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FLEXIBLE SIGN POST

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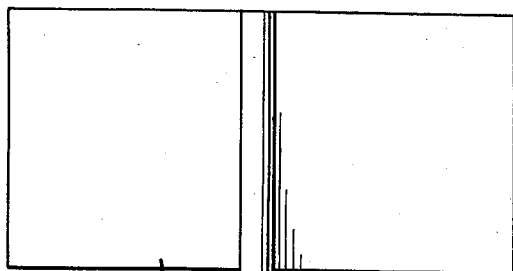


Fig. 1.

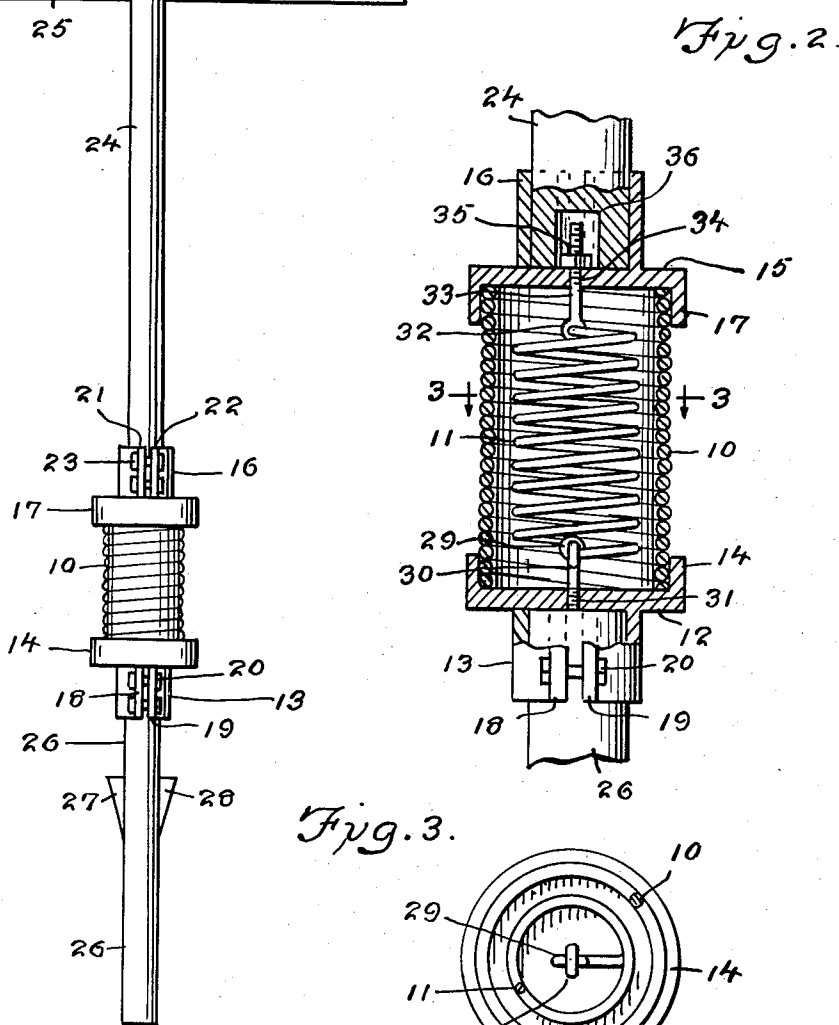
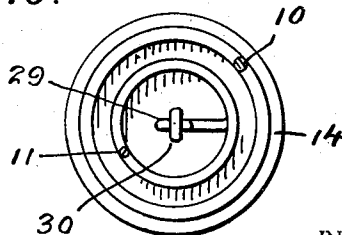


Fig. 2.

Fig. 3.



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## FLEXIBLE SIGN POST

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4 Claims. (Cl. 287—86)

This invention relates to posts for supporting signs, such as used on highways, parking meters, mail boxes and signs of motels, and in particular a flexible section in a sign post including inner and outer coil springs with the spring assembly mounted on the upper end of a post inserted in the ground and with a sign carrying section of the post clamped in the upper end of the spring assembly.

The purpose of this invention is to provide a post for signs, particularly at the sides of highways whereby upon engagement of a vehicle with the sign the post yields preventing damage to the sign or vehicle and after passing of the vehicle the sign returns to the conventional upright position.

Various types of yielding signs have been provided for use on highways wherein upon passing of a vehicle and engagement of wheels of the vehicle with the sign the sign bends to a flat position upon the highway and returns to an upright position after the vehicle passes; however, such signs are subjected to severe abuse and the life of such signs is comparatively short. Numerous types of highway signs such as used for indicating directions and speed and also mail boxes and parking meters are supported by posts at the sides of a highway and, normally, are out of the path of a passing vehicle. However, in numerous instances vehicles are urged over the edge of a highway and engage such signs with the result that the posts are broken or damaged to such an extent that new posts are required. With this thought in mind this invention contemplates a sign post including upper and lower sections in which the sections are connected by a spring assembly in which the springs are so arranged that the upper section of the post may bend to substantially any angle, and after a vehicle passes, return to an upright position.

The object of this invention is, therefore, to provide a flexible section in a post whereby the portion of the post above the ground may bend to a horizontal position and wherein the flexible section returns the upper portion of the post to a vertical position when said upper portion is released.

Another object of the invention is to provide a flexible unit designed to be installed in a post to permit bending of the post in which tension of the flexible unit is adjustable.

A further object of the invention is to provide a post having a flexible unit therein to permit bending in which the post is of a simple and economical construction.

With these and other objects and advantages in view the invention embodies a spring assembly for a post having a lower and upper section in which an outer spring is positioned between the cup-like heads in which the upper and lower sections of the posts are clamped and in which the heads are urged against ends of the outer spring by an inner spring, the tension of which is adjustable.

Other features and advantages of the invention will

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appear from the following description taken in connection with the drawing, wherein:

Figure 1 is a rear elevational view of the improved flexible sign post with the upper section of the post in a vertically disposed position.

Figure 2 is a vertical section through the spring assembly of the flexible post with the parts shown on an enlarged scale, and with upper and lower sections of the post broken away.

Figure 3 is a sectional plan through the spring assembly of the post taken on line 3—3 of Figure 2.

Referring now to the drawing wherein like reference characters denote corresponding parts the improved flexible post of this invention includes a spring assembly having an outer spring 10, an inner spring 11, a lower head 12 having a split sleeve 13 depending therefrom and a continuous flange 14 extended upwardly from the peripheral edge and an upper head 15 having a split sleeve 16 extended upwardly therefrom and a continuous flange 17 depending from the peripheral edge and in which the upper end of the spring 10 nests.

The split sleeve or collar 13 is provided with outwardly extended flanges 18 and 19 through which bolts 20 extend and the upper sleeve or collar 16 is provided with similar flanges 21 and 22 through which bolts 23 extend the bolts 23 clamping the sleeve 16 on the lower end of an upper section 24 of a post having a sign panel 25 on the upper end. The bolts 20 which extend through the flanges 18 and 19 of the sleeve 13 clamp the head 12 upon the upper end of a lower section 26 of the post whereby with the lower section forced into the ground by placing the feet upon the projections 27 and 28 the lower section 26 is rigidly mounted in the ground and the upper section 24 with the sign panel 25 thereon is flexibly connected to the lower section.

The lower end of the tension or inner spring 11 is provided with an eye 29 by which the lower end of the spring is connected to an eye bolt 30 extended from the inner surface of the lower head 12 of the spring assembly. The eye 30 may be threaded in the head 12 as shown at the point 31 or secured to the head by welding or other means.

The upper end of the spring 11 is also provided with an eye, as indicated by the numeral 32 and the eye 32 is secured in an eye bolt 33 that extends through an opening 34 in the head 15 and that is provided with a nut 35 positioned in an opening 36 in the lower end of the upper section 24 whereby the tension of the spring 11 is adjustable by a series of nuts between the nuts 35 and bolt 33.

It will be understood that modifications, within the scope of the appended claims, may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

1. A spring assembly for a sign post comprising an upper head having a depending peripheral flange and a split sleeve extended upwardly therefrom for connecting the head to a post, a lower head having an upwardly extended peripheral flange and a depending split sleeve for connecting the lower head to a post, an inner tension spring extended between and positioned with ends thereof connected to the heads, and an outer spring nested in the flanges of the heads and surrounding the inner tension spring.

2. In a flexible post, the combination which comprises a lower section, an upper section, a head having an upwardly extended peripheral flange and a depending split sleeve mounted with the split sleeve on the upper end of the lower section of the post, the split sleeve depending from the lower head having flanges extended

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therefrom, bolts through the flanges of the split sleeve of the lower head, an upper head having a split sleeve extended upwardly therefrom for receiving the lower end of the upper section of the post, and a depending peripheral flange, an outer spring extended between the heads with ends of the spring nested in the flanges of the heads, the split sleeve of the upper head also having flanges extended therefrom, bolts extended through the flanges of the split sleeve of the upper head, an eye bolt extended from the lower head, a tension spring connected to the eye bolt extended from the lower head and positioned within the outer spring, and an eye bolt adjustably mounted in the upper head and connected to the upper end of the tension spring.

3. In a flexible post for supporting a sign, the combination which comprises a lower section of the post, an upper section of the post, a lower head having a peripheral upwardly extended flange, means for securing the lower head on the upper end of the lower section of the post, an upper head having a depending peripheral flange, means for securing the upper section of the post on said upper head, a stationary eye bolt extended from the inner surface of the lower head, an eye bolt having threads thereon extended through the upper head and depending therefrom, a nut threaded on the threaded upper end of the eye bolt of the upper head, a tension spring positioned with one end connected to the eye bolt of the lower head and the opposite end connected to the eye bolt of the upper head, and an outer spring positioned with the lower end nested in the peripheral flange of the lower head and the upper end nested in the peripheral flange of the upper head.

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4. In a flexible post, the combination which comprises a lower section, an upper section, a head having an upwardly extending peripheral flange, a sleeve on the upper end of the lower section of the post, the sleeve depending from the lower head having flanges extended therefrom, bolts through the flanges at the sleeve of the lower head, an upper head having a sleeve extended upwardly therefrom for receiving the lower end of the upper section of the post, and a depending peripheral flange, an outer spring extended between the heads with ends of the spring nested in the flanges of the head, the sleeve of the upper head also having flanges extended therefrom, bolts extended through the flanges of the sleeve of the upper head, a securing element extended from the lower head, resilient means connected to the securing element extended from the lower head and positioned within the outer spring, and a securing element adjustably mounted in the upper head and connected to the resilient means.

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