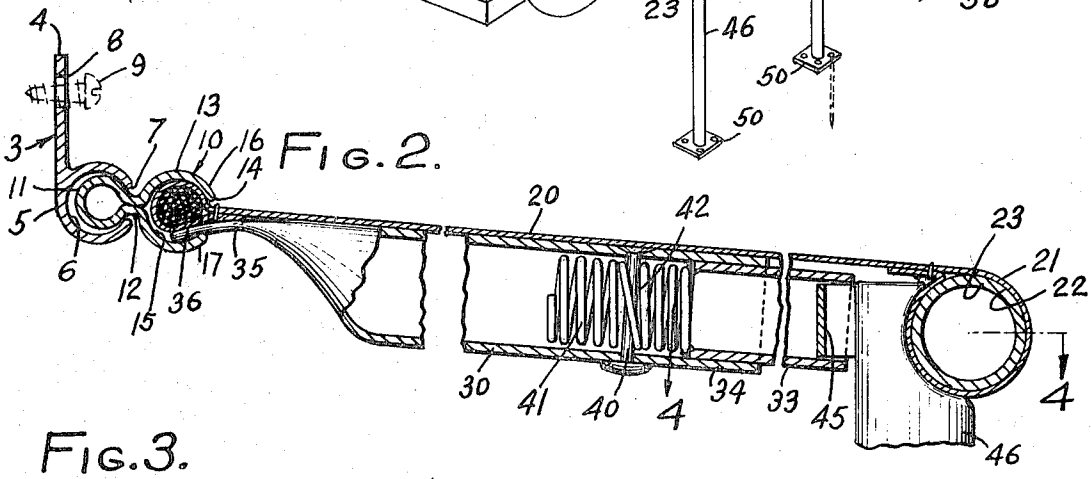
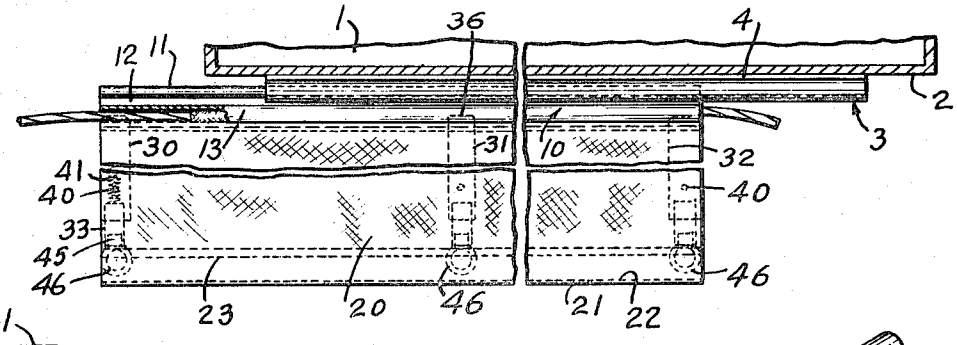




FIG. 2.

FIG. 3.



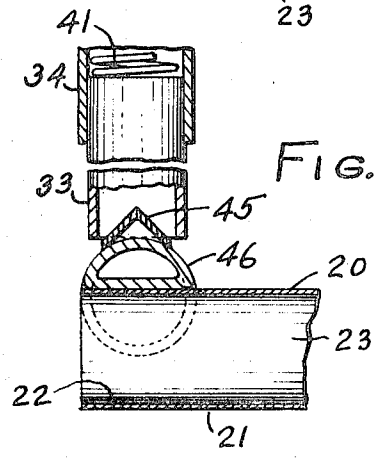




FIG. 4.

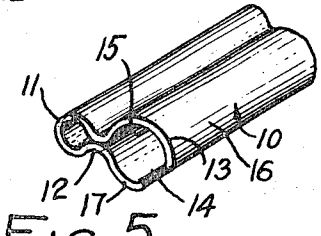



FIG. 5.

INVENTORS
WILBUR D. JOHNSON,
BY EDNA F. JOHNSON;
Calvin Brown,
ATTORNEY

# AWNING FIXTURE

## DESCRIPTION OF THE PRIOR ART

Applicants are familiar with the difficulty of providing an awning fixture which is easily secured to a camper or trailer rail by one person and, likewise, which permits the awning to be removed by one person from the rail for storage purposes.

The following U. S. Patents are noted:

| | |
|---|---|
| 1,991,358 to Bessy | 2,423,402 to Olsen |
| 2,189,567 to Miller | 2,547,692 to D'Azzo |
| 2,287,667 to Brown | 2,720,885 to Legg |
| 2,787,321 to Dietz. | |

All of the aforesaid patented devices, however, are difficult to erect and disassemble and require more than one workman or operator for these operations. The prior art does not show any structure which is wind resistant as well as water resistant so that leaks do not occur between the rail and the awning or in which the awning fixture will not easily be separated from the rail due to inclement weather. In high winds, the awning has a tendency to bellow and such a bellowing will separate the upper edge of the awning from the rail. This cannot occur with the present structure of the inventors.

## SUMMARY

The awning fixture comprises two tubular members interconnected by webbing. The fixture may be formed by extruding aluminum or aluminum alloy. One tubular member is received within the rail which is attached to the trailer or camper horizontally on one side thereof, and usually adjacent the top thereof. This rail may have various forms such as a tubular portion having a longitudinal slot and a cleat or flange secured to said member and, which cleat is fastened to a side of the trailer or camper. The rail tubular portion is usually circular to provide a channel while the awning fixture has one tubular member for reception in the channel of the rail, and a second tubular member which has two arcuate portions, a top and a bottom which are separated by a slot. The top arcuate portion has a greater area than the lower arcuate portion. The webbing joining the two tubular members of the fixture is positioned in the slot of the tubular portion of the rail and has limited vertical swinging movement therein. The awning which is made of any material such as a canvas is hemmed to form a pocket along the upper edge or head portion thereof and, likewise, hemmed to form a pocket at the lower edge portion thereof. The upper or head portion of the awning receives a rope while the bottom pocket portion may receive a rod of some character whether tubular or solid. The fixture may be placed on the ground and the head portion of the awning moved within the slotted tubular portion of the fixture the length thereof. The workman then inserts the front tubular portion of the fixture into the tubular portion of the rail with the webbing between the two tubular portions of the fixture positioned in the longitudinal slot of the rail. When it is desired to disassemble the awning from the rail, a single operator may move the awning fixture outwardly from the tubular portion of the rail followed, if necessary, by the removal of the awning head from the tubular portion of the fixture. The awning may then be folded and stored, as desired, and the awning fixture replaced in the rail.



## DESCRIPTION OF THE DRAWING

FIG. 1 is a fragmentary, perspective view of a trailer incorporating the invention;

FIG. 2 is an enlarged fragmentary sectional view on the line 2—2 of FIG. 1;

FIG. 3 is an enlarged, fragmentary, partly sectional plan view on the line 3—3 of FIG. 1;

FIG. 4 is a fragmentary, enlarged sectional view on the line 4—4 of FIG. 2; and,

FIG. 5 is a perspective view, on an enlarged scale, of the awning fixture.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

FIG. 1 shows a camper 1 provided on one side 2 thereof with a rail 3 of the type shown in FIG. 2. This rail may be of various forms and, as a rule, is furnished with a camper or trailer when the camper or trailer is purchased. In the majority of cases, the rail is of the type shown in FIG. 2 and includes a cleat or flange 4 in substantially tangential relation to a depending tubular portion 5 having a circular channel 6 and a longitudinal slot 7 communicating with the channel. The cleat or flange is provided with holes 8 for the reception of screws 9 whereby the rail may be fastened horizontally to the side of the trailer or camper, as shown in FIG. 1. As stated, practically all rails have a similar construction, that is to say, have a channel for the reception of the awning head and a forward, longitudinally extending slot through which the body of the awning is passed. The present invention is adaptable to practically any form of rail and in some instances the awning head which is hemmed to provide a pocket, receives a rope and the head of the awning is placed within the channel portion of the rail. This is not a satisfactory way of connecting an awning to a rail and permits the head of the awning to be torn in use, and to possibly escape through the slot of the rail during inclement weather. To prevent destruction of the awning and, likewise, to assist in placing the awning in working contact with the rail, an awning fixture designated generally as 10 is employed. This fixture, as shown in FIG. 5, employs a tubular member 11 joined by webbing 12 to a further tubular member 13 provided with a longitudinal slot 14. Preferably, the tubular member 13 is provided with a curved wall channel 15 and the slot 14 has a downward position or is at other than diametric alignment with the webbing 12. Thus, the top 16 subtends a greater arcuate area than does the bottom 17.

The awning 20 is provided at its lower or bottom longitudinal edge 21 with a hem which forms a pocket 22 for reception of a tube or rod 23. Thus, the workman erecting the awning and securing it to the rail may have the awning and the fixture on the ground and will then insert the head of the awning in the channel 15 thereof with the body portion of the awning passed through the slot 14. All the workman need do is push the head of the awning with its rope within the channel 15 and the length thereof, as shown in cross section, in FIG. 2. After completion of the connection of the awning fixture with the awning, the workman then picks up the fixture and awning and inserts the tube 11 within the channel 6 of the rail with the web 12 passed through the slot 7 of said rail. Suitable means is provided for holding the awning in position of service which consists

of providing, in the present instance two or more outriggers designated generally as **30, 31** and **32**. The outriggers in the present instance are similarly constructed and comprise two telescopic tubes **33** and **34**. The upper end of the tube **34** is deformed as shown in FIG. **2** at **35** to pass through the slot **14** within the chamber **15** for contact with the head of the awning, as shown at **36**. It will be noted in this connection, that the deformed end of the tube is in tight fit engagement between the head of the awning and the member **17** of the fixture. Within the tube **34** is a transverse pin **40** and confined within said tube is a coil spring **41** having a diameter substantially equal to the inner diameter of the tube **34**. The pin **40** is passed between certain of the coils of the spring, as shown at **42** and one spring end engages the end of the tube **33**, as shown in FIG. **2**. The outer end of tube **33** receives an angular piece **45** therein which angular piece is carried by an upright or supporting pole **46** and which supporting pole adjacent its upper end is deformed transversely to accommodate the sleeve and tube or rod positioned at the lower end of the awning. Thus, when the tube **33** is rotated, pin **40** will move the coil spring against the end of the tube **33** to maintain the tube between the upright and the tube **42** whereby the awning is held taut. Foot pieces **50** may be provided for the uprights. Assembly and disassembly of the awning becomes a simple matter as the uprights are usually removed from engagement with the outriggers by turning one of the tubes such as **33** relative to the other tube to release compression therebetween due to the spring, followed by either removal of the fixture from the rail together with the awning and the separation of the outriggers from the awning.

The device is simple of construction and inexpensive and found to provide superior results in the most adverse weather conditions, and as previously stated, is a one-man operation to erect the awning and to remove the awning from the rail.

We claim:

1. A trailer or camper of the type which has an awning rail secured along one side thereof, the rail having a tubular portion provided with a longitudinal slot, the combination with said awning rail of an awning fixture having two tubular portions one of which is receivable within the tubular portion of the awning rail and the other tubular portion of the fixture positioned exterior the rail tubular portion; a web passed through the slot of the tubular portion of the rail and joining the two tubular portions of the fixture; said exterior tubular portion of the fixture provided with a longitudinal slot, and an awning having a head, the head being received within the outer exterior tubular portion of the fixture with the body of the awning passing through the slot in said exterior tubular portion.

2. The device as set forth in claim **1**, the slot of said exterior tubular portion of the fixture providing an arcuate top of greater area than the bottom portion thereof.

3. An awning fixture for a camper or trailer provided with an awning rail secured thereto along one side thereof, the rail having a circular tubular portion provided with longitudinal slot, said awning fixture securing an awning to the awning rail, and said awning provided with a pocket along one edge thereof and a rope within said pocket; the awning fixture comprising a tubular member for reception within the tubular portion of the rail and a second tubular portion joined by a web with the first tubular portion, said web extending through the slot of the rail, said second tubular portion of the fixture adapted to receive the head of the awning and said second tubular portion of the fixture provided with a longitudinal slot through which the body of the awning is passed, and means for supporting the awning in extension from the awning rail, comprising outriggers extending between the fixture and uprights for the awning.

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