United States Patent

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[54] **FOOTBALL BLOCKING APPARATUS**
1 Claim, 4 Drawing Figs.

[52] **U.S. Cl.** **273/55**
[51] **Int. Cl.** **A63b 67/00**
[50] **Field of Search** 273/55; 73/379

[56] **References Cited**
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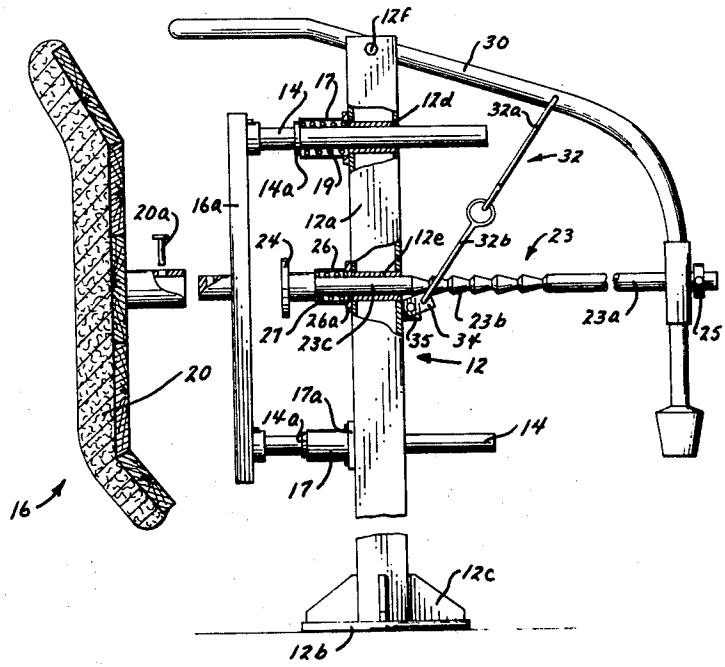
ABSTRACT: An athletic practice apparatus having particular adaptability for the game of football characterized by the movement of a blocking structure from a first position to a second position by reason of body contact, and when at such second position, a thrust member is released to move the blocking structure in the direction of the first position.



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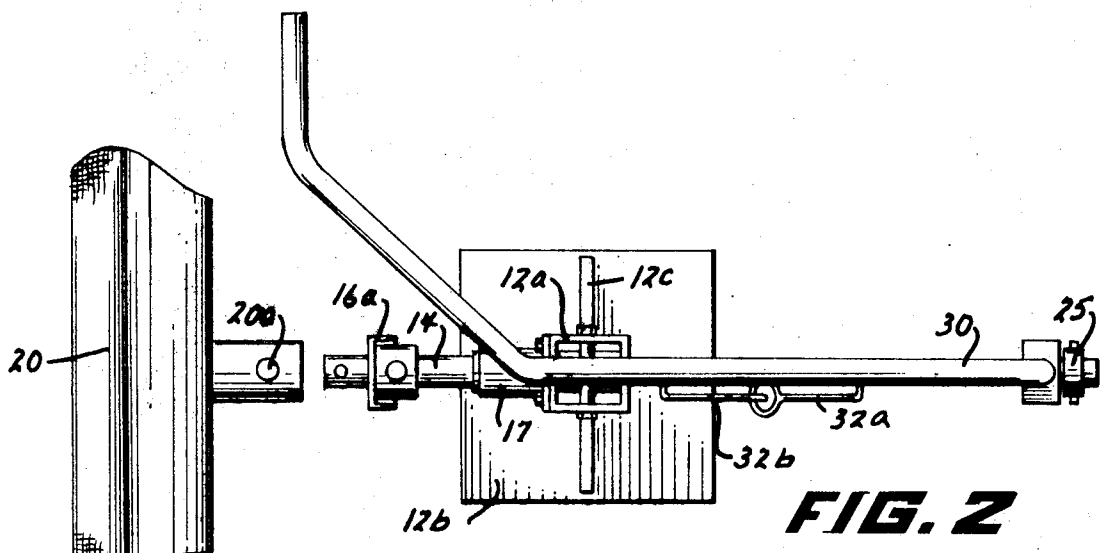

FIG. 2

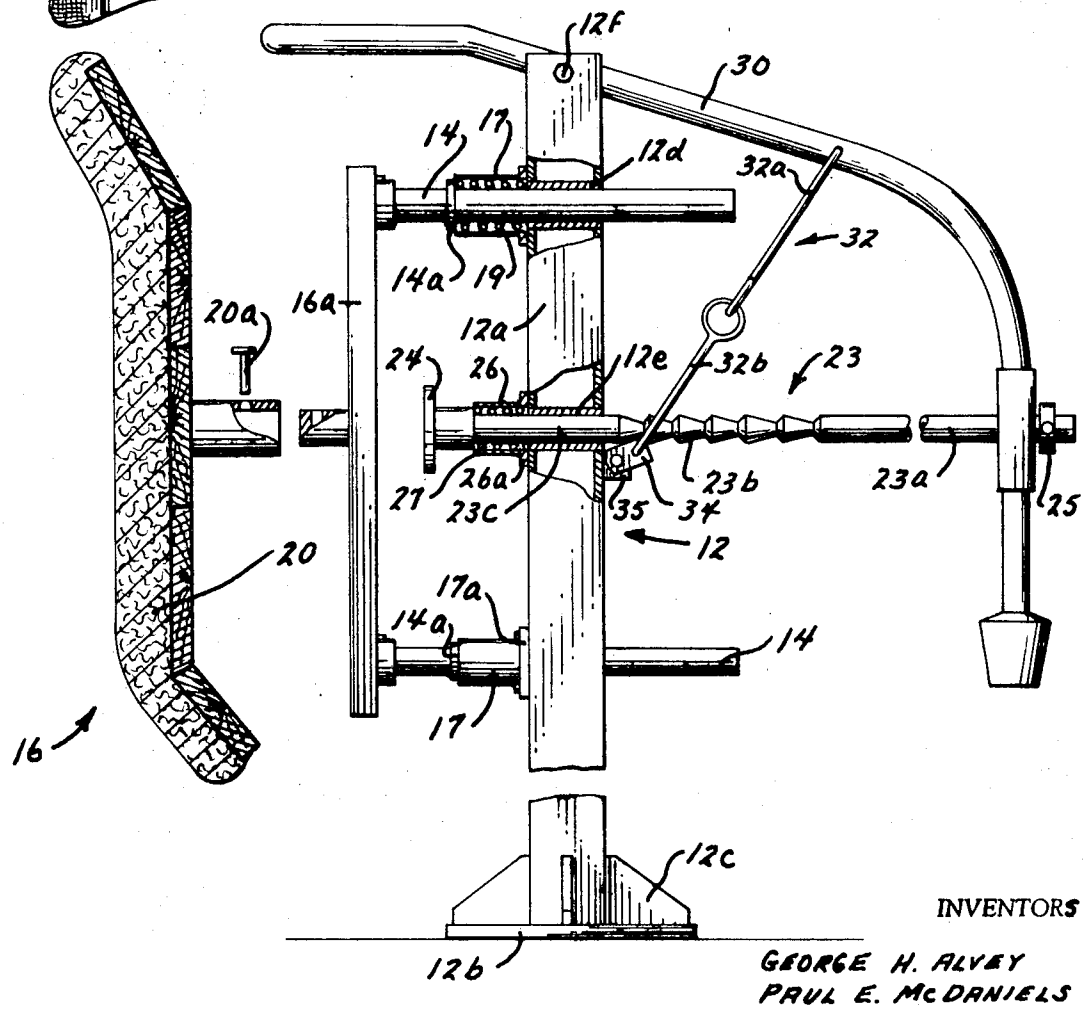

FIG. 1

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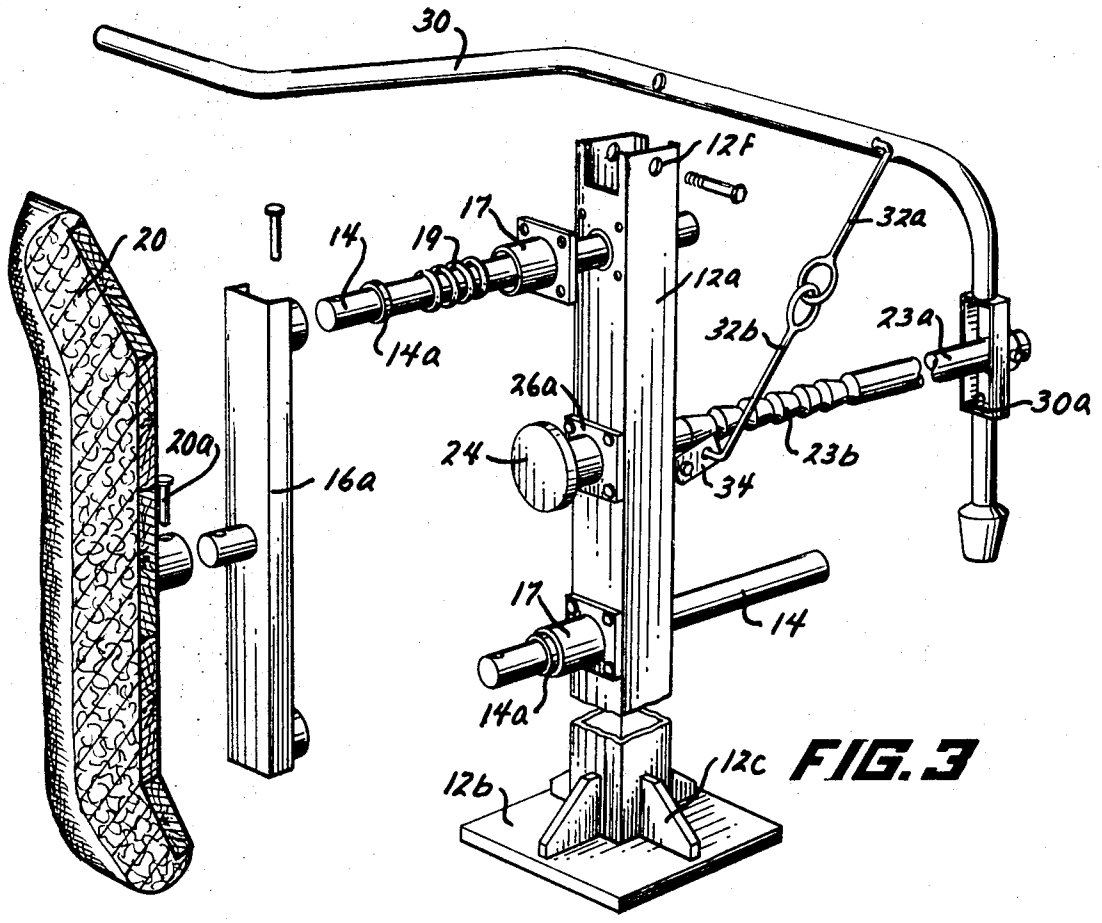

FIG. 3

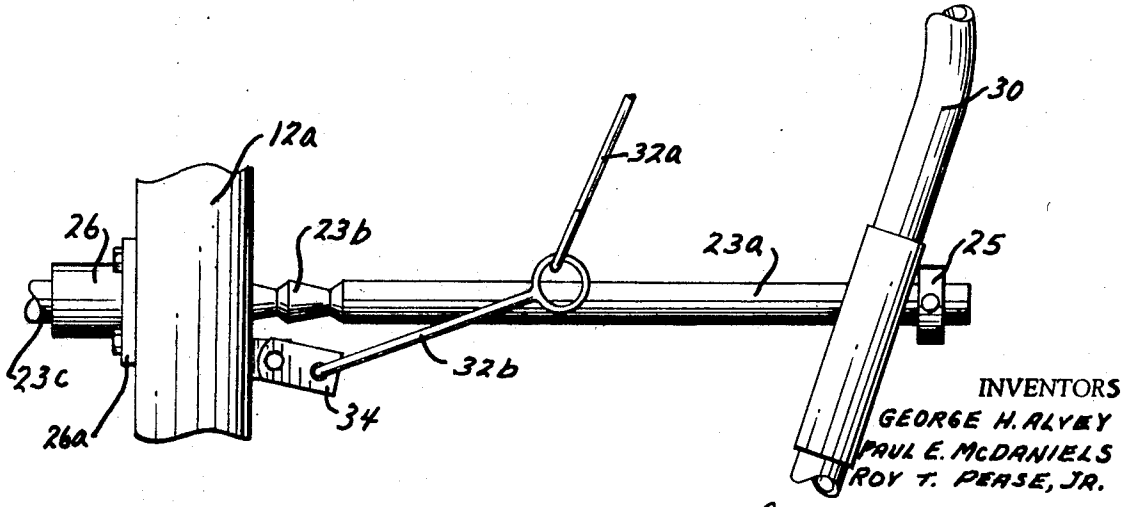

FIG. 4

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FOOTBALL BLOCKING APPARATUS

As is known, there have been many approaches in the form of mechanical apparatuses to improve the playing ability of an athlete, such as for the game of football. In this connection, practice sleds are common, as well as various arrangements which urge against player movement during the practice session.

The invention provides an apparatus which not only urges the blocking structure engaged by the player towards the player, but which, thereafter, and at a second position of movement, releases an oppositely movable thrust member which attempts to resist or overcome the forward movement of the player. The apparatus is one that can be mounted on a fixed or movable base, being represented by operative components including a padded blocking structure, slidable horizontally, both forwardly and rearwardly, but urged in a forward direction, i.e. in the direction of the player. Another member, termed a thrust member, is normally in a locked position and is released when the blocking structure engages such, resulting in movement against or in resistance to that of the player. The overall mechanism can be readily returned to a condition where the thrust member is locked for subsequent use.

In other words, the athletic practice apparatus of the invention acts in two directions to improve the players ability, as for the game of football. Not only must the player overcome a first force to move the blocking structure, but a second force due to a secondarily acting thrust member must be overcome, thereby providing practice advantages not present heretofore.

The invention will become more apparent from the following description, taken in conjunction with the accompanying drawings, wherein:

FIG. **1** is a view in side elevation, partly exploded, partly fragmentary, and partly in vertical section, showing the athletic practice apparatus of the invention;

FIG. **2** is a top plan view of the invention, corresponding to FIG. **1**;

FIG. **3** is a perspective view of the invention, showing, among other features, the thrust member in a locked position; and,

FIG. **4** is a fragmentary view in side elevation, in this instance, showing the thrust member in an unlocked position.

For the purposes of promoting an understanding of the principles of the invention, reference will now be made to the embodiment illustrated in the drawings and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated therein being contemplated as would normally occur to one skilled in the art to which the invention relates.

Referring now to the FIGS., the invention is defined by a support framework **12** comprising a vertically extending support member **12***a*, a base **12***b*, and webs **12***c*. The support member **12***a* has sleeves **12***d* extending therethrough, one of which is shown in FIG. **1**. The sleeves **12***d* are each adapted to receive a slidable rod **14** secured to a support channel **16***a* forming part of a blocking structure **16**.

A collar **17** surrounds a portion of each of the slidable rods **14**, being positioned by a flange **17***a* secured to the support member **12***a*, as by screw means. Each slidable rod **14** has a flange **14***a* thereon, positioning spring means **19** between such flange **14***a* and the support member **12***a*.

The support channel **16***a* has a laterally extending portion which receives a cushioned player engaging member **20**, assembly typically being by pin means **20***a*, for example. Movement of the blocking structure **16** is achieved in a forward and backward direction with reference to a player, where the spring means **19** urge the blocking structure against the force of the player.

A sleeve **12***e* extends through the support member **12***a* and receives an elongated rod **23** having an outer portion **23***a*, a serrated or notched portion **23***b*, and an inner portion **23***c*. The elongated rod **23** has an end member **24** defined on the inner portion **23***c*, being either integral or separate with respect to the remainder of the rod. A collar **26** having a flanged portion **26***a* surrounds a portion of the elongated rod **23**, where a spring member **27** is positioned between the end member **24** and the support member **12***a*. The arrangement is such that the spring member **27** continually urges the end member **24**, when released, in the direction of the blocking structure **16**.

A control arm **30** is pivotally mounted at **12***f* on the top of support member **12***a*. A linkage **32** having portions **32***a* and **32***b* extends between the control arm **30** and a lock member **34**, where the latter is pivotal on a flange **35** forming part of the support member **12***a*. As evident in FIG. **3**, the control arm **30** has a hollow portion **30***a* near its outer end, with respect to the blocking structure **16**, through which the outer portion **23***a* of the elongated rod **23** passes, the latter being retained in such position by reason of a setscrew positioned collar **25**. One end of the control arm **30** is proximate the blocking structure **16**, for ready hand control (see FIG. **2**), where the opposite end of the control arm **30** is weighted (see FIGS. **1** and **3**).

In use, and prior to any engagement by a player, the apparatus is normally in the position of FIG. **1**, i.e. the blocking structure **16** is being urged in the direction of the player by reason of spring means **19**. When the player engages the blocking structure **16**, and overcomes the force of spring means **19**, such moves from left to right in the FIGS., ultimately engaging the end member **24** on elongated rod **23**. Thereafter, the lock member **34** pivots downwardly, as shown in FIG. **4**, releasing the elongated rod **23**.

At such time, and due to spring member **27**, the elongated rod **23** moves from right to left in FIG. **1**, offering resistance to the players movement against the blocking structure **16**. When the lock member **34** is released, and considering the hollow portion **30***a* of the control arm **30**, the control arm **30** pivots in a clockwise direction, because of its weighted end, and assumes the position of FIG. **4**.

When it is desired to reset the elongated rod **23** to the position of FIG. **1**, the control arm **30** is moved in a counterclockwise direction in such FIG. The elongated rod **23** is moved from left to right, against the force of spring member **27**, and locking may be achieved along the notched portion **23***b* on the rod **23**. FIG. **1** shows the rod **23** in its maximum position for movement.

From the preceding, it should be apparent that the athletic practice apparatus of the invention provides twofold pressure for the practicing player. In other words, after the player has overcome the first resistance offered by the blocking structure, and upon release and movement of the elongated rod defining the thrust member, the blocking structure is urged towards the player, and the player further attempts to overcome the blocking structure.

The invention is, of course, susceptible to various changes. In this connection, other locking arrangements may be employed, the control arm varied, and the like. Thus, the preceding description should be considered illustrative, and not as limiting the scope of the following claims.

We claim:

1. An athletic practice apparatus comprising a framework, a blocking pad slidably mounted on said framework for forward movement toward and rearward movement away from a player, spring means biasing said blocking pad in said forward direction towards said player, a thrust member mounted rearwardly of said blocking pad for movement in said forward direction, means applying a constant force biasing said thrust member in said forward direction, means locking said thrust member in a rearward position spaced from said blocking pad, and means responsive to a predetermined rearward movement of said blocking pad to release said locking means whereby said thrust member will be moved by its biasing force forwardly to impart a forward force to said blocking pad in addition to the forward biasing force of said spring means.