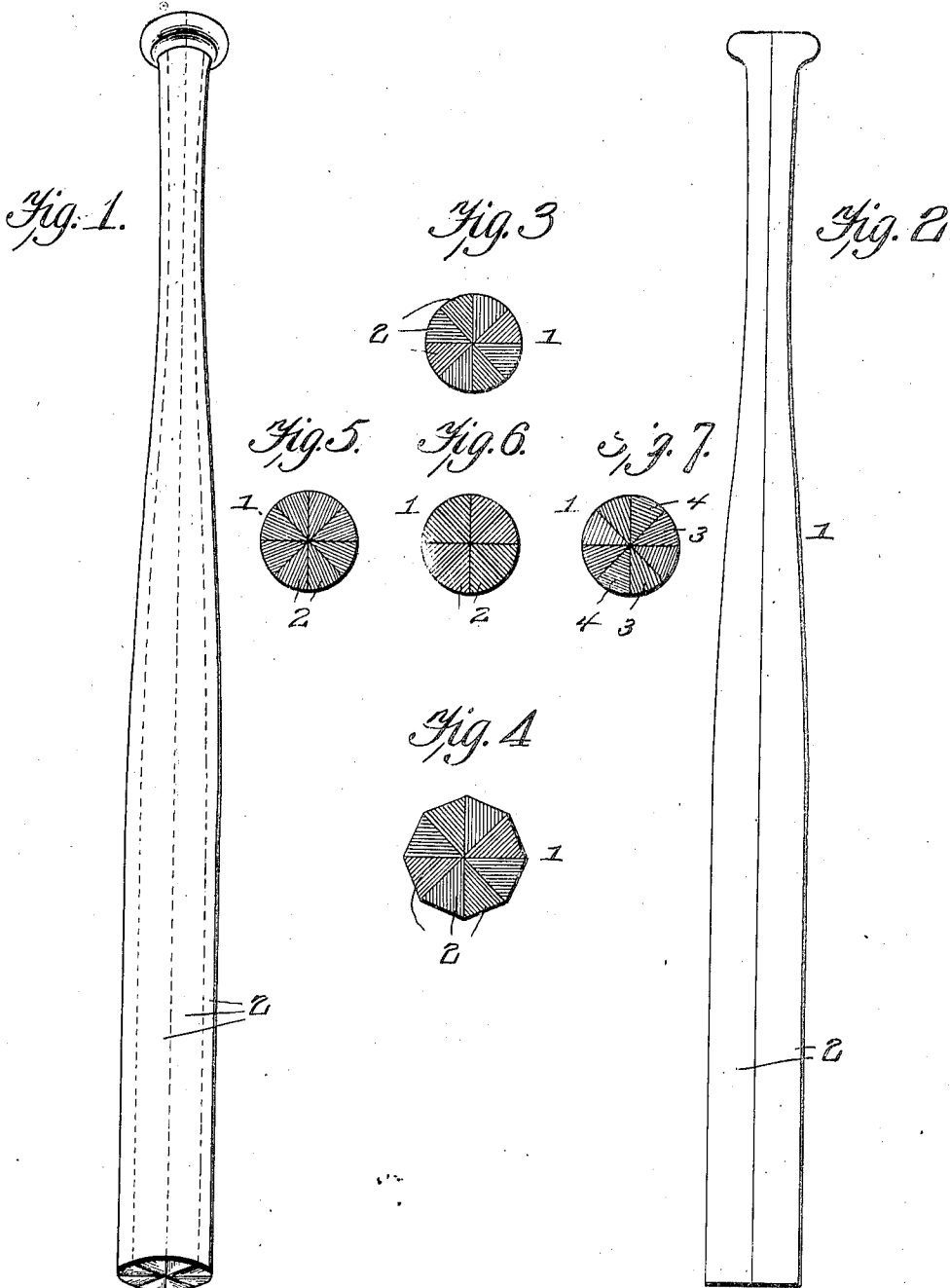


No. 813,400.

PATENTED FEB. 27, 1906.

C. H. BUEHLER.
BASE BALL BAT.
APPLICATION FILED JULY 23, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES H. BUEHLER, OF ST. MARYS, OHIO.

BASE-BALL BAT.

No. 813,400.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed July 23, 1904. Serial No. 217,858.

To all whom it may concern:

Be it known that I, CHARLES H. BUEHLER, a citizen of the United States, residing at St. Marys, in the county of Auglaize and State of Ohio, have invented a new and useful Base-Ball Bat, of which the following is a specification.

This invention relates to base-ball bats, and has for its object to provide improvements in the construction of such devices for the purpose of strengthening the same without the employment of metal rods or other extraneous means.

It is furthermore designed to obviate the necessity of care being taken in the manner of holding the bat so as to prevent breaking thereof when striking a ball.

Another object of the invention is to provide for forming the bat from a plurality of sections and to arrange the grains of the sections in a predetermined relation in order that the several sections may constitute a reinforcement for the section which is struck by the ball, thereby to materially reduce the liability of the bat becoming broken when striking a ball therewith.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a base-ball bat constructed in accordance with the present invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a cross-sectional view. Fig. 4 is a detail view of the stock prior to the turning thereof in a turning-lathe. Figs. 5, 6, and 7 are detail cross-sectional views showing modifications in the arrangement of the bat-sections.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

Ordinarily base-ball bats are formed with the grain running transversely in one direction only, wherefore unless care is always taken to hold the bat with the grain in the proper position lengthwise to the direction of the ball the bat is liable to become broken when a ball is struck thereby. In view of

this disadvantage I propose to construct a bat of a plurality of longitudinal segmental sections with the grain of each section set at an angle to the grain of the adjacent section.

As shown in the accompanying drawings, 1 designates a bat of common or ordinary form, which is made up of a plurality of duplicate longitudinal segmental sections 2, which are glued together to form the polygonal stock. (Shown in Fig. 4.) In assembling the segmental sections, which are originally triangular in cross-section and arranged to bring their apexes at the axial line of the stock, care should be taken that the grain of each section should extend transversely across the stock, and therefore at an angle to the grain of the two adjacent sections, whereby the sections at the front and back of the bat always present the grain longitudinally to the direction of the ball irrespective of the position of the bat as held by the batter. After the stock has been built up it is of course placed in a turning-lathe and turned down to the usual size and shape, when the bat is completed and in readiness for use.

In addition to always having the grain of that portion of the bat which is struck by the ball disposed in a direction longitudinal with respect to the movement of the ball it will be noted that no metal rods or other extraneous devices are employed to strengthen the bat, and therefore the weight of the latter is not increased, and there is no departure whatever from the ordinary form of bat, wherefore there are no peculiarities with which the batter must become acquainted before the bat can be successfully used.

Another important advantage of the present construction resides in the fact that should the section which is struck by the ball become broken the other sections will remain intact and constitute a backing for the broken section, wherefore the effect of the hit upon the ball will be only slightly decreased.

It will be noted that the grain of each of the bat-sections, as illustrated in Figs. 3, 5, and 6, is disposed at right angles to tangents of the bat. In Fig. 3 the grain of the sections is disposed substantially parallel with corresponding edges thereof, while in Fig. 6 the grains of alternate sections are disposed substantially parallel with corresponding edges of said sections, while in Fig. 5 the grain of the sections is set at substantially corresponding angles to corresponding edges of

the sections, whereby the grain of each section is disposed at an angle with respect to the grain of each adjacent section.

Fig. 7 of the drawings illustrates another modified arrangement of bat-sections, wherein alternate sections 3 have the grain arranged at substantially right angles to tangents of the bat, while the other alternate sections 4 have the grain disposed substantially parallel with tangents.

While it is preferred to arrange the grain of the sections at substantially right angles to tangents, as indicated in Figs. 3, 5, and 6, as this arrangement of grain produces the strongest form of bat, yet good results will be obtained by having the grain of only some of the sections arranged at substantially right angles to tangents, the object of the latter arrangement being to make use of the sections 4, which would otherwise be merely lost material. Although the sections 4 are more liable to become broken than the sections 3, they are effectually reinforced or backed up by the other sections, and therefore the breaking of any one of the sections 4 will not result in the breaking of the entire bat.

From the foregoing description it will be noted that the sector-sections of the bat are arranged in a predetermined relation with respect to the grain thereof. Some of the forms

have the grain of each section disposed at substantially right angles to tangents, or, in other words, edgewise to the respective adjacent striking-faces of the bat, while one of the forms has the grain of some of the sections arranged at substantially right angles to tangents, and other sections having the grain arranged substantially parallel with tangents, wherefore it will be understood that the grain of each section is arranged in a predetermined relation with respect to tangents of the bat.

Having thus described the invention, what is claimed is—

1. A bat formed of longitudinal sector-shaped sections with the grain thereof disposed edgewise to the respective adjacent striking-faces of the bat.

2. A bat formed of longitudinal sector-shaped sections with the grain of some of the sections disposed edgewise to the respective adjacent striking-faces of the bat.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES H. BUEHLER.

Witnesses:

J. L. KELLY,

ALEX. VICTOR.