Feb. 23, 1971 H. J. GILMOURE 3,564,743

BANNER MOUNTING DEVICE

Filed Sept. 23, 1968 2 Sheets-Sheet 1

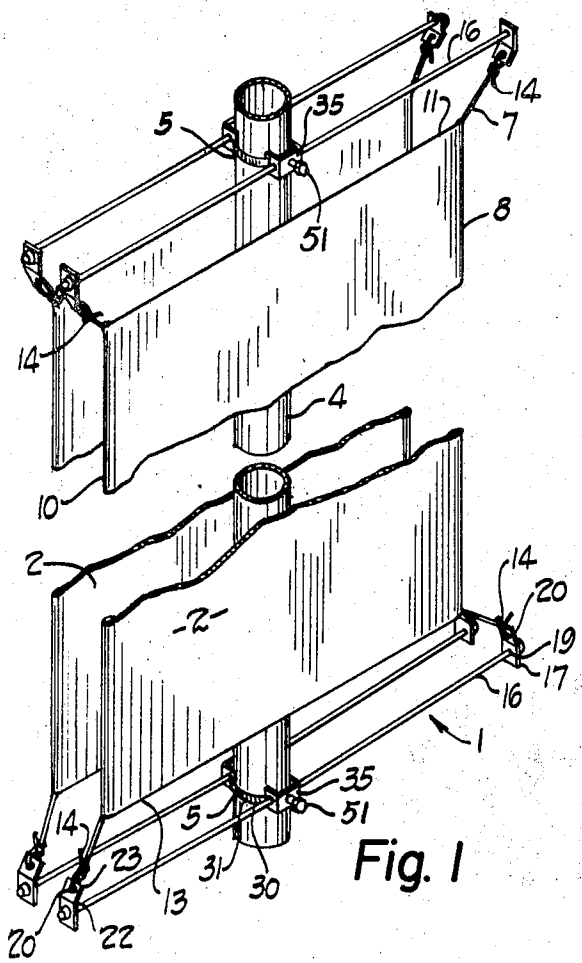


Fig. 1



Fig. 4

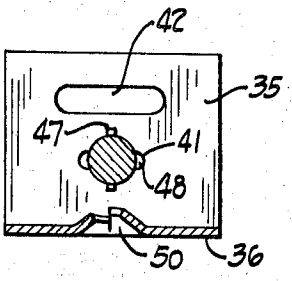


Fig. 5

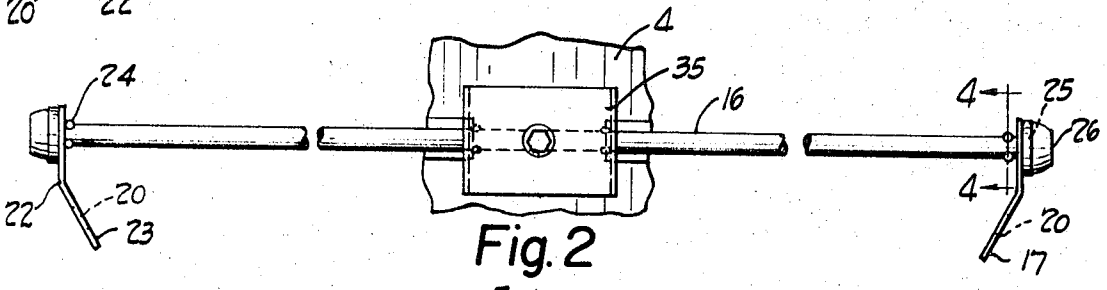


Fig. 2

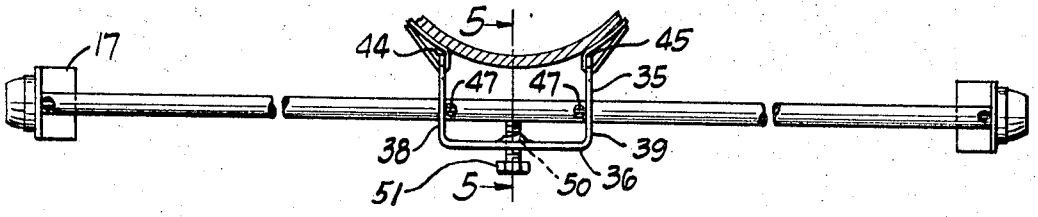


Fig. 3

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BANNER MOUNTING DEVICE

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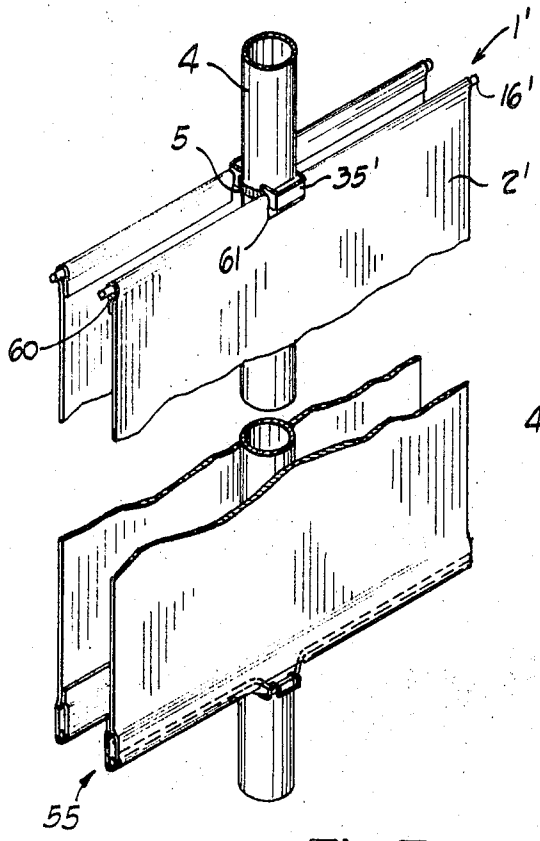


Fig. 7

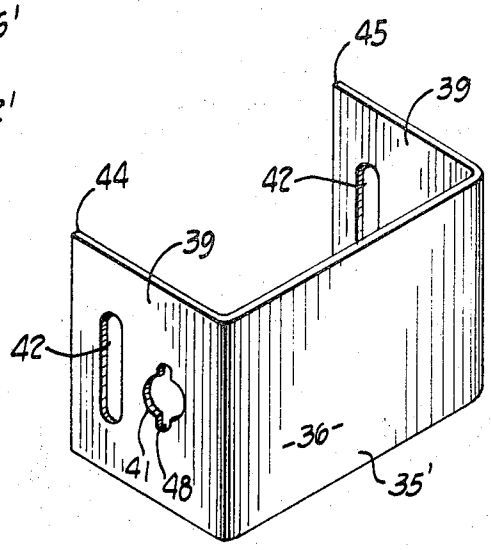


Fig. 6

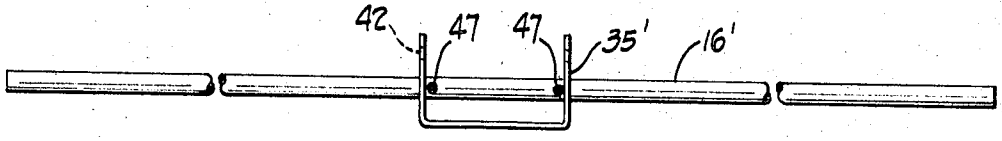


Fig. 8

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3,564,743

BANNER MOUNTING DEVICE

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Int. Cl. G09f 1/00
U.S. Cl. 40—125 17 Claims

ABSTRACT OF THE DISCLOSURE

A banner mounting device having a resilient transverse member, a mounting bracket having means interlocking with the transverse member for proper location intermediate the ends thereof and stop means on the transverse member for holding arms at the end which have apertures in which the banner ropes are tied. The devices are normally used in pairs to mount the banners associated therewith on poles and the like.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to new and improved apparatus and means for mounting display banners, advertising signs, posters and the like on posts, upright poles and supports.

Description of the prior art

Many devices have been proposed for mounting display banners, advertising signs, posters and the like. Some of these elimniate the need for ropes sewed in the banners and others require that the banners have ropes sewed therein.

Many people believe that banners with rope ties have advantages in terms of appearance. In any event, all such devices must be relatively easily used and reused and should hold and support the banner so as, on the one hand, to protect the same from deleterious effects due to wind and the like and, on the other hand, to ensure that the banner is easily visible and does not have its attractiveness diminished or advarsely effected by the structure of the mounting device. Further, the art has not provided a banner mounting device which is easily and readily adapted for use both with banners having ropes sewed therein and banners having pockets for reception of mounting hardware.

SUMMARY OF THE INVENTION

The general object of this invention is to provide a new and improved apparatus for mounting display banners, posters, signs and the like.

A further object of this invention is to provide a new and improved apparatus for mounting display banners, posters, signs and the like which is easily and readily adapted for use both with banners, posters and signs having ropes for attachment and suspension and with those having pockets for reception of the mounting hardware; which is easily and readily used and reused; which has new and improved means for supporting the banner sign or poster in an extended position (both vertically and horizontally) on a post, upright pole or the like; which holds and supports the banner, poster or sign in an attractive manner and does not detract from the appearance and attractiveness thereof; which has improved means for positively holding the elements or parts and portions of the device in predetermined positions; which is easily assembled and disassembled; which protects or aids in protecting the banner from deleterious effect due to winds and the like exerting torsional and other forces thereon;

and which has a new and improved coaction with the banner, poster or sign mounted thereby.

A still further object of this invention is to provide new and improved apparatus for mounting display banners, posters, signs and the like obtaining one or more of the objects set forth above.

These and other objects and advantages of this invention will appear from the following description of preferred forms thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a pair of banners supported and mounted by apparatus embodying a preferred form of this invention;

FIG. 2 is a front view, on an enlarged scale, of the mounting apparatus shown in FIG. 1 together with a portion of the pole upon which the same is mounted.

FIG. 3 is a broken, sectional view taken along the line 3—3 of FIG. 2;

FIG. 4 is a sectional view taken along the line 4—4 of FIG. 2;

FIG. 5 is a sectional view taken along the line 5—5 of FIG. 3;

FIG. 6 is a perspective view of the bracket;

FIG. 7 is a perspective view of a pair of banners mounted, in part, by means of apparatus embodying another form of this invention; and

FIG. 8 is a top view of the apparatus embodying this invention shown in FIG. 7.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Advertising banners, posters or signs of the type with which this invention relates are usually mounted in parallel pairs on poles extending therebetween and face in opposite directions. Such display banners, posters or signs are used extensively, outside, on upright sign-supporting or light poles in gasoline filling stations and similar locations, where their double faces are visible to traffic approaching from either direction.

Broadly this invention comprises new and improved means and apparatus for mountng such banners, posters and signs (hereinafter called banners) comprising a transversely extending, rod-like support, brace or stretcher of length greater than the length (or width) of the banner in the same direction, and having sufficient spring and resiliency to exert a force in tension on a banner mounted thereby, a bracket for holding the brace, brackets carried on the brace at the respective ends thereof having apertures for typing the banner ropes thereto, means for locating and holding the brackets in predetermined position on the brace and means by which the bracket is supported on a strap which is, in turn, mounted on the pole or post upon which the banner is to be supported.

More particularly, apparatus embodying this invention is indicated generally at **1**, FIG. 1, and is shown together with the banner **2**, which is mounted thereby and with which it coacts, the pole **4** on which the banner is mounted and the strap **5** by which the apparatus **1** is supported on the pole.

Also, as shown, each banner **2** is supported by two apparatus **1**, one of which is mounted above and the other below the respective edges of the banner to hold the same taut.

Further, as shown in FIG. 1, a pair of banners may be, and conveniently is, mounted in back-to-back relation on a single pole so that the message on the banners may be seen by persons approaching from either direction and in such instances a single strap **5** may be used to mount both of the apparatus **1** at the corresponding ends of the back-to-back banners.

Banner **2** is, of course, provided with a suitable advertisement, picture or other message on the front or exposed face or side thereof. As shown, banner **2** is adapted to be held in position or mounted by means of a plurality of ropes or ties and to this end a rope **7** is sewn into opposite edges, sides **8** and **10**, for example, of banner **2**. Ropes **7** are each of greater length than the length of the banner in the direction parallel with the rope and each rope extends beyond the transverse edges or ends (top **11** and bottom **13**, as shown, of the banner) to provide two spaced ties **14** at each end of the banner **2** by which the banner is mounted and supported in position by the apparatus **1** and, more particularly, two such apparatus, spaced apart as explained above.

Apparatus **1** includes a transversely extending brace member or means **16** which is of length greater than the distance between the adjacent ties **14** so as to hold or stretch the banner taut in the transverse direction, as will hereinafter be more fully explained.

In addition, brace **16** is resilient, preferably in substantially all directions relative to its center, and springlike in the direction in which the ropes **7** extend, i.e. perpendicular to the brace itself and parallel with the banner **2**. The brace **16** coacts and co-operates with the corresponding brace at the other end, bottom **13** as viewed, of the banner to maintain the banner taut or stretched out on the one hand, yet gives and bends in the direction toward and away from the other brace in response to wind and external stimuli to protect the banner. Brace **16** also cushions, bends and twists to a predetermined degree about a longitudinal axis, to protect against the deleterious effect of torsional forces exerted on the banner and tending to twist it about its own longitudinal axis.

Accordingly, brace **16** is preferably made of spring steel, is cylindrical or rodlike in shape and, for use with banners of the size and kind in conventional use today at gas and service stations and the like, is conveniently of about ¼" in diameter.

In order to provide means for readily and easily tying the ties **14** of ropes **7** to the brace **16** a pair of brackets **17** are mounted on brace **16**, one at each end thereof. Brackets **17** are spaced apart a distance greater than the distance between the ropes **7** at the adjacent edge, top **11** or bottom **13**, as the case may be, of the banner **2** so that the tying or engagement between the brackets **17** and adjacent ties **14**, respectively, will stretch the banner laterally, as viewed, in the manner described above. To this end each bracket **17** preferably includes an aperture **19**, by which it may be slipped on or over brace **16** and which is preferably of a diameter slightly larger than the brace, to have a free sliding fit therewith.

Bracket **17** also includes or provides means for engagement with or on which ties **14** may be securely tied to maintain the banner on the brace **16**. Such means conveniently and preferably comprises a second aperture **20** of sufficient diameter to receive the tie **14** therethrough so that the tie may then be tied about the bracket.

Also, in order to strengthen bracket **17**, improve the appearance of the assemblage and co-ordinate the mechanical structure of the apparatus **1** with the force vectors involved in the suspension of the banner by the ties on the brace, bracket **17** is preferably bent, as at **22**, between the apertures **19** and **20** so that the leg or portion **23** of bracket **17** containing aperture **20** lies in a plane so as to be substantially an extension of the tie **14** which is tied thereto.

Brackets **17** are maintained in spaced relation on brace **16**, preferably near the respective ends thereof, by suitable stops **24**, see FIGS. 2, 3 and 4 which prevent the inward displacement of the bracket either at the time they are positioned on the brace or, in particular, when subjected to tension by the force of the tie **14** acting thereon, when the banner is mounted. Means is, also, preferably provided for retaining the brackets **17** on brace **16** after they are positioned thereon. Such means conveniently

may comprise speed nut **25** which, slip over the respective ends of and grasp the brace **16** and when provided with plastic covers **26**, also are decorative in appearance, FIG. 2.

Strap **5** is of the common type having a plurality of parallel slots **30** therein, which is tightened by means of a screw **31** engaging and coacting with the slots **30**.

In order to support the brace **16** on pole **4** and more particularly on the strap **5**, each apparatus **1** also includes a central bracket **35** which, on the one hand, is carried on and supports the brace **16** and, on the other hand, engages and is supported by the strap **5** and hence by the pole **4**.

Bracket **35** preferably engages both brace **16** and strap **5** at spaced apart points so as to provide a more stable and torsion resistant support for the brace and banner. To this end bracket **35** is conveniently bifurcated or U-shaped, FIGS. 1 and 3, with a base portion **36** and two parallel leg portions **38** and **39** extending perpendicularly thereto.

Each bracket leg **38** and **39** is provided with means, such as aperture **41**, by which the bracket is supported on and supports brace **16** and with means, disposed nearer the strap **5** than the aperture **41**, such as slot **42**, by which the bracket is mounted on and supported by strap **5**, and in engagement with the pole **4**. Conveniently, for purposes of appearance and ease of use, base **36** of bracket **35** is disposed outwardly, relative to the pole, of brace **16** and lies in a plane parallel with that of the banner **2** to be supported by the apparatus. In such instance the ends **44** and **45** of bracket legs **38** and **39**, respectively, engage against pole **4** in spaced relationship, to better hold and support the banner.

Also, apparatus **1** includes means to maintain bracket **35** centered on brace **16** and prevent the brace from displacing relative thereto. Such means preferably comprises two stops spaced apart longitudinally on brace **16** and preferably positioned so as to hold the brace **16** and bracket **35** against relative movement or displacement with the bracket in a position symmetrical with the center of the brace and with the stops which position the bracket **17**. Preferably such means comprises a pair of keys **47**, FIGS. 3 and 5, formed in or on or mounted on brace **16** and positioned so that their mutually remote sides are spaced apart a distance substantially equal to the inner distance between the bracket legs **38** and **39**. Keys **47** only encompass a portion of the circumference of the brace **16**, such as the diametric projections shown, and apertures **41** are made complementary thereto with a diameter substantially equal to the diameter of brace **16** so as to have a free sliding fit therewith but with an enlargement or key slot **48** complementary in shape and slightly larger than the stop or key so that the bracket may have a first angular position, relative to the brace, wherein the leg or legs may slip over the stop and a second position angularly displaced from the first position at which engagement between the key and the bracket, adjacent the aperture **41**, prevents displacement of the bracket relative to the brace. The keys **47** and key slots **48** are disposed so as to prevent displacement of the bracket relative to the brace when the bracket is mounted in the strap and supports the brace in the normal position for supporting the banner, as shown in the drawings.

Also, in order that the bracket **35** may be slid over one or the other end of brace **16** at least one of the stops **24** has the same shape and size as the keys **47**, so that the bracket **35** and, more particularly, the legs **38** and **39** thereof may be passed thereover to center the same on the brace.

In order to further hold and locate bracket **35**, the base **36** may, if desired, also be provided with an aperture **50** formed to receive a set of metal screw **51** which is threaded therein and into biting engagement with the

brace **16**. And, of course, ropes **7** may be at the top and bottom of the banner, instead of the sides.

FIGS. 7 and 8, in which like reference characters refer to like parts as in FIGS. 1 to 6 inclusive, depicts another form of apparatus, indicated generally at **1'**, embodying this invention. Apparatus **1'** is particularly adapted for use with banners, posters and the like which have pockets at opposite edges in which the transverse members of a mounting apparatus are inserted for coaction with and support of the banner, poster and the like.

Further, apparatus **1'** embodying this invention is shown in use with apparatus **55** as depicted in U.S. Pat. No. 3,263,356 to support a banner although it is to be understood that the other (lower as viewed) mounting apparatus may be the same as **1'** or take another form, such as, for example, that shown in U.S. patent application Ser. No. 735,422 filed June 7, 1968.

Apparatus **1'** comprises a brace **16'** which conveniently is the same as brace **16**, except that the stops **24** are omitted, as they serve no function since apparatus **1'** does not include means, such as brackets **17**, to which rope or other ties are tied. Instead, brace **16'** is disposed within the pocket **60** of the banner **2'** to be supported thereby. Apparatus **1'** also includes means by which the brace is supported on the pole **4** and, more particularly, on the strap **5**. Such means preferably comprises a central bracket **35'**, which, conveniently, is the same in structure, function and operation as the bracket **35** depicted in FIGS. 1 to 6 inclusive and described above. Bracket **35'** is preferably centered and retained in position by means of keys **47** and corresponding key slots similar in function and result to those in bracket **35**.

As shown, bracket **35'** does not include the auxiliary holding means, aperture **50** and metal **51**, of bracket **35**, however brackets having such means may be used in apparatus **1'**, just as brackets without such auxiliary holding means may be used in apparatus **1**. And, other means, such as metal or set screw **51**, alone, may be used to center and maintain the bracket in position on the brace in apparatus **1** and **1'**.

Pocket **60** is of sufficient size to receive the brace **16'** and bracket **35'** therein and has an aperture **61** at its center through which the bracket extends, when the brace is properly located therein, to engage and coact with the strap **5**.

Also, the brace **16'** is resilient in the same manner and for the same purpose as brace **16** so as to support the banner taut and under tension, while providing some give and take to resist and bend with forces, such as wind, exerted on the banner so as to mitigate the effect thereof and reduce or preclude deleterious effects or damage to the banner.

Modifications, changes and improvements to the preferred forms of the invention herein particularly disclosed and described may occur to those skilled in the art who come to understand the principles and precepts thereof. Accordingly, the scope of the patent issued hereon should not be limited to the specific forms of the invention herein particularly illustrated, disclosed and described but only consistent with the advance by which the invention has promoted the art.

I claim:

1. Apparatus for mounting a manner, poster or the like on a post, pole or the like comprising a resilient, transversely extending brace means, bracket means carried on and supporting said brace means, and means positioning and holding said bracket means in a predetermined position on said brace means, said bracket means comprising a U-shaped member having a base portion and two parallel legs extending therefrom and spaced apart in the direction of the length of said brace means, each said leg haveing a first aperture for reception of said brace means and a second aperture, more remote from said base portion than said first aperture, for reception of strap means by which said apparatus is mounted on said post, pole or the like, the ends of said legs, respectively, engaging said pole, post or the like when said apparatus is mounted thereon.

2. The apparatus according to claim **1**, in which said brace means has key means thereon to engage at least one said leg and said first named aperture, in at least one said leg, comprises a key slot, said key means and key slot being aligned whereby said bracket means has a first angular position relative to said brace means at which a said bracket leg having said key slot may displace along said brace means with said key slot passing over said key means and a second position angularly displaced from said first angular position at which engagement between said key means and said leg having said key slot prevents displacement of said bracket means along said brace means in the direction of said engagement.

3. The apparatus according to claim **2** in which said key means comprises two keys spaced apart a distance sufficient to engage both said legs on the same side relative to the center of said bracket and each said first named aperture comprises a key slot.

4. The apparatus according to claim **3** in which said bracket means base portion has an aperture therein and set screw means is carried in said aperture and engages against said brace means.

5. The apparatus according to claim **4** in which said brace means has two ends, and said apparatus includes banner supporting bracket means carried on said brace means adjacent each end, respectively, and means to prevent displacement of said banner supporting bracket means toward said first named bracket means, said banner supporting bracket means including means by which banner tie means, carried by the banner to be mounted by said apparatus, may be secured thereto.

6. The apparatus according to claim **5** in which said banner supporting bracket means has a first aperture therein receiving said brace means and a second aperture spaced from said first aperture for receiving said banner tie means.

7. The apparatus according to claim **6** in which said banner supporting bracket means comprises a bent and shaped member having a first portion having said first aperture therein and extending perpendicular to said brace means and a second portion angularly related to said first portion and having said second aperture therein and extending in a direction substantially coincident with the direction in which banner tie means of the banner to be mounted by said apparatus extends between said banner and banner supporting bracket means.

8. The banner mounting apparatus according to claim **5** in which each said means to prevent displacement of said banner supporting bracket means comprises key means corresponding in shape with and aligned with said first mentioned key means whereby to cooperate with said key slots of said bracket means legs in the same manner as said first mentioned key means, and said banner supporting bracket means includes an aperture having a diameter sufficient to receive said brace means but insufficient to pass over said second mentioned key means.

9. The apparatus according to claim **5** with means preventing removal of said banner supporting bracket means from said ends, respectively, of said brace means.

10. The apparatus according to claim **1** in which said brace means has two ends, and said apparatus includes banner supporting bracket means carried on said brace means adjacent each end, respectively, and means to prevent displacement of said banner supporting bracket means toward said first named bracket means, said banner supporting bracket means including means by which banner tie means, carried by the banner to be mounted by said apparatus, may be secured thereto.

11. The apparatus according to claim **10** in which said banner supporting bracket means has a first aperture therein receiving said brace means and a second aperture spaced from said first aperture for receiving said banner tie means.

12. The apparatus according to claim 11 in which said banner supporting bracket means comprises a bent and shaped member having a first portion having said first aperture therein and extending perpendicular to said brace means and a second portion angularly related to said first portion and having said second aperture therein and extending in a direction substantially coincident with the direction in which banner tie means of the banner to be mounted by said apparatus extends between said banner and banner supporting bracket means.

13. The apparatus according to claim 12 with means preventing removal of each said banner supporting bracket means from said respective end of said brace means.

14. Apparatus for mounting a banner, poster or the like on a post, pole or the like comprising a resilient, transversely extending brace means having two ends, bracket means carried on and supporting said brace means and including means for engagement with and support by support means carried on said post, pole or the like, means positioning and holding said bracket means in a predetermined position on said brace means, banner supporting bracket means mounted on said brace means adjacent each end, respectively, and extending therefrom in the general direction of the banner to be supported thereby, and means, providing interengagement between said brace means and said banner supporting bracket means, preventing displacement of said banner supporting bracket means toward said first named bracket means, said banner supporting bracket means having means formed as a part thereof to which banner tie means, carried by the banner to be mounted by said apparatus, may be tied, whereby said banner is mounted on and secured to said apparatus.

15. The apparatus according to claim 14 in which said banner supporting bracket means has a first aperture

therein receiving said brace means and a second aperture spaced from said first aperture for receiving said banner tie means.

16. The apparatus according to claim 15 in which said banner supporting bracket means comprises a bent and shaped member having a first portion having said first aperture therein and extending perpendicular to said brace means and a second portion angularly related to said first portion and having said second aperture therein and extending in a direction substantially coincident with the direction in which banner tie means of the banner to be mounted by said apparatus extends between said banner and banner supporting bracket means.

17. The apparatus according to claim 16 with means preventing removal of each said banner supporting bracket means from said respective end of said brace means.

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U.S. Cl. X.R.

40—145; 248—221, 231