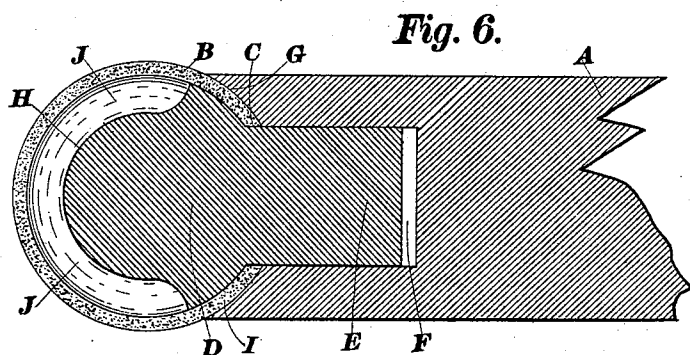
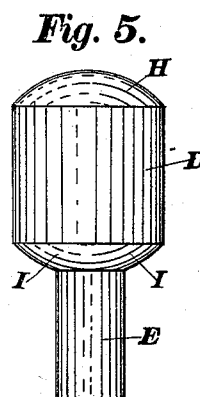
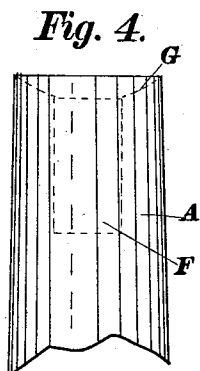
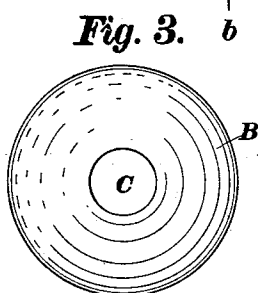
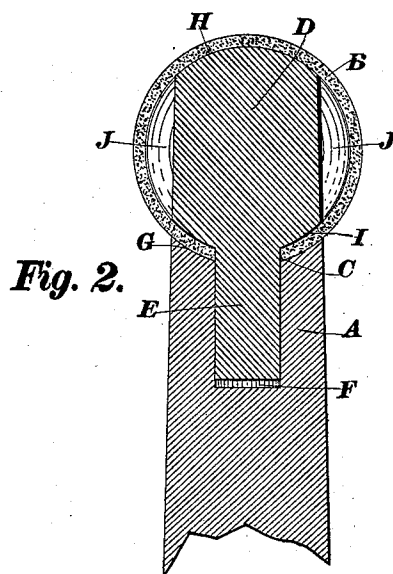
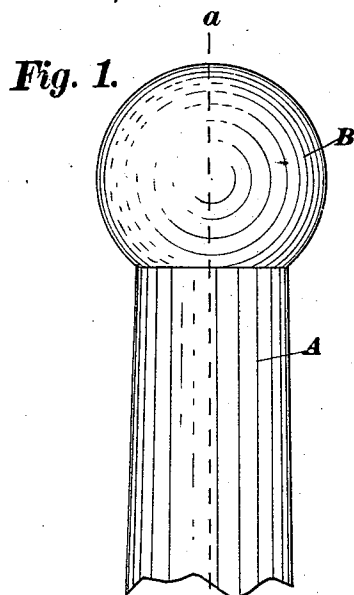


(No Model.)

G. W. HANCOCK.
CUSHION TIP FOR BALL BATS.

No. 471,545.

Patented Mar. 29, 1892.



Witnesses
Charles E. Shurman.
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UNITED STATES PATENT OFFICE.

GEORGE W. HANCOCK, OF CHICAGO, ILLINOIS.

CUSHION-TIP FOR BALL-BATS.

SPECIFICATION forming part of Letters Patent No. 471,545, dated March 29, 1892.

Application filed June 13, 1891. Serial No. 396,069. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HANCOCK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Cushion-Tip for Ball-Bats, of which the following is a specification.

My invention relates to those improvements in ball-bats which are designed to secure a firmer hold of the hands and also to prevent the bat from being so dangerous should it accidentally slip from the hands of the player.

My objects are to secure an elastic rubber substantially spherical-shaped tip to either one or both ends of a ball-bat in such a manner that there will be an inclosed air-space between a portion of the tip and the end of the bat which partially fills the interior of the tip and by means of which the tip is firmly secured in proper position in a very substantial manner. These objects are attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the handle of an ordinary base-ball bat, showing the end thereof having a tip embodying my improvement, the greater part of the bat being broken away. Fig. 2 is a section on line *a b*, Fig. 1, showing construction and relative position of parts. Fig. 3 is a view of the side of the tip to which the end of the bat is attached. Fig. 4 is an elevation of a portion of the end of a ball-bat with the tip removed therefrom, the dotted lines showing a concave end to fit the tip and also a hole to receive the tenon of the reinforce end of the bat, as will be fully described. Fig. 5 is an elevation of the reinforced end of the ball-bat detached from the bat to show construction. Fig. 6 shows section of large or outer end of ball-bat and tip, this construction being adapted to use for the tops of chair-posts, &c., to prevent abrading the walls or furniture of a building.

Similar letters indicate like parts throughout the several views.

A is a portion of the end of a ball-bat; B, a hollow elastic sphere with a hole C at one side.

D is a reinforce end of the bat which is provided with a tenon E, which is tightly fitted to a hole F in the end of the bat. The end of the bat is concave to fit the outside surface of hollow sphere B, which concavity is shown

at G, Figs. 2 and 6, and in dotted lines Fig. 4. The diameter of end D is about the same as the bat where it joins the sphere B. The end H and shoulder I are of a convex shape to fit the interior concavity of sphere B, and when in use for a ball-bat handle-tip, as shown in Figs. 1 and 2, has a diameter from H to I about equal to the interior diameter of sphere B. In Fig. 6, however, D does not contact with the interior of the sphere, except at shoulder I, thus leaving an air-space J for cushion all around the sides and end, the cushion J of air shown in Fig. 2 being shown only at the sides of D. These constructions, however, can be modified considerably without changing the principle of action.

The rubber sphere B can have a smooth or roughened surface or its shape can be of many sides or oblong or even cylindrical; but in all these instances it will be substantially the same for the purpose intended, my most particular object being the inclosure of air by means of an elastic bulb at one or both ends of a ball-bat for the purpose of preventing the hands from slipping and ease the grip if applied to the end of the handle of a ball-bat, and if applied to the large or outer end of a ball-bat to provide a cushion to prevent the bat from being so dangerous, as it commonly is, should it slip from the player's hands accidentally and strike a person or any object which is easily injured. In constructing this device for a tip the sphere is made of any elastic rubber or other elastic material, so that the full diameter of D can be forced through hole C, when the material of the sphere will close again and contact with the sides of tenon E, as shown in Figs. 2 and 6. Glue is now applied to the tenon E, and the tenon is forced into hole F in the end of the bat downward until the walls of the sphere are compressed between shoulder I of D and concave end G of bat A, the glue from tenon E being forced up around the junction and not only forming an air-tight joint, but firmly cementing the part D to the end of the bat, so that the two form, practically, but one piece, the sphere being held in position in the best possible manner to insure durability and always presenting a neat appearance.

Ball-bats furnished with this improvement are more particularly intended for indoor

base ball, a game which has recently grown into great favor in cities where halls of sufficient size can be obtained. In playing indoor base ball a large soft ball is used, which, on account of the space of an ordinary hall being very limited, becomes a necessity, since a large soft ball cannot be batted to but a short distance, and will do no damage when it strikes the walls or windows; also, on account of the contracted space it becomes very necessary to have some form of bat which can be held in the hands very firmly; but should it accidentally slip from the hands of the player it should be provided with a cushion at the outer end to prevent a possibility of a serious accident.

In my new invention I have endeavored to construct a bat which will meet the above objections.

I claim—

1. In combination with a ball-bat, an elastic cushion B, said cushion having a space within

it to contain air, said cushion to be attached to one or both ends of a ball-bat, for the purpose described.

2. In combination with a ball-bat, a hollow elastic cushion for containing air, said cushion having within it a head D, said head being larger where it contacts with the inside of cushion B at the shoulder I of said head than the diameter of the single orifice C of said cushion, said head B having a tenon E or dowel which passes through said orifice C and connects said head to the end of bat A, substantially as described, the margin around the orifice C of cushion B being held in permanent position between shoulder I of head D and concave end of bat A, for the purpose described.

GEORGE W. HANCOCK.

Witnesses:

W. G. BOORMAN,
C. E. DOANE.