The present invention relates to automatic ball throwing devices and specifically to a football passing device duplicating the routines of a football center.

The quarterback of a team in receiving the ball from center and commencing the execution of various plays consumes hours of practice in which the services of the center are not actually necessary. The center's presence is not required for many attack formations and his position and repetitious passing of the ball backwards between his legs is arduous.

The present invention is a frame supporting a padded replica of a portion of the center's legs and buttocks and has a trigger within the buttocks which sets the device into action, snapping the ball into the hands of the player behind in an exact duplication of the manner of the center receiving the signal of a slight touch on the leg from the quarterback.

The invention has for its principal object to provide a machine for passing a football backwardly in the exact manner of the center player on a team.

A further object is to provide such a machine whose actuation is initiated in response to the identical signal used by the quarterback to the actual center.

A still further object is to provide such a machine which is easily portable out to the field of practice.

Another object is to provide a means of adjusting the strength of the throwing mechanism to the desired amount of thrust of the ball rearwardly.

These and other objects and advantages of the invention are readily apparent from the following description when taken with annexed drawings, in which:

Fig. 1 is a side view in elevation of the invention showing in dotted lines the position of the elements when a ball has been passed to a player's hands.

Fig. 2 is a top view.

Fig. 3 is a partial side view partly in section on line 3--3 of Fig. 2.

Fig. 4 is a rear view in elevation on line 4--4 of Fig. 1.

Fig. 5 is a detail view of the ball holding portion of the machine on line 5--5 of Fig. 1.

Fig. 6 is a view in section of the main frame only taken on line 6--6 of Fig. 1, and

Fig. 7 is a view in section of the main frame only taken on line 7--7 of Fig. 1.

Referring to the drawings in which like numbers indicate like parts throughout, the several views for Figs. 1 and 2, main frame 10 is shown to be supported at its forward end by a leg 11 adjustably secured in shoe 12. The frame 10 is preferably of light weight channel iron or other suitable material and is shown in Figs. 2, 6, and 7 to have a slot 13 substantially its full length. The frame 10 has a box portion 14 as seen in Fig. 6 which is taken on line 6--6 of Fig. 1 and shows only the section where the trigger mechanism extends through hole 15. A rear set of legs 16, one on either side have wheels 17 at their lower ends, making the machine easily transportable by lifting the front leg 11 and wheeling it out onto the field, although the wheels may be omitted and the device supported on the ground.

The ball passing part of the mechanism is seen to consist of arm 18 ending in cross member 19 on which are adjustably positioned two fingers 20 which are covered with a resilient material in order that the football placed thereon is not scuffed. Fingers 20 are slightly curved to receive the football 21 as shown in Fig. 1. Arm 18 is bent at an angle at 22 and extends upwardly through the main frame 10 and out of slot 13 and is formed at its end to be a handle 23. A hook 24 on arm 18 (Fig. 3) is engaged by trigger 25 which extends through hole 15 on the bottom of box portion 14 and upwardly out of hole 26. This hole 26 is a slight distance rearwardly of the slot 13. A spring 27 biases the trigger 25 downwardly, the bottom of the trigger ending in a nut and washer 28 or other suitable anchoring means in the sponge rubber padding 29 which is formed as an approximate representation of the center's buttocks. A bumper 31 and a second bumper 32 of rubber or other resilient material protects the handle 23 and adjustable stop 33 on which bumper 32 is positioned as a tongue portion 34 extending through the slot 13 and serves to maintain the width of the slot in order that the handle 23 does not bind. The arm 18 is biased forwardly by spring 35 and is pivoted by angle braces 36 which are seen in Figs. 1 and 4 to be attached to the sides of the frame 10.

In operation, as seen in Fig. 1, the arm moves forwardly and upwardly to cast the ball into the hands of a receiver. The extent of the throw is made adjustable by moving the stop 33 forwardly or rearwardly on frame 10. The strength of the throw is made adjustable by securing the spring to other hooks 37.

The receiver in actual play signals the center of his team in several ways, one of the most effective being the slight upward touch of the backs of the hands on the nether portion of center's buttocks. This signal, while also accompanied by a verbal signal is generally unobservable by the opposing team members. It will be seen in this invention that this signal is duplicated by the backs of the player's hands (Fig. 3) to lift the trigger 25 from the hook 24, thereby releasing the arm 18 to snap the ball upwardly.

While a single embodiment of the invention has been thusly described and illustrated other embodiments are contemplated and many modifications and changes may be made without departing from the spirit and scope of the invention in which it is claimed.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

1. A football passing machine of the type which resembles a bent over center member of a team comprising a substantially horizontal frame extending at its rear with a facsimile of the buttocks of the center, said buttocks being of padded and resilient material, a ball holding means movably suspended beneath said buttocks, an arm pivotally mounted on said frame and supporting said ball holding means, trigger means concealed in said buttocks releasably engaged with said arm, and power means biased to move said arm and said ball holding means in a direction which would pass the football placed thereon upwardly into the hands of a receiver.

2. The device as set forth in claim 1 together with a pair of legs at the rear end thereof on which are wheels for the convenience of moving the machine.

3. The device as set forth in claim 1 in which power means for moving said arm and said ball holding means is a resilient member attached to said frame and adjustably secured to said arm.

4. A football passing machine resembling in action the center's manner of passing a ball rearwardly to the quarter-
back comprising a substantially horizontal frame having an inverted U-shaped configuration for a greater part of its length, a slot in said frame length-wise thereof, an arm transversing said slot and extending below said frame, a pair of braces attached to said frame and pivotally supporting said arm at their lower ends, front and rear ground engaging support means mounted on said frame, a facsimile representation of the center's buttocks of sponge rubber or the like, a trigger biased downwardly mounted in said frame at the rear end thereof and fastened to said simulated buttocks, means on said arm for releasably holding the football, other means on said arm for engaging said trigger and power means biased for motivating said arm to pass a football into the hands of a player when said trigger is actuated by upward pressure of the player's hands on said simulated buttocks.

5. The device as set forth in claim 4, said rear ground engaging support means consisting of a pair of spread legs attached to said frame, said passing arm extending between said spread legs.

6. The device as set forth in claim 5, said front ground engaging means consisting of a single leg attached at its upper end to said frame and a ground engaging shoe adjustably positioned on the lower end of said leg, and ground engaging wheel means mounted at the lower ends of said spread rear legs.

References Cited in the file of this patent

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