# United States Patent [19]

**Gerela**

[11] **3,897,948**

[45] **Aug. 5, 1975**


[54] **FOOTBALL PLACE-KICKING DEVICE**


[76] Inventor: **Roy R. Gerela,** 760-2D Carriage Rd., Pittsburgh, Pa. 15220



[22] Filed: **Nov. 16, 1973**

[21] Appl. No.: **416,587**

[52] **U.S. Cl.** ..... **273/55 B**

[51] **Int. Cl.**[2] ..... **A63B 67/00**

[58] **Field of Search** ..... 273/55 B



[56] **References Cited**

UNITED STATES PATENTS

| | | | |
|---|---|---|---|
| 3,105,686 | 10/1963 | Elsea | 273/55 B |
| 3,439,916 | 4/1969 | Kopp | 273/55 B |
| 3,762,706 | 10/1973 | Cavett | 273/55 B |



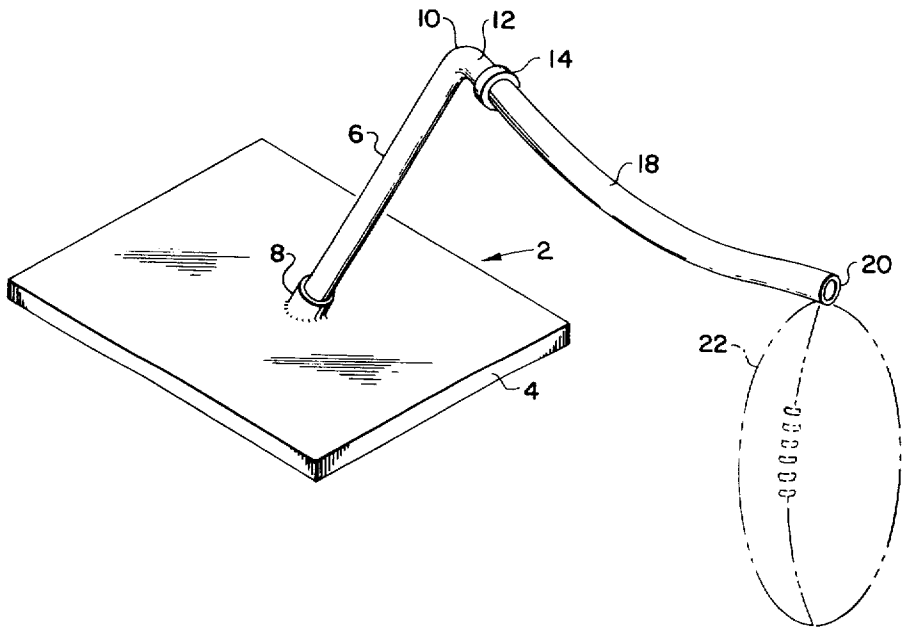
*Primary Examiner*—Richard J. Apley
*Assistant Examiner*—T. Brown
*Attorney, Agent, or Firm*—Robert D. Yeager, Esq.



[57] **ABSTRACT**

A football place-kicking device for holding a football in a substantially upright position on a playing surface. The device includes a base, a supporting shaft connected to the base and extending upwardly from the base at an angle thereto, and a semi-rigid arm mounted to the shaft at one end and having a free end projecting beyond the edge of the base to engage the top end of the football.


**3 Claims, 7 Drawing Figures**



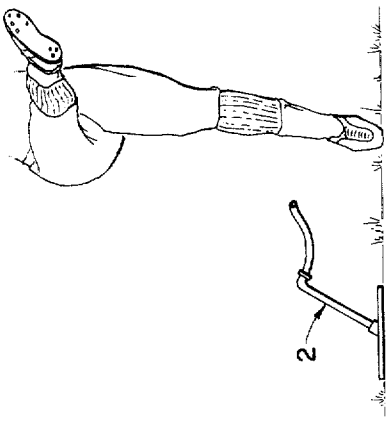


Fig. 4d

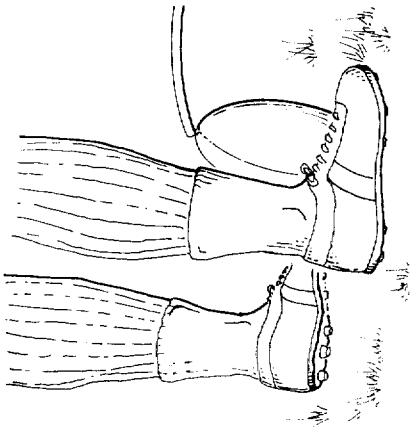


Fig. 4c

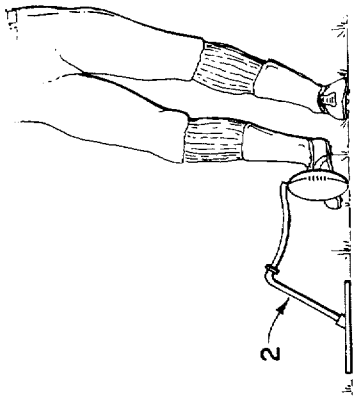


Fig. 4b

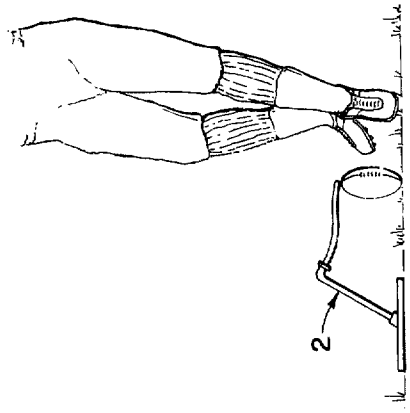


Fig. 4a

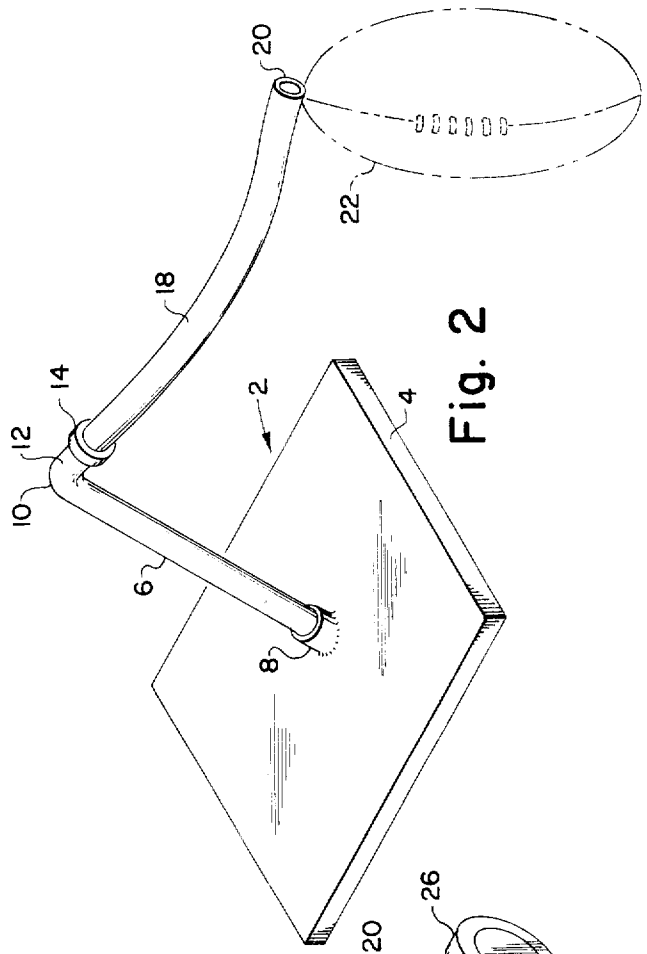



Fig. 2

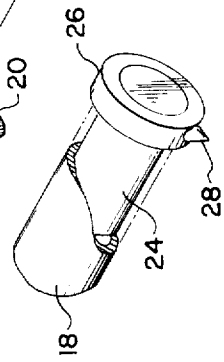



Fig. 3

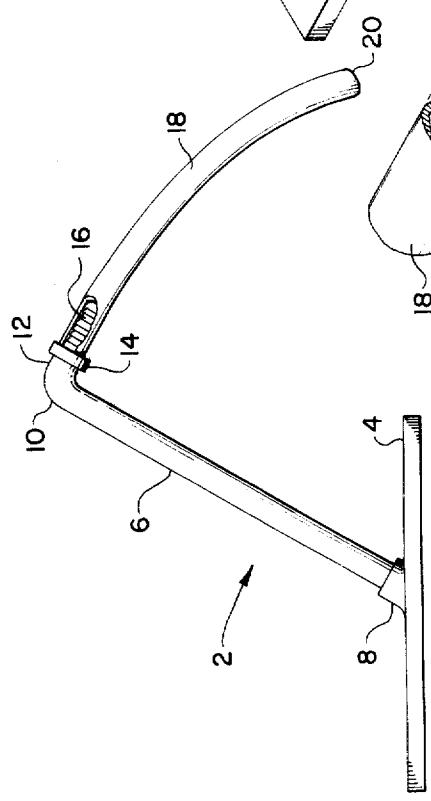



Fig. 1

# FOOTBALL PLACE-KICKING DEVICE

## BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a device for holding a football in position for place-kicking.

2. Description of the Prior Art

The sport of football, as played in the United States and Canada, has gained widespread popularity both among participants and spectators. The game has become refined to the point where specialists have developed in all phases of offensive and defensive play. One such phase is the art of place-kicking the football.

The place-kick is performed by resting one end of the football on the playing surface as in professional football or on a platform up to two inches in height as in collegiate and scholastic football; having one player steady the ball in a generally upright position by normally placing his index finger on the top end of the ball and applying slight downward pressure; and having another player kick the ball out of that "hold" by striking the ball with his foot. The place-kick is used to initiate play through the kick-off but the most important role of the place-kick is in scoring points either by a field goal or on the point after touchdown. These latter kicking maneuvers require extreme accuracy to obtain the correct azimuth and trajectory of the flight of the ball to cause it to pass between the uprights of the goal post.

Accordingly, a place-kicker must devote hours of time on a regular basis to practicing the place-kick in order to achieve and maintain the skills necessary for such accuracy. Such practice sessions would ordinarily require another player to serve as holder except that recently various devices have been employed to mechanically hold the ball in position for the kick. A mechanical holding device is useful in practice sessions only if the device closely simulates actual game conditions in which a player manually holds the ball as described above.

Representative of the available devices are U.S. Pat. Nos. 3,105,686; and 3,462,145. These prior art devices are suitable, however, only for fields having natural turf because they depend upon the insertion of prongs and the like into the turf for securely holding the device in place. The widespread adoption of artificial turf for football stadium playing surfaces has rendered these prior art supporting devices inoperable because the artificial surface cannot be punctured. Moreover, the construction of the prior art devices does not permit simulation of actual game conditions.

There is a further reason, however, for rejecting the prior art supporting devices even on natural turf. The forerunner of the modern place-kick was a maneuver called the "drop-kick". The drop-kick was performed by the kicker dropping the football on the ground in the upright position. As the lower end of the ball touched the ground, the kicker would strike the ball with his toe in a forwarding sweeping motion of his leg. The drop-kick evolved into what is known as a "straight-ahead" style place-kick in which, instead of dropping the ball, the ball is manually held by another player as described above and the kicker strikes the ball with his toe with a kicking motion in which the leg moves in a vertical plane corresponding to the plane of the desired flight path of the ball. The designers of the prior art devices for holding a football were concerned only with this



"straight-ahead" kicking technique and thus were able to include various types of structural components so long as the path of the kicker's foot as described was unobstructed.

A new style of place-kicking has now replaced in large measure the straight-ahead place-kick. This new kicking technique is called "soccer-style" because it derives from the traditional kicking motion used in kicking a soccer ball. In soccer-style kicking, the kicker approaches the ball from an angle to the desired line of flight of the ball rather than from directly behind it as in the straight-ahead style. The kicking leg describes a sweeping arc which lies in a plane that intersects the plane of the flight path of the ball at an angle; and the ball is kicked with the inside portion of the foot near the ball of the foot instead of with the toe.

Soccer-style kicking has revolutionized the field goal method of scoring in football because of the greater distance and accuracy afforded by the technique. Because of the difference in the path of the kicker's foot from that employed in the straight-ahead place-kick, the known football supporting devices present the hazard of injury to the soccer-style kicker and are, therefore, unsatisfactory for use in practicing soccer-style kicking. Consequently, a need for a place-kicking practice device suitable for use not only on an artificial surface but also in soccer-style kicking has existed and is met by the present invention.

## SUMMARY OF THE INVENTION

The present invention provides a portable football place-kicking device adapted to hold a football in a substantially upright position on a playing surface comprising: a base; a rigid shaft member connected to the base and extending upwardly from the base at an angle thereto; and an elongated semi-rigid arm mounted at one end to the shaft member at its upper end and having a free end projecting beyond the edge of the base to engage an upper end surface portion of the football. Preferably, the semi-rigid arm normally extends from the shaft at substantially a right angle thereto and is adapted to be deformed upwardly for engagement at its free end with the upper end surface portion of the football. In one embodiment, the present invention further comprises: means rotatably mounted to the free end of the semi-rigid arm for engagement with the recess formed in the upper end of the football.

Other objects and advantages of the present invention will become apparent from a consideration of the following detailed description thereof taken with the accompanying drawing.

## BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is an elevational view of the present invention with a portion broken away to illustrate details;

FIG. 2 is a perspective view of the present invention as it is used to hold a football;

FIG. 3 is a perspective view, partially broken away to illustrate details, of an attachment for use with the present invention; and

FIG. 4 consists of four views captioned (a), (b), (c), and (d), and is intended to sequentially illustrate the movements involved in performing a soccer-style place-kick.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the drawing, and particularly to FIGS. 1 and 2, there is shown a place-kicking device generally designated by the reference numeral 2. Place-kicking device 2 includes a base 4 designed to support the ball-holding components of the invention described hereinafter while resting upon a playing surface without being otherwise attached thereto. Accordingly, base 4 is preferably constructed of heavy metal or is suitably ballasted if constructed of lighter weight material such as plastic and the like. Base 4 is also dimensioned to provide a relatively large bottom surface in contact with the playing surface in order to counteract any tipping tendency caused by the ball-holding components which are canted from base 4.

Secured to base 4 and projecting upwardly at an angle thereto is supporting shaft 6 constructed of a rigid material such as metal, plastic and the like. Shaft 6 may be mounted to base 4 by means of a threaded socket 8 attached to base 4 and adapted to receive a threaded end of shaft 6 (not shown). Shaft 6 may also be formed integrally with base 4 if desired. As shown in the drawing, the included angle between base 4 and shaft 6 is approximately 60° but this angle may be varied as desired. The length of shaft 6 may be varied according to the angle of cant it makes with base 4 but should be of sufficient length such that the vertical distance from the upper end of shaft 6 to the playing surface exceeds the length of a regulation size football.

As shown in the drawing, the upper end of shaft 6 has an elbow 10 formed therein to provide an extension 12 at approximately a right angle to shaft 6. The longitudinal axis of extension 12 is directed downwardly at an angle of about 60° from the vertical and falls in substantially the same plane as the longitudinal axis of shaft 6.

Extension 12 of shaft 6 includes a flange 14 and terminates with a section 16 of reduced cross-section. Section 16 is adapted to snugly receive a tubular flexible arm 18. To aid in the frictional engagement between section 16 and the interior surface of arm 18, section 16 may be fitted with repeating truncated conical sections as shown in the broken-away portion of FIG. 1. Flange 14 serves as a stop means for end of arm 18. As will be understood by those skilled in the art, numerous other means may be utilized to mount arm 18 to shaft 6.

Arm 18 as shown in the drawings is tubular and constructed of a semi-rigid material. The term "semi-rigid" means being deformable but having a proclivity to resume an an original shape. An example of a material for use as arm 18 is a length of commonly available plastic garden hose of the type reinforced with nylon or polyester cord. Arm 18 may also be formed as a solid member from a suitable semi-rigid material such as hard rubber, plastic and the like; and may have a variety of cross-sectional configurations.

The length of arm 18 may vary but should be sized to be roughly equal to the length of shaft 6. Such a length will permit the football to be held by arm 18 a comfortable distance from base 4 without fear of interference therefrom. As shown in FIG. 1, it is preferable that arm 18 in its undeformed state be shaped to have a slight downward arcuate curve along its length to provide downward biasing against a football held by arm 18.

As shown in FIG. 2, a football 22 may be held in a generally upright position by deforming arm 18 upwardly and simply resting the free end 20 of arm 18 on the top end of the ball. The semi-rigid nature of the material of arm 18, together with its mounting point to shaft 6 being above the top end of the football 22, provides substantially point contact between the bottom surface of free end 20 and the top end of football 22. This feature of point contact simulates a manual holder. Furthermore, the semi-rigid nature of the material of arm 18 provides for the necessary stability of arm 18 in the deformed state to assure that the football will be held steadily after being positioned.

It has been found that the downward pressure applied to the ball by the tendency of arm 18 to assume its original shape is approximately equivalent to the pressure applied by a manual holder and this is a great advantage to the kicker in simulating game conditions. Depending upon the preference of the kicker and the conditions for the kick, the longitudinal axis of the football may be inclined from the vertical and still be effectively held in position by arm 18.

FIG. 3 shows an adaptor 24 formed in circular cross-section which may be inserted into the free end 20 of arm 18 and frictionally held there by any well-known means. Adaptor 24 is sized to permit it to be rotated within arm 18 to any desired position. The exposed end of adaptor 24 includes a flange 26 having a protrusion 28 formed thereon. The purpose of adaptor 24 is to permit insertion of protrusion 28 into the well-known recess which exists in the end of a football and thereby aid in the steadying of the ball at any desired angle of inclination.

The use of the place-kicking device of the present invention by a soccer-style kicker is illustrated in FIG. 4. In view (a) of that Figure, the kicker is seen approaching a football held by device 2. View (b) shows the moment of impact by the side of the kicker's foot against the ball. View (c) is an enlarged view of this same moment of impact taken from the rear. It will be noted that a relatively large surface area of the foot is in contact with the ball. This may be compared with straight-ahead style place-kicking where only a relatively small surface area available at the kicker's toe comes into contact with the ball. The difference in contact areas between the two styles seems to account for the greater accuracy achieved by soccer-style kickers. View (d) shows the follow-through of the kicker's leg after the ball is kicked.

The sequence of views in FIG. 4 clearly shows that the device of the present invention presents no obstructions to the kicker's foot or leg in executing the approach and kick. The arrangement of base 4, shaft 6, and arm 18 permit base 4 and shaft 6 to be spaced a safe distance from any area of movement of the kicker's foot. Semi-rigid arm 18 presents no more obstruction than would a manual holder's arm and hand. Moreover, the device rests directly on the playing surface and need not be attached thereto by prongs or the like. Therefore, the device may be used on artificial turf without damage to the playing surface and conveniently may be moved from place to place on the playing surface during a practice session. It is clear, of course, that the device of the present invention may be used equally well in the same way on natural turf.

It is apparent that the device of the present invention may be used by both right and left-footed kickers who

employ either the soccer or straight-ahead style kicking technique. It is further apparent that in using the device of the present invention the football may be placed either on the playing surface or on a kicking tee of any well-known type.

What is claimed is:

1. A portable place-kicking device for holding a standard dimensioned football in a substantially upright position on a playing surface comprising:

a generally horizontal base;

a rigid shaft member connected to said base and extending upwardly from said base to a height above said football in said substantially upright position, said shaft having a major portion at an acute angle to the plane of said base; and

an elongated semi-rigid arm mounted to said shaft member at its upper end, said arm having its free end extending downwardly toward said playing surface and projecting beyond the edge of said base to engage an upper end surface portion of said football in substantially single point contact; said arm being deformable but having a proclivity to resume an original shape.

2. The place-kicking device recited in claim 1 wherein:

said semi-rigid arm normally extends from said major portion of said shaft at substantially a right angle thereto and is adapted to be deformed upwardly for engagement at its said free end with said upper end surface portion of said football.

3. The place-kicking device recited in claim 1 which further comprises:

means rotatably mounted to said free end of said semi-rigid arm for engagement with the upper end of said football.

* * * * *