Sept. 23, 1924. 1,509,733

J. H. LANGFORD

BALL BAT

Filed Aug. 23, 1921

Fig. 1.

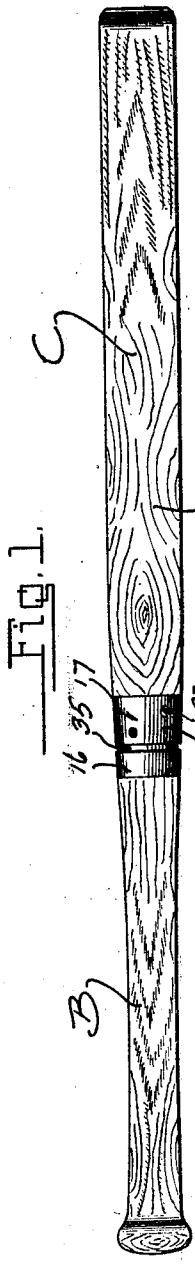


Fig. 2.

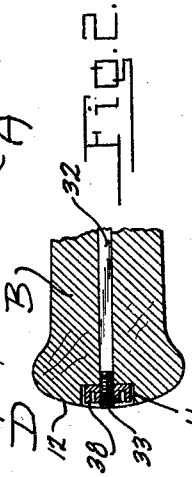


Fig. 4.

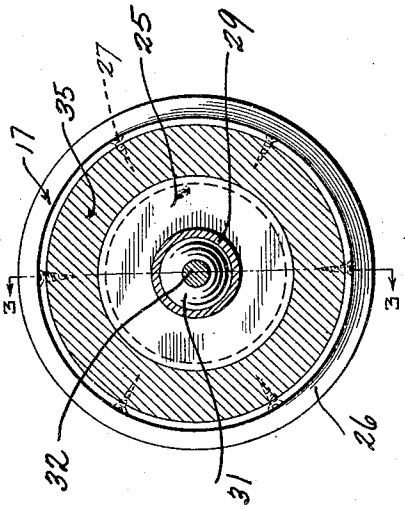
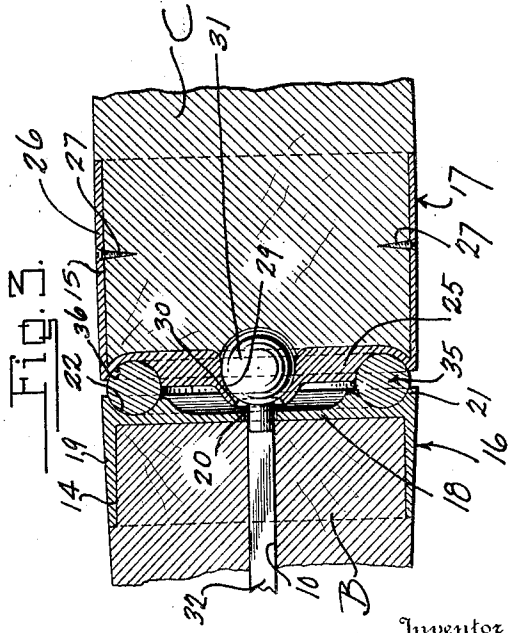


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN HENRY LANGFORD, OF IMPERIAL, PENNSYLVANIA.

BALL BAT.

Application filed August 23, 1921. Serial No. 494,626.

To all whom it may concern:

Be it known that I, JOHN H. LANGFORD, a citizen of the United States, residing at Imperial, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Ball Bats, of which the following is a specification.

This invention relates to improvements in base ball bats.

The primary object of this invention is the provision of a base ball bat capable of absorbing shock incident to contact with a base ball.

A further object of the invention is the provision of a base ball bat comprising a pair of sections resiliently connected in a novel manner for absorbing shock incident to hitting a base ball, thereby aiding in the preservation of the bat, as well as preventing injury to a batter's hands.

Other objects and advantages will be apparent during the course of the following detailed description.

In the accompanying drawing, forming a part of this specification, and in which similar reference characters designate corresponding parts throughout the several views,

Figure 1 is a side elevation of the improved base ball bat.

Figure 2 is a fragmentary end sectional view of the ball bat.

Figure 3 is a fragmentary enlarged cross sectional view showing the resilient connecting details of the improved bat, and taken on the line 3—3 of Figure 4.

Figure 4 is a transverse cross sectional view taken through several of the details illustrated in Figure 3.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the letter A designates the improved bat, including a hand engaging section B, and a ball engaging or batting section C; said sections B and C adjustably maintained in detachable resilient relation by the improved connection D.

The hand engaging section B preferably includes but little over one third of the total length of the bat A, the section C comprising the remaining length. The section B is axially provided with the square bore or aperture 10, opening out into a depression 11 upon the extreme end surface 12 of the hand engaging section B.

The sections B and C are turned adjacent their abutting ends to provide the circumferential grooves 14 and 15 for the reception of the ferrules or casings 16 and 17 respectively. The casing 16 adapted for connection over the groove 14, comprises a base plate 18, having the circumferentially outstanding flange 19 thereon, for fitting into the groove 14, whereby the external surface of the flange 19 lies flush with the external circumferential surface of the bat B. The base 18 is centrally provided with an aperture 20, for alignment with the bore 10 of section B. The base 18 is furthermore provided with the upstanding circumferential portion 21, extending opposite in direction to the flange 19, and having the arcuate seating depression 22 therein.

The ferrule 17, comprises a base plate 25 for overlying the end of the section C, which is in abutting relation with respect to the section B, said base 25 having the circumferentially outstanding flange 26 thereon, for engaging in the groove 15 of the section C, whereby the external surface of the flange 26 may lie flush with the external surface of the section C. It is preferred, that the flange 26 be relatively longer than the flange 19 of ferrule 16, adapted to receive detachable screw elements 27 or the like, for the purpose of detachably maintaining the ferrule 17 in secure relation over an end of the section C. The base 25 is centrally provided with the arcuate socket 29, extending away from the section C, and having an aperture 30 outletting from this socket 29, and for a purpose to be subsequently set forth.

A ball 31 is preferably provided for reception within the socket 29 and having a stem 32 detachably connected thereto, and adapted for extending through the aperture 30 in said socket 29. The stem 32 is preferably square in cross section, or of other polygonal cross section, and having a screw threaded end 33.

In assembling, the sections B and C are placed in position to form the back structure A having the ferrules 16 and 17 facing each other. In this position, a resilient ring 35, circular in cross section is provided, for disposition intermediate the bases 18 and 25 of the ferrules 16 and 17, and seating in the depressions 22 and 36 provided, respectively in said bases. The polygonal shank 32 extending from the aperture 30 of socket 29 is

slidably disposed through the axial bore 10 in the section B; the screw threaded end 33 projecting outwardly into the depression 11. A spanner wrench actuated nut 38, or other adjustable element, is provided for engaging the screw threaded end 33 and for entirely seating within the depression 11 provided in the end surface 12 of the hand engaging portion B.

From the foregoing, it can be seen that as the nut 38 is adjusted, the ball 31 will be drawn toward the section B, and due to the socket connection 29, the sections B and C will be longitudinally and relatively drawn together for clamping the resilient ring 35 therebetween. When so clamped together, the ring 35 maintains the bases 18 and 25 of the ferrules 16 and 17 in spaced relation for shock absorbing purposes.

A batter using the ordinary base ball bat is compelled to carefully adjust the bat in his hand, in order to position the grain of the wood, of which the bat is constructed, parallel to the line of the pitched ball, in order to prevent splitting of the bat when contacting the ball. With the improved bat herein described, the batter need not necessarily line the grain up to assume a predetermined position with respect to the pitched ball, since when the ball contacts the bat end C, the ring 35 will automatically absorb any shock incident to contact of the bat with the ball. In like manner, the ring 35 absorbs all shock, or vibration resulting from hitting the ball, thus preventing injury to the hands or wrists of the batter.

Various changes in the shape, size and arrangement of parts may be made to the form of the invention herein shown and described, without departing from the spirit of the invention or the scope of the claims.

I claim:

1. A ball bat comprising a hand engaging section and a ball hitting section; a resilient ring, and means carried by one section extending through the other section for exterior adjustment to clamp said ring intermediate the abutting ends of the sections.

2. A ball bat comprising a hand engaging section and a ball hitting section, and ball and socket joint connecting means for said sections including securing means extending exteriorly of one of said sections for permitting adjustment of the securing means from a point exteriorly of the last mentioned section.

3. A ball bat, comprising a pair of sections, one section having an axial aperture therethrough, ball and socket means for connecting said sections including a stem slidable in the axial aperture in said section to project externally of the same, and a nut engaging the external projecting portion of said stem for adjustment thereon for relative positioning of said sections.

4. A ball bat, comprising a pair of sections, ferrules over the abutting ends of said sections, resilient means for engagement between the ferrules, and means adjustable exteriorly of the bat sections for relative movement of said sections to permit clamping of said resilient means therebetween.

5. A ball bat, comprising in combination a pair of sections, resilient means intermediate the abutting ends of said sections, fastener means pivotally mounted on one abutting end of one of said sections and extending through the other of said sections and securing means adjustably engaged with the extended end of said fastener means for tightening the fastener means and adjustably clamping the resilient means.

6. A ball bat, comprising in combination a pair of bat sections, ferrules over the abutting ends of said sections having seating depressions therein, a ball engaging in a socket of one of said ferrules, a stem axially extending from the ball in said section and through the ferrule holding said ball and adapted for slidably extending through the other of said sections to project exteriorly thereof, an adjustable nut for engaging the projecting end of said stem, and resilient means seated in the depressions of said ferrules and adapted for clamping therein by adjusting of the nut upon said stem.

7. A ball bat comprising a hand engaging section and a ball hitting section, the hand engaging section having an axial passageway therethrough, a ball and socket joint connected to the ball hitting section on an end thereof, the ball of said joint having a relatively long shank provided with a screw threaded end which is adapted for movable disposition in the passageway of the hand engaging bat section so that the screw threaded end thereof extends exteriorly of the hand engaging section, a resilient member adapted for disposition intermediate the facing ends of the bat sections, and a nut for adjustably engaging the screw threaded end of said ball shank, adapted for adjustment thereon whereby the bat sections may be relatively moved for clamping said resilient member therebetween.

JOHN HENRY LANGFORD.