Nov. 10, 1959 E. FREY 2,911,746

BANNER MOUNTING CONSTRUCTION

Filed Feb. 17, 1955 2 Sheets-Sheet 1

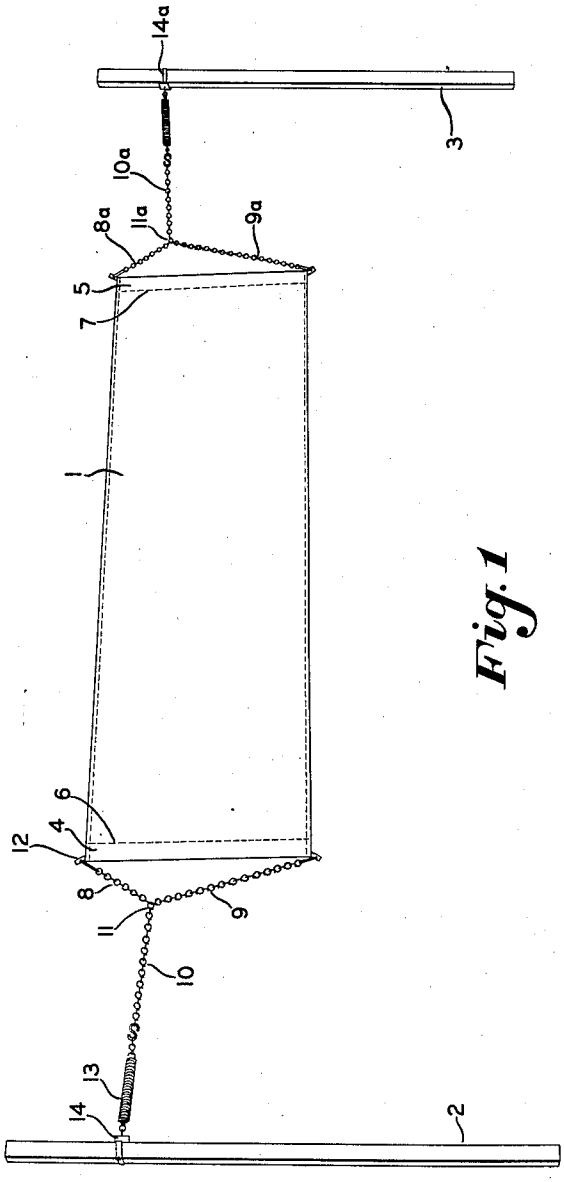


Fig. 1

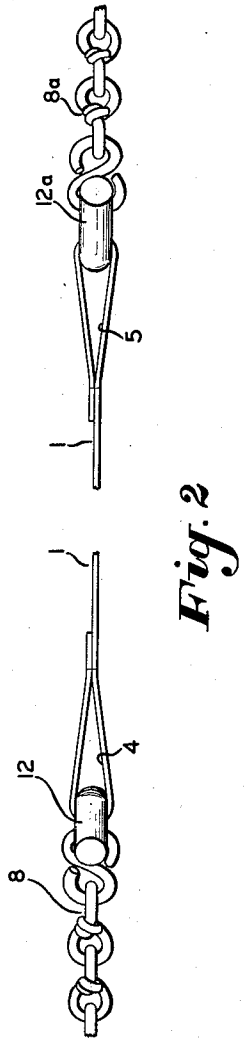


Fig. 2

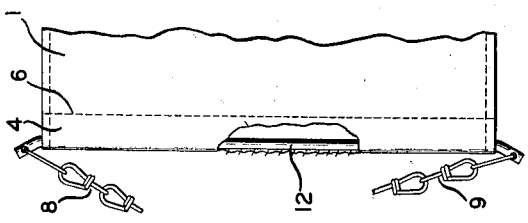


Fig. 3

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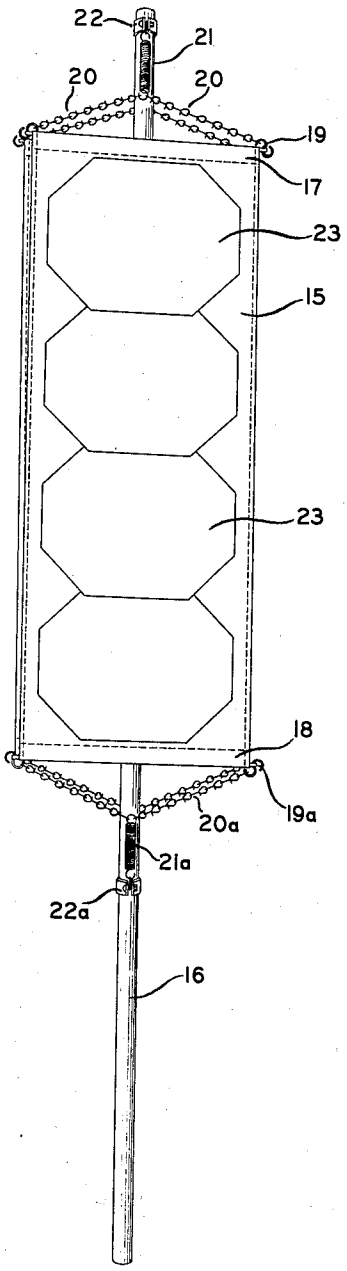


Fig. 4

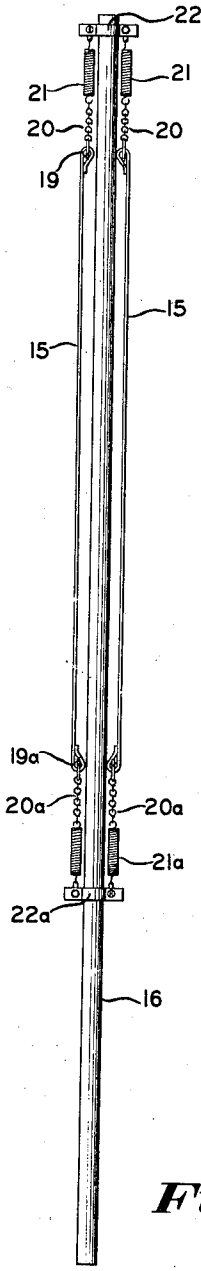


Fig. 5

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BANNER MOUNTING CONSTRUCTION

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Application February 17, 1955, Serial No. 488,791

1 Claim. (Cl. 40—128)

This invention relates to a construction for suspension mounting a flexible member such as a banner or sign, and more particularly the invention pertains to tensioned suspension supports for banners or signs.

Generally, this invention relates to flexible banners or signs made of cloth or other sheet-like material included in a construction adapted for securing the banner or sign against damage due to wind. By maintaining the banner or sign tightly drawn at all times, it is displayed to better advantage. In addition, the useful life is prolonged because of elimination of whip or flap caused by wind when a flexible article is permitted to hang loose.

Prior constructions for supporting and tensioning banners or signs have been unsatisfactorily for various reasons. One reason is that such prior constructions for sustaining cloth or fabric banners or signs in tension have included rigid frames, each including frame members engirdling an opening in which the banner or sign has been tension supported by tension members extending between the borders of the banner or sign and the frame members. Such constructions include a substantial number of parts which contribute to the cost of the constructions and their erection and maintenance.

Accordingly, it is a primary object of this invention to provide a suspension construction for supporting a flexible banner or sign in tension, and which has a limited number of parts, much less in number than those included in prior constructions.

Another object of this invention is to provide a flexible banner or sign in which whip or flap caused by wind blowing on the flexible banner or sign is minimized.

Finally, it is an object of this invention to provide a sign mounting construction having the foregoing features, and which is simple and economical to manufacture and maintain.

These and other objects and advantages apparent to those skilled in the art from the following description and claims may be attained, the stated results achieved, and the described difficulties overcome, by the discoveries, principles, apparatus, parts, combinations, subcombinations, and elements which comprise the present invention, the nature of which are set forth in the following statement, preferred embodiments of which—illustrative of the best modes in which applicant has contemplated applying the principles—are set forth in the following description, and which are particularly and distinctly pointed out and set forth in the appended claims forming part hereof.

The nature of the present invention may be stated in general terms as including an elongated banner or sign made of flexible material, such as cloth, the banner or sign having a transverse sleeve formed in each end thereof, suspension means at each end of the banner or sign including a stiff rod or a substantially rigid member extending through each sleeve, a chain hitch having an end connected to each end of each rod, another end of each chain hitch being connected to a tension spring which in turn is secured to a stationary object, whereby

the banner or sign is sustained between two fixed points in tension to prevent vibration and whipping of the sign when subjected to the wind, and for other purposes.

By way of example, preferred embodiments of this invention are illustrated in the accompanying drawings in which similar numerals refer to similar parts throughout the various figures wherein:

Fig. 1 is a perspective view of a flexible banner construction mounted between two upright posts;

Fig. 2 is an enlarged, fragmentary, plan view of the construction shown in Fig. 1;

Fig. 3 is an enlarged, fragmentary, elevational view, partly broken away, of one end of Fig. 1;

Fig. 4 is an elevational view of another embodiment of the sign shown in Fig. 1; and

Fig. 5 is the vertical end view of the sign shown in Fig. 4.

One embodiment of this invention is shown in Fig. 1 in which a flexible banner or sign **1** is suspended between a pair of spaced vertical posts **2** and **3**. As shown in the drawing, the banner or sign **1** is an elongated, rectangular flexible member having a longitudinal axis which is substantially horizontal. Other shapes of the banner or sign may be used, so that a rectangular shape having a vertical longitudinal axis may be likewise suspended in the manner shown. Whatever shape is used, the opposite ends of the banner or sign **1** are provided with sleeves or hem-like borders **4** and **5**, more clearly shown in Fig. 2. The sleeves **4** and **5** are formed by folding each end of the banner or sign **1** back upon itself and securing the folded ends to the body of the banner or sign in a suitable manner, preferably by sewing or stitching at **6** and **7**.

The means for suspending the banner or sign **1** includes assemblies of parts which are identical at each end of the banner or sign, and which are given sets of duplicate numerals, one set of which has the letter *a* appended to each numeral. The suspending means at the left end of Fig. 1, includes a chain having three portions **8**, **9**, and **10**, which join at **11**. The portions **8** and **9** have ends which have connections with opposite extremities of a rod or substantially rigid member **12** which extends through the sleeve **4**, as shown in Fig. 3. The chain portion **10**, extending from the chain junction **11**, has a connection with one end of a resilient means such as a tension spring **13**, the other end of which in turn is secured to a wrap strap **14** on the post **2**.

As shown in Fig. 1, in order for the banner or sign **1** to remain in a vertical plane, it is a feature of the present invention that a greater portion of the weight of the banner or sign be below the suspension points, i.e., the chain junctions **11** and **11***a*. For attaining this weight distribution, the chain junctions **11** and **11***a* are disposed above the longitudinal axis of the elongated banner or sign **1** in which the center of gravity of the banner or sign is located. Further, in order for the banner or sign **1** to be taut, the posts **2** and **3** are spaced far enough apart that the springs **13** and **13***a* are in slight tension.

For any posts already installed, the overall length of the banner or sign construction between the outer ends at the springs **13** and **13***a* is such as to tension the springs when connected to the posts.

Another embodiment of the invention is shown in Figs. 4 and 5. In this embodiment the means for suspending a vertical sign **15** includes a single upright standard or post **16**. In the drawings, two similar signs **15** are mounted on the post **16** so that each may be viewed from opposite directions. The signs **15** are similar in construction to the sign **1** of Fig. 1. That is, each sign **15** includes a sleeve or hem-like border **17** and **18** at opposite ends thereof. Likewise, rods **19** and **19***a* extend through the sleeve **17** and **18**, respectively. To the ends of the rods **19** and **19***a* are secured the ends

of a chain **20** and **20***a*, which in turn are secured to tensioning means such as springs **21** and **21**a, respectively. The spring **21** is attached to a clamp bracket **22** at the upper end of the post **16**, and the lower end of the spring **21***a* is secured to a similar clamp bracket **22***a* near the lower end of the post **16**.

As in the case of the posts **2** and **3** (Fig. 1) the distance between the brackets **22** and **22***a* (Fig. 4) is sufficient to sustain the springs **21** and **21***a* in slight tension whereby the signs **15** are retained in constant tautness. By using a single chain at each end, the sign **1** or signs **15** may be permitted to sway or swing in the wind and thereby attract attention.

Both signs **1** and **15** are preferably provided with advertising copy including words, figures or pictures or combinations thereof. For example, the sign **15** in Fig. 4 has a series of similar figures or designs **23**.

The foregoing sign mounting construction of the present invention is an improvement over previous constructions for several reasons. In the first place, the means for suspending the sign as well as the sign itself are constituted by a minimum number of parts which are relatively inexpensive. In the second place, the parts are readily assembled and disassembled so that the signs may be frequently changed if desired. Finally, the foregoing construction is adapted to relatively easy fabrication, maintenance, and repair.

In the foregoing description, certain terms have been used for brevity, clearness and understanding, but no unnecessary limitations are to be implied therefrom beyond the requirements of the prior art, because such words are used for descriptive purposes herein and are intended to be broadly construed.

Moreover, the embodiments of the improved construction illustrated and described herein are by way of example, and the scope of the present invention is not limited to the precise details of construction shown.

Having now described the features, constructions and principles of invention, the characteristics of the new banner or sign mounting construction, and the advantageous, new and useful results provided; the new and useful discoveries, principles, parts, elements combinations, subcombinations, structures, and arrangements and mechanical equivalents obvious to those skilled in the art, are set forth in the appended claim.

I claim:

Suspendible flexible member construction including an elongated flexible member, the flexible member having transversely extending sleeve portions longitudinally spaced from each other, suspension means connected with each sleeve portion for holding the flexible member fully extended, each suspension means including a rod having opposite extremities, the rod extending through the connected sleeve portion, a first chain having a connection with one extremity of the rod, a second chain having a connection with the other extremity of the rod, the first and second chains having a connection with each other at a point closer to one rod extremity than to the other, each suspension means also including tension spring means having a connection with the connection of the first and second chains with each other, and the spring means being adapted for connection with a fixed support.

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