

Aug. 15, 1939.

T. TAYLOR

2,169,774

STREAMLINED BASEBALL BAT OR THE LIKE

Filed May 11, 1938

2 Sheets-Sheet 1

Fig. 1.

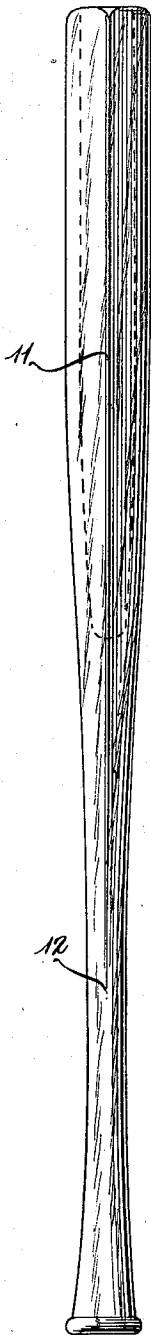


Fig. 2.

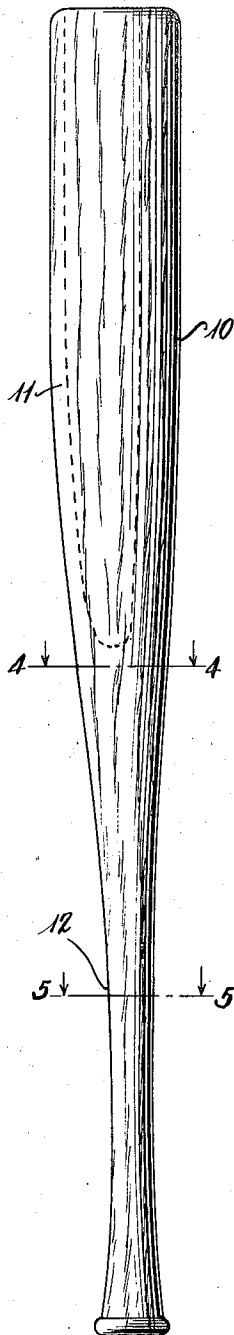


Fig. 3.

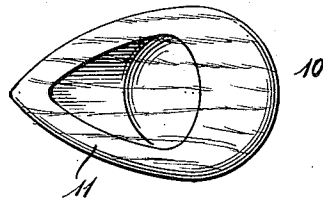


Fig. 4.

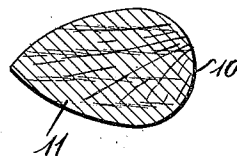
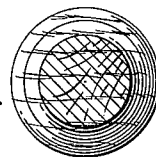


Fig. 5.



Inventor

Thomas Taylor

By

Brown & Phelps

Attorneys

Aug. 15, 1939.

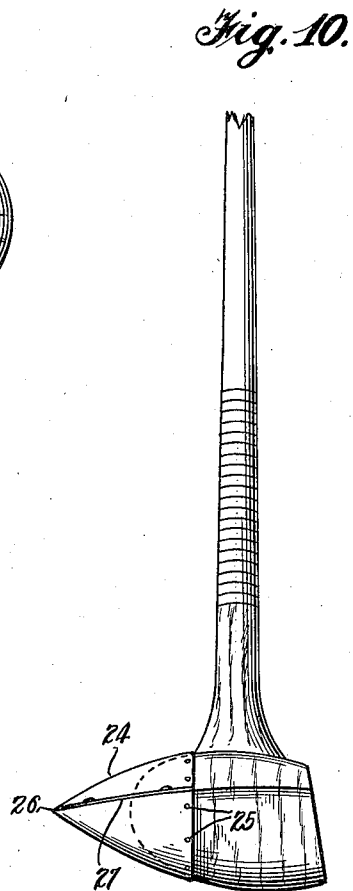
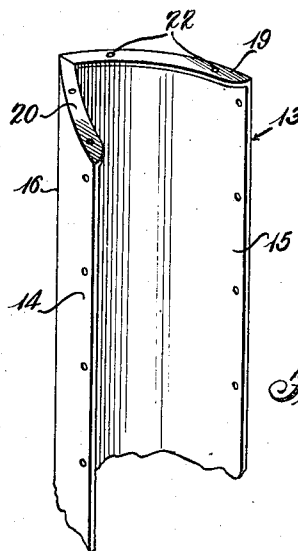
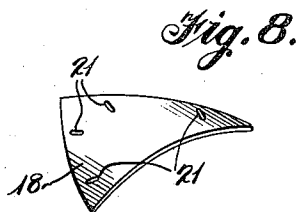
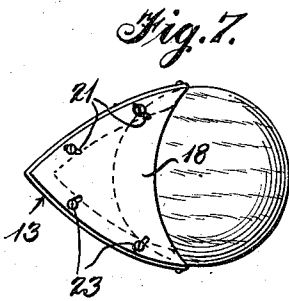
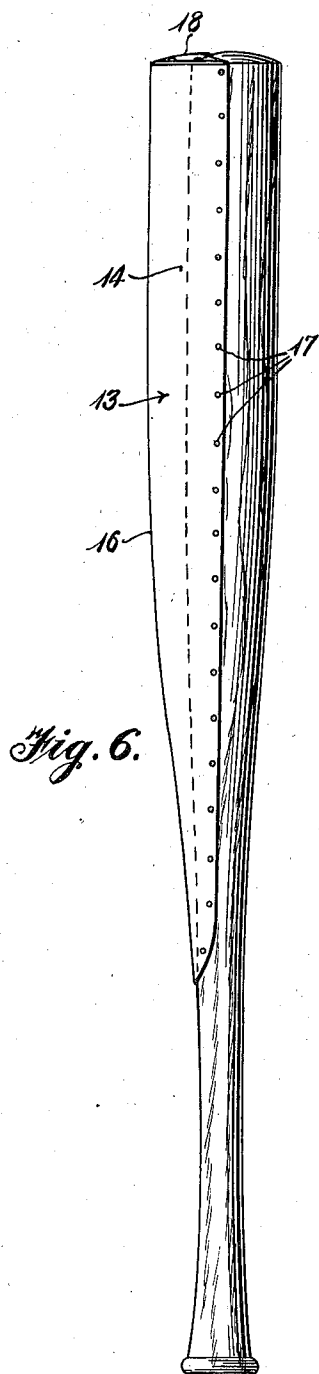
T. TAYLOR

2,169,774

STREAMLINED BASEBALL BAT OR THE LIKE

Filed May 11, 1938

2 Sheets-Sheet 2



Inventor
Thomas Taylor

By *Brown & Phelps*

Attorneys

UNITED STATES PATENT OFFICE

2,169,774

STREAMLINED BASEBALL BAT OR THE
LIKE

Thomas Taylor, Carmel, Calif.

Application May 11, 1938, Serial No. 207,355

1 Claim. (Cl. 273—72)

The invention relates to impact implements as baseball bats and has as an object the provision of an implement made of the usual materials streamlined in such a manner as to not make the implement heavier than those usually in use.

It is a further object of the invention to provide a baseball bat offering substantially less resistance to motion through the air than a round bat.

It is a further object of the invention to provide a bat having the advantages enumerated and of pleasing appearance.

It is a further object of the invention to provide an attachment for existing playing implements which may be placed thereon to produce a streamline form.

Further objects of the invention will appear from the following description when read in connection with the accompanying drawings showing illustrative embodiments of the invention, and wherein:

Fig. 1 is a rear elevation, Fig. 2 is a side view, and Fig. 3 is an end view of a baseball bat formed in accordance with the invention;

Figs. 4 and 5 are horizontal sections on line 4—4 and 5—5 respectively of Fig. 2;

Fig. 6 is a side elevation of a bat having an attachment of the invention applied thereto;

Fig. 7 is an end view of the structure of Fig. 6;

Fig. 8 is a perspective view of a cover plate for the attachment of Figs. 6 and 7;

Fig. 9 is a detail perspective view of a portion of the attachment;

Fig. 10 is an elevation of an attachment made in accordance with the principles of the invention as applied to a golf club.

It has been proposed to form golf clubs to simulate a streamlined shape, that is a shape wherein the trailing side of the head of the club is so formed as to avoid the air eddies when the club is swung, which eddies cause the resistance of the air while flowing into the partial vacuum produced by the motion of the club. The principles and effect of streamlining are well understood, having been thoroughly investigated by the air craft industry and in many other arts since the development of that industry.

The application of the principle to golf clubs is handicapped by the fact that the face of the club must have a flat striking surface. No one prior to my invention so far as known has ever proposed the application of the principle to a baseball bat, in spite of the fact that its application to golf clubs has been proposed many years

ago, as shown by the prior patent granted to me on November 8, 1921, No. 1,396,470.

A difficulty with the application of the principle of the invention to baseball bats, which is a greater obstacle than in the case of golf clubs, is that bats as now used, considering the material of which they are made, are about as heavy as desired by players. They cannot be made of less diameter than normal in a direction perpendicular to the impact surface because of the added difficulty of hitting the ball, and therefore if they are to be made solid and of the form proposed by the invention, they are bound to be too heavy. The present invention therefore involves the application of the streamlined form to baseball bats broadly and furthermore the producing of such a structure of the form indicated which shall be of normal weight for the use intended.

In furtherance of the objects of the invention in the form thereof shown in Figures 1 to 5 inclusive, the striking portion 10 of the bat is made solid and the portion 11 of the bat, which may be considered as a lenticular portion applied to a normal bat, is made hollow, whereby the bat in effect comprises a solid striking portion and a lenticular shell carried by the portion rearwardly of the striking portion.

As shown, the streamlined portion is caused to die out at about the portion 12 where it is expected the bat will not be grasped normally in use when a hard blow is to be struck. The size and shape of the bat for some distance outwardly from the point 12 is such as to offer no serious obstacle to grasping as in the laying down of a bunt.

The end of the hollow shell in Figures 1 to 3 inclusive is shown as left open although it is obvious that it may be closed in any suitable manner as by the placing of a wooden or metallic insert.

It has been determined by scientific investigations that the head of a golf club travels in excess of 100 miles per hour and it will be perceived that a bat, having in mind its greater rigidity to transmit the force of the swing must travel at a speed commensurate with the speed of a golf club. Any object of the size of a baseball bat traveling at such speed offers very marked air resistance to motion.

It has also been found that in the case of golf clubs drives may be increased from ten to twenty per cent by the use of the principles of my former patent above referred to. Due to the conditions under which a baseball is struck, it is impossible to give similar comparisons but the

improvement is marked as a result of the present invention.

5 The aspect ratio shown is for purposes of illustration only as those skilled in the art will understand what aspect ratio is most desirable and the necessary compromise between that which is desirable and that which is practicable for use, but the fineness of streamlining as shown in the drawings results in very marked improvement in the use of the bat.

10 In Figures 6 to 9 inclusive there is illustrated another form of the invention which comprises a shell 13 which may be formed of thin metal, as aluminum, and which may be sold to owners of bats already in use and by them applied to their bats.

15 In order that the shells may be applied to bats of different sizes, the end of the shell 13 is left open so that the sides 14, 15 may hinge about the crest 16 to bring the sides into contact with the bat at about its greatest diameter, and may be secured thereto as by brads 17.

20 In order to close the end of the open shell in its adjusted position, a cover plate 18 is provided which may be attached to the flanges 19, 20 of the shell by means of screws passing through slots 21 in the cover plate. Obviously the openings 22 in the shell flanges may be made

as slots and the openings at 21 round, and nuts may be applied to the screws 23 interiorly of the shell before it is applied to the implement.

The same principle of the invention is shown in Figure 10 as applied to a golf club wherein a hollow shell 24 is shown as attached to a club by means of brads 25. The shell 24 may also be made of portions connected only at the apex 10 and provided with an adjustable connection at 27 of the nature shown in Figures 6 to 9 inclusive.

Minor changes may be made in the physical embodiments of the invention within the scope of the appended claim without departing from the spirit thereof.

I claim:

15 An attachment for a baseball bat comprising an elongated substantially V shaped hollow shell, the arms thereof widest at the outer-end-of-the-bat-contacting portion and decreasing to substantially a point at the bat handle contacting portion, said arms movable about their line of juncture to fit bats of differing diameters; marginal flanges carried by the wide ends of said arms, and a covering plate securable to said flanges.

THOMAS TAYLOR.