

Aug. 9, 1932.

J. S. KOTLARZ
FOOTBALL GAME INDICATOR

1,870,515

Filed April 12, 1932 4 Sheets-Sheet 1

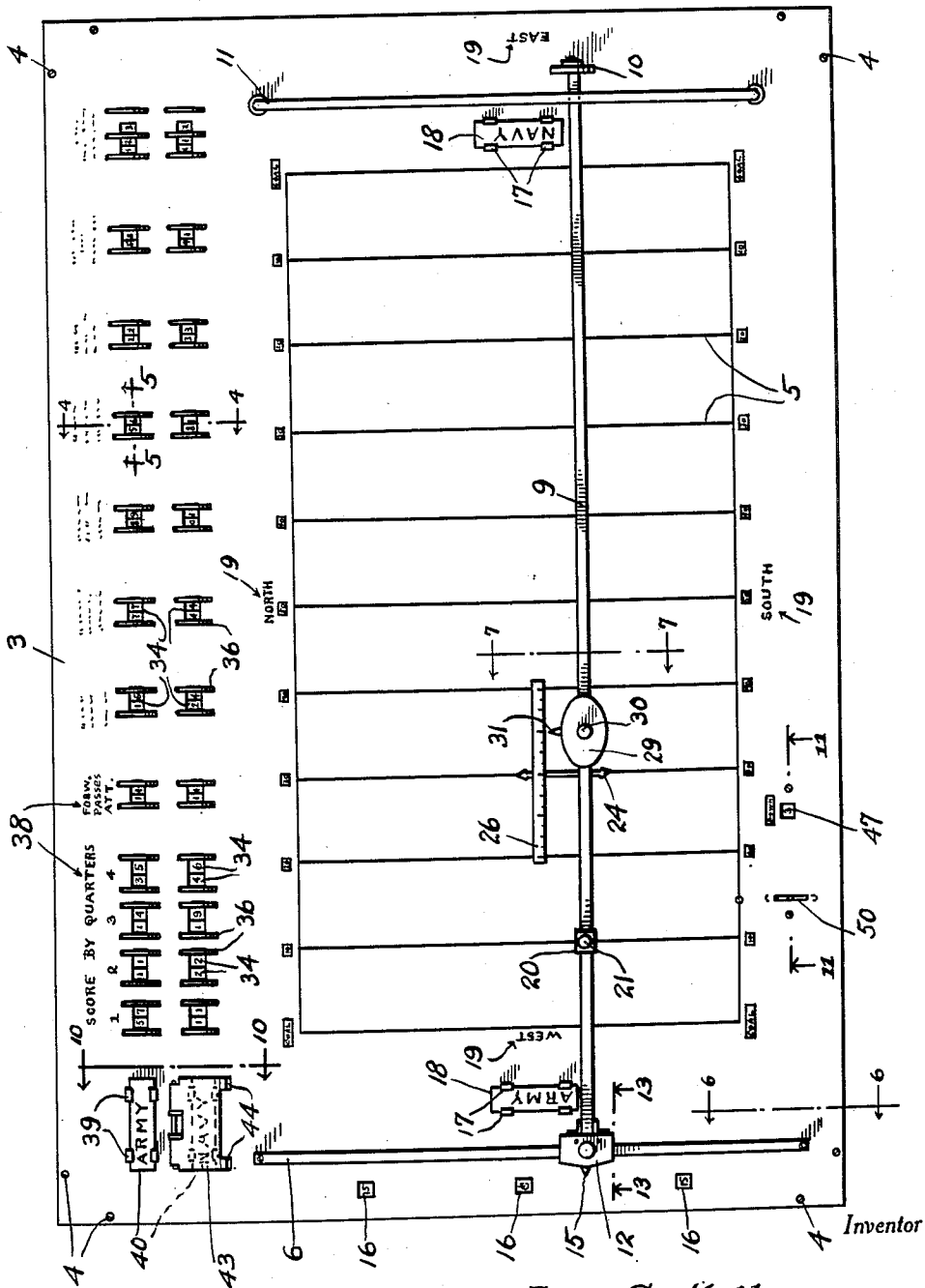


Fig. 1.

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4 Sheets-Sheet 2

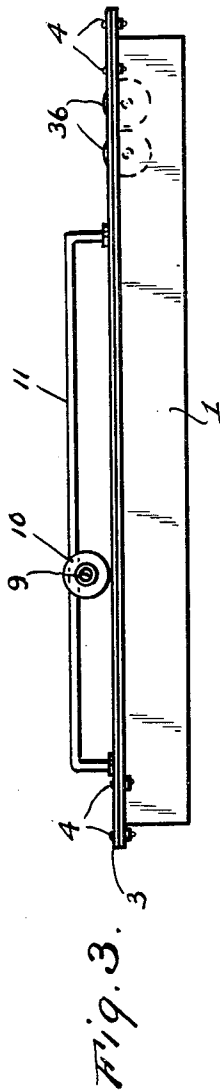
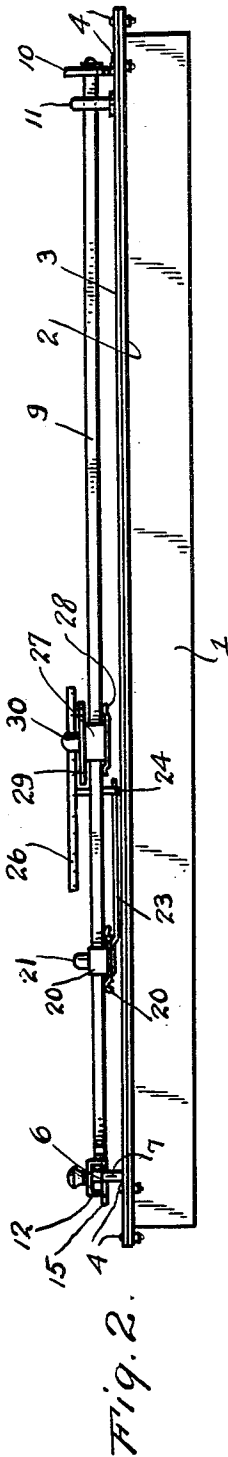


Fig. 5.

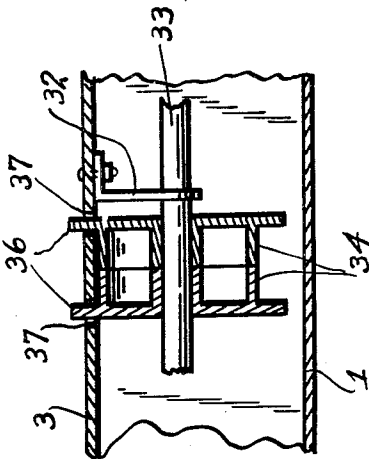
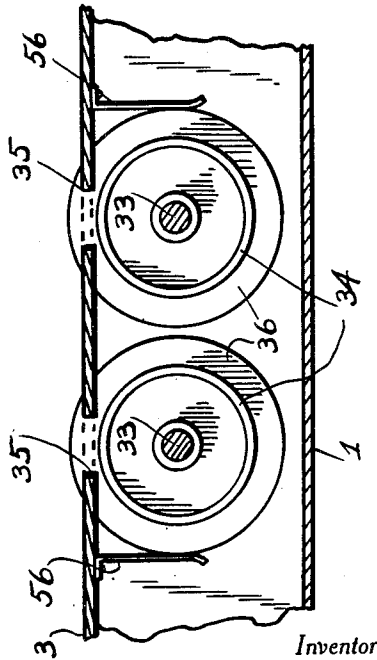


Fig. 4.



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4 Sheets-Sheet 3

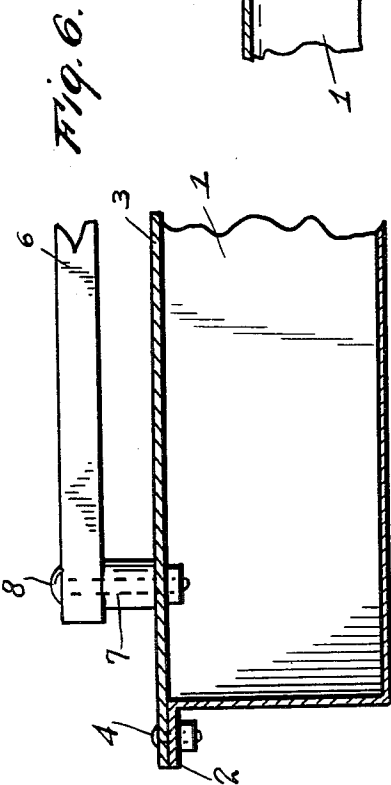
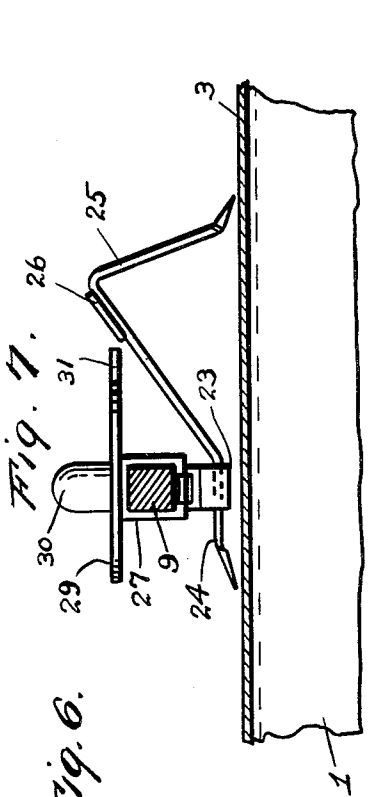


Fig. 8.

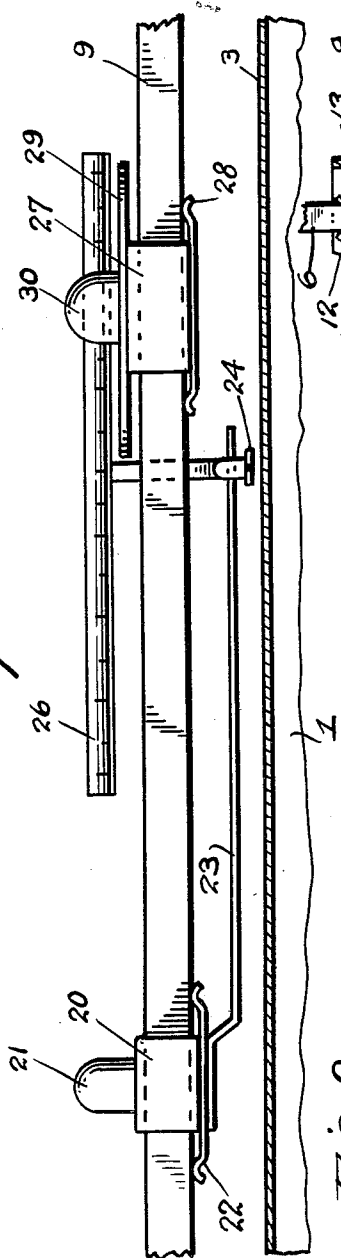
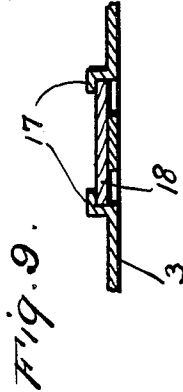
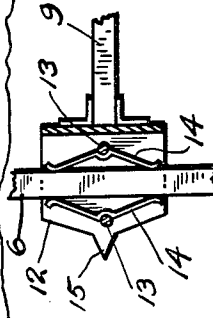


Fig. 14.



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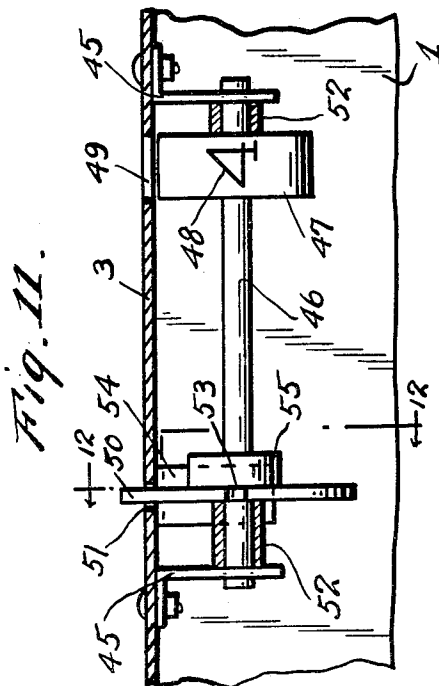
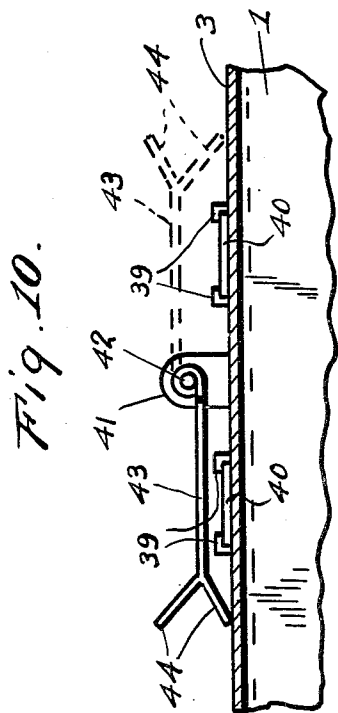
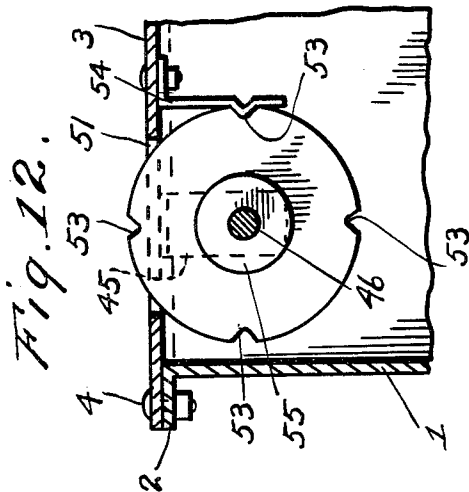
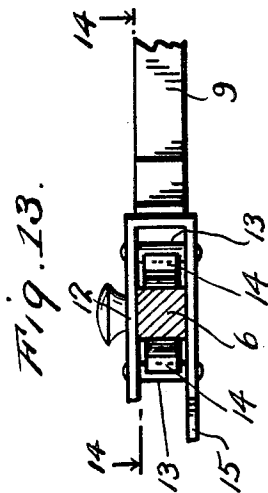
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FOOTBALL GAME INDICATOR

Application filed April 12, 1932. Serial No. 604,814.

The present invention relates to a football game indicator for use particularly by radio listeners and has for its primary object to provide, in a manner as hereinafter set forth, an indicator of this character embodying a novel construction, combination and arrangement of parts through the medium of which a game which is being broadcast may be visualized, the position of the ball indicated after the completion of each play and a record kept of important points of the game, such as the number of downs, the number of forward passes attempted and completed or intercepted, the number of yards gained, etc.

Another very important object of the invention is to provide a football game indicator of the aforementioned character including novel means for indicating the yardage gained by a team after it has gained possession of the ball and for indicating how many yards will have to be made to complete the usual ten yards, making a first down for said team.

Other objects of the invention are to provide a football game indicator of the character described which will be simple in construction, strong, durable, efficient and reliable in use, attractive in appearance and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a view in top plan of a football game indicator in accordance with the present invention.

Figure 2 is a view in side elevation thereof.

Figure 3 is a view in end elevation of the game indicator.

Figure 4 is a view in vertical transverse section, taken substantially on the line 4—4 of Figure 1.

Figure 5 is a view in vertical longitudinal section, taken substantially on the line 5—5 of Figure 1.

Figure 6 is a view in vertical transverse

section, taken substantially on the line 6—6 of Figure 1.

Figure 7 is a view in vertical transverse section, taken substantially on the line 7—7 of Figure 1.

Figure 8 is a view in vertical longitudinal section through an intermediate portion of the playing field, showing, in side elevation, the ball indicator and the "ten yard" indicator.

Figure 9 is a detail view in vertical longitudinal section through one of the team indicating cards, showing the means for securing the same in position.

Figure 10 is a view in vertical transverse section, taken substantially on the line 10—10 of Figure 1.

Figure 11 is a view in vertical longitudinal section, taken substantially on the line 11—11 of Figure 1.

Figure 12 is a view in vertical transverse section, taken substantially on the line 12—12 of Figure 11.

Figure 13 is a view in vertical longitudinal section, taken substantially on the line 13—13 of Figure 1.

Figure 14 is a view in horizontal section, taken substantially on the line 14—14 of Figure 13.

Referring now to the drawings in detail, it will be seen that the reference numeral 1 designates a casing which is open at its top and which is provided with an external flange 2 at its top. A flat board 3 is mounted on top of the casing 1 and secured by bolts 4 passing therethrough and through openings provided therefor in the flange 2. The casing 1 and the board 3 are preferably formed of metal, but, of course, may be of any suitable material. The board 3 has defined thereon in spaced relation to its edges a football field 5.

Mounted transversely on the board 3 adjacent one end of the field 5 is a rod 6 of polygonal cross section which is secured in elevated position by the spacers 7 and the bolts 8. The reference numeral 9 designates a laterally shiftable rod of polygonal cross section which extends longitudinally above the field 5 and has one end slidably connected

to the rod 6 and its other end supported by a roller 10, said other end being operable beneath a substantially U-shaped guard 11 which is mounted transversely on the board 3 adjacent the end of the field 5 which is remote from the rod 6. The guard 11 prevents the adjacent end of the rod 9 from being raised. The rod 9 is slidably connected to the rod 6 through the medium of a metallic yoke 12 secured on one end of said rod 9 and which straddles said rod 6. Vertical pins 13 extend between the sides of the yoke 12 in spaced relation to the vertical sides of the rod 6 and engaged with the pins 13 are the intermediate portions of the angular springs 14 having their end portions slidably engaged with the rod 6. The springs 14 provide means for frictionally retaining the rod 9 in laterally adjusted position while at the same time permitting limited swinging movement of said rod 9. A pointer 15 is formed integrally with the yoke 12 and is cooperable with the yard indicating numerals and indicia 16 on an adjacent portion of the board 3. Fingers 12 are struck up from the board 3 adjacent the ends of the field 5 for retaining the slidably insertable and removable team indicating cards 18. The cards 18 indicate which goal each team is defending. The board is provided with indicia indicating the east and west goals and also the north and south sides of the field, as designated by the reference numeral 19.

Slidably mounted on the rod 9 is a sleeve 20 having a knob or lug 21 rising therefrom to facilitate actuating said sleeve. A spring 22 is mounted on the lower side of the sleeve 20 and has its end portions engaging the rod 9 for frictionally securing said sleeve in adjusted position. A resilient arm 23 is also fixed to the lower side of the sleeve 20 and extends longitudinally beneath the rod 9 and has mounted transversely on its free end portion a double pointer 24 having an angular portion 25 upon which is fixed a longitudinally extending, graduated yardage marker 26.

Another sleeve 27 is slidably mounted on the rod 9 and is frictionally secured in adjusted position by a spring 28 mounted on the lower side of said sleeve 27 and having its end portions adjacent with said rod 9. A ball marker 29 is fixed on the upper side of the sleeve 27 and substantially simulates a football. A knob or lug 30 rises from the ball marker 29 to facilitate actuating the same. A pointer 31 projects from one side of the ball marker 29 and is associated with the yardage marker 26.

Brackets 32 depend from one of the longitudinal marginal portions of the board 3 in the casing 1 and mounted therein are the spaced, parallel, longitudinally extending shafts 33 on which are journaled the pairs of registering rollers 34 having the numerals 0 to 9, inclusive, on their peripheries observable through the openings 35 in said board 3. The rollers 34 are provided with the flanges 36 which project through the slots 37 provided therefor in the board 3 for digital operation. Indicia 38 is provided on the board 3 for designating the purpose of the various pairs of rollers.

The registering rollers are arranged in duplicate, longitudinal series and adjacent one end of each series fingers 39 are struck up from the board 3 for receiving and retaining the slidably insertable and removable team indicating cards 40. Gears 42 rise from the board 3 between the cards 40 and extending between said gears is a shaft 42 upon which is mounted for swinging movement in a vertical plane a screen 43 for selectively concealing the cards 40. Diverging fingers 44 are provided on the free end of the screen 43 for engagement with the board 3 for supporting said sleeve in elevated position, as illustrated to advantage in Figure 10 of the drawings. In using the device, the name of the team which is on the offensive or in possession of the ball is left exposed while the team which is on the defensive is concealed by the screen 43.

Depending from the other longitudinal marginal portion of the board 3 in the casing 1 are the bearings 45 in which a shaft 46 is journaled. Fixed on the shaft 46 is a roller 47 having "down" indicating numerals 48 on its periphery which are observable through an opening 49 in the board 3. Also fixed on the shaft 46, in spaced relation to the roller 47, is a disk 50 which projects through a slot 51 in the board 3 for digital operation. Collars 52 are mounted on the end portions of the shaft 46 and engageable with the bearings 45 for preventing longitudinal movement of said shaft. The periphery of the disk 50 is provided with the spaced notches 53 in which a spring 54 which depends from the board 3 is engageable for releasably securing said disk in the desired position. The spacing of the notches 53 conforms to the spacing of the numerals 48 on the roller 47. The notches 53 and the spring 54 provides means for facilitating stopping of the disk 50 at the desired positions. A collar 55 is also fixed on the shaft 46 and engaged with one side of the disk 50. Springs 56 (see Figure 4) depend from the board 3 and are engaged with the peripheries of the flanges 36 for frictionally securing the rollers 34 against rotation.

In use, the yardage marker 26 is moved to position one end thereof to the point above the field 5 where the ball is first put into play by the team which is on the offensive. The marker 29 is also shifted to dispose the pointer 31 at the same position. As the ball is advanced or as ground is lost, the marker 29 is shifted accordingly on the rod 9. It will thus be seen that the marker 29 cooperate with the marker 26 for indicating how many

yards have been gained by the team on the offensive and also how many more yards must be gained to total the required ten yards, thereby giving the team a first down. Should the required ten yards or more be gained, the markers 29 and 30 are again positioned at the point where the ball is to be snapped for the first play and the foregoing operation repeated.

As each down is made, it is indicated by actuating the roller 47 through the medium of the disk 50. Such points of interest, such as the scores made in each quarter, the number of forward passes attempted, the number of passes intercepted, the number of fumbles which are made, etc. are indicated through the medium of the rollers 34. When possession of the ball passes to the other team, the screen 43 is shifted to expose the name of said other team and to conceal the name of the team which has just lost the ball. By shifting the rod 9 laterally on the rod 6, the marker 29 may be located at any desired point relative to the field 5.

It is believed that the many advantages of a football game indicator constructed in accordance with the present invention will be readily understood, and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:—

1. A football game indicator comprising a board having a representation of a football field thereon, a rod extending longitudinally over the field, a yardage marker slidably mounted on the rod, and a ball marker slidably mounted on the rod and operatively associated with the yardage marker.

2. A football game indicator comprising a board having a representation of a football field thereon, a rod extending longitudinally over the field, an elongated, graduated strip slidably mounted on the rod longitudinally above the board and constituting a yardage marker, a ball marker slidably mounted on the rod, and a pointer projecting from the ball marker and operatively associated with the yardage marker.

3. A football game indicator comprising a board having a representation of a football field thereon, a rod extending longitudinally over the field, a sleeve slidably mounted on the rod, a resilient arm secured to the sleeve and extending longitudinally therefrom beneath the rod, a pointer mounted transversely on the sleeve and associated with the field, and a longitudinally extending yardage marker mounted on the pointer.

4. A football game indicator comprising a board having a representation of a football

field thereon, a rod extending longitudinally over the field, a sleeve slidably mounted on the rod, a resilient arm secured to the lower portion of the sleeve and extending therefrom longitudinally beneath the rod, a double pointer mounted on the free end portion of the arm, said pointer including a raised angular portion, a graduated strip mounted on the angular portion of the pointer and extending longitudinally with respect to the playing field, said strip constituting a yardage marker, and resilient means mounted on the sleeve and engaged with the rod for frictionally retaining the sleeve in adjusted position on said rod.

5. A football game indicator comprising a board having a representation of a football field thereon, a rod extending longitudinally over the field, a sleeve slidably mounted on the rod, a ball marker fixed on the sleeve, and a spring fixed on the sleeve having its end portions engaged with the rod for frictionally securing the sleeve in adjusted position on said rod.

6. A football game indicator comprising a board having a representation of a football field thereon, a rod extending longitudinally over the field, a sleeve slidably mounted on the rod, a ball marker fixed on the sleeve, a knob rising from the ball marker, a pointer projecting from the ball marker, and a spring fixed on the sleeve having its end portions engaged with a rod for frictionally securing the sleeve in adjusted position on said rod.

7. A football game indicator comprising a board having a representation of a football field thereon, a rod mounted transversely on the board adjacent one end of the field, a rod extending longitudinally over the field and having one end slidably connected to the transverse rod for lateral adjustment, and markers slidably mounted on the longitudinal rod.

8. A football game indicator comprising a board having a representation of a football field thereon, a transverse rod mounted on the board adjacent one end of the field, a longitudinal rod extending over the field and having one end slidably supported on the transverse rod for lateral adjustment, marking means slidably mounted on the longitudinal rod, and a supporting roller journaled on the other end of the longitudinal rod having roller contact with the board.

9. A football game indicator comprising a board having a representation of a football field thereon, a transverse rod mounted on the board adjacent one end of the field, another rod extending longitudinally over the field and having one end slidably connected to the transverse rod for lateral adjustment, marking means slidably mounted on the longitudinal rod, a supporting roller journaled on the other end of the longitudinal rod and engaged with the board adjacent the other end

of the field, and a guard mounted transverse-ly on the board and extending above the free end portion of the longitudinal rod.

10. A football game indicator comprising
5 a board having a representation of a football field thereon, a transverse rod mounted on the board adjacent one end of the field, a rod extending longitudinally over the field, marking means slidably mounted on the longitudinal
10 rod, and means for slidably connecting one end of the longitudinal rod to the transverse rod.

11. A football game indicator comprising
15 a board having a representation of a football field thereon, a transverse rod mounted on the board adjacent one end of the field, a rod extending longitudinally over the field, marking means slidably mounted on the longitudinal rod, and means for slidably connecting
20 one end of the longitudinal rod to the transverse rod, the last named means including a horizontally disposed yoke fixed on the longitudinal rod and straddling the transverse rod, vertical pins mounted in the yoke adjacent opposite sides of the transverse rod, and
25 springs mounted in the yoke having intermediate portions engaged with the pins and end portions engaged with the transverse rod for frictionally securing the yoke in adjusted
30 position thereon.

12. A football game indicator comprising a board having a representation of a football field thereon, a transverse rod mounted on the board adjacent one end of the field, a rod
35 extending longitudinally over the field, marking means slidably mounted on the longitudinal rod and means for slidably connecting one end of the longitudinal rod to the transverse rod, the last named means including a
40 horizontally disposed yoke fixed on the longitudinal rod and straddling the transverse rod, vertical pins mounted in the yoke adjacent opposite sides of the transverse rod, and springs mounted in the yoke having inter-
45 mediate portions engaged with the pins and end portions engaged with the transverse rod for frictionally securing the yoke in adjusted position thereon, the board having yard indicating numerals extending in a
50 transverse series adjacent the transverse rod, and a pointer on the yoke associated with said numerals.

13. A football game indicator comprising
55 a board having a representation of a football field thereon, marking means associated with the field, series of registering means mounted on the board, team designating means on the board adjacent each series of registering units, and a screen shiftably mounted on the
60 board for positioning selectively over the team designating means.

14. A football game indicator comprising
65 a board, series of indicating units operatively mounted on the board, team designating means on the board adjacent each series of

the units, and a screen pivotally mounted on the board for positioning selectively over the team designating means.

15. A football game indicator comprising a board, spaced, parallel series of changeable indicating units operatively mounted on the board, a team indicating means mounted on the board adjacent one end of each of the series of units, and a screen pivotally mounted on the board between the team indicating means for positioning selectively over said team indicating means for concealing one of same.

16. A football game indicator comprising a casing, a board mounted on the casing, brackets depending from the board in the casing, spaced, parallel rods mounted in the brackets, the board having openings and slots therein above the rods, pairs of rollers journaled on the rods having numerals on their peripheries observable through the openings in the board, and flanges on the rollers projecting through the slots and providing means for actuating the rollers.

17. A football game indicator comprising a casing, a board mounted on the casing having openings and slots therein, brackets depending from the board in the casing, spaced, parallel rods mounted in the brackets beneath the openings and the slots, rollers journaled on the rods and arranged in pairs, said rollers having numerals on their peripheries observable through the openings in the board, flanges on the rollers projecting through the slots and providing means for actuating said rollers, and springs depending from the board in the casing engaged with the peripheries of the flanges for frictionally retaining the rollers against rotation.

18. A football game indicator comprising a casing, a board on the casing, bearings depending from the board in the casing, a shaft journaled in the bearings, the board having an opening therein above the shaft and further having a slot therein above the shaft, a roller fixed on the shaft having numerals on its periphery observable through the openings, a disk fixed on the shaft and projecting through the slot and providing means for actuating the shaft and roller.

19. A football game indicator comprising a casing, a board on the casing, bearing depending from the board in the casing, a shaft journaled in the bearings, the board having an opening therein above the shaft and further having a slot therein above the shaft, a roller fixed on the shaft having numerals on its periphery observable through the openings, a disk fixed on the shaft and projecting through the slot and providing means for actuating the shaft and roller, said disk having spaced notches in its periphery, and a spring mounted on the board and engageable in the notches for releasably securing the disk against rotation.

20. A football game indicator comprising a board having a representation of a football field thereon, a longitudinally extending strip constituting a yardage marker, and means for mounting the yardage marker for lateral and longitudinal adjustment above the football field.

In testimony whereof I affix my signature.
JOHN STANLEY KOTLARZ.

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