Nov. 21, 1933. G. W. DOVER 1,936,188

TIE-BACK MEANS FOR CURTAINS

Filed Jan. 27, 1931

Fig. 1.

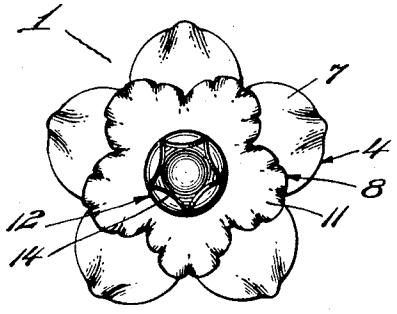


Fig. 2.

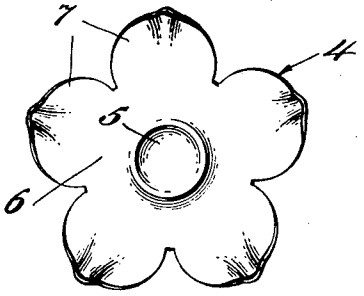


Fig. 3.

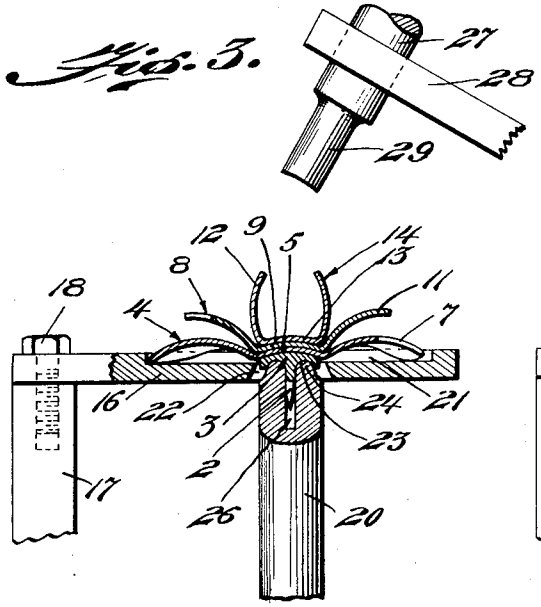
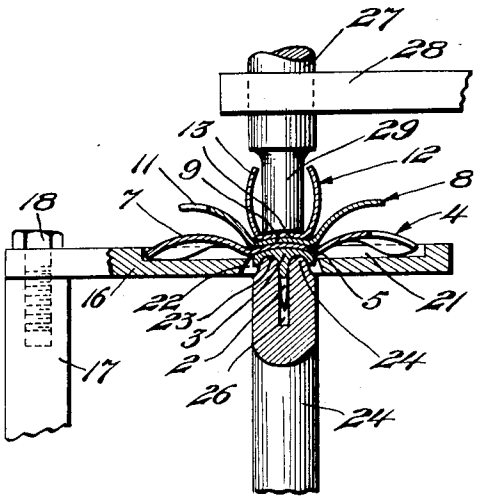


Fig. 4.



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TIE-BACK MEANS FOR CURTAINS

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Application January 27, 1931. Serial No. 511,487

2 Claims. (Cl. 85—53)

This invention relates to an ornamental tie-back means for curtains and method of making the same such as is particularly adapted for use in holding the lower portions of window curtains in draped relation to the window frame and comprises an ornamental structure formed from separate plates secured together and to a holding pin.

One object of the invention is to provide an ornamental device of this character made up of a plurality of separate parts each of which may be readily formed from thin metal stampings or other suitable material and firmly secured together in such a manner as to properly locate the several parts in symmetrical relation and provide an attractive ornamental structure, capable of use for the purpose set forth.

A further object of the invention is to provide an improved means for locating the several parts in suitable position relative to each other to form a symmetrical structure and at the same time attaching the parts together to form a unitary structure.

Another object of the invention is the provision of an improved method of assembling and attaching together the several parts of an ornamental structure of this character in such a manner that the parts are properly located relative to each other substantially simultaneously with the connection of the parts together.

Other objects and advantages of the invention relate to various improved details of construction and methods of forming the same as will be more fully set forth in the detailed description to follow:—

Referring to the drawing:—

Fig. 1 is a top plan view of the ornamental tie-back member,

Fig. 2 is a top plan view of the lower section thereof, showing that portion which is shaped to conform with corresponding portions of the remaining sections,

Fig. 3 is a vertical sectional view taken through the assembled sections forming the ornamental tie-back member showing their approximate positions relative to each other just prior to the union of the several parts together to form the completed structure, and illustrating the position of the centering electrodes prior to their being brought into operative position to center and spot weld the several sections together, and,

Fig. 4 is a vertical sectional view taken through the ornamental tie-back member and showing the position of the parts as the several sections are centered or brought into proper symmetrical relation relative to each other by the electrodes and as they appear when secured together by means of spot welding.

In the embodiment of the invention illustrated herewith 1 designates generally the ornamental tie-back member which is made up of several sections including a pin 2 provided with a head 3, the pin member 2 and head 3 being formed integral with each other or constructed of separate parts united together in any suitable or desired manner, the head 3 having the upper surface thereof shaped to conform substantially with the shape of the central portions of the various sections or stampings employed in forming the completed structure. The lower section 4 of the completed structure may be formed by stamping the section from a plane metal sheet and then shaping the same by means of suitable dies and comprises a portion 5 which in the present instance is located substantially centrally thereof and which is shaped to conform substantially with the exterior surface of the pin head 3, and an outer portion 6 lying outwardly of the central portion 5 and which may include a plurality of curved peripheral petal like portions 7 or other desired ornamental shapes. A second section 8 which may be formed in a similar manner to the section 4, as by being stamped from a plane metal sheet and shaped in a desired manner to conform with the desired plan of ornamentation, comprises a portion 9, which may be located centrally thereof, and which is shaped to conform with the shape of the corresponding portion 5 of the section 4. The section 8 may also be provided with portions extending outwardly from the central portion 9 thereof which may consist of or comprise petal shaped portions 11. A section 12, which may be formed in a similar manner to those previously described, is provided with a central portion 13 shaped to conform with the shape of the corresponding portion 9 of the section 8, and may have portions extending outwardly beyond the central portion 13, which in the embodiment illustrated comprises portions 14 which are formed to resemble the partially open petal portions of a flower.

The ornamental parts of the sections 4, 8 and 12 may be shaped in any desired manner to simulate any desired form of petal or other ornamental shape which they may be combined to represent, and while in the present instance these portions are shaped to represent the petals of a flower they may be given any other ornamental shape which may be desired, in order to simulate a flower or any other appropriate ornamental form.

In assembling and securing together the several parts to make the completed structure there is preferably employed a holding plate 16 which may be adjustably secured to a portion of a machine frame 17 by means of a screw or other suitable holding means 18 in order that the plate may be suitably adjusted with relation to a stationary electrode 20. The holding plate 16 is provided with a shallow recess 21 formed in one surface thereof which in the present instance is substantially concentric with an opening 22 in the plate which receives the end portion 24 of the stationary electrode. The shallow recess 21 is shaped to receive the section 4 and so position the same that the portion 5 of the section is located to coincide substantially with the upper surface of the pin head 3. The lower surface of the pin head 3 is preferably shaped to provide an annular groove 23 extending about the pin 2 within which the annular curved end portion 24 of a stationary electrode 20 fits, the electrode 20 being provided with an axial opening 26 for loosely receiving the pin 2. By forming the pin head 3 with an annular groove 23 upon its lower face, as shown in Fig. 3, and correspondingly shaping the end of the electrode 20, as at 24, to fit within the groove in the pin head, the tendency of the electrode to spread out or mushroom at the end after continued use is largely eliminated and the electrode is capable of much longer use without being reshaped or replaced than would otherwise be the case. A movable electrode 27 carried by an arm 28 is provided with a reduced end 29 preferably shaped to conform substantially with the cup shaped opening formed by the petal like portions 14 of the section 12.

In forming the completed structure the pin 2 is first placed in position upon the end of the stationary electrode in such a manner that the pin 2 will be positioned within the opening 26 and the annular curved end 24 of the electrode 20 will fit within the groove 23 of the pin head. An ornamental section 4 is then placed in position within the recess 21, which is preferably of such size and shape as to substantially locate the central portion of the section 5 in interfitting engagement with the upper surface of the pin head 3. Sections 8 and 12 are then successively placed above the section 4, their correspondingly shaped central portions 9 and 13 being located above and in substantially interfitting relation with each other and with the central portion 5 of the section 4. The movable electrode 27 is then moved to bring the reduced end portion 29 thereof into the central cavity formed by the petal portions 14 of the section 12, and as the reduced end 29 of the movable electrode 27 engages the central portion 13 of the section 12 the correspondingly shaped portions 5, 9 and 13 of the sections 4, 8 and 12 are moved into position to center the several sections or bring them into substantially symmetrical position relative to each other by means of the pressure exerted between the electrodes 20 and 27 upon the correspondingly shaped portions 5, 9 and 13 of the sections 4, 8 and 12, the correspondingly shaped portions 5, 9 and 13 of the sections being so shaped that when they are pressed closely together they interfit with each other and cause the sections to assume the desired symmetrical relation to each other. While the parts are held in this position an electric current is caused to pass between the electrodes 20 and 25 to spot weld the pin head 3 and the correspondingly shaped portions 5, 9 and 13 of the sections together.

While the section 4 is located with the portion 5 thereof in substantially interfitting relation with the upper surface of the pin head 3 by being placed within the shallow recess 21 of the plate 16, the corresponding portions 9 and 13 of the sections 8 and 12 are located and held in proper interfitting position relative to the portion 5 of the plate 4 and the upper surface of the pin head by pressing the movable electrode 27 into close engagement with the parts as shown in Fig. 4 of the drawing. The electrodes 20 and 27 may be said, therefore, to center or locate the several parts relative to each other simultaneously with the attachment of the parts together by means of spot welding.

What I claim is:

1. An improved tie-back member comprising a pin head and a plurality of ornamental sections, each of said ornamental sections having a centrally disposed portion shaped to correspond with the shape of the exterior surface of the pin head, said ornamental sections being located upon said pin head and having their centrally disposed portions arranged in superposed position relative to said pin head and integrally united thereto.

2. An improved tie-back member comprising a pin head and a plurality of ornamental plate sections of varying over-all diameters, each of said ornamental sections having a centrally disposed portion shaped to correspond with the shape of the exterior surface of the pin head, said ornamental sections being positioned upon said pin head and arranged thereon in the order of their over-all diameters from the exterior surface of the pin head outwardly thereof, and having their centrally disposed portions arranged in superposed position and in axial alignment with said pin head, said ornamental plate sections being integrally united to each other and to said pin head.

GEORGE W. DOVER.