

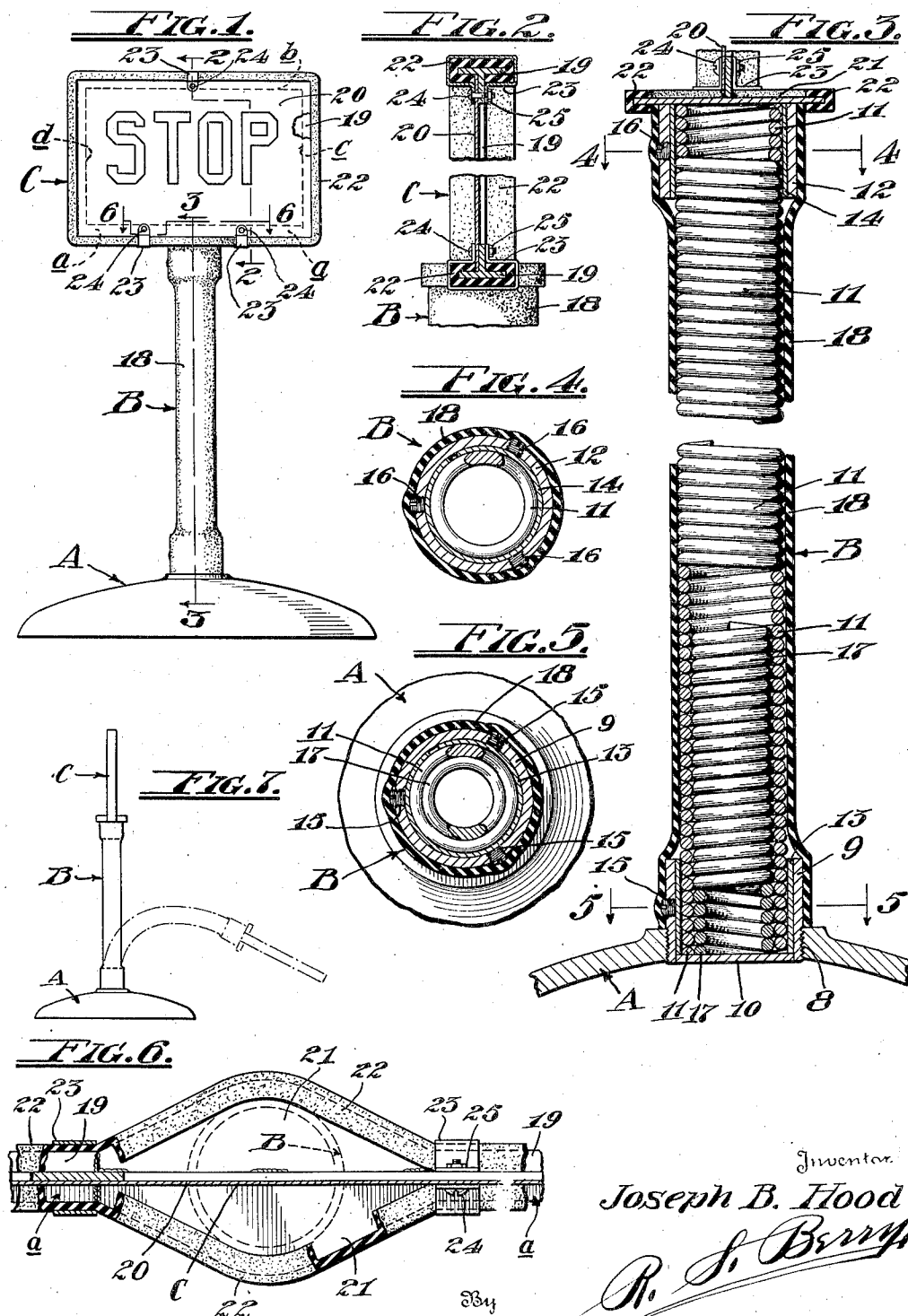
July 11, 1939.

J. B. HOOD

2,165,704

SIGN

Filed Aug. 19, 1938



Inventor
Joseph B. Hood
By *R. S. Berry*
Attorney

UNITED STATES PATENT OFFICE

2,165,704

SIGN

Joseph B. Hood, Hollywood, Calif.

Application August 19, 1938, Serial No. 225,737

5 Claims. (Cl. 40—145)

This invention relates to a sign and more particularly pertains to warning signs employed in roadways and the like to indicate to drivers of motor vehicles the presence of pedestrian lanes and in giving notice of traffic regulations and the like and which signs are usually positioned on the roadway at or near the middle portion thereof where they may be readily observed by drivers of vehicles traversing the roadway in either direction.

A particular object of the invention is to provide a sign of the above character which while being formed of a size to project a distance of several feet above the roadway on which it is supported will not constitute a hazard in event of its being struck by a vehicle either as to damage of the sign or the vehicle.

Another object is to provide a sign of the above character embodying a resilient sign supporting standard which is so formed as to normally project vertically from a base but which is capable of being flexed in any direction from the vertical and also axially so that it may be bent over and/or twisted from its normal position under stresses applied thereto, and thereafter automatically return to normal, and whereby a sign carried by said standard may readily yield and move in various directions under lateral pressures or impacts imposed thereon.

Another object is to provide a construction in the sign whereby the marginal portions thereof will be cushioned so as to not be liable to injure vehicles or persons which might be brought forcibly into contact therewith.

A further object is to provide a sign embodying a base, a flexible standard, and a sign carrying frame supported on the standard in which resiliency is imparted to the standard by forming the latter of one or more coiled metallic springs encompassed in a resilient sheath, and in which effective means is provided for facilitating interconnection of such standard to the base and to the sign supporting frame in such fashion as to insure against accidental disconnection of the standard from the base and frame.

With the foregoing objects in view, together with such other objects and advantages as may subsequently appear, the invention is carried into effect as illustrated by way of example in the accompanying drawing, in which:

Fig. 1 is a view of the sign as seen in front elevation;

Fig. 2 is a detail in section of the sign panel and frame as seen on the line 2—2 of Fig. 1;

Fig. 3 is an enlarged detail in section partly in elevation as seen on the line 3—3 of Fig. 1;

Fig. 4 is an enlarged detail in horizontal section taken on the line 4—4 of Fig. 3;

Fig. 5 is a detail in horizontal section taken on the line 5—5 of Fig. 3;

Fig. 6 is a detail in horizontal section taken on the line 6—6 of Fig. 1;

Fig. 7 is a diagram in side elevation depicting the mode of operation of the invention.

Referring to the drawing more specifically A indicates generally a base, B designates a flexible standard erected on the base A, and C denotes generally a sign panel and frame supported on the flexible standard B.

The base A may be of any suitable construction but is here shown as comprising a cast metal pedestal of the type commonly employed in portable street signs and which is formed with a central internally threaded opening 8 to demountably receive the lower end of the standard B which latter embodies an externally threaded cylindrical cup 9 formed of a short length of metallic tubing closed at one end by a disc 10. Extending into the cup 9 and seating on the disc 10 is a closely wound spiral spring 11 which projects upwardly from the cup 9 and the base A and has its upper end extended into an inverted cup 12 on which the sign panel and frame C is carried.

As a means for effecting secure interconnection between the ends of the spring 11 and cups 9 and 12 split sleeves 13 and 14 are interposed between the end portions of the spring 11 and the inner peripheries of the cups and are engaged by a series of set screws 15 and 16 extending through the side walls of the cups adjacent the outer margins thereof with their inner ends bearing against the sleeves 13 and 14 in such fashion as to clamp the latter against the spring 11; the split sleeves 13 and 14 being formed of metal sufficiently resilient to yield under the pressure of the screws 15 and 16. It will be seen that the set screws 15 and 16 could not be relied upon to act effectively unless the split sleeves were also provided to afford an unbroken surface for the inner ends of the screws to act upon. It will also be noted that the sign structure, considered as a whole, includes two vertically spaced apart, relatively movable parts, one of which is a base element and the other a sign element, and that each of these parts carries a cup the open end of which is directed toward the other, each of these cups being lined with a sleeve which receives an end portion of the upstanding spiral spring and being also fur-

nished with means to clamp the sleeve which it contains against said spring.

As a means for affording adequate rigidity of the standard B and at the same time permit requisite flexing thereof a second coil spring 17 is telescoped interiorly of the spring 11 and which interior spring 17 preferably extends from the base of the spring 11 to a point spaced below the upper cup 12 so as to have a stiffening action on the standard only throughout the lower portions thereof whereby the upper end portion of the standard is rendered more flexible and resilient than its lower portion. Said second spring 17 interiorly reinforces the portion of the spring 11 which it occupies and offers an additional resistance to the action of the set screws 15, thus causing said screws, when properly screwed down, to grip both of said springs more effectively.

To further effect a stiffening action on the standard B and at the same time afford a cushion covering therefor a resilient sheath 18 formed of rubber composition, neoprene, or the like, is arranged to encompass spring 11 in intimate contact therewith; the end portions of the sheath 18 overlying the cups 9 and 12 and covering the set screws 15 and 16.

The sign portion C may be of any suitable construction and of any desired contour but is here shown as embodying a rectangular frame 19 including a bottom rail a, a top rail b and end rails c and d, which rails are of T cross section with the web portion thereof extended inwardly as particularly shown in Fig. 2 to afford an abutment against which the margins of a sign carrying plate 20 abut. The lower frame member a projects from opposite sides of the cup 12 which latter is formed with a marginal flange 21 extending in continuation of the laterally projecting webs of the rail a. The frame 19 and the flange 21 is covered by a resilient sleeve 22 formed of rubber, neoprene or the like so as to equip the margins of the sign panel with a protective cushion.

The sign plate 20 is held in place in the frame 19 by a series of metallic clips 23 arranged to encompass the resilient sleeve 22 with their end portions overlying the opposite sides of the sign plate 20 and connected with the latter by bolts 24 fastened to the plate 20 and fitted with nuts 25 thus rendering the clips readily removable and replaceable to permit changing of the sign plate 20.

While the sign thus formed may be of any suitable dimension, it is subject to being made of such size that the upper margin of the sign plate will be disposed at least four feet above the level of the roadway on which the base A is supported so as to bring the sign within the range of vision of the driver of an approaching vehicle at a point spaced above the roadway approximating the usual level of the headlights of motor vehicles or slightly thereabove.

The operation of the invention is apparent from the foregoing it being manifest that by constructing the standard B of the coil springs 11 and 17 encompassed by the resilient sheath 18

the standard B is rendered capable of flexing longitudinally as indicated at broken lines in Fig. 7 and is also capable of flexing movement around the axis thereof. The standard is also subject to elongation within limits. By reason of the flexible characteristics of the standard B it is free to move in any direction horizontally and also longitudinally on being subjected to stresses, such for example as would be occasioned by a motor vehicle or the like impacting either the standard or the sign supporting frame carried thereby. The resiliency of the standard renders it self-righting on being bent, twisted or elongated from its normal upright position relative to the base A.

While I have shown and described a specific embodiment of my invention I do not limit myself to the exact details of construction set forth, and the invention embraces such changes, modifications and equivalents of the parts and their formation and arrangement as come within the purview of the appended claims.

I claim:

1. In a sign structure, a base, a cup supported by said base, a resilient longitudinally split sleeve mounted interiorly of said cup, an upstanding coil spring having its lower end portion fitted within said sleeve, clamping means supported by the structure in a position to apply external pressure to said sleeve, and a sign element supported by said spring in a vertically spaced relation to said base.

2. In a sign structure, a base, a cup supported by said base, a resilient, longitudinally split sleeve interiorly lining said cup, an upstanding coil spring having its lower end portion fitted within said sleeve, a plurality of set screws operating through the circumferential wall of said cup and abutable against circumferentially spaced portions of said sleeve to contract its diameter and thereby grip said spring, and a sign element carried by said spring in a vertically spaced relation to said base.

3. The subject matter of claim 2, and, there being a re-inforcing spiral spring telescoped within the lower portion of the first recited spring which offers additional resistance to the action of said set screws.

4. In a sign structure including two relatively movable parts, one being a base and the other a sign element, an upstanding spiral spring connecting said parts in a vertically spaced relation to each other, a cup carried by at least one of said parts with its open end directed toward the other a longitudinally split resilient sleeve carried by said cup and surrounding said spring, and clamping means mounted in an operative relation to said sleeve to force it to contract around said spring.

5. The subject matter of claim 4 and, said clamping means comprising a plurality of set screws in circumferentially spaced relations to said sleeve.

JOSEPH B. HOOD.