Oct. 5, 1926. 1,601,916

J. A. HILLERICH

BOWLING PIN

Filed April 2, 1923

Fig. 1.

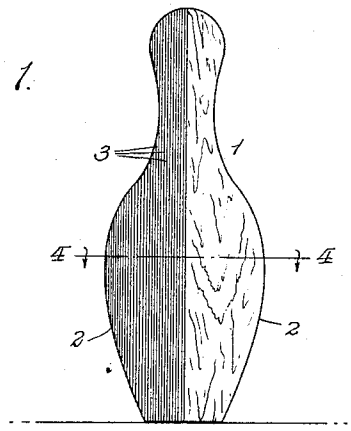


Fig. 2.

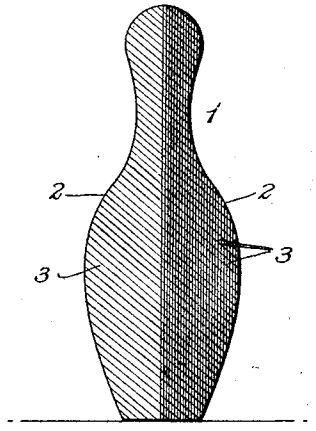
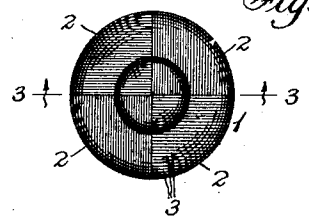


Fig. 3.



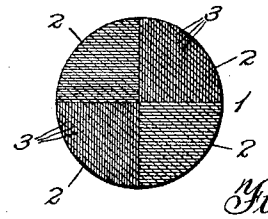


Fig. 4.

Inventor.
John A. Hillerich
By H. H. Low
Attorneys.

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UNITED STATES PATENT OFFICE.

JOHN A. HILLERICH, OF LOUISVILLE, KENTUCKY.

BOWLING PIN.

Application filed April 2, 1923. Serial No. 629,433.

My invention relates to that class of bowling pins which are constructed of a plurality of longitudinal splints, sections or sectors secured together so as to make a unitary solid pin.

The present invention is directed to improving the construction of pins of this character, so as to produce a much stronger pin which will resist the hard usage to which it is necessarily subjected, and the construction of which also involves a great saving in lumber, which is a matter of national interest and importance. According to my improvement the pin is composed of laminations of wool or other suitable material. These laminations I prefer to make relatively thin, and the necessary lumber for them is readily procured, often from wood which would otherwise be waste, After the laminations are solidly adhered together to make a body suitable for the operation of the lathe, the pin is turned and finished in the usual manner.

A further improvement in my construction of bowling pin is to arrange the laminations in different longitudinal sections, which are or may be of sector-like form with their angles meeting at the middle of the pin, and each section is built up of the laminations above referred to.

In carrying out this idea I have the further improvement that I arrange the laminations of one sector at a right angle, or other suitable angle, to the laminations of the next sector, whereby the grain of the material is so disposed that the pin is of unually great strength and durability, practically impervious to splitting or breaking. In uniting the laminations I do or may employ a waterproof glue which unites all of the laminations and sectors into a solid unitary body. It will be understood that the arrangement of the laminations is subject to considerable variation while still carrying out my improved construction of pin. I have illustrated and described in detail in this application what I consider to be the best and most effective arrangement of said laminations for the described purposes of strength and durability, as well as of convenience and economy in manufacture.

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 side view of a bowling pin embodying the invention.

Fig. 2 is a vertical sectional view on line II—II of Fig. 3.

Fig. 3 is a plan view of the pin.

Fig. 4 is a horizontal section of the same on line IV—IV of Fig. 1.

Referring to the drawings, 1 is the pin here shown as composed of four sector-like longitudinal splints 2. I consider that four sectors is a convenient number for manufacture and to realize the objects of the construction but other numbers of sectors may be employed. Each sector is composed of a plurality of laminations 3, which are preferably relatively thin, and flat, sawed from wood suitable for bowling pins, and securely and permanently united wth each other by waterproof glue and pressure.

A number of such longitudinal sectors may first be prepared, their splints being glued together to make a body which is elongated and rectangular in cross section, and before the glue is dry four of said rectangular bodies may be combined together, with interposed glue, and properly treated by a strong pressure and drying. Thereafter the pin is turned from the body or block thus produced.

What is claimed is—

1. A bowling pin composed of longitudinal sections, the sections being composed of laminations of material, all solidly adhered together to form a unitary pin.

2. A bowling pin composed of sector-like longitudinal sections having their angles meeting at the middle of the pin, the sections being composed of laminations of wood, all solidly adhered together to form a strong unitary pin.

3. A bowling pin composed of sections and and said sections being composed of lamina-

tions, all solidly adhered together, the sections being arranged so that the planes of the laminations of a section are at an angle to the laminations of the next contiguous section.

4. A bowling pin composed of four longitudinal sections and said sections being composed of longitudinal flat laminations, all solidly adhered together, the sections being arranged so that the planes of the laminations of one section are at right angles to the laminations of the next contiguous sections.

In testimony whereof I affix my signature.

JOHN A. HILLERICH.