Oct. 5, 1926. 1,601,915

J. A. HILLERICH

BAT

Filed August 25, 1921

Fig. 1.

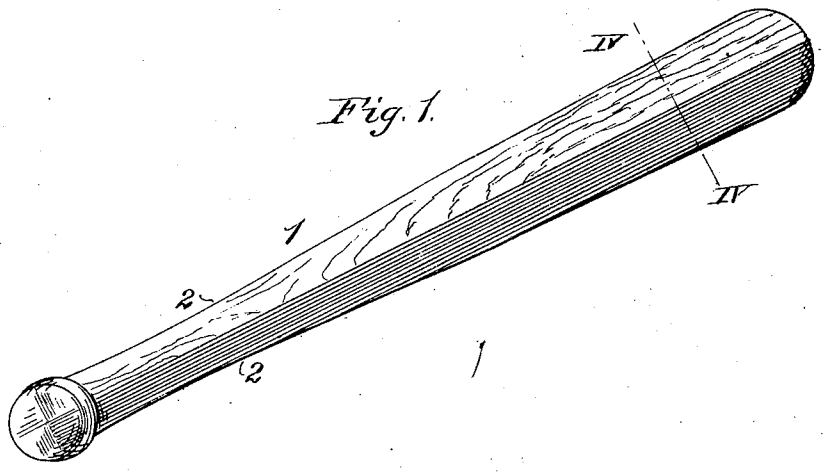


Fig. 2.

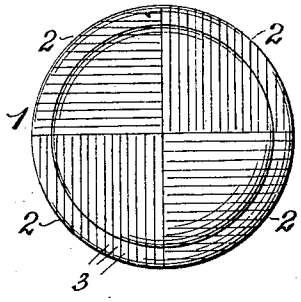


Fig. 3.

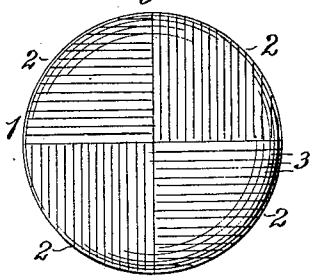


Fig. 4.

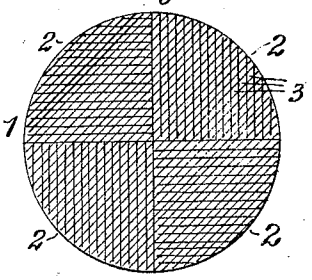
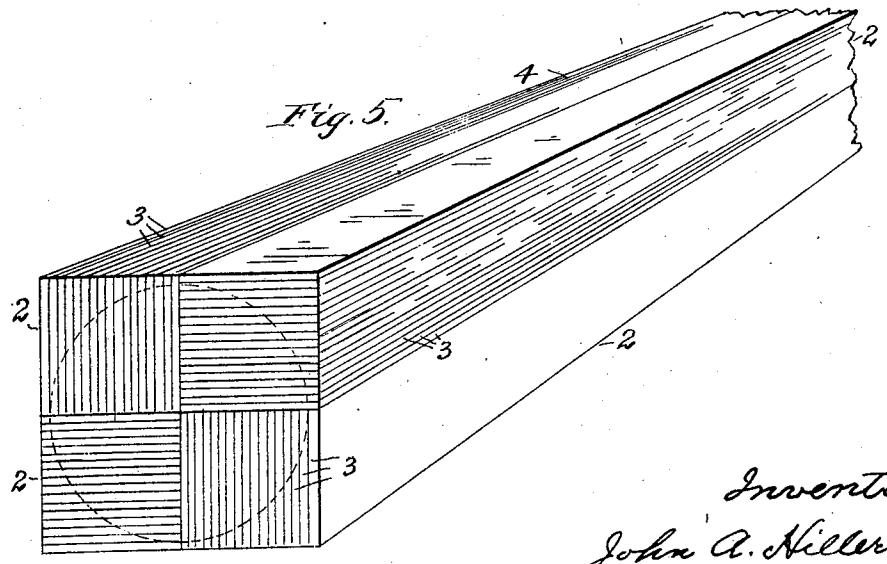


Fig. 5.



Inventor -
John A. Hillerich
by H. N. Low attorney

Patented Oct. 5, 1926. 1,601,915

UNITED STATES PATENT OFFICE.

JOHN A. HILLERICH, OF LOUISVILLE, KENTUCKY.

BAT.

Application filed August 25, 1921. Serial No. 495,212.

The invention relates to that class of baseball bats which are constructed of a plurality of longitudinal splints, sections or sectors secured together so as to make a unitary solid body.

The present invention is directed to improving the construction of bats of that character so as to produce a stronger bat of relatively light weight, and the result is attained by a new arrangement and combination of the longitudinal splints of which the bat is composed.

According to the preferred form of the invention the bat is composed of relatively thin splints so arranged that a certain number of said splints, varying in widths from the radius of the bat to a very small width, form a group which may be a sector of the bat, and a sufficient number of such sectors constitute the whole bat and complete its contour circularly and from end to end, the bat tapering from the striking part to the handle and being externally shaped as is usual or as may be preferred.

A further feature of the invention, which is or may be comprised in the same when reduced to practical form is the arrangement of the splints of one group or sector so that their planes are at right angles (or other practicable angle) to the planes of the splints of the next group or groups. This last mentioned feature gives great strength to the shaft of the bat in whatever position it be held in batting and also prevents the peeling up of the grain of the wood at all parts of the bat. This last mentioned result is also very important and saves a considerable number of bats which would otherwise be returned as imperfect.

With such objects in view as well as other advantages which may be incident to the use of the improvements, the invention consists in the parts and combinations thereof hereinafter set forth and claimed, with the understanding that the several necessary elements constituting the same may be varied in proportions and arrangement without departing from the nature and scope of the invention.

In order to make the invention more clearly understood there are shown in the accompanying drawings means for carrying the same into practical effect, without limiting the improvements, in their useful applications, to the particular constructions which, for the purpose of explanation, have been made the subject of illustration. In said drawings—

Figure 1 is a perspective view of a baseball bat embodying the invention.

Fig. 2 is a top end view of the same.

Fig. 3 is a bottom end view.

Fig. 4 is a sectional view on line IV—IV of Figure 1.

Fig. 5 is a perspective view of the composite stick, constructed of splints as described and from which the bat is to be turned.

Referring to the drawings, 1 is the bat composed of four sectors 2. Four sectors is a convenient number for construction but the invention is not limited to such number. Each sector is composed of a plurality of splints 3, which are preferably thin and flat, sawed from ash or other suitable wood, and securely and permanently united with each other by water-proof glue and pressure.

When such splints are first combined together they ordinarily appear as shown in Fig. 5. The several sectors 2 may first be prepared and afterwards united to make a complete stick 4, or the splints of each sector and the several sectors may all be united by one gluing and pressing operation.

It will be seen from the foregoing that the bat as a whole is of substantially homogeneous grain, the splints strengthening one another, so that cracking along the grain in any splint is prevented by the different grains of the adhering splints.

The arrangement of the splints may be varied to accomplish the desired result, but that arrangement is preferred in which the edges of the splints of one group are united to the flat faces of the other contacting groups of splints. I prefer such an arrangement that the splints balance each other around and throughout the bat, and relative to the axis of the bat, in their respective strengthening effects, so that considering the bat as a whole it has no predominating grain and no tendency to break in one place rather than in another place, however it be held in striking.

There is an increasing demand for lighter bats, but as they are usually constructed their weight cannot well be decreased without materially lessening their strength, but this limitation does not apply to my improved bat.

What is claimed is—

1. A bat formed of sectors, the sectors be-

ing formed of flat splints, all permanently united together, the edges of the splints of each sector being united to the flat faces of the splints of the other contacting sectors.

2. A bat composed of flat splints secured together in groups by means of their flat faces, said groups being secured together by means of the edges of the splints of one group against the flat faces of the splints of another group.

3. A composite piece of lumber for the manufacture of bats and the like, composed of flat splints secured together in groups by means of their flat faces, said groups being secured together with the edges of the splints of one group against the flat faces of the splints of a contiguous group.

4. A baseball bat composed of laminated sectors, the laminations of each sector being disposed at substantially right angles to the planes of the laminations of one of the contiguous sectors.

5. A handle for bats and the like composed of longitudinal sections of wood glued together, each section consisting of laminations of wood glued together, the sections being arranged with the planes of the laminations of one section at an angle to the planes of the laminations of another section, and the edges of the laminations forming the exterior surface of the handle.

In testimony whereof I affix my signature.

JOHN A. HILLERICH.