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BASEBALL BAT

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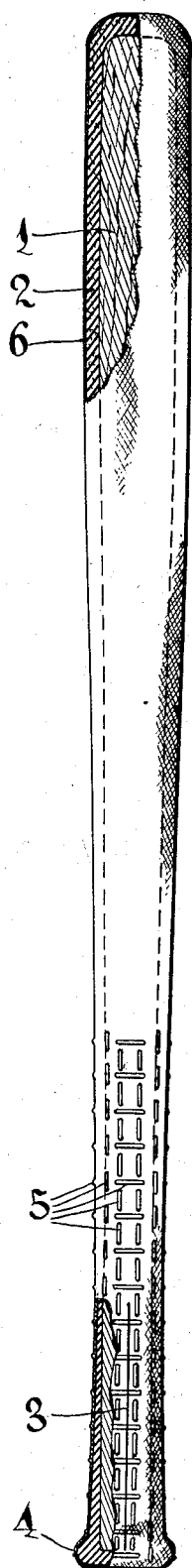


FIG. 1.

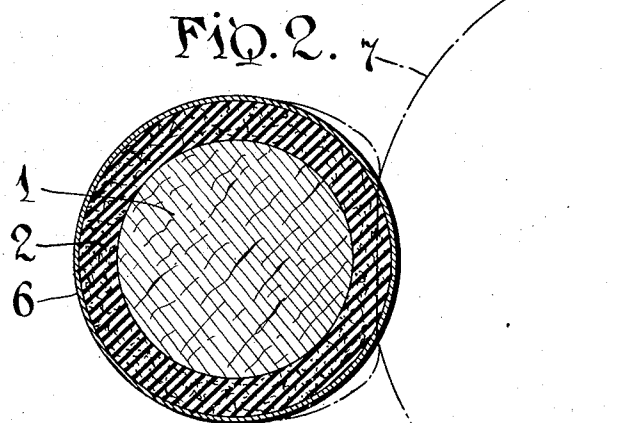


FIG. 2.

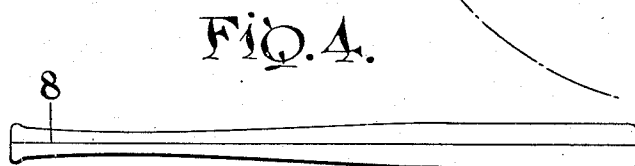


FIG. 4.

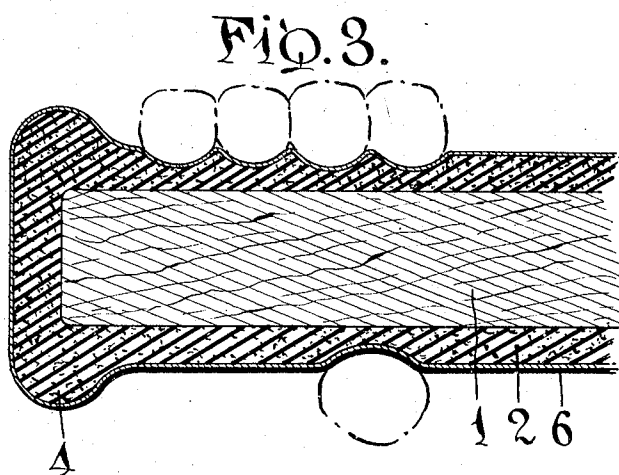


FIG. 3.

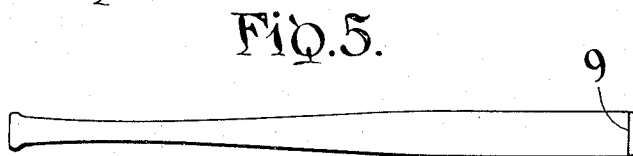


FIG. 5.

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BASEBALL BAT

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8 Claims. (Cl. 273-72)

The present invention relates to a baseball bat and primarily to one especially adapted for soft ball or indoor ball playing, although it is not restricted to such use, since certain features thereof are applicable to equipment for other games.

In playing the game of baseball indoors or on the play ground, the bases are much closer together than in the regulation hard ball game of baseball and, therefore, the players, as well as the spectators, are at closer range to the batsman. Heretofore the bats employed in this game have been similar to those used in the regulation hard ball game, except probably as to their dimensions which are usually smaller. At times the bat will slip from the hand of the batter, and at other times he will throw his bat, in the excitement of the game, so that injury to the other players as well as to the spectators frequently occurs.

An object of the present invention is to provide a baseball bat which will increase the safety of the game and tend to reduce the number of injuries. The invention further has for its object to provide a soft ball bat of special formation to properly receive the impact of the soft ball, whereby the batter may obtain his natural and full swing as he hits the ball without fear of overdriving the ball.

These and other objects will manifest themselves as the detailed description progresses, reference being had to the accompanying drawing wherein

Fig. 1 is an elevation of a bat constructed in accordance with the present invention, portions being broken away for the sake of clearness;

Fig. 2 is a transverse sectional view through the bat and depicting in broken lines the moment of contact with the soft ball;

Fig. 3 is a fragmentary longitudinal sectional view illustrating the self-conforming characteristic of the hand grip of the bat; and

Figs. 4 and 5 show modifications of the invention.

Referring more particularly to the drawing, the numeral 1 designates the core of the bat which for lightness is preferably formed of wood or a tube of light metal alloy. The core may be cylindrical throughout, although that depicted in Fig. 1 is provided with a slight taper toward the hand engaging end of the bat.

Enveloping the core is a cover 2 of soft pliable material which will yield as well as cushion the impact of the bat against a ball or other object. Preferably the cover is of a sponge rubber or

synthetic rubber composition, but is not restricted thereto. When sponge rubber is used, it may be adhesively secured to the core by a rubber cement or otherwise so as not to slip thereon while playing the game. While the cover may be wound or otherwise applied to the core, it may be preformed in the shape of an envelope with a slit 3 in its side through which the core may be introduced. The slit 3 may extend longitudinally of the envelope and be secured in a closed position by suitable means, such as a rubber cement. The slit is herein shown as being provided in the hand gripping portion of the bat and terminating short of the inner end thereof whereby such end may be distended or stretched over the adjacent end of the core. This permits both ends of the core to be fully concealed and protected so that should the bat strike any person, the force will be dampened.

The bead 4, usually provided on baseball bats to reduce the chances of the bats slipping through the hands, is formed integrally with the sponge rubber envelope. This not only permits the core to be of uniform size for easy insertion into the entrance slit 3, but it accomplishes the intended purpose of retarding slippage of the bat to a practical extent. In this connection it will be noted from Fig. 3 that the spongy or readily yielding texture of the cover permits the fingers of the hand, when gripping the bat, to sink deeply into the cover with those portions intermediate the fingers and under lighter gripping pressure extending upwardly between the fingers in more or less of an interlocking manner.

If desired, the hand gripping portion of the bat may be provided with surface projections 5 to increase the margin of safety and facilitate gripping the bat by the hands. When the cover is made of sponge rubber, its body cells may be enclosed by a non-porous skin or layer 6 of rubber, or this may be in the form of a fabric enclosure. This outer protective layer 6 will serve to preserve the cushioning quality of the envelope by excluding the light and preventing deterioration of the rubber texture. The protective layer may be molded integrally with the rubber envelope or secured thereto otherwise, as by rubber cement.

In practice, the soft pliable covering on the firmer core will readily yield upon coming into contact with the ball, generally indicated by the broken line 7 in Fig. 2, so as to increase the surface area contacting the ball and thereby enable the batter to more properly place or direct the ball. The soft yieldable cushioning surface of the

bat will prevent injury, since it will dampen the force of the bat striking any of the other players or spectators, and when the game is being played indoors, as it frequently is in the school gymnasiums, the noise of the bat being thrown around will be materially silenced. The batter is enabled to firmly grip the bat and swing naturally as hard as he wishes, since the impact of the bat with the ball will be dampened so that the flight of the ball will be checked to a certain extent but more readily guided as the soft pliable cover spreads under the impact. Furthermore, should the core become broken or split, the cushioning envelope will prevent parts of the bat flying off toward the players or spectators.

While the cushioning envelope is illustrated as being co-extensive and fully enclosing the core, it is obvious that modifications in the manner and method of enclosing the core, together with the construction of the bat, may be modified so as to adapt the inventive teachings herein to other physical embodiments of ball bats and clubs, and the hand grips thereof. The reference to sponge rubber in the appended claims is not by way of limitation but rather inclusive of other coverings possessive of like or substantially similar cushioning characteristics.

The cushioning envelope may be formed in sections, each section enveloping or enclosing a part of the core and meeting substantially flush with the companion section completing the safety enclosure of the core, whether or not the enclosure is wholly enclosed or partially so. The covering may be divided into sections longitudinally of the core, as shown in Fig. 4, or transversely of the core, as shown in Fig. 5. From Fig. 1 it will be observed that the cushioning cover increases in thickness over the opposite ends of the core. This will serve as a measure of protection since the bat, if released from the hands accidentally, will more than likely come in contact with a person or object at one end or the other.

What is claimed is:

1. A baseball bat, comprising a rigid core enclosed by a conformable envelope of sponge rubber firmly united therewith and providing a soft pliable ball engaging portion and a compressible cushioning hand grip, the envelope having a longitudinal slit provided adjacent one end portion for introduction of the core thereinto.

2. A baseball bat, comprising a rigid core enclosed by a conformable envelope of sponge rubber firmly united therewith and providing a soft pliable ball engaging portion and a compressible cushioning hand grip, and an outer protective layer enclosing the envelope.

3. A bat for soft ball games and the like, comprising a rigid core and a sectional covering therefor of soft pliable material conforming to the core, the sections of the covering having their edges abutting and joined together.

4. A bat for soft ball games and the like, comprising a rigid core having a heavy covering of sponge rubber substantially enclosing the same, the covering adjacent each end portion of the core being increased in thickness and overhanging the ends of the core to enclose the latter.

5. A play ground bat for soft ball, comprising a sponge rubber body providing a hand gripping portion and a ball impact portion, and a rigid core enclosed by said body and giving thereto a self-sustaining character, said sponge rubber body covering the core to a substantial depth and giving the bat shaped appearance to the bat, while at the same time serving as a protective factor if and when the bat is accidentally thrown, said core and sponge rubber body being adhesively secured together.

6. A play ground bat for soft ball comprising a self-sustaining body having an impact surface covered by a heavy layer of sponge rubber of substantial thickness sufficient to yield and spread laterally under the force of the impact with the ball to thereby increase the effective surface contact with the ball for enabling the batter to direct the flight of the batted ball, the layer of sponge rubber extending over the end of the body as a safety factor.

7. A play ground bat for soft ball comprising a rigid core and a soft pliable covering of sponge rubber wholly enclosing the core from end to end and overhanging the ends thereof to guard against injury while playing, said covering providing a yieldable surface for yielding under the impact of a ball thereagainst.

8. A safety play ground bat for soft ball, comprising a readily yieldable and shock absorbing body providing a hand gripping portion and a ball impact portion, and a rigid core for the body giving thereto a self-sustaining character, said shock absorbing body covering the core to a substantial depth and giving the bat shaped appearance to the bat, while at the same time serving as a protective factor, said core and shock absorbing body being secured together to avoid creeping of the latter on the former, the shock absorbing body yielding and spreading under the force of the impact with the soft ball thereby to increase the effective surface contact therewith.

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