

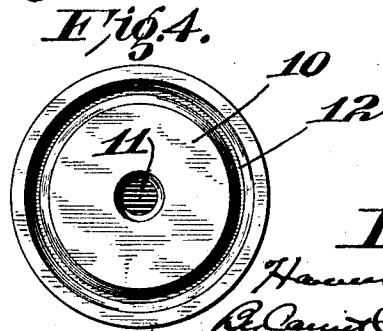
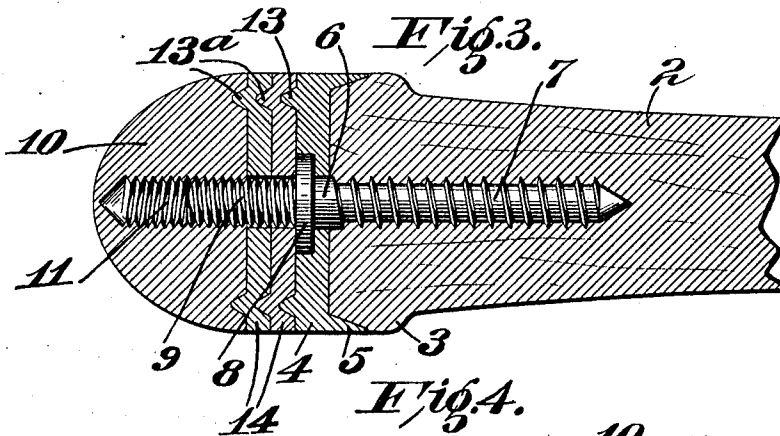
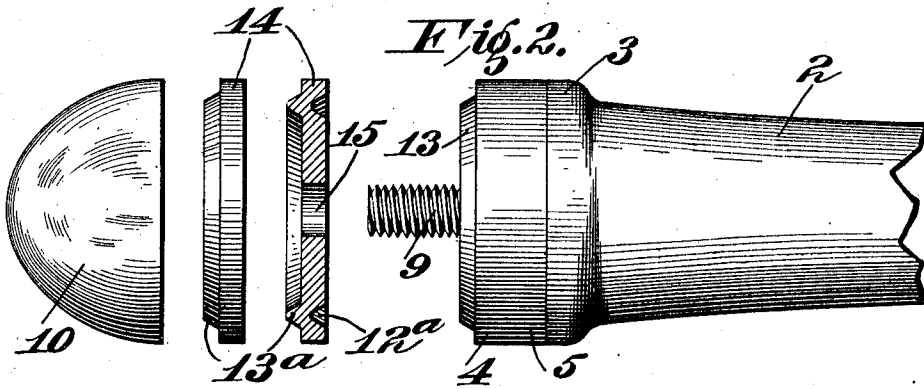
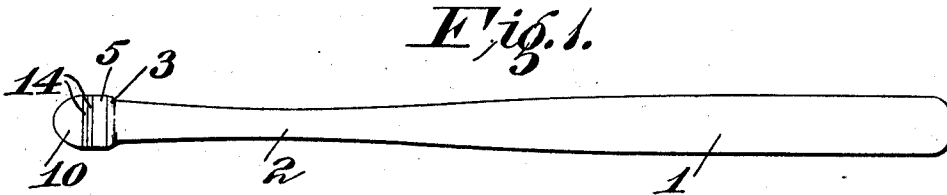
H. MATSON.

BAT.

APPLICATION FILED OCT. 27, 1910.

1,026,990.

Patented May 21, 1912.



Witnesses:

Edgar T. Farmer,

G. A. Pennington

Inventor:

Harrison Watson,
By C. A. Davis, Attys.

UNITED STATES PATENT OFFICE.

HARRISON MATSON, OF ST. LOUIS, MISSOURI.

BAT.

1,026,990.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed October 27, 1910. Serial No. 589,342.

To all whom it may concern:

Be it known that I, HARRISON MATSON, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Improvement in Bats, of which the following is a specification.

This invention relates to bats and more particularly to base-ball bats.

It has for its principal objects to counteract the shock due to the impact and to preserve the equipoise of the bat when it strikes the ball, to produce a counterbalancing device which can be readily applied to any ordinary bat, to provide for varying the weight and leverage of the device to suit the requirements of the user, to prevent the weight from jarring loose, and to attain certain other advantages hereinafter more fully appearing.

In the accompanying drawing which forms part of this specification and wherein like symbols refer to like parts wherever they occur, Figure 1 is a side view of a base-ball bat provided with a counterbalancing weight according to my invention; Fig. 2 is a fragmentary view, partly in elevation and partly in section, showing the end portion of a bat with the counterbalancing weights detached; Fig. 3 is a fragmentary longitudinal section of the end portion of the bat with the weights applied; and Fig. 4 is an inner face view of the weighted knob member.

In the drawing is shown a base-ball bat 1, which may be of any ordinary or desirable shape. On the end of the handle portion 2 of the bat is preferably formed an annular knob or flange 3 and the end is cut off square to provide a flat face. Secured against the end of the bat is a circular metal plate 4 which is provided with an annular flange or ferrule portion 5. The inner side of the flange or ferrule 5 is tapered or outwardly flaring and fitted over a counterpart tapered portion at the end of the bat. The plate 4 is provided with a central perforation and counterbored from its outer face; and a securing screw 6 is inserted through said central perforation. The inner portion 7 of this screw 6 is provided with a lag screw thread and it is screwed into an axial bore in the end of the bat. The screw is provided with an annular flange or shoulder 8 which is fitted into the countersunk

portion of the central opening in said plate 4, so as to lie flush with or below the outer face of the latter and hold the same in place.

The outer portion 9 of the screw 6 is provided with a machine screw thread and is adapted to receive a metal knob or weight 10 which is provided with a counterpart threaded axial bore 11. As shown more clearly in Fig. 4, the flat inner face of the knob or weight 10 is provided with an annular groove or channel 12 which is a counterpart of an annular rib 13 on the plate 4. That is, the sides of the rib and groove are beveled or tapered. By this arrangement, when the knob or weight is screwed tightly against the outer face of the plate 4, the rib 13 will fit snugly within the groove 12, and the weight is thereby prevented from jarring loose.

The plate 4 is preferably made of steel or other hard metal while the weight or knob is made of Babbitt metal, or the latter may be made of lead, iron or any other desirable metal.

As shown more clearly in Figs. 2 and 3, removable and interchangeable metal disks 14, preferably of the same material as the knob, are sleeved on the threaded stud 9 between the plate 4 and said knob. Preferably the central perforations 15 in said disks are not screw-threaded, but the same are of a diameter to fit loosely over said screw-threaded stud 9; and said disks are provided on their opposite faces, respectively, with counterpart grooves and ribs 12^a and 13^a, which correspond to or are counterparts of the groove 12 and rib 13 of the knob 9 and the plate 4, respectively. By this construction and arrangement of the disks 14, the screw threads of the stud 9 are not depended upon to hold the disks in place, but the interlocked ribs and grooves, as shown in Fig. 3, serve to hold the knob, disks and plate against independent lateral movement; and the parts are clamped by the knob which serves as a jam nut.

By providing the lag screw portion 7, the end of the bat may be bored cylindrically and of sufficiently small diameter to receive said lag screw, and the liability of splitting the bat is thereby avoided. So, too, the tapered or flared flange or ferrule portion 5 of the plate 4 further serves to prevent the splitting of the bat when the screw is ap-

plied. It also serves to prevent the plate and screw from jarring loose. However, it is obvious that in some cases the plate 4 may be dispensed with and the annular rib 13 may be formed integrally or turned directly upon the end of the bat.

By the construction and arrangement of the counterbalancing weight as herein set forth the same may be readily varied and adjusted to suit the individual requirements of different users or to suit different conditions when used by a single individual; and the weights will not jar loose from the rough usage to which a base-ball bat is subjected.

Obviously, the device admits of considerable modification without departing from my invention. Therefore, I do not wish to be limited to the specific construction and arrangement shown.

What I claim is:

1. A bat having a fixed screw-threaded stud projecting axially from its handle end, an annular rib surrounding said screw-threaded stud on the end of the bat, and a detachable weighted metal knob having a screw-threaded axial bore fitted on said screw-threaded stud and impinged against the end of the bat, said knob having an annular groove in its inner face which is a counterpart of said annular rib on the end of the bat.

2. The combination with a bat, of a circular metal plate fitted against the handle end of the bat and having an annular ferrule portion on its inner side which is sleeved over the end portion of the bat, said plate having a central perforation therein, a metal stud having a screw-threaded inner portion which is inserted through the perforation in said metal plate into the end portion of the bat, said stud having an annular shoulder arranged and adapted to retain said metal plate in position and said stud also having its outer portion screw-threaded, and a weighted metal knob having a screw-threaded bore which is fitted on the screw-threaded outer portion of said metal stud.

3. The combination with a bat, of a circular metal plate which is fitted to the handle end of the bat, said metal plate having a peripheral ferrule portion on its inner side which is fitted around the end portion of the bat and an annular rib on its outer face, and said plate also having a counter-bored central perforation therein, a metal stud having its inner portion screw-threaded and inserted through the central perforation in said plate into the end portion of the bat, said stud having an annular shoulder which is seated in the counterbored portion of the perforation in said metal plate so as to retain the latter in place, and the outer portion of said stud being screw-threaded, and a weighted metal knob having a screw-

threaded bore which is fitted on the screw-threaded outer portion of said stud, said knob having an annular groove in its inner face which is a counterpart of the annular rib on the outer face of said metal plate.

4. The combination with a bat, of a circular metal plate secured to the handle end of the bat and having an annular rib on its outer face, a screw-threaded stud extending axially from the outer face of said metal plate, and a weighted metal knob having an axial bore which is screw-threaded to fit said screw-threaded stud and having an annular groove in its inner face which is a counterpart of the annular rib on said plate.

5. The combination with a bat, of a circular metal plate secured to the handle end of the bat and having an annular rib on its outer face, a screw-threaded stud extending axially from the outer face of said metal plate, a weighted metal knob having a screw-threaded bore which is fitted to said screw-threaded stud, said knob having an annular groove in its inner face which is a counterpart of the annular rib on said metal plate, and detachable and interchangeable metal disks secured on said screw-threaded stud between said knob and said metal plate, the opposite faces of said metal disks having, respectively, annular grooves and ribs which are counterparts of the groove and rib on said knob and metal plate, respectively.

6. The combination with a bat, of a circular metal plate secured to the handle end of the bat, said plate having a peripheral ferrule portion on its inner side, said ferrule being flared on the inside and fitted over the counterpart tapered end portion of the bat, and said plate having a central perforation therein, a metal stud having a screw-threaded inner portion which is inserted through the perforation in said plate axially into the end portion of the bat, said stud also having its outer portion screw-threaded and having intermediate its opposite ends an annular shoulder which is arranged and adapted to hold said plate on the bat, and a weighted metal knob having a flat inner face and an axial bore which is screw-threaded to fit the screw-threaded outer portion of said stud.

7. A bat having a screw-threaded stud projecting axially from its handle end, an annular rib surrounding said screw-threaded stud on the end of the bat, a weighted metal knob having a screw-threaded axial bore fitted on said screw-threaded stud, said knob having an annular groove in its inner face which is a counterpart of said annular rib on the end of the bat, and detachable and interchangeable metal disks interposed between said knob and the end of the bat, said disks having on their opposite faces, respectively, grooves and ribs which are

counterparts of the groove and rib on said knob and end of the bat, respectively.

8. A bat having a stud projecting axially from its handle end, and a weighted knob detachably secured on said stud and abutting against the end of the bat, the contiguous face of said knob and end of the bat having interfitting counterpart portions adapted to resist independent lateral movement of the knob and bat.

9. A bat having an annular knob protuberance formed integrally on its handle end and a relatively heavy weighted metal knob member detachably secured on the end of the bat and forming substantially a continuation of said integral annular knob protuberance.

10. A bat having an annular knob protuberance formed integrally on its handle end and a weighted metal knob portion detachably secured on said handle end and forming substantially a continuation of said integral knob protuberance, said detachable knob portion comprising a relatively heavy outer member and a series of lighter detachable and interchangeable members inter-

posed between said relatively heavy member and said integral knob protuberance.

11. A bat having a fixed stud projecting axially from its handle end, a pile of metal disks fitted detachably on said stud, a relatively heavy metal knob member detachably secured on said stud and adapted to clamp the pile of disks against the end of the bat, and cooperative means on said knob member, interposed disks and end of the bat, adapted to resist independent movement of said elements.

12. The combination with a bat, of a metal weight, means for detachably securing said metal weight to the handle end of the bat and holding it normally against endwise movement, and separate means on the weight and end of the bat for resisting independent lateral and rotary movement of said metal weight and bat.

Signed at St. Louis, Missouri, this 22nd day of October, 1910.

HARRISON MATSON.

Witnesses:

G. A. PENNINGTON,
A. H. CROISSANT.