

[54] GAME BAT

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[51] Int. Cl.² A63B 59/00

[58] Field of Search... 273/129, 67 R, 67 A, 67 DA, 273/67 DC, 67 B, 73 R, 72 R, 266, 1 R, 80 R, 80 B, 80 D, 80 C, 80.2, DIG. 4, DIG. 5, DIG. 8, 81 R, 118; 272/76

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Primary Examiner—Richard J. Apley

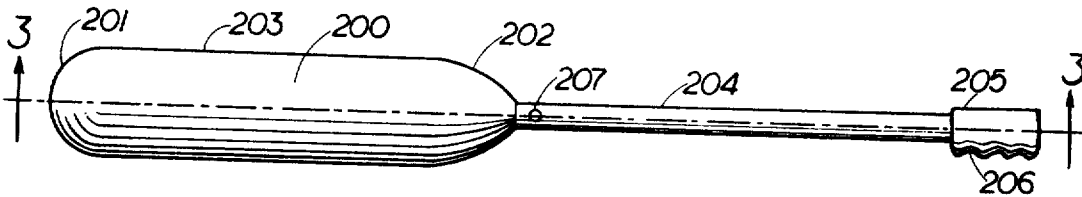
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[57] ABSTRACT

An injury free game playing stick for hitting a ball having a solid cylindrical ball hitting body portion and a flexible handle centrally attached to one end of the body and extending therefrom. The body is made of foam material. One end of the handle extending into the body and attached thereto by rivets and/or glue. The body portion is provided with cover or skin which may be sprayed on or it may be a denim cloth bag. The handle may be a polyvinylchloride plastic material while the ball hitting body portion may be a flexible polyurethane plastic foam material.

10 Claims, 9 Drawing Figures



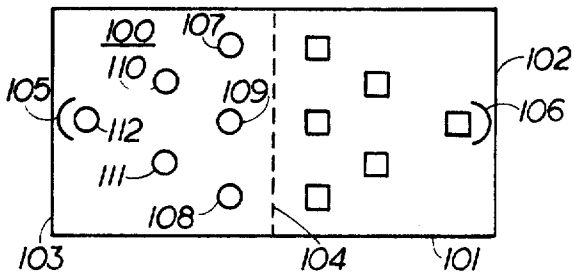


FIG. 1

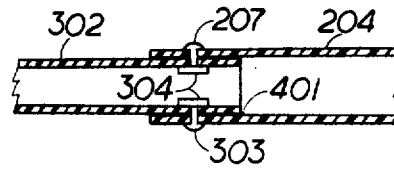


FIG. 4

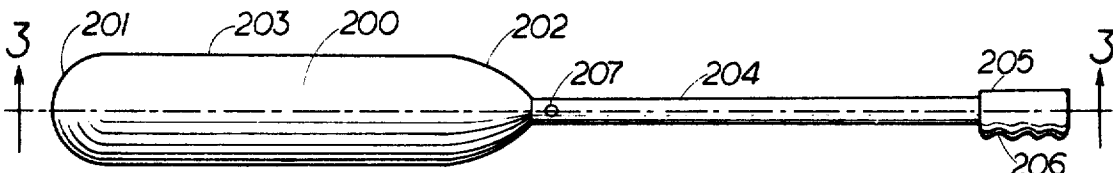


FIG. 2

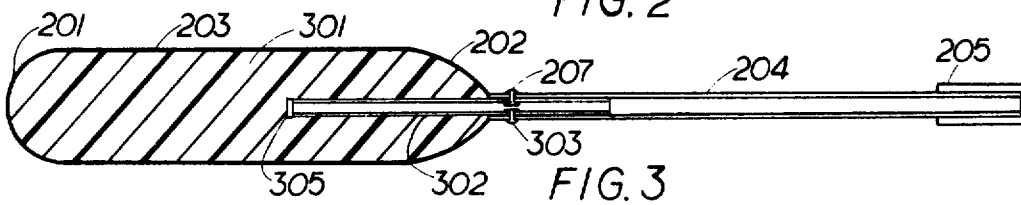


FIG. 3

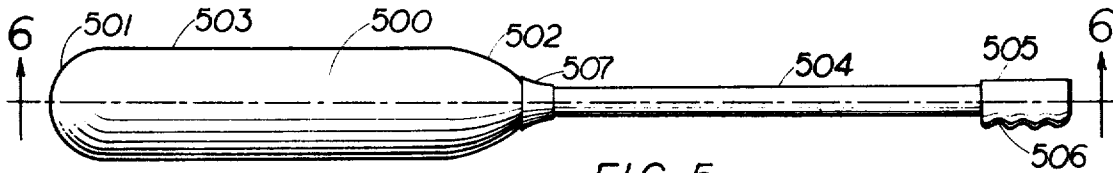


FIG. 5

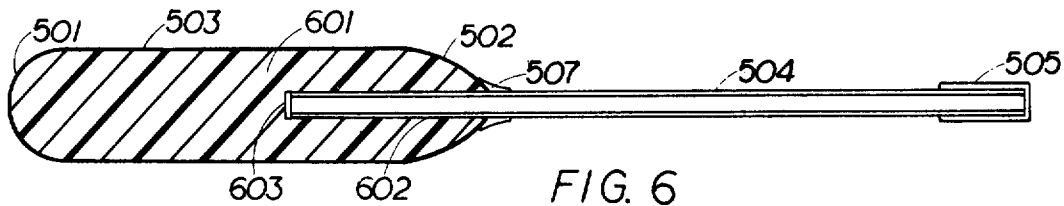


FIG. 6

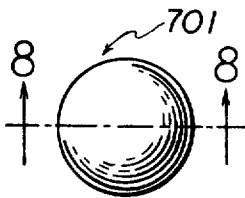


FIG. 7

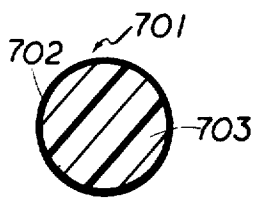


FIG. 8

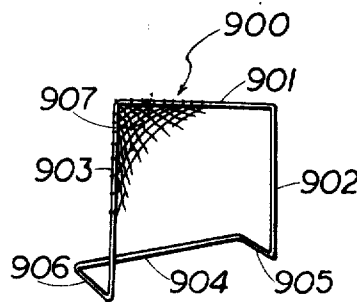


FIG. 9

GAME BAT

BACKGROUND OF THE INVENTION

This invention relates to playground activities wherein ten to twelve players may engage in a sports event with maximum recreational value and exercise with a minimum hazard of injury. The game is particularly adapted to provide the benefits of recreation and exercise for a large number of players for institutions as schools, etc., at a minimum cost while minimizing the likelihood of injuries to the players. The game is adapted from hockey or polo having a coined name of PILLO-POLO. Within applicant's knowledge there is no known similar game except insofar as the general scheme is related to hockey or polo.

BRIEF SUMMARY OF THE INVENTION

The game is played on a somewhat conventional field, indoors or outdoors, having a pair of goals with light weight aluminum frames and netting, one goal at the longitudinal ends of the field, but the conventional hockey stick or polo mallet is replaced with an injury-free playing stick for each player. The conventional hockey puck or polo ball is replaced with a light weight plastic foam ball of substantial diameter whereby injuries to players are very unlikely.

The primary object is to provide the equipment for playing the hockey-like game whereby maximum exercise and recreational benefits are realized at minimum cost and with the least likelihood of injuries to the players.

Further objects and advantages of my invention will be apparent from the following detailed description taken in conjunction with the accompanying drawing in which:

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

FIG. 1 is a top view of a typical playing field with goals and players;

FIG. 2 shows a player's stick;

FIG. 3 is a cross-sectional view taken on the lines 3—3 of FIG. 2;

FIG. 4 depicts a detail of the joiner of tubes of FIGS. 2 and 3;

FIG. 5 illustrates a modification of the player's stick;

FIG. 6 is a cross-sectional view taken on the lines 6—6 of FIG. 5;

FIG. 7 shows a ball suitable for use in the game;

FIG. 8 is a cross-sectional view taken on the lines 8—8 of FIG. 7; and

FIG. 9 is a showing of a goal suitable for use in the game.

Similar reference numerals are applied to similar elements throughout the drawing.

DETAILED DESCRIPTION

In FIG. 1 is shown the outline of the playing field 100, indoors or outdoors, having long sides 101 and short sides 102 and 103. Preferably the field is 50 feet by 100 feet in dimensions, but other dimensions may be used depending upon the available space. A center line 104 is provided which may be a dashed line as shown or the center line may be a solid line. Goals 105, 106 are located at each end of the playing field as in hockey (see FIG. 9). While more or less players may play the game the normal players are left and right wingmen 107, 108,

a center 109, left and right defensemen 110, 111, and a goalie 112. The opposite side would normally have the same number of players.

A side view of a player's stick is depicted in FIG. 2, a sectional view taken on the lines 3—3 of FIG. 2 is shown in FIG. 3, and an enlarged view of a detail of FIG. 3 is shown in FIG. 4. The ball striking portion indicated at 200 has a rounded end 201, an upper curvilinear portion 202, and a surface 203 which may have a skin as it comes from the mold or may have an added cover consisting of a sewn six-piece denim cloth bag or a polyurethane skin. The polyurethane skin may be sprayed onto the striking portion after molding, but preferably it is sprayed into the mold before the striking portion foam is injected. The skin or cover 203 may be colored blue for sticks used by one side and colored red for the sticks used by the other side. At 301, as indicated by the cross hatching for plastic, is shown the body of the striking portion of the playing stick which is preferably injection molded with a flexible polyurethane plastic foam material although a material like sponge rubber could be used. The foam material may be of about 3.7 pounds per cubic foot, and the polyurethane skin may be 0.0625 inches in thickness with 5,000 pounds tensile strength. The striking body 200 is provided with a one-inch diameter bore 305 about six inches in depth which receives a hollow, tubular plastic pipe 302 made of polyvinylchloride as a stabilizing tube. The stabilizing tube 302 may be placed in the mold before the foam for body 200 is injected or it may be glued or cemented in the bore later. The body 200 may be about 4½ inches in diameter and about 12 inches in length. A hollow, tubular handle 204 of flexible polyvinylchloride plastic material is cemented or glued as at 401 over the stabilizing tube 302 with a force fit. A pair of rivets 207, 303 with internal expanded portions 304 (see FIG. 4), are also provided to prevent separation of the stabilizing tube 302 and the handle 204. A grip 205 having finger grooves 206 is provided on the distal end of the handle. The grip is cemented and force-fitted onto the handle. The weight of the entire playing stick is less than 10 ounces, and due to the cushion-like striking portion a player may strike another player with little chance of injury. The length of the handle 204 is about 22 inches, and since the length of the striking body 200 is about 12 inches, the overall length of the playing stick is about 34 inches. It will be understood that these dimensions may be varied somewhat as may be necessary or desirable.

A modified player's stick is illustrated in FIGS. 5 and 6 with FIG. 6 being a cross sectional view of FIG. 5 taken on the lines 6—6. The ball striking portion 500, plastic foam body 601, rounded end 501, upper curvilinear portion 502, surface or skin 503, and hand grip 505 with finger grooves 506 are identical with similar elements in FIGS. 2 and 3 as are the bore 603, weights, dimensions, color coding, and the materials. The stabilizer tube is omitted and the hollow tubular polyvinylchloride handle 504 extends into and is glued or cemented into the bore 603 as shown by handle extension 602. A rubber grommet 507 encircles the handle 504 adjacent the upper portion of the striking body 500. It should be noted that such a grommet may be utilized with the playing stick shown in FIGS. 2 and 3.

Instead of a hockey puck or polo ball the ball 701 of FIG. 7 is provided, FIG. 8 being a cross sectional view of the ball of FIG. 7 taken on the lines 8—8 of FIG. 7. The ball 701 is approximately seven inches in diameter

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and is made of a light weight material as a flexible plastic polyurethane foam material indicated at 703 weighing about one ounce. The playing ball 701 may be provided with a skin or outer cover 702 as described with respect to the playing stick, but such a cover is not necessary. The ball 701 may be cut from a suitable block of plastic polyurethane foam or produced by molding. Obviously such a light weight foam plastic ball is extremely unlikely to cause injuries to the players.

In FIG. 9 the numeral 900 generally indicates a goal symbolically shown at goals 105, 106 in FIG. 1. The goal includes a light weight aluminum tubular frame comprising a top horizontal tube 901, a pair of vertical tubes 902, 903, a pair of horizontal tubes 905, 906 as feet, and a back horizontal tube 904. Attached to the tubular frame is a net 907 having squares of about two-inch configuration. A goal and net may be 56 inches high, 42 inches wide, and 22 inches deep, but these dimensions may be varied as desired. These goals and other similar goals are commercially available, and it is thought that further description is not necessary to an understanding of the invention. As with the ball and playing sticks, these light weight goals are extremely unlikely to be the cause of injuries to the players.

There has been disclosed a new game and equipment therefor that is very fast, very safe, involving team play for about 12 players, and providing vigorous exercise and fun for boys and girls of all ages. The polo-type playing equipment and game requires a new skill which is easily acquired and is absolutely safe. It should be noted that no masks, hand, elbow, or shin guards are required.

The game is usually played with two teams of six players on each side, as in hockey, with a referee commencing play with a face off at center (and after a goal is scored). Three 10 minute periods are suggested to constitute a game. When the ball goes out of the playing area the other team takes possession of the ball at that point, but the players must be on-side when taking the ball over the center line. A checking, charging, or bumping penalty retires a player from the game. Normally only the three offensive players are allowed to cross the center line to reduce congestion around the goals. The playing ball cannot be caught or held in the hand, but it can be knocked down by hand. An offensive player may not deliberately kick or throw the ball into the net, but if a defensive player shoots, kicks, or throws the ball into his own net, a goal is awarded to the offensive team. Other rules adapted from hockey will readily occur to those familiar with games of hockey, polo, or soccer.

While for purposes of description I have shown and described specific embodiments of my invention, it will

be apparent that changes and modifications can be made therein without departing from the spirit of my invention or the scope of the appended claims.

I claim:

5 1. A lightweight injury-free player's stick for a game comprising a solid substantially cylindrical resilient foam ball striking body having a length about 3 times the diameter, said ball striking body having a protective and frictional skin on the external surface thereof and a central longitudinal bore about 6 inches in depth, and a flexible handle means in said bore and extending a substantial distance therefrom.

10 2. A lightweight injury-free player's stick for a game according to claim 1 wherein said ball striking body is made of flexible polyurethane foam and said body skin is a high tensile strength polyurethane material.

15 3. A lightweight injury-free player's stick for a game according to claim 1 wherein said ball striking body is made of flexible polyurethane foam and said body skin is a cloth covering.

20 4. A lightweight injury-free player's stick for a game according to claim 1 wherein said ball striking body is about 4½ inches in diameter and about 12 inches in length and has a rounded lower end and a curvilinear upper end.

25 5. A lightweight injury-free player's stick for a game according to claim 1 wherein said flexible handle means is a hollow polyvinylchloride tube having a grip on the distal end thereof.

30 6. A lightweight injury-free player's stick for a game according to claim 5 further including a grommet around said tube adjacent said ball striking body.

35 7. A lightweight injury-free player's stick for a game according to claim 1 wherein said flexible handle means comprises a stabilizing hollow tube in said body bore and extending therefrom, a second hollow tube fitted onto said stabilizing tube, and means connecting said stabilizing hollow tube and said second hollow tube.

40 8. A lightweight injury-free player's stick for a game according to claim 7 wherein said connecting means includes a pair of rivets.

45 9. A lightweight injury-free player's stick for a game according to claim 7 wherein said connecting means includes a cement material and rivets.

50 10. A lightweight injury-free player's stick for a game according to claim 7 wherein said stabilizing hollow tube and said second hollow tube are made from polyvinylchloride material, further comprising a hand grip on the distal end of said second hollow tube and a grommet around said second hollow tube adjacent said ball striking body.

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