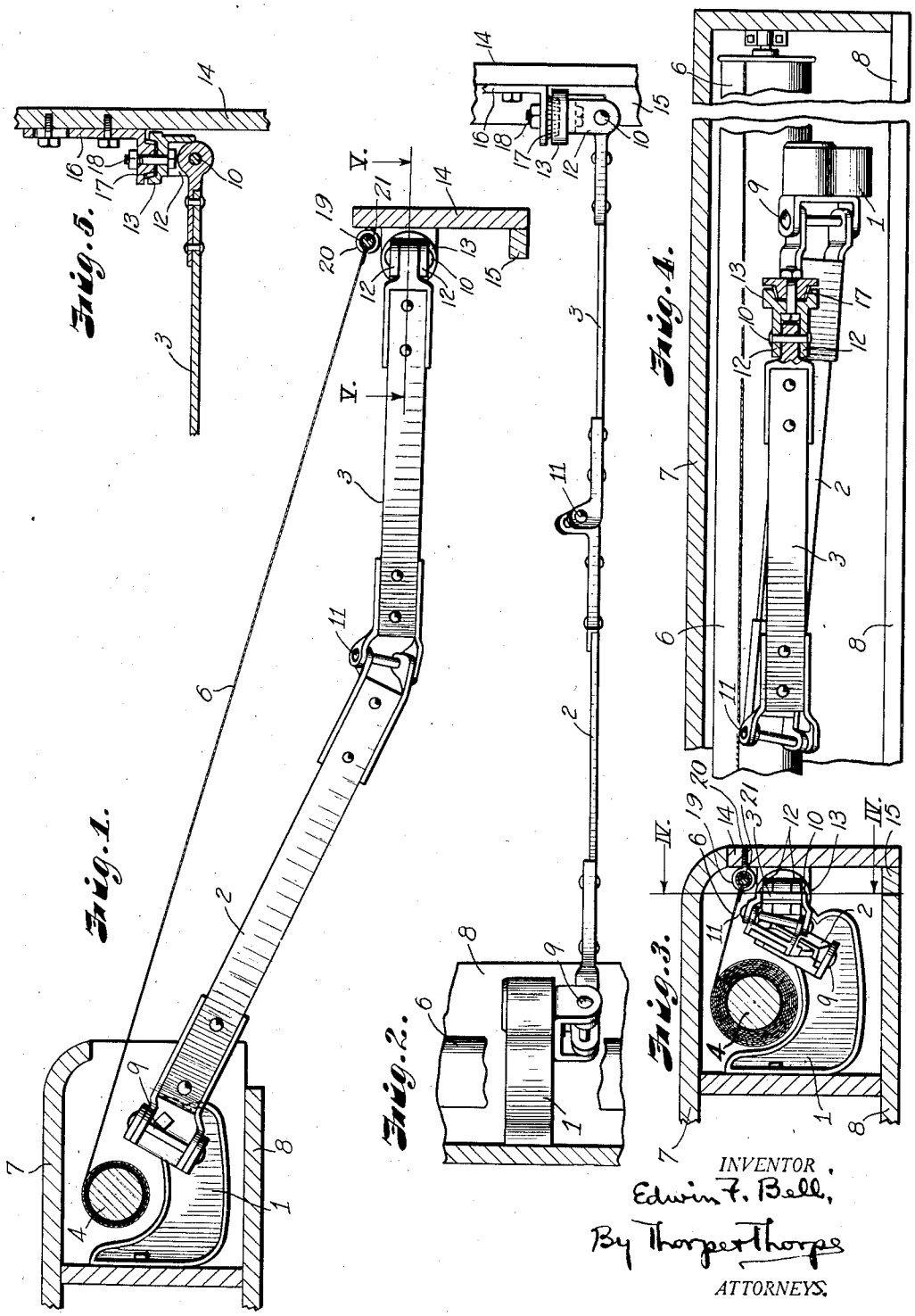
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FRONT BOARD SUPPORT FOR AWNINGS

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FRONT BOARD SUPPORT FOR AWNINGS

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This invention relates to mounting constructions for rigid front boards used in conjunction with lateral arm awnings, and has for its general object to provide an adjustable member whereby the relationship between the front board and the awning arms may be set to maintain the front board in predetermined position for accurately closing the front of the awning boxing or housing when the awning is collapsed into closed position.

With this type of construction a housing or boxing is provided for the awning roller, lateral arms, etc., into which the collapsed awning is snugly received, and to close the front end of this housing against the weather and to provide a neat and attractive appearance with no exposure of the operating parts, it is essential that the front board carried by the awning shall be rigid and shall accurately match or close the front of the boxing or housing.

With the general objects named in view the invention consists in certain novel and useful features of construction and organization of parts as hereinafter described and claimed; and in order that it may be fully understood, reference is to be had to the accompanying drawing, in which:—

Figure 1 is a section through a lateral arm awning in operative position to illustrate the front board and housing for the awning.

Figure 2 is a top plan view of the construction shown in Figure 1 with the awning fabric omitted.

Figure 3 is a section through the housing and operating awning parts in collapsed or folded position.

Figure 4 is a section on the line IV—IV of Figure 3.

Figure 5 is a section on the line V—V of Figure 1.

In the said drawing, where like reference characters identify corresponding parts in all of the figures, suitable brackets 1 are secured to the building front, and pivotally mounted on said brackets are the inner and outer arms 2 and 3, respectively, of a lateral arm awning construction, and at any suitable point with relation to said arms and journaled in suitable brackets secured in fixed relation with respect to the building front, is a roller 4 for the support of an awning fabric 6.

The parts just described are enclosed in a housing or boxing comprising top and bottom members 7 and 8. The inner awning arm 2, as common in the art is adjustable in its bracket 1 so that the pitch of the awning may be regulated to suit conditions, the awning arms bearing such a relationship to each other and to the awning pitch, that the outer pivot 10 secured to the outer end of the outer arm 3, shall maintain the same angle, which may be substantially vertical as illustrated, in both open and closed positions, it being understood in this connection, however, that for any particular installation, this angle of the outer pivot 10 may be inclined more or less inwardly or outwardly of the vertical, depending upon the pitch of the awning, the relationship between the arms 2 and 3 as determined by the inclination of their connecting pivot 11, and the angle of the housing or boxing. In Figure 2, it will be noted that for convenience of illustration, arms 2 and 3 are indicated as being in substantially a straight line, which, however, in practice, is avoided as such a relationship of the parts tends to lock the awning in open position.

To provide means whereby a rigid front board may be adjustably supported so that it may be set to suit pitch as described, the outer end of arm 3 carrying the pivot pin 10, is received between a pair of ears 12 formed at one end of a toothed socket 13, preferably provided with inclined bevel or conical side walls.

The rigid front board comprises a member 14 provided at its lower edge with an angle portion or extension 15 adapted to abut the lower housing member 8, and secured to the rear face of said front board is a right-angle member 16 formed integrally with a toothed rosette 17, preferably of conical form, adapted to be received within and to interlock with the teeth of the socket 13, the parts being maintained tightly clamped against vibration by means of a bolt 18. Attention is particularly called to the fact that the preferred construction, to avoid noise or vibration by the wind, comprises the beveled socket and cone rosette similar to that illustrated, as the bolt thus draws the parts tightly together regardless of any slight irregularities in the meshing of the teeth and completely prevents any play or lost motion, which would allow vibration. With the type of construction illustrated and described, it is evident that by manipulation of the bolt 18, the front board may be rotated around the ends of the awning arms to suit the angle of the parts, and that if the arms are so adjusted that the angle of the pivot bolt 10 is the same in both open and closed positions, or if the board is set to close the boxing regardless of its posi-

tion when open, it will be apparent that the front board will properly and accurately close the open side of the boxing, which usually requires a vertical position, although it might be an angle under some conditions, and that this angle will be reliably and accurately maintained until manually readjusted, to allow for an accidental change in the adjustment of any of the other parts of the structure or a change in the character of installation.

The awning fabric is attached to the front board in any suitable manner, one method of attaching being illustrated in which the fabric at its outer end is formed with a loop 19 running for its length, which is notched at points to accommodate screw eyes 20 secured to the back of the front board, and threaded through said fabric loop and the screw eyes is a locking or securing rod 21.

From the above description, it will be apparent that I have described a construction embodying the features of advantage set forth as desirable; and while I have described the preferred embodiment of the invention, I reserve the right to make all changes within the spirit of the invention and without the ambit of the prior art.

I claim:—

1. The combination in a lateral arm awning, of a plurality of laterally movable arms, a front board at the outer ends of said arms, and a rotatably adjustable connection uniting each of said arms and the board for rotatable adjustment of the latter on its longitudinal axis to change the angle of its face in relation to the plane of movement of the folding arms.

2. A lateral arm awning, comprising the combination of a laterally-operable awning arm and front board, a pair of relatively rotatable clamping members connecting said arm and board, one of said members being pivotally secured to the outer end of said lateral arm, and the other member being fixed to the front board, and means to clamp said members in fixed relation to vary the angle of the face of the board with respect to the plane of movement of the awning arm.

3. A front board carrier for awnings, comprising a pair of relatively rotatable clamping members, one adapted to be connected to a front board and the other to an awning arm, said members being formed with cooperating wedge faces in relatively rotatable engagement, and means for securing the members in fixed relation to hold the board at the desired angle with respect to the plane of movement of the awning arm.

4. A front board carrier for awnings, comprising a pair of clamping members relatively adjustable around a common axis, one adapted to be connected to a front board and the other to an awning arm, said members being formed with cooperating toothed wedge faces, and means for clamping the members with their toothed wedge faces in interlocked relation to hold the board at the desired angle with respect to the plane of movement of the awning arm.

5. A front board carrier for awnings, comprising a pair of relatively rotatable clamping members, one of said members having a conical socket and the other a cone engaging said socket, and one member being adapted for connection to an awning arm and the other to an awning board, and means for maintaining the cone clamped in said socket to hold the board at the desired angle with respect to the plane of movement of the awning arm.

6. A front board carrier for awnings, comprising a pair of clamping members, each of said members having teeth for interlocking engagement with the teeth of the other member, and one of the members being adapted for connection to an awning front board and the other to an awning arm, and means for maintaining their teeth in interlocked clamped relation to hold the board at the desired angle with respect to the plane of movement of the awning arm.

7. The combination in an awning, of a plurality of laterally-foldable arms, a front board, and a pair of cooperating clamping members for each arm and the board, one member of each pair of clamping members being carried by an arm and the other by said board, the members of each pair being relatively rotatable to vary the angle of the board with relation to the plane of movement of said foldable arms.

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