Oct. 7, 1958 F. J. ZARNOWSKI 2,855,036

JOINTS

Filed Aug. 19, 1954

Fig 1

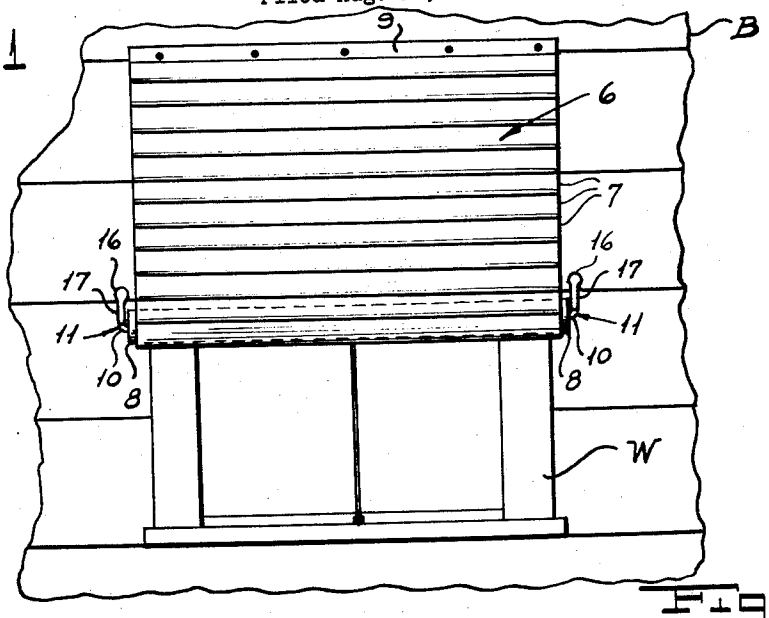


Fig 4

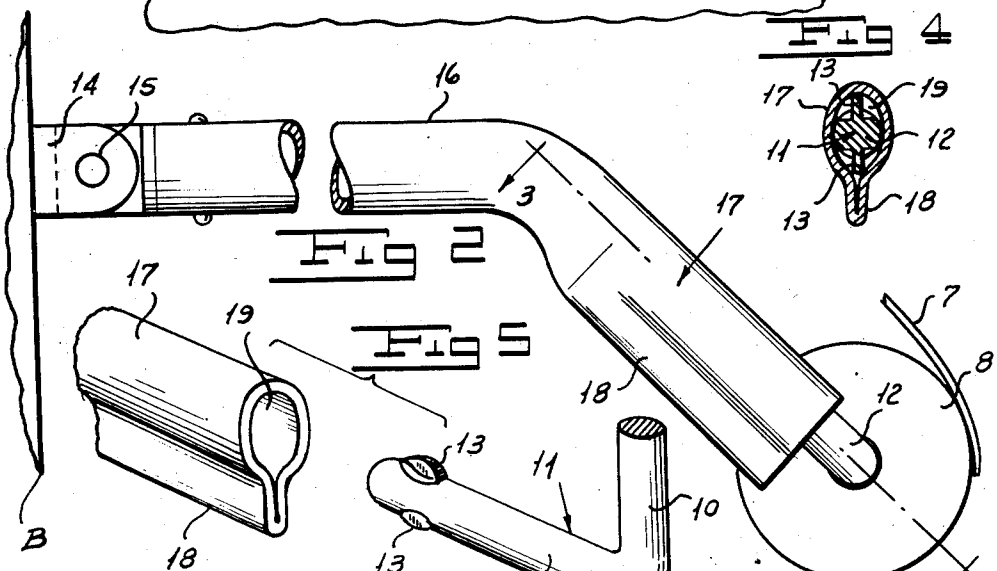


Fig 2

Fig 5

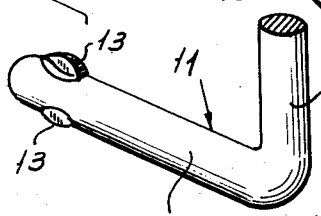
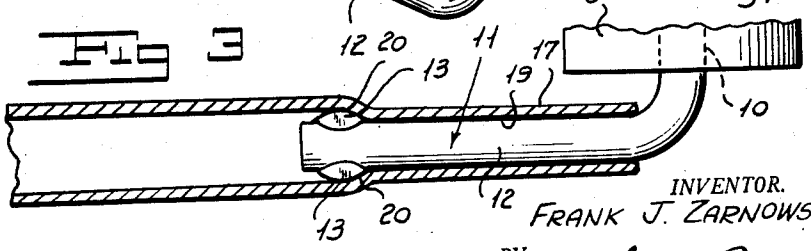


Fig 3



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JOINTS

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2 Claims. (Cl. 160—67)

An important object of my invention is to provide a joint of the foregoing described character which is simple in construction, durable in use, efficient in operation, economical in manufacture and lends itself to many uses and adaptations.

With the above and other objects in view, as will hereinafter appear, the invention consists in the combination and arrangement of parts hereinafter set forth and illustrated in the accompanying drawings from which the several features of the invention and the advantages attained thereby will be readily understood by those skilled in the art.

Referring to the drawings wherein like reference characters designate like parts throughout the several views:

Figure 1 is a front elevation of an awning of the roll-up type having my invention incorporated therein.

Figure 2 is a fragmentary side elevation of the lower portion of the awning illustrating my invention in use therewith.

Figure 3 is a detail sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a cross-sectional view of a pair of awning frame members and illustrating the position of one member during its insertion into the end of the other member.

Figure 5 is a fragmentary disassembled perspective view of a pair of the members.

In disclosing an elected embodiment of my invention, as illustrated in the drawing, I employ an awning **6** constructed with a plurality of slats **7** connected together for relative pivotal movement to permit rolling of the awning about a roller **8** secured to the lowermost slat, the topmost slat of the awning being connected to a building B or the like, above the window W, by means of a mounting strip **9**. The roller **8** is of the spring-actuated type and has extending into its ends coaxially extending bearing sections **10** of a pair of mounting rod members **11**. The sections **10** of the members **11** are connected to and have sleeved thereon springs (not shown) having ends attached to the roller **8** for urging rotation of the roller and windup of the awning when the latter is in a lowered position as is common in such constructions. Each of the members **11** is also provided with a cylindriform frame section **12** disposed in substantially right-angular relation with the section **10**. The frame section **12**, adjacent its free end, is formed with a pair of diametrically outwardly extending ears **13** for a purpose hereinafter made apparent.

At the sides of the window W, the building has secured thereto brackets **14** to which are pivotally connected, by means of pins **15**, the inner ends of a pair of tubular guide or frame members **16**. The outer end portions of each frame member **16** is disposed at an angle with respect to the body portion and constitutes a sleeve **17** formed, along one side, with a rib **18** and, adjacent said rib, an elliptical bore or slot **19** to accommodate therein the section **12** whereby to secure the roller **8** to the respective frame members. The width of the bore **19** is

such, while permitting the insertion of the ears entirely and axially through the sleeve, precludes rotation of the ears within the confines of the sleeve. However, inwardly of the sleeve, the bore of the member **16** is of a size sufficient to permit the section **12** and the ears **13** to be rotated 90 degrees and lock the section **12** within the bore by engagement of the ears **13** with the shoulders **20** defining the inner end of the sleeve thereby precluding withdrawal of the section **12** from the sleeve **17** as disclosed in Figure 3.

In assembling, the members **16** being disconnected from the brackets **14**, the sections **12** are inserted within the sleeves whereupon the members **16** are rotated relative to the sections **12** to lock the sections **12** within the sleeves as shown in Figure 3. When the sections **12** are thus locked with the sleeves, the inner ends of the members **16** are connected to the brackets **14** by the pins **15** thereby precluding disconnection of the members **11** and **16** without detaching the members **16** from the building.

Without further elaboration, the foregoing will so fully explain the invention that others may, by applying current knowledge, readily adapt the same for use under various conditions of service. Moreover, it is not indispensable that all the features of the invention be used conjointly since they may be employed advantageously in various combinations and subcombinations.

It is obvious that the invention is not confined solely to the use herein disclosed in connection therewith as it may be utilized for any purpose to which it is adaptable. It is therefore to be understood that the invention is not limited to the specific construction as illustrated and described, as the same is only illustrative of the principles involved which are capable of extended application in various forms, and the invention comprehends all construction within the scope of the appended claims.

What I claim is:

1. In combination, an awning adapted to be secured to a building or the like and operable to raised and lowered positions, a roller about which said awning is rolled to said raised position, mounting devices adapted to be fixed to said building, a pair of side arms pivotally connected to said devices for guiding said awning to said positions, each of said arms having an end portion formed with a bore of elongated cross-section extending therethrough and with a shoulder defining the inner end of said bore, said portion having an outwardly directed rib extending therealong, rods extending into the ends of said roller, respectively, for mounting the latter, each rod having an angularly related section disposed in the bore of the adjacent portion and rotatably shiftable therein, said section being formed with a pair of diametrically arranged outwardly extending ears engaging said shoulder and connecting said section to said portion against displacement through said bore when said section is disposed in one position within said bore and the respective arm connected to one of said devices, said sections being disconnectable from said portions upon detachment of at least one of said arms from its respective device and relative turning of said portions and said sections to other positions to disengage said ears from said shoulders to permit entire withdrawal of said sections and said ears axially through said bore.

2. In combination, a roll-up awning having one end adapted to be fixed to a building or the like and an opposite end movable to raised and lowered positions relative to said one end, a roller fixed to said opposite end and about which roller said awning is rolled to said raised position and unrolled to said lowered position, mounting devices adapted to be fixed to said building, means for connecting said devices to said roller for guiding said awning to said positions and including a pair of rods

mounting the ends of said roller and a pair of members connected to said rods, respectively, each of said members being movable to locked and released positions relative to the rod connected thereto, said devices being pivotally connected to said members and coacting therewith when so connected to maintain said members in said locked positions to preclude detachment of said awning from said members, at least one of said members being detachable from its respective device to permit movement thereof to a released position whereby said awning may be detached from said members.

References Cited in the file of this patent

UNITED STATES PATENTS

801,664	Holtman	Oct. 10, 1905
1,056,484	Anderholm	Mar. 18, 1913
1,194,793	Styers	Aug. 15, 1916
1,285,804	Saylor	Nov. 26, 1918
1,717,921	Gillet	June 18, 1929
1,729,158	Dunn	Sept. 24, 1929
1,965,917	Anderholm	July 10, 1934
2,379,984	Nereaux	July 10, 1945

FOREIGN PATENTS

72,398	Netherlands	May 15, 1953