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(54) Advertisement support structure

(57) The structure comprises a small diameter, substantially high tubular mast (2) resting on its lower end on a socle (1) that provides an ample supporting base, said mast being stiffened by a side arch (4) the ends of which are attached to the mast (2) relatively adjacent to the ends thereof, the attachment to the mast being implemented through a plurality of uniformly distributed horizontal crossbeams (5) and a plurality of diagonal and oblique braces (6) which emerge from said mast (2), whereby, at a point substantially spaced apart from its upper end, a horizontal arm (7) emerges opposite said structure for the purpose of securing said advertising posters (14), the free end of said arm (7) being attached to the free end of the mast (2) via an oblique strut (12). The support may optionally be formed by two masts (2-2') joined by upper crossbeams (17-17') to define an adequately dimensioned portal (18) for persons to pass through.

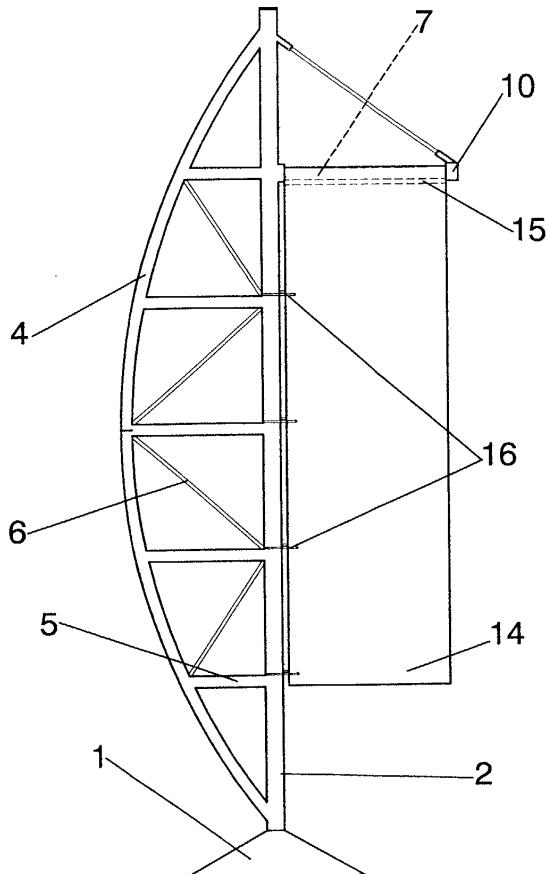


FIG. 1

Description**OBJECT OF THE INVENTION**

[0001] The present invention refers to a structure conceived particularly as an advertising support for billboards, pennants, etc.

[0002] The object of the invention consists in providing a strong lightweight structure which is furthermore appealing to the viewer and capable of maintaining a perfectly stable condition in use.

DESCRIPTION OF THE INVENTION

[0003] Toward this end and more specifically, the structure being advocated comprises a socle that provides ample ground support for adequate stability, a mast in the form of a small diameter steel tube emerging vertically therefrom, the mast being stiffened by a side arch attached to it via a plurality of small diameter crossbeams and braces, the arch and crossbeams being formed by steel tubing with a diameter smaller than that of the mast, the struts and braces being formed by steel rods positioned diagonally in the bays defined between the crossbeams.

[0004] Relatively adjacent to the upper end of the mast, which end is fitted with a steel cover plate, an arm emerges sideways from the mast, opposite said arch, designed to constitute, with or without the aid of the mast itself, a means of support for the billboard or information panel, said arm being braced to the upper end of the mast by a tie rod likewise in the form of a round steel bar.

[0005] As from this basic solution, the structure may be fitted with two masts similar to the one described, conveniently spaced-apart and attached to each other by means of at least one upper crossbeam placed sufficiently high as to allow the passage of persons between and under the masts, said crossbeam being provided with large, in-line, opposing protrusions emerging from the two arches and conveniently braced, said horizontal protrusions also allowing signs or billboards to be hanged and thus enhancing the service offered by the structure.

[0006] There are obviously no limits to the possibility of attaching advertising elements to said structure save for those deriving from its own volume and configuration.

DESCRIPTION OF THE DRAWINGS

[0007] In order to add to the description and help toward a better understanding of the characteristics of the invention according to a preferred example of a practical embodiment, a set of drawings is enclosed that forms an integral part of the description and, in an illustrative and non-limiting character, depicts the following:

Figure 1 shows a front elevation view of an adver-

tising poster support structure according to the simplest embodiment thereof.

Figure 2 shows a plan view of the assembly shown in the preceding figure.

Figure 3 shows an enlarged detail of the side arm-to-mast attachment coupling.

Figure 4 shows a further enlarged detail corresponding to the free end of the arm.

Figure 5 shows a detail similar to that in figures 3 and 4, although corresponding to the attachment of the bracing bar to the upper end zone of the mast via the attachment coupling shown in the preceding figure.

Figure 6 shows, on ending and according to a drawing similar to the one shown in figure 1, a more complex version of the structure, now comprising two support masts.

PREFERRED EMBODIMENT OF THE INVENTION

[0008] In the light of these figures, and particularly figures 1 to 5, it can be seen that a socle (1) is included in the structure being advocated, the socle selected for the example of the embodiment adopting a truncated cone shape with an acutely slanting generatrix and a small diameter minor upper base, although allowing for some other configuration to be adopted without altering the essence of the invention provided it offers a lower base having a diameter large enough to provide the overall structure with adequate stability.

[0009] From the minor base of the socle (1) emerges a vertical mast (2) of a considerable height in the form of a steel tube closed on its upper end by a steel cover (3), the mast (2) being stiffened by a side arch (4) the ends of which are attached to the mast (2) relatively adjacent to the ends of the mast, as shown perfectly in figure 1, the arch (4) being formed by a steel tube of a diameter smaller than that of the mast (2), the arch being attached to the mast through a plurality of uniformly distributed horizontal crossbeams (5) made of steel tube similar to that of the arch (4), while between adjacent crossbeams some steel rod braces (6) of a considerably smaller diameter are installed in a diagonal and alternate arrangement, as shown also in figure 1.

[0010] To the mast (2), in a position relatively close to its upper end and preferably as an extension of its upper end crossbeam (5), is attached to a horizontal arm (7) preferably by insertion in a short tube (8) conveniently adhered to the mast (2) and firmly secured with the aid of a pass-through bolt (9), said arm (7), of a considerable length, finishing in a small head (10) that acts as an inserted arm closure, which head (10) is attached to an oblique sleeve (11) onto which the end of a steel rod (12) extending from the free end of the arm (7) to the proximity of the upper end of the mast (2) is adhered, further comprising an additional slanting sleeve (13) for receiving the end of rod (12).

[0011] The arm (7) constitutes the supporting element

for a pennant (14) or some other advertising item which may be secured to the arm (7) by means of a simple upper edge purl (15), for example, and additionally secured also to the mast (2) by means of plastic clamps (16), shown in figure 1, or short arms emerging from the mast (2), depending on the nature of the advertising item in question.

[0012] Optionally, as shown in figure 6, the structure may comprise two masts (2-2') with their respective socles (1), arches (4), crossbeams (5) and braces (6) conveniently spaced apart and attached to each other by means of at least one crossbeam (17), or two crossbeams (17-17'), as in the practical embodiment example shown in the figure, converting the structure into a kind of portal (18) under which a person can comfortably pass.

[0013] In this specific case, the lower crossbeam (17'), positioned at the level of the upper crossbeams (5) in masts (2-2'), projects considerably beyond the arches (4), thus determining extensions (19) of a length which may be equivalent to the distance between the masts (2-2') and allowing for the support of advertising posters. In order to compensate for the considerable length of these extensions (19), braces are provided in the form of cables (20) going from the free ends of each extension up to the nearest mast (2), to a point adjacent to its upper end, and from said end to the vertex attaching the intermediate and lower crossbeams (17) and the other mast (2'), with an additional strut (21) possibly being provided between the ends of the extensions (19), although positioned above the latter in its intermediate zone, attached to the masts (2-2') above the lower crossbeam (21), as shown in figure 6.

Claims

1. Advertising poster support structure, **characterised in that** it comprises a mast (2) preferably having a cylindrical shape, a small diameter and a considerable height, the mast resting on its lower end on a socle (1) that provides an ample supporting base, said mast being stiffened by a side arch (4) the ends of which are attached to the mast (2) relatively adjacent to the ends thereof, the attachment to the mast being implemented through a plurality of uniformly distributed horizontal crossbeams (5) and a plurality of diagonal and oblique braces (6), whereby, at a point substantially spaced apart from the upper end of the mast (2), a horizontal arm (7) emerges opposite said structure for the purpose of hanging said advertising means (14), the free end of said arm (7) being attached to the free end of the mast (2) via an oblique strut (12).
2. Advertising poster support structure according to claim 1, **characterised in that** the mast (2), the arch (4) and the crossbeams (5) are made of tubular

steel, the diameter of the arch (4) and crossbeams (5) being smaller than that of the mast (2), which mast is closed on its upper end by a steel cover (3), the braces (6) and strut (12) being formed by solid rods and the advertising poster support arm (7) by tubular steel.

3. Advertising poster support structure according to the preceding claims, **characterised in that** said advertising poster is attached to the horizontal upper arm (7) by any appropriate means, being furthermore optionally attached to the mast (2), below said arm (7), through plastic clamps (16) or fixed joints composed of short arms which emerge from said mast, depending on the nature of the advertising poster.
4. Advertising poster support structure according to the preceding claims, **characterised in that** two masts (2-2') with their corresponding accessories may optionally be provided, which masts are substantially spaced apart and mutually attached by at least one upper crossbeam (17) that replaces said arm (7), the overall structure providing a kind of portal (18) dimensionally adequate for persons to pass under it.
5. Advertising poster support structure according to claim 4, **characterised in that**, as an extension of the crossbeam forming the portal or an extension of the lower crossbeam (17'), in the event that more than one crossbeam is involved, it incorporates, beyond the arches (4) and associated to corresponding masts (2-2'), ample extensions (19) of a length preferably equivalent to the width of the portal (18) that are capable of supporting advertising posters, being conveniently braced by cables (20) adhered to the upper region of the very masts.

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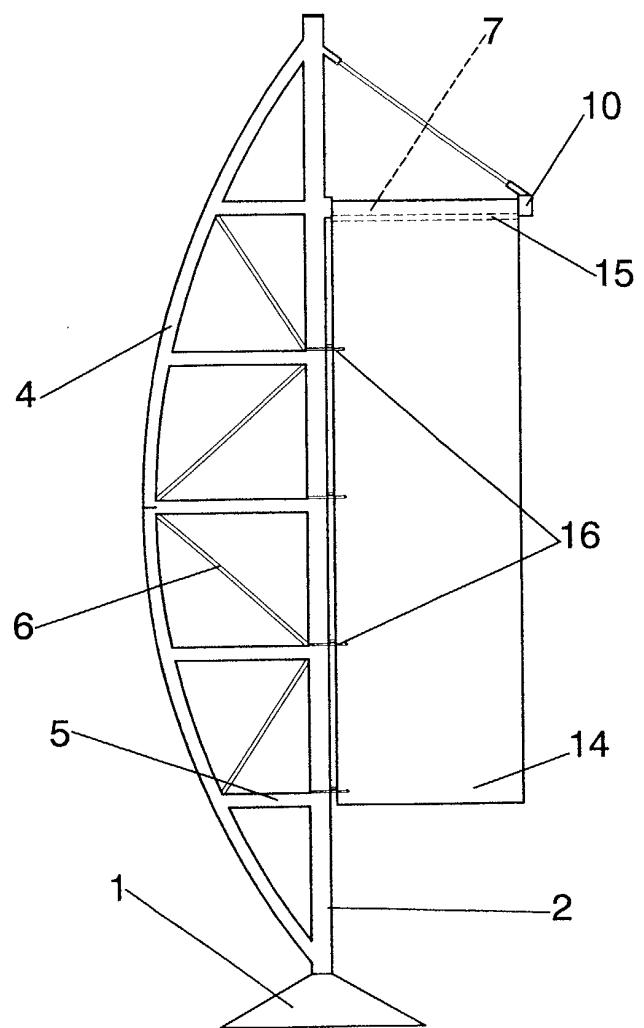


FIG. 1

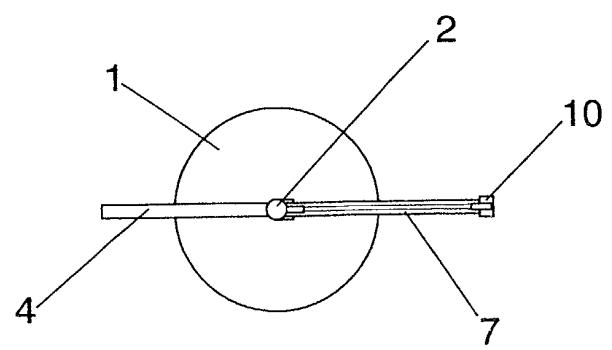


FIG. 2

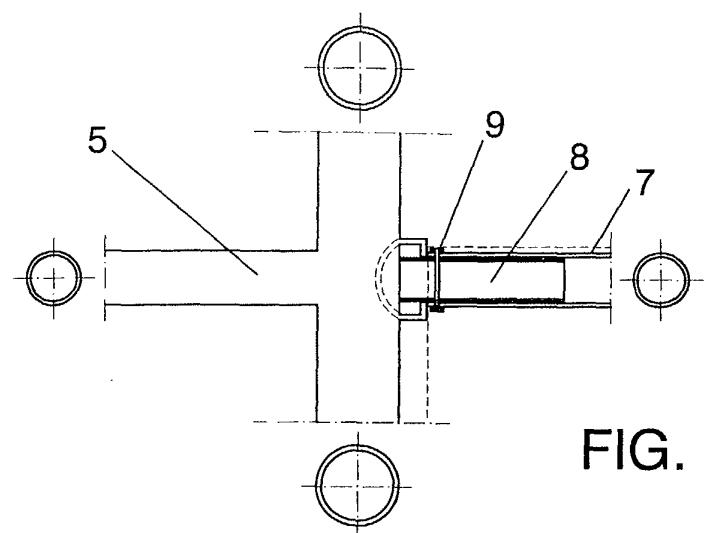


FIG. 3

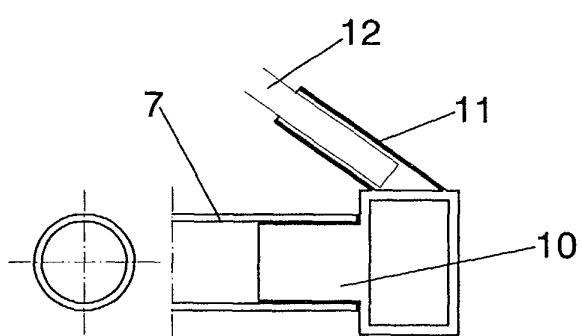


FIG. 4

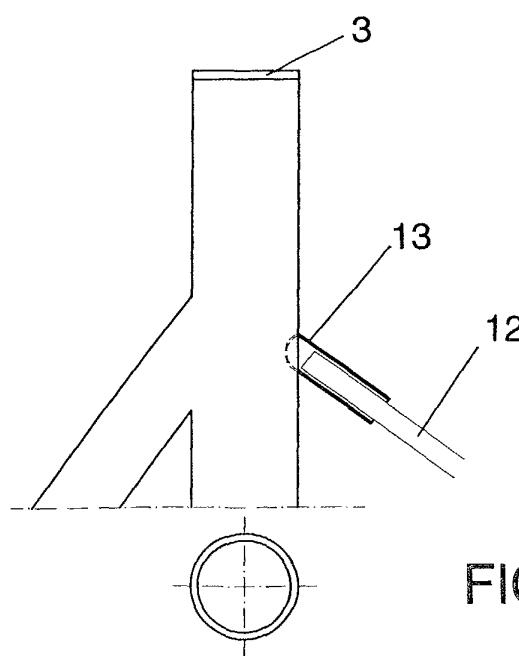


FIG. 5

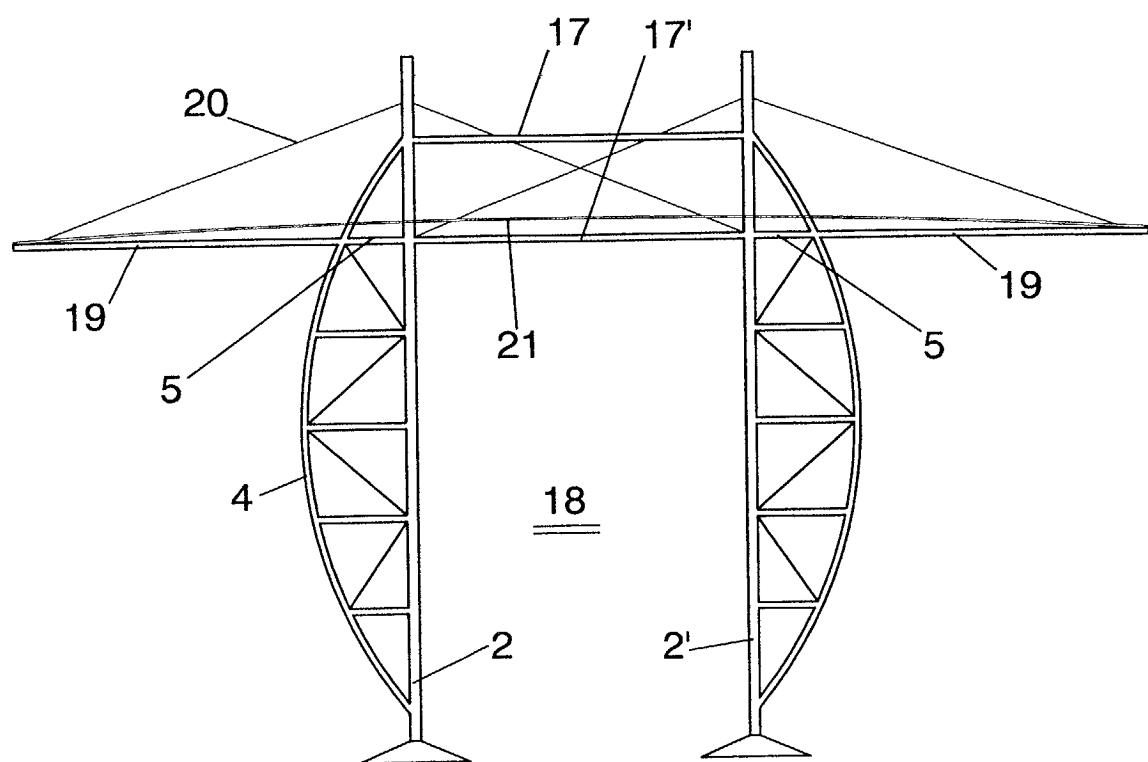


FIG. 6



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	GB 2 342 753 A (CHALLANGILA PTY LTD) 19 April 2000 (2000-04-19) * abstract; claims; figures *	1-5	G09F15/00 G09F7/18
A	US 5 921 035 A (KEMPF BRIAN J) 13 July 1999 (1999-07-13) * abstract; figures; tables *	1-5	
A	US 2 814 140 A (ELLIS HORACE R) 26 November 1957 (1957-11-26) * claims; figures *	1-5	
A	FR 2 621 727 A (JOSEPH GEORGES) 14 April 1989 (1989-04-14) * claims; figures *	1-5	
A	DE 197 14 220 A (EISELE ROLF) 15 October 1998 (1998-10-15) * claims; figures *	1-5	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			G09F
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search		Examiner
THE HAGUE	28 November 2001		Gallo, G
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
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P : intermediate document		& : member of the same patent family, corresponding document	

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 01 50 0178

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-11-2001

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