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Rottman et al.

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[54] **GOAL POST PADDING**

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[52] **U.S. Cl.** ..... **273/55 R,** 273/DIG. 8

[51] **Int. Cl.** **A63b 67/00**

[58] **Field of Search** ..... 273/55; 128/165, 128/DIG. 15; 52/722, 724, 725, 728; 46/DIG. 1; 114/219, 220; 298/71 R; 272/57 D, 60; 74/551.9, 558, DIG. 8

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[57] **ABSTRACT**

There is provided in accordance with the most preferred described embodiment of the invention a stack of tubular right circular cylindrical bodies of resilient foamed plastic material, each having an adherent coating of flexible plastic-based paint. Each body is split along a radiating, longitudinal axis-containing plane and provided with cooperating fasteners within the split to permit easy assembly of the padding about a goal post standard. The color of the flexible coating on adjacent bodies may be different, e.g., to match school colors. A preferred composition is polyurethane plastic foam used in conjunction with a polyurethane-based paint. The exterior of the bodies may be an appropriately colored integral skin on the foamed bodies.

4 Claims, 3 Drawing Figures

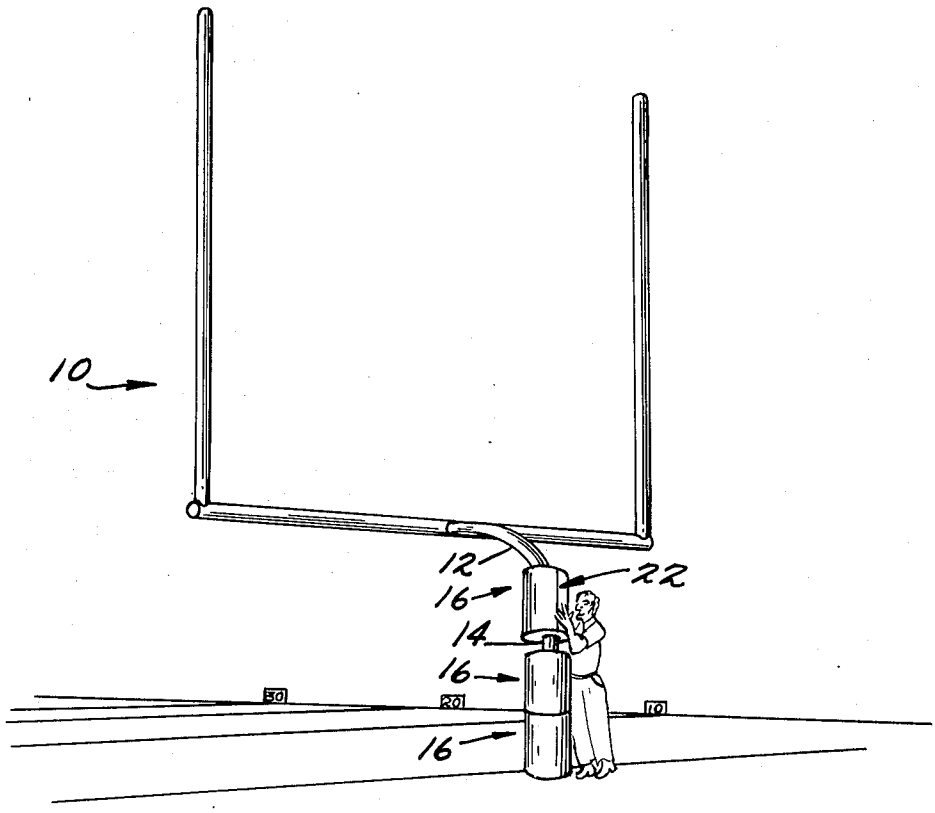


Fig. 1.

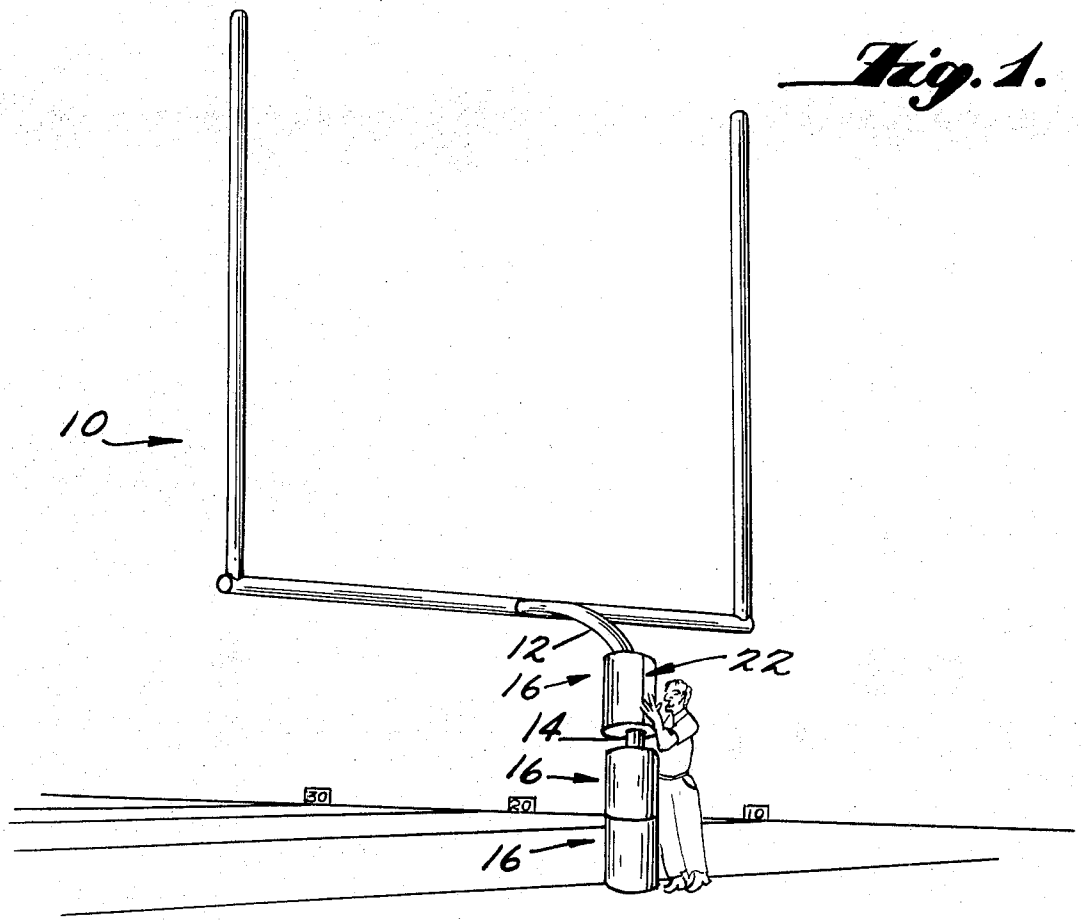
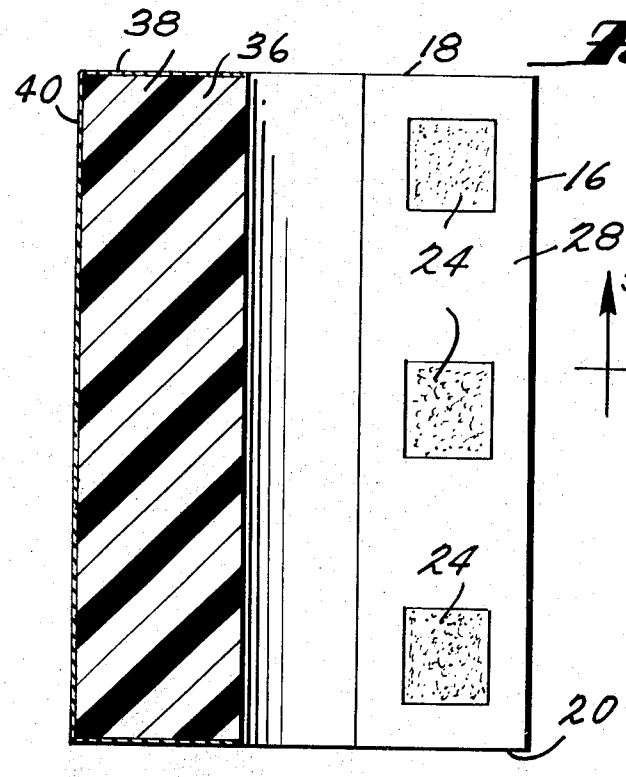


Fig. 2.



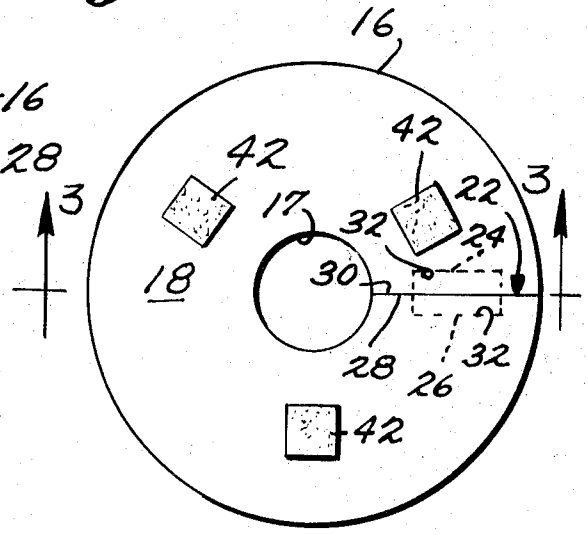


Fig. 3.

GOAL POST PADDING

BACKGROUND OF THE INVENTION

Sports tend to be tradition-bound because they are played in accordance with announced rules, and the "right" way of playing is taught to new players by those experienced at the game. This traditional basis carries over into the equipment used in playing the game, so that innovations such as the fiberglass vaulting pole, synthetic playing field turf, the Telegoal single curved standard football goal post (of which one of the present inventors is co-inventor) are initially surprising and become dominant only when their ability to add to the game is proven by those of freer spirit who are willing to buck tradition.

In the field of goal post padding, the dominant and traditional goods have been mattress-like bodies of filler such as reprocessed cotton fibers covered by canvas and strapped to the post to be protected. It is not uncommon for injuries to be caused by body contact with such padding due to its relative lack of resiliency, its precompression where straps bind it to the protected post, and the surface harshness of its covering material.

SUMMARY OF THE INVENTION

There is provided in accordance with the most preferred described embodiment of the invention a stack of tubular right circular cylindrical bodies of resilient foamed plastic material, each having an adherent coating of flexible plastic-based paint. Each body is split along a radiating, longitudinal axis-containing plane and provided with cooperating fasteners within the split to permit easy assembly of the padding about a goal post standard. The color of the flexible coating on adjacent bodies may be different, e.g., to match school colors. A preferred composition is polyurethane plastic foam used in conjunction with a polyurethane-based paint. The exterior of the bodies may be an appropriately colored integral skin on the foamed bodies.

This product overcomes many of the drawbacks of the prior art padding because it is quite resilient, its cover has a less harsh surface, and it has no areas of initial precompression to the detriment of resiliency, because of the novel manner in which it is removably secured on the goal post standard. Note that the individual bodies may be interchanged and/or individually replaced.

The principles of the invention will be further hereinafter discussed with reference to the drawing wherein a preferred embodiment is shown. The specifics illustrated in the drawing are intended to exemplify, rather than limit, aspects of the invention as defined in the claims.

BRIEF DESCRIPTION OF THE DRAWING

FIG. **1** is a perspective view of a single curved standard football goal post showing the third of a stack of three goal post padding bodies being emplaced;

FIG. **2** is a longitudinal cross-sectional view of one of the goal post padding bodies of FIG. **1**; and

FIG. **3** is a top plan view of the goal post padding body of FIG. **2.**

DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENT OF THE INVENTION

In FIG. **1** there is shown a single curved standard football goal post **10** of the kind sold under the trademark Telegoal and currently used by National Football League teams, as well as by other professional, college and high school teams. It is the subject of U.S. Pat. No. D212,372. Generally, the curved single standard **12** of this post is of uniform diameter throughout and does not curve very much from verticality until it reaches past 6 feet above ground level. The standard **12** is generally either 4 or 6 inches in outer diameter in order to provide the goal post with sufficient structural rigidity to keep it from swaying significantly in breezes normally encountered on football playing fields during game time.

Shown disposed about the standard at its generally vertical base portion **14** is a stack of tubular, right circular cylindrical goal post padding bodies **16.** In the instance depicted, there are three such bodies **16** in the stack, with the final, uppermost such body shown being emplaced. Each of these bodies measures approximately 2 feet high by about 15–18 inches in outer diameter and has an internal throughbore **17** whose interval diameter substantially matches that of the standard about which it is installed, e.g., about 4 or 6 inches in internal diameter.

Each body **16** has flat annular upper and lower end surfaces **18,20** and a radially directed split **22** which proceeds between the internal and external peripheral surfaces of the respective body and between the end surfaces **18,20** thereof substantially along a radiating plane containing the longitudinal axis of the respective body.

The bodies **16** are each installed upon and removed from the base of the goal post standard by flexing the respective body **16** to open the split **22** sufficiently to laterally pass the base of the standard therethough.

In order to ensure that bodily contact with the bodies does not flex them sufficiently to push them off the standard, cooperative securement means **24,26** are provided within the split upon the opposed surfaces **28,30.** By preference, the securement means **24,26** respectively comprise approximately 3 inch × 3 inch pads of Velcro fastener fleece and hooks. This type of securement has the virtue that it is relatively flat, nonmetallic and so constructed that it may be fastened by adhesives in appropriately formed shallow recesses **32** in the surfaces **28,30** so the interconnectable fastener means thereof are substantially flush with the surfaces **28,30.** Accordingly, when the fasteners **24,26** are mutually secured, the split **22** is effectively closed, without the presence of angularly directed stress trying to open the body at the split, or to distort the body in a sense to spread the split **22.**

By preference, the bulk **36** of each body **16** consists of foamed synthetic plastic resin which is energy absorbent, yet resilient, and covered by an unfoamed integrally formed skin **38** of the same composition. Although dye compositions are known for coloring such plastic materials throughout their bulk, the relatively great volume of the bodies **16** relative to their surface areas would cause much of such dye to remain forever unobserved, so it is currently preferred to utilize undyed plastic material, and to apply, e.g., by spraying, dipping or the like, an adherent, resilient coating **40** of plastic-based colored paint to the bodies to provide the appropriate exterior coloration thereof. This also provides a constructional advantage in that the bodies **16** may be fabricated in an uncolored state on an assembly line basis when it is still unknown what exterior color-

ation the ultimate purchaser may wish the bodies to exhibit.

Generally, the weight of the bodies is sufficient to ensure that they will not be separated vertically from one another to any detrimental degree by body contact. However, additional cooperative Velcro fasteners or the like **42** may be similarly partly embedded in the annular ends **18,20** to secure the bodies **16** to one another. If three such fasteners are provided on each end at 120° intervals, the splits **22** may be angularly staggered from body to body. The splits **22** are generally best disposed toward the back side of the goal post, since body contact with the padding generally predominates from the playing field side of the goal posts.

Although three 2 inch high bodies **22** are shown constituting the padding for one goal post and a padding height of about 6 feet is a practical necessity where the game to be played will be played by adult humans, a different number of different height bodies **22** which cumulate to a different total height could be employed without departing at all from the principles of the invention. For instance, from one to six such bodies might be used to cumulate to a height of from 4 to 8 feet.

The present inventors are not chemists and understand little chemistry, but are strong believers in the privilege and capacity of innovating persons to utilize synthetic materials innovated by persons who do understand chemistry, to construct novel products. Thus, the present inventors have an appreciation for the mechanical properties of resiliency, energy absorbency, durability, lightness in weight and conveniency of the product of their innovation but would have to rely upon the knowledge of those in other fields of technology in respect to the chemistry of the product.

By preference, the product is made of polyurethane foam and coated with polyurethane paint. A foamable composition which has proven acceptable is a system manufactured by M & R Plastics, and utilized in accordance with the manufacturer's label instructions, a copy of which is being concurrently filed in the Patent Office with this application. A polyurethane paint composition which has proven acceptable is a system manufactured by Dexter-Midland, and utilized in accordance with the manufacturer's label instructions, a copy of which is being concurrently filed in the Patent Office with this application. The foam has a density of about 6 pounds per cubic foot and can stand being repeatedly hit by football players while they are running or being tackled thereagainst, yet will substantially recover its original size and shape, with its coating substantially intact over the equivalent of eight seasons of normal professional football playing, at temperatures in the range of −40° – 150° F., assuming proper care (i.e., placed in storage when not being used).

Due to the modular nature of the preferred embodiment, the padding bodies may be switched to match the team colors or jersey colors, for shared fields. For instance, the blue and gold of a school's varsity team and the gold and blue of its junior varsity team can be used as a basis for exchanging and/or replacing one or more of the padding bodies.

It should be apparent that the padding of the invention may also be used on two-legged goal posts and on other one-legged goal posts than the one depicted.

It should now be apparent that the goal post padding as described hereinabove possesses each of the attributes set forth in the specification under the heading "Summary of the Invention" hereinbefore. Because the goal post padding of the invention can be modified to some extent without departing from the principles of the invention as they have been outlined and explained in this specification, the present invention should be understood as encompassing all such modifications as are within the spirit and scope of the following claims.

What is claimed is:

1. A goal post padding body comprising:

a tubular body of resilient, foamed synthetic plastic material having a throughbore axially thereof, and having a resilient, highly colored covering adhered on the exterior thereof; means defining a split in said body, running from end to end thereof and from the throughbore thereof to the exterior thereof defining two split surfaces of said body; and securement means within said split and at least partly recessed in said surfaces for releasably connecting the two split surfaces to one another with the split remaining substantially completely closed.

2. The goal post padding body of claim **1** wherein the securement means are constituted by at least one patch each of interengageable hooks and fleece, of the kind sold under the trademark Velcro, secured upon said surfaces.

3. The goal post padding body of claim **2** wherein the body and covering are made of polyurethane plastic material.

4. The goal post padding body of claim **3** wherein the covering is constituted by polyurethane paint.

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