Feb. 16, 1932. N. J. RICH 1,845,558

MARKING PANEL

Filed Nov. 8, 1930

Fig. 1

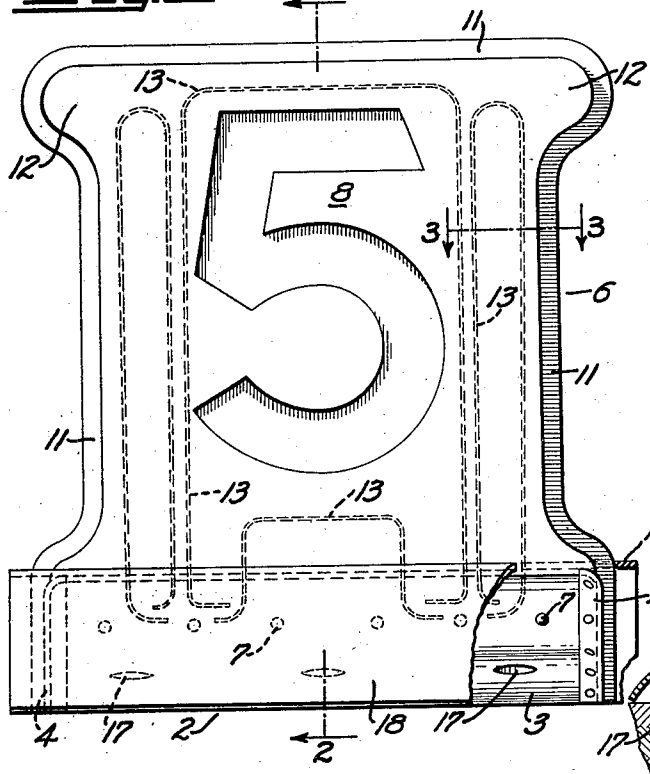
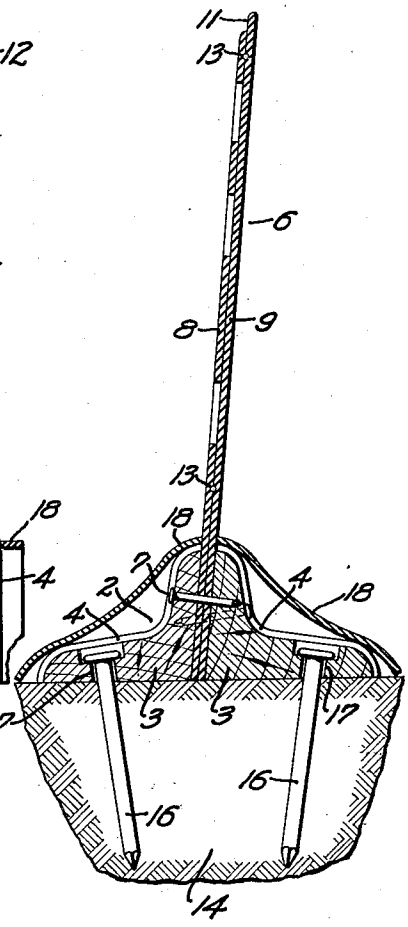


Fig. 2



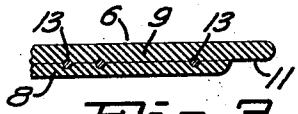


Fig. 3

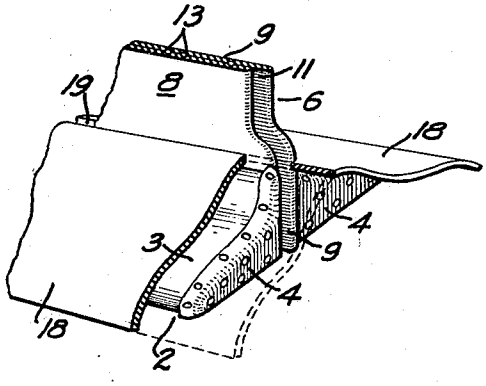


Fig. 4

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UNITED STATES PATENT OFFICE

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MARKING PANEL

Application filed November 8, 1930. Serial No. 494,340.

My invention relates to a marking panel, and particularly to such a panel for marking the boundary or guide lines of an athletic field, such as the yard lines of a football gridiron.

It is among the objects of my invention to provide a marking panel with which a player may forcefully collide without danger of receiving an injury.

Further objects of my invention include the provision of a marking panel which will resist displacement from its marking position; and which will withstand repeated collisions without deterioration.

A still further object of my invention is the provision of a portable marking panel adapted to be removably secured in position, so that when not in use the marking panel may be readily removed and stored for safe keeping.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of my invention. It is to be understood that I do not limit myself to this disclosure of species of my invention, as I may adopt variant embodiments thereof within the scope of the claim.

Referring to the drawings:

Figure 1 is a side elevation of the marking panel embodying my invention; a portion of the structure is omitted from the view to disclose clearly the construction.

Figure 2 is a vertical sectional view of the marking panel, taken in a plane indicated by the line 2—2 of Figure 1. The marking panel is shown secured to the ground.

Figure 3 is a fragmentary horizontal sectional view of my marking panel, taken in the plane indicated by the line 3—3 of Figure 1.

Figure 4 is a fragmentary perspective view illustrating a portion of the base construction of the marking panel of my invention. A portion of the structure is omitted from the view to disclose clearly the construction.

In many sports, and particularly in the popular game of football, the nature of the game is such that the players are constantly exposed to the infliction of injuries, during the execution of the plays. Due to this, it is highly desirable to remove all external hazards or sources of injury. On a football field, it is customary to mark the yard lines, by signs arranged adjacent the side lines of the gridiron. Heretofore, it has been the practice to make these panels of non-resilient or rigid materials, such as metal, and players are constantly being severely injured by their presence. The marking panel of my invention is designed to overcome this potential hazard, since a player may forcefully collide therewith without danger of injuring himself. At the same time, my marking panel will advantageously indicate to the spectators as well as the players and officials, the position of the ball.

In terms of broad inclusion, the marking panel of my invention comprises a base. A sheet of flexible material, readily yieldable under impact, is secured to the base, and has preferably inscribed on both sides thereof a number or other designating index. Preferably, the marking panel is portable and the base is adapted to be removably secured, in any desirable position, to the athletic field, so that the marking panel may be readily installed, and then removed and stored for safe keeping when not in use. The sheet of flexible material is adapted to project above the surface of the field, so as to be readily visible to all concerned. Tabs are preferably provided on the exposed corners of the sheet, and the exposed edges of the sheet are preferably more flexible and yieldable than the body of the sheet, to reduce the hazard of injury if one should strike these parts. Resilient reinforcing means are also preferably provided to give added rigidity to the sheet and hold it

in upright position, without destroying its deflectable character.

In greater detail, the marking panel of my invention comprises a base 2, preferably formed of two pieces of relatively soft molding material 3, such as rubber or soft wood, of generally triangular cross section. The exposed corners and edges of the molding 3 are preferably rounded, so as to avoid any sharp edges which might cause injury to one striking the base. Strips 4 of resilient material, such as soft sponge rubber, are preferably secured over the exposed end edges and sides of the base to provide further protection against injury by one hitting these parts. The panel includes a sheet 6 of flexible material, such as rubber, readily yieldable under impact. Preferably, the sheet 6 is of general rectangular shape, and is suitably secured, adjacent its bottom, between the strips of molding 3, by means of nails 7. Preferably the surfaces of the molding 3, contacting with sheet 6, are inclined; so that the sheet may slant slightly in upright position, in a direction away from the spectators. This is to provide ready visibility to those seated high up in the stadium seats.

Sheet 6, preferably, comprises a plurality of layers of rubber secured together, preferably by vulcanization. One of these layers 8, preferably the one visible to the spectators, has a predetermined yard line numeral cut therein; so as to enhance the readability of the numeral to the spectators, who are furthest away from the field. The other layer 9 is preferably imperforate; and one of the layers 8 is preferably of lesser area than the other layer 9, so as to provide side edges 11 of a single thickness. This makes the top and side edges of the sheet 6 more flexible and yieldable than the sheet body; thus minimizing danger of injury, if a player should strike the edges of the sheet first.

In order further to minimize danger of injury, the upper or exposed corners of the sheet 6 are made more flexible than the body thereof by being formed as projecting tabs 12 having their edges curved, to avoid sharp corners which might otherwise cause serious injury. As another safeguard, one of the layers 9 of sheet 6 extends beyond the end sides of the base 2, to provide a protecting cushion if one should happen to collide with the base at this portion thereof. While the described manner of making the exposed corners and edges of the sheet more flexible than the sheet body is a convenient method, it is apparent the same result may be obtained in other ways, as, for example, by making the tabs and edges of softer and more yieldable rubber than the sheet body.

For the purpose of aiding the sheet 6 to maintain an upright position, resilient means is preferably provided. As best shown in Figures 1 and 3, resilient strips of wire 13 are preferably employed for this purpose, being firmly secured between the layers 8 and 9 of the sheet 6. This may be done by placing the wires, in proper position, between the layers 8 and 9 prior to their being vulcanized together. The wires are so bent and arranged between the layers of the sheet, as not to be visible through the cut portion forming the indicating numeral on layer 8. The wires 13 are bent in loops, and the ends are positioned adjacent the bottom of sheet 6 between the pieces of molding 3 of the base 2, the loops being adjacent the top of the sheet. This arrangement prevents the ends of the wire from being poked through one of the rubber layers, and thereby injuring a person who might happen to forcefully collide with the sheet.

As illustrated in Figure 2, the base 2 may be secured to the ground 14, by means of long spikes 16 driven through suitably positioned apertures 17 in the base. The marking panels may thus be removably positioned at any selected place, preferably at the end of the yard lines and adjacent the side lines. When the game is over and it is no longer desired to use the marking panels, it is apparent that they may be readily removed and stored for safe keeping.

Preferably, the entire base 2 is covered by a cushioning apron, such as a thick sheet 18 of soft sponge rubber. The sheet 18 is provided with an elongated slot 19 adapted to slip over the top edge of sheet 6. The apron further protects the player from injuring himself, if he should happen to strike the base a forceful blow.

For the purpose of illustration, the index or number 5 is shown to indicate the 5 yard line of a football field. It is obvious that other predetermined numerals may be used on the markers in accordance with the yard line desired. The numeral formed by the cut in layer 8 is painted a preselected color, and the other side of the sheet 6 has a similar numeral painted therein. Preferably, the numerals are painted one color and the body of the sheet painted another color, to provide the color combination of the school or college.

While rubber is preferably used for the material of sheet 6, due to its elastic, readily yieldable, and durable properties, it is to be noted that other flexible materials such as rubberized fabric, or fabric alone may be used. In the latter case, the flexible and resilient reinforcing wire 13, or other resilient reinforcing means, would serve to hold the sheet in the upright position.

From the preceding description, it is apparent that if a player chances to run, fall or in any manner collide with the marking panel of my invention, he will not be injured, because the flexible sheet will readily give way under the impact. Furthermore, after being struck, the sheet will return to its nor-

mally upright position due to its flexibility and resiliency.

I claim:

A marking panel comprising a base, a sheet built up of a plurality of layers of flexible material secured together and to the base, and resilient wire secured in a loop between said layers, the ends of said wire being adjacent the base.

In testimony whereof, I have hereunto set my hand.

NEVILLE J. RICH.