

[54] **RESILIENT MOUNTING FOR SIGN POST**

[76] Inventor: **Kennedy M. Russell**, 760 Alhambra Ct., East St. Louis, Ill. 62205

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Primary Examiner—John E. Murtagh

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[51] Int. Cl. **G09f 7/18**

[58] Field of Search 52/292, 725, 296, 170; 404/10, 11, 6; 403/291, 384; 256/1, 13.1; 248/160; 40/125 N, 145 R, 145 A, 125 H

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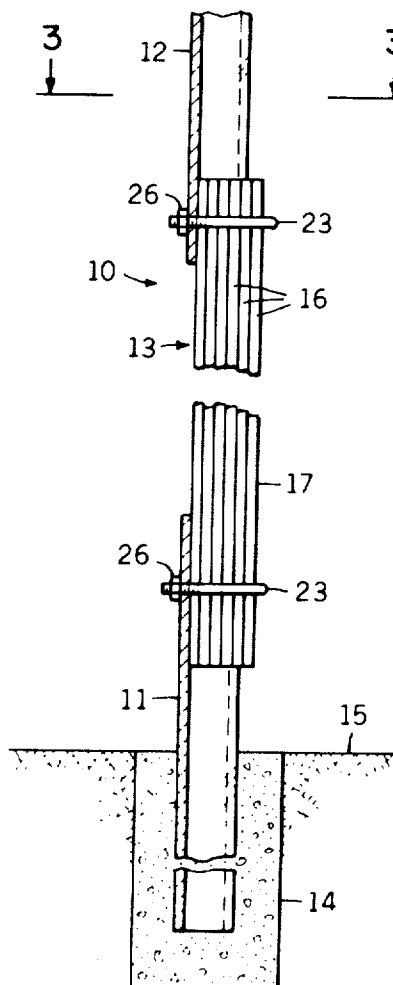
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[57]

ABSTRACT

This resilient sign post mounting includes a ground attached lower section, a separate upper section for carrying the sign and a resilient connection between the upper and lower sections. The resilient connection is provided by a bundle of rods securely clamped to one section and relatively loosely attached to the other section so that the rods can slide relative to each other when the upper and lower sections are moved temporarily out of alignment under impact with a vehicle.

4 Claims, 3 Drawing Figures



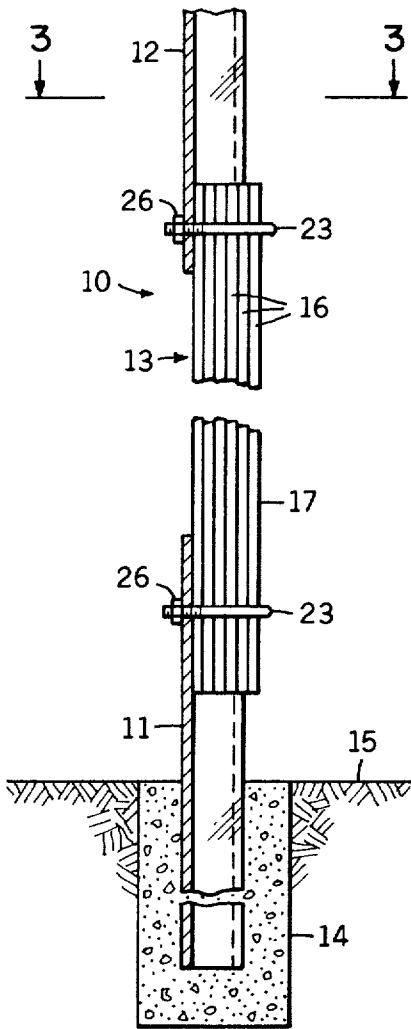


FIG. 1

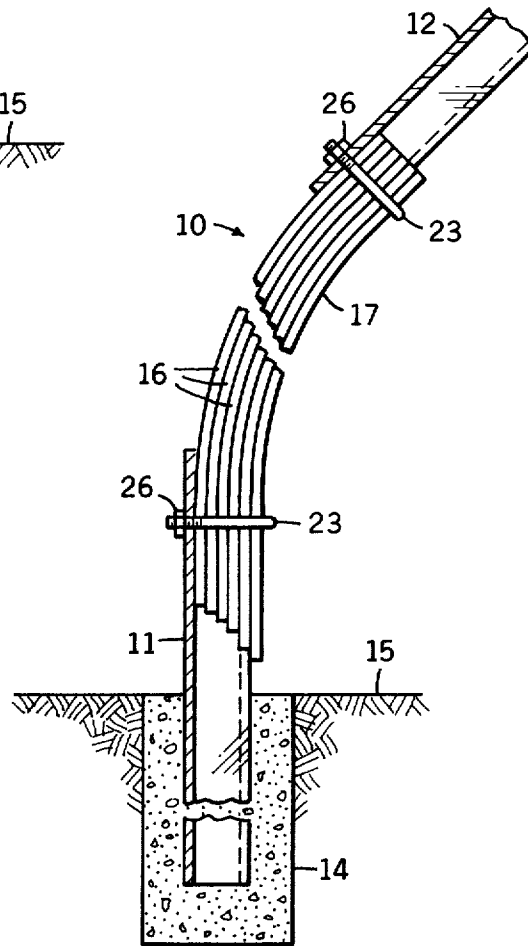


FIG. 2

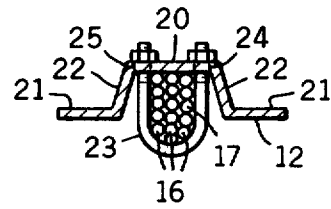


FIG. 3

RESILIENT MOUNTING FOR SIGN POST

BACKGROUND OF THE INVENTION

This invention relates to a resilient mounting for a sign post and particularly to a resilient connection provided by a plurality of elongate elements extending between separated sections of the post.

The need for resiliently mounted sign posts is particularly apparent in those instances in which roadway signs are carried by the posts and they are placed in close proximity to vehicular traffic. Such posts are subject to severe damage under impact from moving vehicles if they are of a conventional rigid structure. Not only is there considerable expense involved in the replacement of such posts, but the signs carried by the posts are frequently out of commission for long periods of time thereby depriving travelers of the important information conveyed by the signs. This is particularly important in the case of intersection stop signs, for example, where the absence of instructional information presents a positive danger.

Although resilient sign posts are known they have not been readily accepted. The reason is undoubtedly due, at least in part, to the expensive nature of the spring connections which have been used. Primarily, these have been provided by coil springs which are particularly susceptible of fracture at the positive connection points.

The present resilient post overcomes the deficiencies inherent in the known prior posts.

SUMMARY OF THE INVENTION

This resilient mounting for a sign post can be readily adapted for use with conventional channel posts and provides a simple resilient means extending between spaced upper and lower sections of the post and connected to the sections by attachment means which are virtually indestructible. The resilient mounting is achieved without utilizing coil springs and the resulting post is inexpensive to manufacture and simple to erect without special instructions.

It is an object of this invention to provide a resilient connection between normally aligned sign post sections, the connection being formed by a bundle of elongate rods extending between and attached to the upper and lower post sections.

An important object is to provide a connection between at least one end of the bundle and the section of the post to which it is attached, which is capable of carrying the gravitational load placed upon it yet permits the rods to slide relative to each other to take up an arcuate configuration under an applied impact load.

Another important object is to provide an embracing U-bolt connection between each end of the bundle and the associated channel post section to which it is attached, one of said U-bolts being fixedly clamped to preclude slippage between the individual rods and the other of said clamps being sufficiently loose to permit slippage between said individual rods.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a sectional elevation through a sign post in a normal upright position;

FIG. 2 is a similar section showing the displacement of parts following impact; and

FIG. 3 is a section taken on line 3—3 of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now by characters of reference to the drawing and first to FIGS. 1 and 3 it will be understood that the resilient post is generally indicated by numeral 10 and includes spaced upper and lower sections 11 and 12 separated by a resilient connection 13. The post 11 is attached to the ground in fixed cantilever relation, as by embedding the lower post section 11 in a concrete block 14 disposed below the ground surface, which is indicated by numeral 15. The upper section 12 is intended to carry a sign or the like (not shown) at its remote end.

The resilient connection 13 is provided by a plurality of resilient individual rods 16 of spring steel, or the like, the rods having substantially the same length and together constituting a rod bundle 17 having a longitudinal axis that is substantially vertical in the normal, upright position.

As shown in FIG. 3 the post sections are of a channel configuration having a bight portion 20 and a pair of parallel flange portions 21 separated by transverse side portions 22. It will be understood that the upper and lower sections are of the same configuration and are in substantial alignment in the normal condition shown in FIG. 1.

The rods 16 are connected to the sections 11 and 12 by means of U-bolts 23 having an axis transverse to the axis of said post sections. Each U-bolt 23 includes a pair of arms 24 extending through apertures 25 provided in the associate post section bight 20 and each end of the rod bundle 17 is attached to a post section by one of the U-bolts 23 by means of nuts 26. The U-bolt 23 coacts with said bight 22 to embracingly receive the rods 16 and hold said rods within the channel portion of the post section. One end of the rod bundle 17, the upper end in the embodiment shown, is clamped sufficiently tightly to the post section so that, as clearly shown in FIG. 2, the individual rods 16 are substantially fixed to said post section and do not move relative to each other when the rods are bent into an arcuate configuration after suffering an impact force, as when an automobile strikes the upper post section. Because of the arcuate configuration taken up by the rod bundle 17 the individual rods 16, having different radii, slide relative to one another. This movement is taken up at the lower end of the rod bundle 17 because of the relatively fixed connection at the upper end. In order to achieve this structural arrangement of parts the upper U-bolt 23 is clamped tightly against the rod bundle 17 while the lower U-bolt 23 is clamped less tightly, that is, sufficiently to hold the gravitation weight and yet insufficiently to preclude relative sliding of the individual rods 16.

The rod bundle 17 is made up of a plurality of rods disposed about the longitudinal axis of the bundle such that the bundle is at least two rods in width in directions parallel and perpendicular to the bight 22 of the post sections. This arrangement permits the rod bundle 17, and therefore the post as a whole, to bend in any direction and then simply spring back to its original upright position following impact, without suffering permanent deformation.

I claim as my invention:

1. A resilient mounting for a sign post, comprising:

3

- a. a lower post section adapted to be fixed in cantilever relation to the ground,
 - b. an upper post section spaced from the lower post section but substantially aligned therewith in a normal condition,
 - c. a resilient connection between said upper and lower post sections including:
 - 1. a bundle of elongate rods having a longitudinal axis extending between opposed ends and disposed in side-by-side relation,
 - 2. first fastener means connecting one end of said bundle to one of said post sections and second fastener means connecting the other end of said bundle to the other of said post sections, and
 - 3. at least one of said fastener means permitting said rods to move relative to each other when the post sections are misaligned following impact.
2. A resilient mounting for a sign post as defined in claim 1, in which:
- d. the first fastener means connects said one end of said bundle to said one post section in substantially fixed relation and the second fastener means connects said other end of said bundle to said other post section to permit said rods to move relative to each other.
3. A resilient mounting for a sign post as defined in claim 2, in which:
- e. the first fastener means includes a U-bolt having an axis transverse to the axis of the rod bundle, said U-bolt being connected to its associated post section in coacting relation with said post section to embrace and clamp the rods to said post section,

4

- f. the second fastener means includes a U-bolt having an axis transverse to the axis of the rod bundle, said U-bolt being connected to its associated post section in coacting relation with said post section to embrace and hold the rods to said post section sufficiently loosely to permit relative sliding motion between said rods in a longitudinal direction and yet sufficiently tightly to maintain the elevation of the upper post section.
4. A resilient mounting for a sign post as defined in claim 2, in which:
- e. the upper and lower post sections provide elongate channels having a bight portion,
 - f. the rod bundle is at least two rods in width in a direction parallel to said bight portion and at least two rods in width in a direction perpendicular to said bight portion,
 - g. the first fastener means includes a U-bolt having opposed ends connected to its associated post section, said U-bolt coacting with said post section to embrace and clamp the rods to said post section, and
 - h. the second fastener means includes a U-bolt having opposed ends connected to its associated post section, said U-bolt coacting with said post portion to embrace and hold the rods to said post portion sufficiently loosely to permit relative sliding motion between said rods in a longitudinal direction and yet sufficiently tightly to maintain the elevation of the upper post section.

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