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A. M. OWEN ETAL WEIGHTED BASEBALL BAT Filed April 16, 1962 3,116,**926** 



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## 3,116,926

WEIGHTED BASEBALL BAT Arnold M. Owen, Box 38, Miller, Mo., and George John Zanotti, 4048 N. Kolze, Schiller Park, Ill., assignors of one-fourth to Charles W. Owens, Springfield, Mo., and one-fourth to Philip C. Rizzo, Chicago, Ill. Filed Apr. 16, 1962, Ser. No. 187,572 1 Claim. (Cl. 273-72)

This invention relates to improvements in baseball 10 bats and more particularly relates to an improved form of weighted baseball bat adapted to improve the batting ability of the batter.

A principal object of the invention is to provide a novel and improved form of baseball bat constructed with a 15 view towards developing the wrist and forearm and the snap of the wrist of the batter.

A further object of the invention is to adapt a baseball bat to develop the batting action of the batter by selectively weighting the outer end of the bat.

Another object of the invention is to provide an improved form of baseball bat particularly arranged to develop the forearm and wrist and the snap of the wrist of the batter by selectively weighting the outer end portion of the bat and detachably retaining the weight <sup>25</sup> therein in stationary relation with respect to the length of the bat, during use of the bat.

Still another object of the invention is to improve upon the baseball bats heretofore in use by providing a chamber extending axially along a bat and opening to the outer end thereof and by providing weights for selected insertion in said chamber, and locking the weights in position during use of the bat.

A still further object to the invention is to adapt a baseball bat for use in developing the forearms and wrist and the snap of the wrist of the batter, by forming a chamber extending axially along the bat and opening to the outer end thereof, and by placing a weight or weights in this chamber held to a locking member by spring means, and by mounting the locking member in the outer end of the chamber to accommodate the number of weights in the chamber to be varied.

These and other objects of the invention will appear from time to time as the following specification proceeds and with reference to the accompanying drawing wherein:

FIGURE 1 is a plan view of a form of baseball bat embodying the principles of the present invention;

FIGURE 2 is a longitudinal sectional view taken through the outer end portion of the bat shown in FIG- 50 URE 1;

FIGURE 3 is an end view of the bat looking at the bat toward the outer end thereof and showing the locking member for the weights in position in the end of the bat prior to movement of said locking member to a locking 55 position;

FIGURE 4 is an end view of the bat somewhat similar to FIGURE 3, but showing the locking member for the weights turned to a position to lock the weights to the bat;

FIGURE 5 is an end view of the inner end of the retainer prior to insertion of the retainer in the end of the baseball bat; and

FIGURE 6 is a sectional view taken substantially along line VI—VI of FIGURE 5.

In the embodiment of the invention illustrated in the drawings, we have shown in FIGURE 1 a baseball bat 11, which may be a regulation bat and vary in diameter at its largest end from 2!4'' to 2%'' and vary in length from 29'' to 36'' depending upon the purposes for which 70 the bat is used. The bat may also vary in weight from 25 ounces to 42 ounces.

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The bat 11 is shown as being drilled from its outer end concentrically with the longitudinal axis thereof, and as having a metal sleeve 12 carried therein, the interior of which forms a chamber 13 carrying one or more weights 15. While we have herein shown a sleeve in the drilled portion of the bat, the principal function of the sleeve is to reinforce the bat and where strength is not necessary, the sleeve may be omitted.

The bat 11 is also shown as being counter drilled from its outer end portion to provide an enlarged diameter outer chamber portion 16. The enlarged diameter portion 16 converges to the smaller diameter drilled portion of the bat and to the sleeve 12 along a beveled shoulder 17.

The enlarged diameter chamber portion 16 of the bat has a retainer 19 threaded therein, serving to retain a locking member 20 to the bat and to retain a selected number of weights 15 within the chamber 13.

The retainer 19 is shown in FIGURE 2 as being gen-20 erally annular in form having an outer enlarged diameter or flanged portion 21 recessed within the head of the bat when the retainer 19 is threaded in position on the end of the bat. The retainer 19 has a generally cylindrical inner wall 22 having diametrically opposed slots 23 extending therealong, and affording communication to the inner end of said retainer. The inner end of the retainer 19 has a pair of diametrically opposed inwardly opening notches 25 formed therein, forming locking means for diametrically opposed pins 26 projecting from periphery of the locking member 20. The pins 26 are adapted to slide along the slots 23 of the retainer 19 when inserting the locking member to retain a weight or weights to the chamber 13, and to then arcuately move along the inner surface of the retainer 19 for registry with the notches 25. When in this position, a compression spring 27 seated on the inner end portion of the chamber 13 and in engagement with an innermost weight 15, will bias the pins 26 into engagement with the notches 25, and retain the locking member 20 and weight or weights 15 to the bat.

The locking member 20 has a transverse key 30 extending across its outer end portion, and generally semispherical portions 31 on each side of said key, said key provides a means for turning said locking member to lock the weight or weights 15 in position within the end of the bat, or to accommodate removal of said locking member from the retainer 19, and the consequent removal or replacement of the weights in the end of the bat.

The weights 15 are shown as being generally cylindrical in form and may be made from lead or from any other desired material. It should be understood that the length and number of weights may be varied in accordance with the degree it is desired to weight the bat.

In assembling the bat, when a certain weight has been selected, the spring 27 is first placed through the retainer 19 and along the sleeve 12, with the bat held in a generally vertical position and the chamber 13 opening upwardly. The number of weights required may then be inserted through the retainer 19 in abutting engagement with the spring 27 and into abutting engagement with each other.

As the weights are placed along the chamber 13, and particularly where the spring 27 is materially compressed, it is desirable to maintain pressure on the outer weight with one hand and engage said weight with another weight with the other hand and then to press the weight along the chamber 13 against the compression spring 27. When the required number of weights have been added, the locking member 20 is inserted in the retainer 19, with the pins 26 thereof in registry with the slots 23. The locking member 20 is then depressed until the pins are beneath the inner or bottom surface of the retainer 19. The

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locking member 20 may then be turned  $90^{\circ}$  to register the pins 26 with the notches 25. The spring 27 will thus engage and retain the pins 26 to the notches 25 and the weights 15 will be locked in stationary positions within the chamber 13.

When it is desired to remove a weight from the chamber 13, it is merely necessary to depress the locking member 20 to release the pins 26 from the slots 25 and to then turn said locking member until the pins 26 register with the slots 23. The spring 27 will then force 10 the locking member 20 and weights 15 from the end of the bat.

While we have herein shown and described one form in which our invention may be embodied, it may readily be understood that various modifications and variations 15 in the invention may be attained without departing from the spirit and scope of the novel concepts thereof, as defined by the claim appended hereto.

We claim as our invention:

In a baseball bat, means varying the weight of the bat 20 at the outer end portion thereof comprising:

a chamber opening to the outer end of the bat and extending axially along the bat for a portion of the length thereof,

a spring seated against the inner end of said chamber, 25 at least one weight in said chamber abutting said

spring and biased toward the outer end of the bat by said spring, and means positively holding the weight in said chamber and permitting the number of weights in said chamber to be varied as selected, said means comprising an annular retainer encircling said chamber and recessed in the outer end portion of the bat and having a cylindrical inner wall, a locking member closing the end of said annular retainer and axially movable along said retainer and having at least one locking pin extending radially therefrom,

- and bayonet-like slot means in said retainer registrable with said locking pin, and permitting axial movement of said locking member along said retainer to force a weight in said chamber against said spring,
- said locking member and pin being turnable along said bayonet-like slot means, to lock said locking member in a closed position and to positively lock a selected number of weights in said chamber in position to weight the extreme outer end portion of said bat.

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