April 14, 1936. M. J. GILMAN 2,037,508

FOOTBALL DUMMY

Filed April 23, 1935 2 Sheets-Sheet 1

Fig. 1.

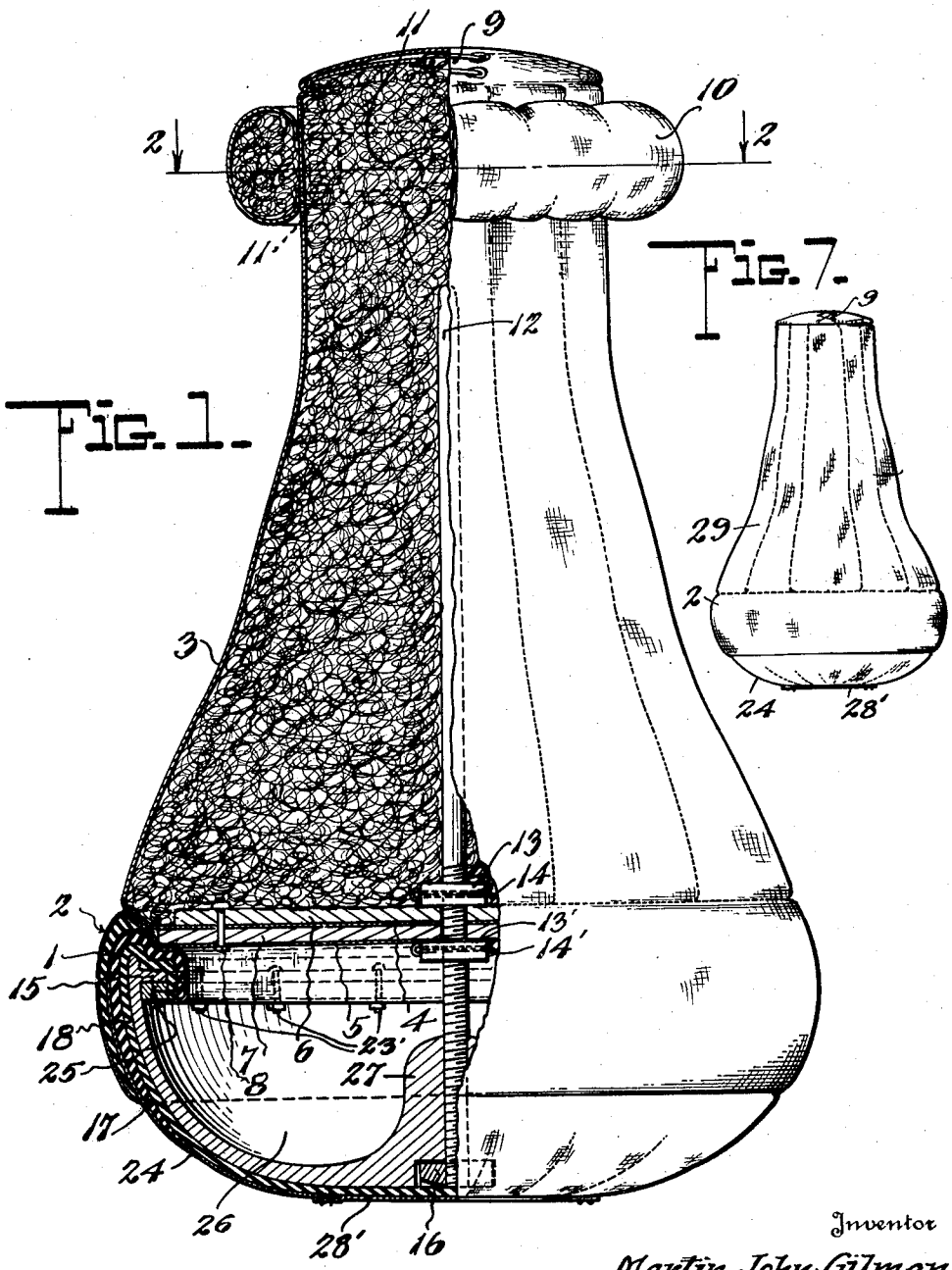


Fig. 7.

Inventor

Martin John Gilman

By Herbert H. Smith

His Attorney

April 14, 1936. M. J. GILMAN 2,037,508

FOOTBALL DUMMY

Filed April 23, 1935 2 Sheets-Sheet 2

Fig. 2.

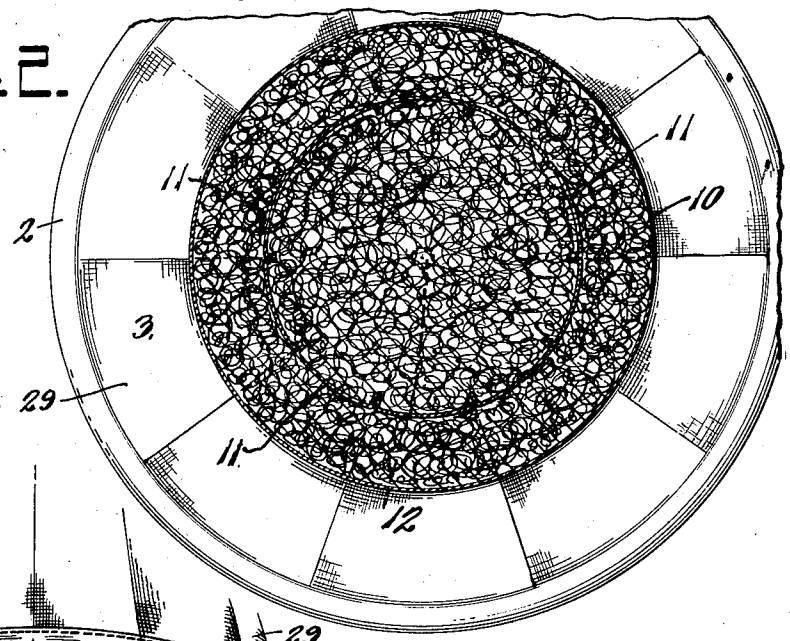


Fig. 3.

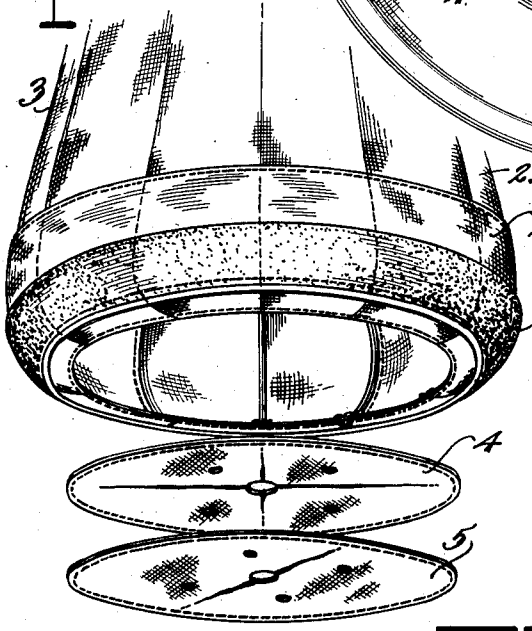
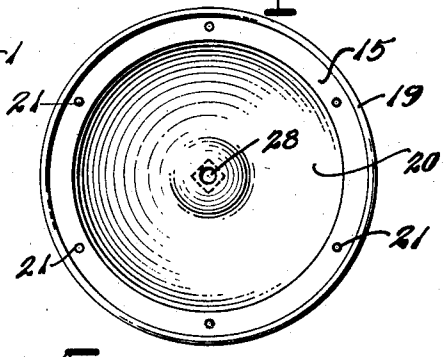


Fig. 5.



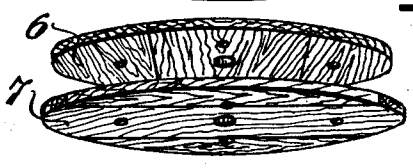
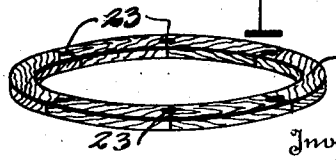


Fig. 4.

Fig. 6.



Inventor

Martin John Gilman

By Herbert J. Smith

His Attorney

Patented Apr. 14, 1936 2,037,508

UNITED STATES PATENT OFFICE

2,037,508

FOOTBALL DUMMY

Martin John Gilman, Gilman, Conn.

Application April 23, 1935, Serial No. 17,862

10 Claims. (Cl. 273—55)

My invention pertains to athletic training devices, more particularly known as football blocking and tackling dummies. Therefore, by hereinafter referring to the word "dummy", I wish to embrace the blocking as well as the tackling dummy.

In teaching football players the art of tackling and blocking, the general apparatus employed are dummies which require either an overhead suspension device or a supporting member placed below the ground surface, or are of a self-supporting nature.

The overhead suspension devices cannot be used on the regular playing field unless they are portable, and all of these portable devices now in use are cumbersome to handle, and are natural obstacles not encountered in a football game. The fact that the structure must extend into the air presents an obstacle which greatly handicaps the players, in that the art of passing cannot be properly taught under normal playing conditions.

The dummy requiring a supporting member which is placed below the ground surface is disadvantageous, as the dummies cannot be moved to a different position unless there has already been made an accommodation for the base-supporting member. Then, too, dummies employing these ground supports cannot be used on the regular playing field, for under the best arrangements, the ground support becomes an obstacle for foot work, frequently causing injury.

In the dummy of the self-supporting type, which requires no external supporting structure, the prior art discloses that the dummy, when it is knocked over by tackling or blocking, remains on the ground in substantially a horizontal position until it is again set up properly by a member of the football squad. Moreover, this type of dummy now in use, while it affords a target for blocking and tackling, offers not sufficient resistance in construction per se, nor in reaction to properly simulate life-action. When the dummy is once hit by a player, and the center of gravity moves past the fulcrum point, it offers no resistance, and continues to fall of its own weight. Further, when a player strikes the dummy, if the point of impact is near the top, the consequent result is that the player's shoulder slips over and off the dummy, the player frequently alighting on his head, causing serious bodily injury.

One of the advantages of my dummy is that it makes it practicable for a coach to now use, particularly just before a game, a system of offensive drills, wherein the defensive team is represented by eleven of my dummies, so arranged on the field that each dummy is set at a predetermined position, which is the same position as each defensive player would reach at a given instance. One formation drill may be used a number of times with slight or no position adjusting of my dummies, for when my dummy is hit, its self-erecting action returns it to substantially the same location in an upright position. If the play is changed after a few drills, the defensive backfield and end dummies are, by a slight tilting of each dummy, easily and quickly rolled into the new formation. Coaching experiments have shown it advantageous to use, on a defensive dummy team, both types of my dummy, namely the type with the shoulder contact abutment ring, Fig. 1, and the type without the abutment ring, Fig. 7.

While the drawings show the upper section of the dummy with somewhat curved lines, in actual construction the upper section is substantially a frustrum of a pyramid.

One of the objects of my invention is the provision of a self-erecting football dummy, which eliminates all overhead suspension devices or ground supporting apparatus.

Another object of my invention is to provide a football dummy, built in two distinct sections, which simulates life-action.

A further object of my invention is to provide a football dummy with a resilient doughnut-like abutment ring surrounding the upper structure, to give added resistance when acted upon by human impact.

In the drawings:—

Fig. 1 is a side elevation partly broken away to show the interior construction.

Fig. 2 is a horizontal section on the plane indicated by line 2—2 of Fig. 1.

Fig. 3 is a detailed perspective view showing the lower portion of the top section in process of assembly.

Fig. 4 is a detailed view of the supporting clamping boards in the lower portion of the top section.

Fig. 5 is a top plan view of the base.

Fig. 6 is a perspective view of the base cover fastening ring.

Fig. 7 is a side elevation of a modified form.

Referring now to the drawings, and especially Fig. 1, it will be observed that the sponge rubber 1, and a resilient durable covering 2, are fastened to the outer casing 3, near the bottom edge.

Canvas discs 4 and 5 are also fastened to the outer casing 3, near the bottom edge. The wooden disc 6 is slipped through the slit in the flexible disc 5, and also through one of the slits in the flexible disc 4, so that the wooden disc 6 is inside the outer casing 3. The wooden disc 7 is then slipped through the slit in the flexible disc 5, resting intermediate the flexible discs 4 and 5. The two wooden discs 6 and 7, and the two canvas discs 4 and 5, are then moved into position and fastened by bolts 8. This bottom inserting method is employed, as the opening 9, in the top of the bag 3, is obviously too small.

The abutment ring 10 is made of flexible material, such as canvas or leather, and is cut so that when it is fastened on the outer casing 3, it fits nicely, and all the sewing is neatly concealed.

There are communicating ports, or openings 11, in the outer casing 3, which permit the filling of the abutment ring 10, from within the outer casing 3. The closure 9 is laced in the same manner as a football. Fastening means, known as a zipper, may also be used to close the opening 9. While Fig. 1 shows the abutment ring 10, filled from within the outer casing 3, through communicating ports 11, experiments have shown that in lieu of a filling for ring 10, which is pushed through the opening 11, a unit of resilient material may be employed, such as a ring of sponge rubber. This sponge rubber or other resilient material ring may also be used with or without the covering of the abutment ring 10.

A metallic shaft or rod 12, threaded on one of its ends is partially housed in the outer casing 3, with the threaded end of said rod 12, extending through discs 4, 5, 6, and 7, at the bottom of the top section. Threaded collars, or nuts 13—13', clamp tightly together the discs 4, 5, 6, and 7, and cotter pins 14—14' are inserted through holes in the rod and nuts to prevent any possible loosening of said nuts.

The outer casing 3, and the abutment ring 10, may be filled with any material such as cotton waste, wool, etc. I find that a hair filler, as used in stuffed furniture, works very well, as it has a good inherent resiliency and is comparatively light weight.

Referring to Fig. 2, the section view more clearly shows the ports 11.

Fig. 3 shows the seams of the panels of resilient material which forms the pyramid shape of outer casing 3. The sponge rubber 1, and its resilient covering 2, are shown fastened near the bottom of the top section, in a rolled-back position, before the top section is assembled on the base unit. While the resilient covering 2, of Fig. 3, for the purpose of description, is shown proportionately wider than on Fig. 1, it is understood that the width of the resilient covering band 3, covers the sponge rubber 1, and may overlap reasonably and extend beyond the sponge rubber band.

The wooden discs of Fig. 4 shows disc 7 to have a greater diameter than disc 6. The disc 7 is somewhat smaller in diameter than the inside diameter of the base unit near the top. In Fig. 1 it will be noted that the periphery disc 7 is over the base shoulder. For the purpose of description, the dummy in its assembled form is not shown with the upper section pulled tightly to the base unit by the nut 16. In actual construction the covered disc 7 compresses the padding 17 and 18 to such a degree, that the bottom edge of the covered disc 7 is lower than the top edge 19 (Fig. 5), of the molded base. This method of construction prevents any lateral movement of the discs 6 and 7 and gives added stability to rod 12.

Fig. 5 discloses a top view of the metallic, molded base 20, with the shoulder 15, and holes 21, drilled therein for insertion of the bolts 23'.

Fig. 6 shows a collar 22, which is composed of sections of wood. These sections are placed under the metallic base shoulder 15, and rigidly secured thereto by bolts 21, which are placed in holes 23 and 21.

The molded base 20, save for a small opening at the bottom, is covered with a padding 18, preferably of sponge rubber. Surrounding the base, at its greatest diameter, there is an additional band of padding 17, preferably of sponge rubber, to further prevent the possibility of human injury. Both of the sponge rubber pads 17 and 18 extend up over the edge 19, and inside of the base 20. The pads 17 and 18 are covered by a snug-fitting layer of canvas, or leather 24, which covers all of the outside of the base 20, save for a small opening at the bottom. The covering 24 extends over the paddings 17 and 18 into the base 20, and is securely fastened to the underside of the wooden ring 23 by screws 25.

Fig. 7 is a showing of my dummy without the abutment ring 10.

The base section 26 is completed as a unit, as is the upper section 29. The two sections are then united by inserting the threaded end of the rod 12 through the hole 28 (Fig. 5), of the hub 27, and clamping the upper section tightly into position by means of the nut 16. After the assembly of the two sections is complete, the protective padding 1, and its covering 2, are rolled down over the upper portion of the base section. A flap or covering 28' is fastened over the bottom of aperture 27 by sewing or other means. The base section, while it is substantially semi-spherical or parabolic in general, it has a flattened bottom to add sturdiness while it is upright and to more rapidly restore the dummy to a normal position.

Modifications may be and may become obvious to those skilled in the art, and I do not desire, therefore, to limit my invention except by the scope of the subjoined claims.

Having thus described my invention, what I claim is new and desire to secure by Letters Patent of the United States, is—

1. A football dummy having a substantially semi-spherical molded base, a substantially pyramid-shaped upper section, comprising an outer casing, a filler for said outer casing, and a connecting means for uniting said base with said upper section.

2. A football dummy comprising a rocking base, and a substantially frustum-shaped upper section, said upper section consisting of an outer casing having a doughnut-like tubing attached near the top of said casing, and communicating ports intermediate said outer casing and said tubing.

3. A football dummy having a rocking base and an upper section, said upper section being substantially a frustum of a pyramid, and a doughnut-like abutment ring secured adjacent the periphery of the vertex end of said pyramid frustum.

4. A football dummy having a rocking base and an upper section, said upper section consisting of an outer casing, and a filler for said casing, a rigid disc in the bottom of said upper sec-

tion, a hub within the base, and a shaft securing said rigid disc to said hub.

5. A football dummy having a rocking base and an upper section, said upper section being substantially a frustum of a pyramid, a doughnut-like ring secured adjacent the vertex end of said frustum of a pyramid, and a filler for the doughnut-like ring and said frustum of a pyramid.

6. A football dummy having a base and an upper section, said upper section comprising an outer casing, a doughnut-like ring secured adjacent the top peripheral edge of said upper section, an opening in the top of said upper section, and closure means for said top opening.

7. A football dummy having a base and a resilient covering therefor, a circular shoulder molded within said base, an upper section having a substantially rigid disc secured in its lower portion, and means to compress the resilient base covering within the base.

8. A football dummy comprising a molded base, a shoulder molded within said base adapted to receive a rigid disc, a hub molded within said base having a rod receiving aperture, an upper section comprising an outer casing substantially a frustum of a pyramid, a doughnut-like ring secured adjacent the vertex end of said outer casing, a protective covering secured adjacent the peripheral bottom edge of said outer casing, said protective covering adapted to be rolled over the upper portion of said base.

9. A sectional football dummy having a base section and a separate upper section, said base section being substantially a parabola, said upper section consisting of an outer casing, and a resilient stuffing for said casing, and a rigid member centrally disposed in said dummy for securing said base to said upper section.

10. A football dummy having a substantially semi-spherical base, a separate substantially frustum-shaped upper section consisting of a casing, a filler for said casing, a rigid member secured to and extending across the bottom of said upper section, and means interconnecting said rigid member and said base.

MARTIN JOHN GILMAN.