Aug. 11, 1942. G. C. HENNE 2,292,785

FLEXIBLE LINE MARKER

Filed May 29, 1940

Fig. 1

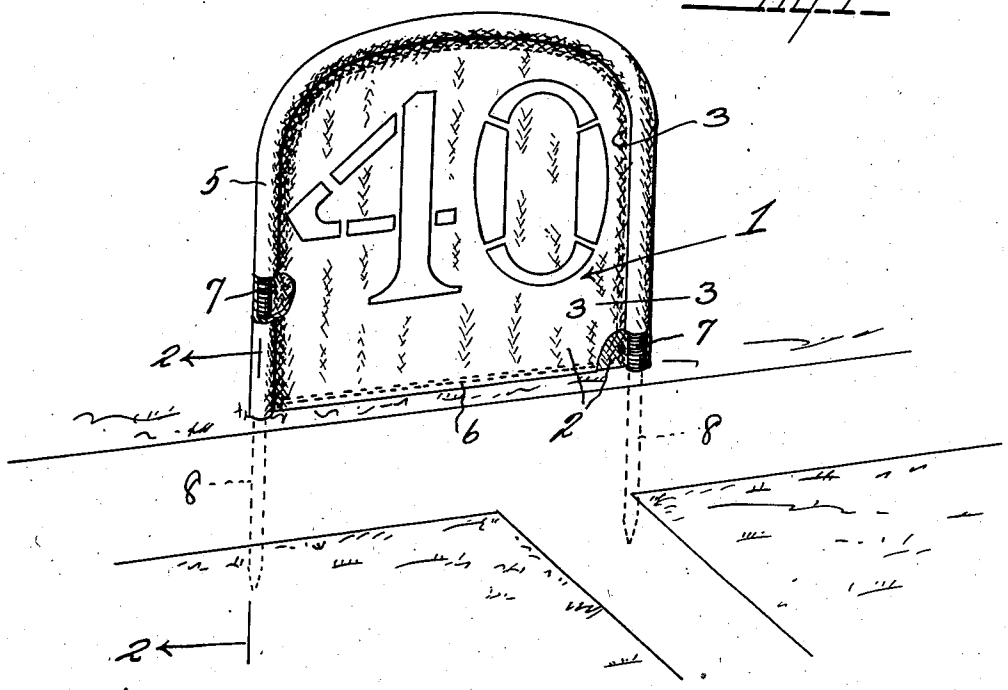


Fig. 2

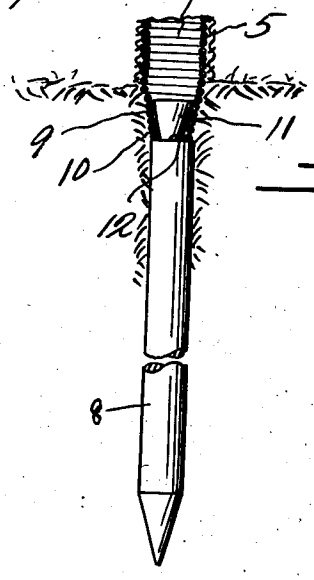


Fig. 4

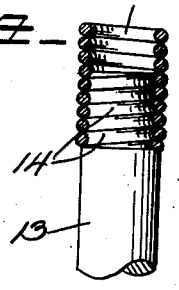
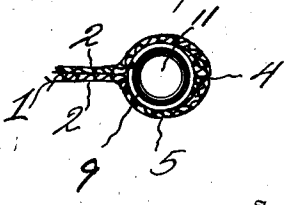


Fig. 3



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FLEXIBLE LINE MARKER

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8 Claims. (Cl. 40—125)

This invention relates to the class of markers or position indicators and pertains particularly to a device which is especially desirable for use as line markers on athletic fields.

The present invention has for its primary object to provide a position indicator or line marker which may be mounted vertically on the ground and which is so constructed that it will easily yield if struck by a player on the field where the marker is used and thus avoid throwing or injuring such player.

Another object of the invention is to provide a marker, comprising a relatively wide and high body which is connected to ground penetrating pins in such manner that when the pins are forced into the ground so as to maintain the body vertically, the body may be bent over against the ground so that it will not form an obstruction on a playing field, the character of the supporting means for the marker being such, however, that in the event that it is bent over, it will return immediately to its vertical position when released.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not to be confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:

Fig. 1 illustrates a marker constructed in accordance with the present invention, the same being shown in perspective and with portions broken away.

Fig. 2 illustrates in detail a method of connecting an end of the panel bordering spring body with a ground penetrating stake, the same being a section on the line 2—2 of Fig. 1.

Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Fig. 4 is a view illustrating another method of attaching an end of the spring to a stake.

Referring now more particularly to the drawing, the numeral 1 generally designates a panel of yieldable or flexible material such as woven material which may be in the form of canvas of suitable weight. This panel may be of double thickness as illustrated in Fig. 3, the two sheets of material, each of which is indicated by the numeral 2, being placed one against the other and stitched together along the line 3 throughout two side edges and a transverse edge constituting the top of the panel, the line of stitching being a substantial distance inwardly from the edges of the material, as illustrated. The two sheets of material may then be secured together at their edges and along a line spaced from the line 3, as indicated at 4 in Fig. 3, so as to form a hem or guide 5 throughout the said three edges of the panel and the two pieces of material 2 may also be stitched together along the bottom edge of the panel as indicated at 6.

It will, of course, be readily understood that a single sheet of material may make up the panel if desired, in which case a suitable hem or guide might be formed throughout its side and top edges in a manner well known to seamstresses.

Extended through the hem 5 is a single length of coil spring which is indicated by the numeral 7. Each end of such length of coil spring extends slightly from an end of the hem or guide 5, as shown in Fig. 2, and due to the tendency of such a spring body to straighten out, it will be readily apparent that this spring border around the panel will constantly tend to pull the panel flat as each of the end portions will tend to move outwardly away from the other portion, thereby tightening the edge along which the line of stitching 6 extends.

Figs. 2 and 4 illustrate two methods of securing ground penetrating stakes or pegs to the panel. In Fig. 1, there are indicated two ground penetrating stakes, each of which is indicated by the numeral 8, the stakes being in the dotted outline and Fig. 2 shows one of such stakes in full lines, with the upper end thereof coupled with an end of the coil spring 7. This form of coupling comprises tapering or reducing the end of the spring 7, as indicated at 9, and providing the upper end of the stake 8 with an encircling channel 10, thereby forming a head 11 which is of greater width at its upper end than at its lower end and also forming a shoulder 12 at the point of joinder between the head and the stake body. The tapered reduced portion of the end of the spring engages around and substantially conforms to the taper of the head 11, thereby firmly gripping the head and establishing a positive connection between the spring and stake. Both stakes 8 are, of course, secured each to an end of the spring 7 in the manner described.

In the form of connection shown in Fig. 4, the stake which is indicated by the numeral 13, is provided at its upper end with threads 14 pitched to conform to the pitch of the convolutions of

the spring which is here indicated by the numeral 15. Each end of the spring 15 remains straight instead of being tapered in the manner shown in Fig. 2, and is designed to act as a sleeve into which the threaded upper end portion of the stake 13 is turned. By this means, a substantial fixed connection is established between the stake and an end of the spring frame for the panel.

From the foregoing, it will be readily apparent that when the device embodying the present invention is set up for use as, for example, upon a football field where the panel may bear the number of one of the division lines, it may be mounted directly at the end of such division line as shown in Fig. 1, so that spectators and players may readily see the marking on the panel, and it will also be readily apparent that when the securing pegs for the panel have been forced into the ground until the ends of the coil spring frame for the panel come into contact with the ground, the panel may be struck or kicked from either side without being damaged and it will readily yield under such a blow. Because of the yieldable character of the frame, a player striking the same will not be likely to be thrown or at least will not be injured by striking the panel and also the panel will immediately return to its upright position after being struck.

What is claimed is:

1. A yieldable marker of the character stated, comprising an indicia bearing panel formed of a sheet of soft material and having a bottom edge, means joined to said panel along the periphery thereof from one end of the bottom edge to the other and having an inherent tendency to force apart opposite edges of the panel to maintain said panel in flattened condition, and means connected with said first means adjacent to said bottom edge for engagement with the ground to maintain the panel in upright position.

2. A marker, comprising a sheet-like body of soft material and having a bottom edge, resilient means extending along the periphery of said body exclusive of the bottom edge and secured thereto under a tensioned condition and constantly drawing said body into a flattened-out condition through its tendency to return to normal form, and means connected with said flexible means substantially at said bottom edge for supporting the body vertically.

3. A marker, comprising a panel formed of a sheet of soft material and having a bottom edge, means forming a guide along the periphery of the panel exclusive of said bottom edge, said guide having two portions in parallel relation and upon opposite sides of the panel, a length of coil spring extending through said guide and held thereby in bent flexed condition, the tendency of the flexed spring to resume a straightened out condition functioning to hold the panel taut, and means connected with the ends of the spring substantially at the said bottom edge for supporting the panel vertically.

4. A marker, comprising a panel formed of a sheet of soft material and having a bottom edge, a coil spring bent from an initial straight condition to a condition in which two end portions are in angular relation to an intermediate portion, means for attaching said end portions of the spring to opposite edges of the panel, said panel forming the sole connection between said end portions and the inherent tendency of the spring to return to its normal condition functioning to maintain the panel taut between said end portions, and means connected to the ends of the spring substantially at said bottom edge for supporting the panel in upright condition.

5. A marker, comprising a panel formed of a sheet of soft material and having a bottom edge, a coil spring bent from an initial straight condition to a condition in which two end portions are in angular relation to an intermediate portion, means for attaching said end portions of the spring to opposite edges of the panel, said panel forming the sole connection between said end portions and the inherent tendency of the spring to return to its normal condition functioning to maintain the panel taut between said end portions, and means for supporting the panel in upright condition, comprising a pair of ground penetrating pegs each having a portion of an end secured in an end portion of the spring substantially at said bottom edge of the panel.

6. A yieldable marker, comprising a coil spring flexed transversely from a straightened condition, a panel of soft material connected between remote portions of said flexed spring and holding said portions against separation and thereby being maintained taut by the inherent tendency of the spring to return to its straightened out condition, the panel having a bottom edge extending between said remote portions and means connected with the ends of the spring adjacent to said bottom edge and forming a support therefor and for the panel to maintain the panel in display position, said spring further functioning to yield with respect to the last-mentioned means for the temporary deflection of the panel from its display position.

7. A marker, comprising a substantially rectangular panel of soft material, a coil spring outlining three of four sides of the panel and secured to the panel and maintained under tension against a tendency to straighten out, and a ground penetrating peg having an end secured in an end of the spring with the said end of the peg located substantially at the edge of the fourth side.

8. A marker, comprising a substantially rectangular panel of soft material, a coil spring outlining three of four sides of the panel and secured to the panel and maintained under tension solely by the material of the panel, against a tendency to straighten out, each end of said spring being tapered off to a reduced diameter, and a peg connected at one end with each of said spring ends substantially at the edge of the fourth side of the panel and having a head engaged in the tapered end of the spring to effect such connection.

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