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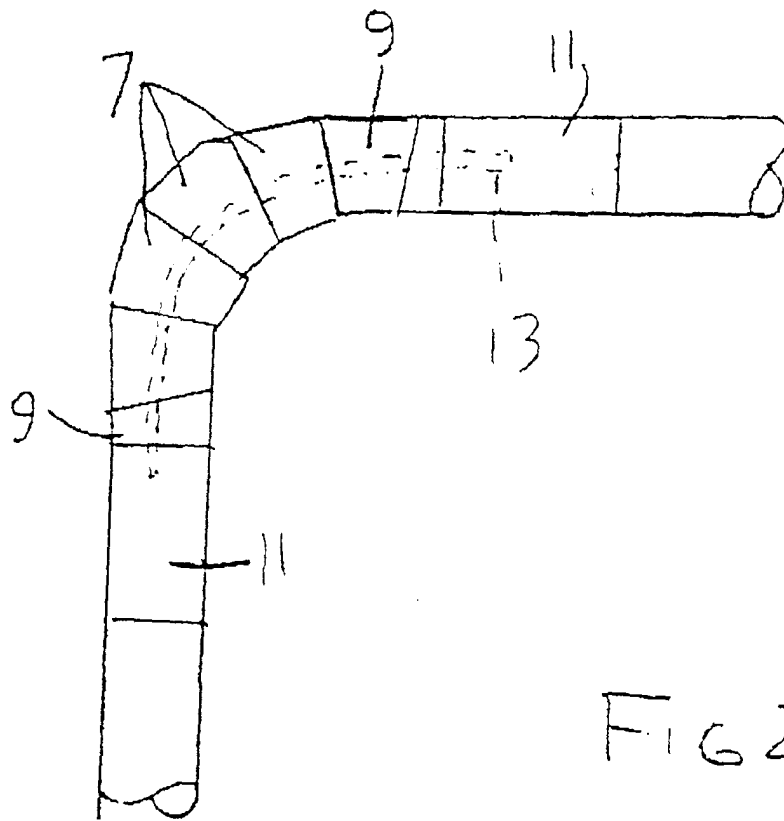
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(54) **Curtain pole**

(57) A corner arrangement for a curtain pole comprises a number of wedge shaped pole pieces (7,9)

which can be connected between two conventional curtain pole ends (11) to provide a continuous track on which to carry curtains about a non-linear surface.



Description

[0001] This invention relates to curtain poles.

[0002] Curtain poles are currently a well used method of hanging curtains. The usual form of such devices comprises an elongate pole, generally but not always of wood, which carries rings thereon, slidable along the pole and from which the curtains are suspended by means of hooks. The pole itself is supported adjacent to its ends and, where the pole is intended for use with a pair of curtains, at its mid point.

[0003] These curtain poles are very successful with straight windows, but they cannot be used where a bend is required, such as is found in full- or semi-bay windows.

[0004] The present invention seeks to provide a pole construction which will enable curtain poles to be used around bends without significantly detracting from the appearance of the pole.

[0005] According to the invention there is provided a corner arrangement for a curtain pole comprising two or more pole pieces, each piece having two substantially flat ends which are not parallel to each other, the pieces being connectable to adjacent pole pieces and/or curtain pole ends

[0006] Preferably the wedge shaped pole pieces are connected together in such a way that they are rotatable relative to each other about the axial aperture.

[0007] A pole piece may have one end inclined perpendicular to the central axis of the pole pieces and the other end parallel to that plane so as to lie parallel to the end surfaces of the pole parts while the intermediate pole pieces may have both sides inclined in opposite directions.

[0008] The means for connecting pole pieces to adjacent pole parts may comprise a short cylindrical pole piece connectable at one end to the end pole piece and at the other end to the adjacent pole part.

[0009] Suitably a tensioning wire or spring may pass through the axial apertures of all the pole pieces and be tensioned by a mechanism carried by the cylindrical pole piece.

[0010] The invention will now be described in greater detail, by way of example, with reference to the drawings, in which:-

Figure 1 is a plan view of the parts of one form of corner arrangement in an unbent or straight configuration,

Figure 2 is a view similar to figure 1 but showing the corner arrangement in a bent or cornering configuration,

Figure 3 is a perspective view of an intermediate pole piece used in the arrangement of figures 1 and 2;

Figure 4 is a sectional view through the pole piece of figure 3;

Figure 5 is a sectional view similar to figure 4 but of an end pole piece, and

Figure 6 is a sectional view through a tensioner connector for connecting a row of pole pieces to adjacent pole parts

[0011] Referring firstly to figure 1, a corner arrangement 1 according to one embodiment of the invention is shown in a straight configuration. The ends of two standard poles are shown at 3 and 5.

[0012] The corner arrangement comprises, in the case shown, five intermediate pole pieces 7, two end pole pieces 9 and two cylindrical tensioner connectors 11 by means of which the pole pieces are connected to the adjacent pole parts 3 and 5. The corner arrangement also has a spring or like tensioner 13 passing through axial apertures in the pole pieces 7 and 9 which retains the pole pieces together with a tension maintained by the cylindrical tensioner connectors 11 as will be described hereafter.

[0013] Figure 2 shows the same corner arrangement in a bent or cornering form

[0014] Referring now to figure 3 and 4 an individual intermediate pole piece 7 is shown in perspective and in cross section. It will be seen that the pole pieces 7 are short lengths of basically cylindrical pole of which the sides 15 and 17 have been transversely slanted at an angle α to the diametral plane, indicated at 19. Both sides are slanted in opposite directions by the same angle so as to form an isosceles wedge like formation. Suitably the angle used is 15° but other angles may be used.

[0015] The pole piece 7 has a central axial aperture 21 adapted to receive a tensioning spring on which all the pole pieces, both 7 and 9, are threaded. It will be further observed that one of the sides 15 of the pole piece 7 has an annular rib 23 surrounding the aperture 21 which, when the pole pieces are assembled together, mates with a complementary annular recess 25 on the other side 17 of the adjacent pole piece to provide increased stability.

[0016] Figure 5 shows an end pole piece 9 in a similar sectional view to figure 4. The only difference between the intermediate pole pieces and the end pole pieces is that the end pole piece has only one slant side 27, the other side 29 lying in a diametral plane at right angles to the axis of the pole piece. It must be borne in mind that the end pole piece 9 for use at the end of a set of intermediate pieces 7 will have its rib 23 on the slant face and the recess on the diametral plane face.

[0017] Figure 6 is a cross sectional view of a cylindrical tensioner connector 11. The connector shown is for the right hand end of the corner arrangement and thus has an annular recess 25. The connector 11 at the other end being reversed and having a rib 23 instead of a pro-

jection. Basically the tensioner connector 11 comprises a cylindrical piece of pole having two axially extended bores 31 and 33 therein. These bores are threaded in opposite senses to provide a tightening function to be described. In the left hand bore 31 one end of a suitably dimensioned spring 13 is located. The spring 13 is so arranged that its coils form a thread engaging the threads in the bore 32. The right hand bore 33 is intended to receive a threaded element formed with a wood screw at the other end which screws directly into the end of the pole part 5.

[0018] The production of a suitable corner will now be described:-

[0019] To make up a corner arrangement the straight parts of the curtain run are cut off from lengths of the pole leaving the corner missing. The appropriate number of intermediate pole pieces 7 is selected and the pieces are threaded onto a suitable length of spring 13. Then appropriate end pole pieces 9 are threaded onto the spring 13 and pushed up against the intermediate pieces 7. Finally a tensioner connector 11 is screwed onto the ends of the spring 13 by means of the bores 31.

[0020] Care must be taken to ensure that the various pieces are connected the right way round so that a rib 23 on one piece mates up with a recess on the adjacent piece and *vice versa*. If the intermediate pieces 7 are laid out back to back, as shown in figure 1, then the corner arrangement will have a straight configuration. In order to put curvature into the corner arrangement, the intermediate pole pieces 7 are rotated relative to each other, to achieve the amount of curvature required. The further the rotations of the pole pieces depart from the figure 1 configuration, the greater the curvature. Figure 2 shows the maximum curvature achievable with the set up as shown. In figure 2 a 90° bend has been achieved by rotating all the intermediate pieces until they all point the same way.

[0021] Once the desired curvature has been achieved, the curve can be tightened up by screwing the tensioner connectors 11 further onto the spring 13. The corner attachment can then be attached to the pole parts 3 and 5 using the threaded bores 33 and threaded element referred to above. On completed assembly of the whole pole in position, a final tensioning can be given to the corner arrangement by rotating the tensioner connectors to bring the pole parts and the pieces of the corner arrangement more tightly together.

[0022] It will be appreciated that the above described embodiment may be modified or added to without departing from the scope of the invention. For example, instead of using a spring to provide the tension, the other connecting elements such as wires, ropes or threads could be used. Although a single right angled corner has been shown, the arrangement of the invention can provide any suitable type of bend which can be achieved by selection of the right number of intermediate pieces and appropriate relative rotation between the intermediate pieces. Thus it is envisaged that shallow curves

and steep curves be allowed for as well as more sophisticated shapes such as "S" bends.

[0023] While the above arrangement has been described in relation, basically, to wooden poles, the invention could also be applied to poles made of plastics material or metal.

Claims

1. A corner arrangement for a curtain pole comprising two or more pole pieces (1, 7, 9) each piece having two substantially flat ends which are not parallel to each other, the pieces being connectable to adjacent pole pieces and/or curtain pole ends (3, 5).
2. A corner arrangement as claimed in Claim 1, wherein two of the pieces (1, 7, 9) are connected by means of a protrusion (23) from at least one of the ends of a pole piece suitably proportioned and shaped to be received by an orifice in an adjacent pole piece or curtain pole end.
3. A corner arrangement as claimed in any preceding claim, wherein the pole pieces are connectable in any given rotational position about their respective central axes..
4. A corner arrangement as claimed in any preceding claim wherein the pieces are provided with an axial aperture (21) suitable for receiving a stringing member (13).
5. A corner arrangement as claimed in Claim 4, wherein the stringing member is a pretensioner.
6. A corner arrangement as claimed in any preceding claim, comprising two end pole pieces (9) each having one end with a plane perpendicular to the central axis of the pole piece and one or more centre pole pieces (1, 7) each having both ends inclined to the plane perpendicular to the central axis of the pole piece.
7. A corner arrangement as claimed in Claim 6, wherein the one or more centre pole pieces have ends inclined at about 15° to the plane perpendicular to the central axis.
8. A corner arrangement as claimed in any preceding claim, wherein the pole pieces are substantially circular in cross-section.

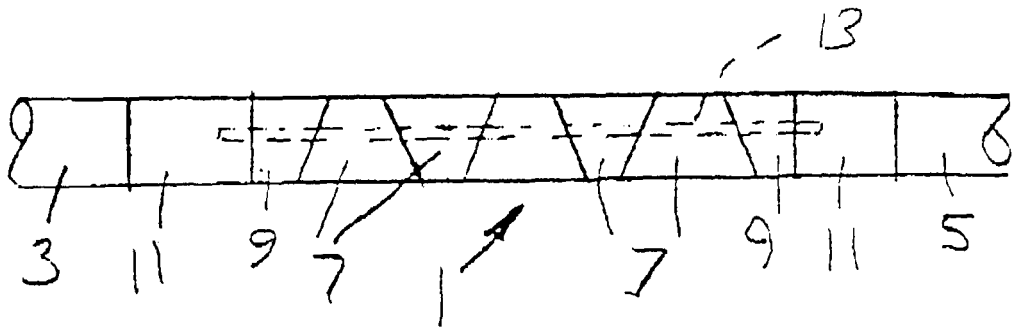


FIG 1.

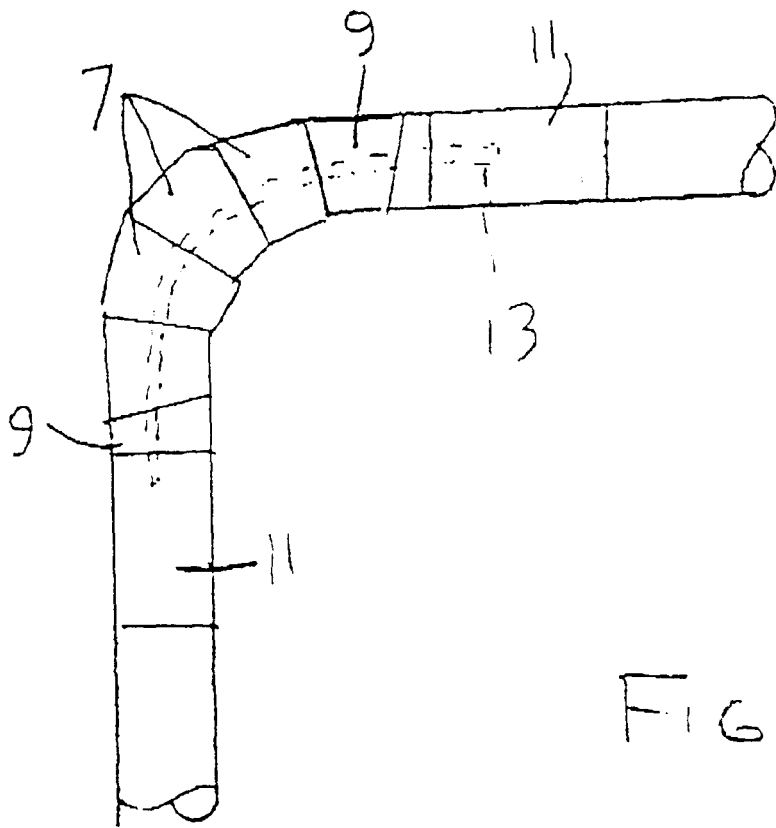


FIG 2.

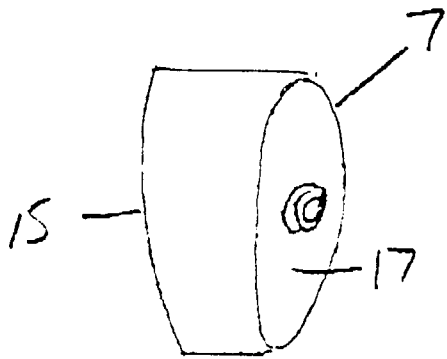


FIG 3

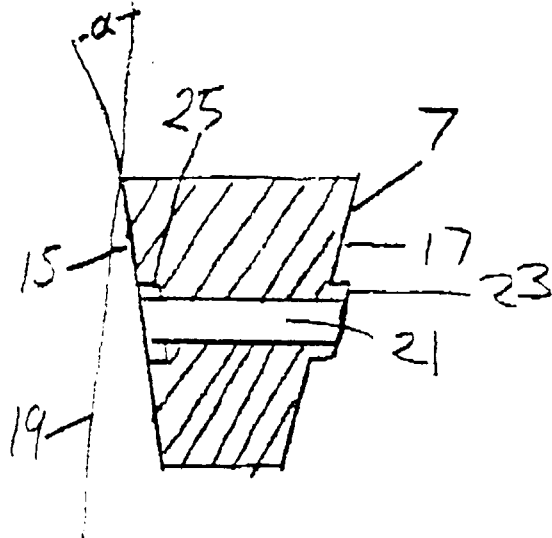


FIG 4

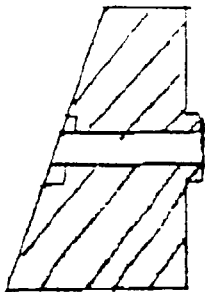


FIG 5

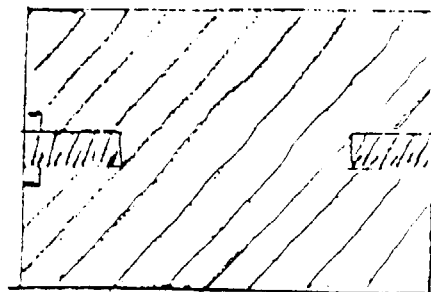


FIG 6