No. 652,993. Patented July 3, 1900.

G. H. BURT.

POOL BALL.

(Application filed Mar. 30, 1900.)

(No Model.)

Fig. 1.

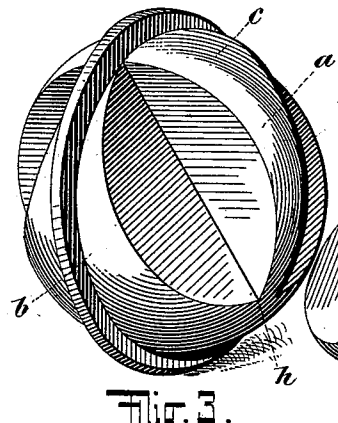


Fig. 2.

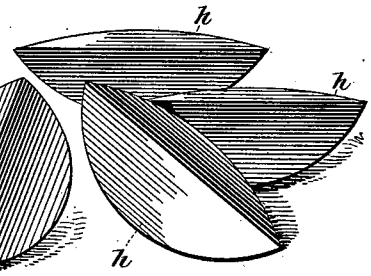


Fig. 3.

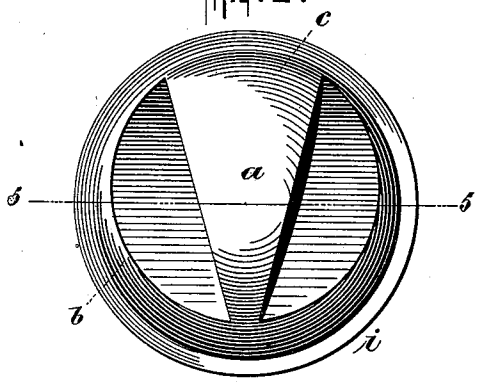


Fig. 4.

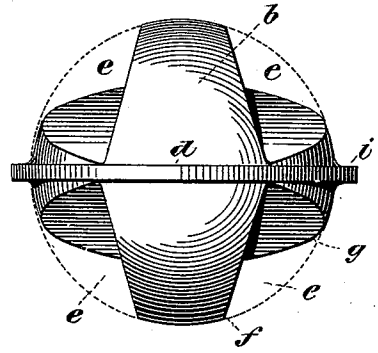


Fig. 5.

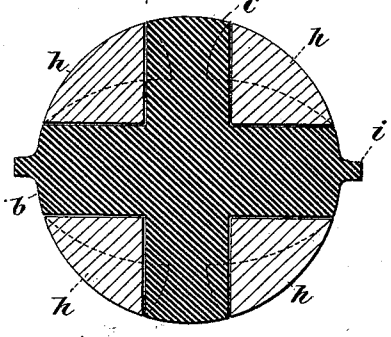
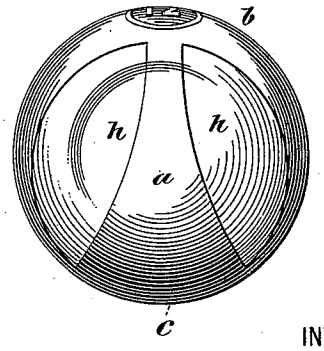


Fig. 6.



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POOL-BALL.

SPECIFICATION forming part of Letters Patent No. 652,993, dated July 3, 1900.

Application filed March 30, 1900. Serial No. 10,722. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY BURT, a citizen of the United States, residing at Milburn, Essex county, State of New Jersey, have invented certain new and useful Improvements in Pool-Balls, of which the following is a specification.

My invention relates to pool-balls—that is to say, variegated balls employed in the playing of pool and other games.

My invention will be described with reference to the accompanying drawings, which illustrate in the various views pool-balls and parts of the same constructed in accordance with my invention.

In the drawings, Figure 1 is a perspective view of the nucleus of the ball. Fig. 2 is a perspective view of other parts of the ball of a different color than the nucleus, which parts are adapted to be fitted to the nucleus and the whole compacted or formed into a solid ball by heat and pressure. Fig. 3 is a side view of the nucleus, the object of this view being to show the conformation of one set of wedge-shaped tongues. Fig. 4 is a view of the nucleus, taken at right angles to the direction of view in Fig. 3. Fig. 5 is a section of the nucleus on the line 5 5 of Fig. 3, also showing the ball assembled, and Fig. 6 is an isometric view of the completed ball after the parts have been united by heat and pressure.

The ball shown and described herein is of the same general type as those appearing in patents granted to me heretofore—No. 507,880, dated October 31, 1893; No. 513,876, dated January 30, 1894, No. 517,972, dated April 10, 1894, and No. 545,578, dated September 3, 1895. The ball constituting my present invention, however, is simpler in construction and may be more readily made than the balls shown in the said prior patents. The ease of construction is due largely to the fact that the nucleus is provided with pockets of greater length than width, having oppositely-placed surfaces, preferably converging, into which pockets suitable solid portions may be placed and the integral parts of the ball united by heat and pressure, as described. It will be observed that the pockets are bounded by opposing facets of substantially-equal extent, and when I say "substantially-equal extent" I do not mean to thereby exclude the idea of having these facets irregular nor to limit myself to plane facets, the essential idea being that whatever the character of the facets they will, if reduced to a normal plane, be of substantially-equal extent. I have also employed the term "pockets" to distinguish from what is shown in my prior patent, No. 507,880. In this patent a beveled groove extends entirely around a part of the ball. This groove, however, does not constitute a pocket, in that the surfaces do not oppose each other in the true mathematical or geometrical sense, as one surface is plane and the other is curvilinear.

In producing the ball forming the subject-matter of this invention I preferably form a nucleus of the form shown in Figs. 1, 3, and 4 and one or more solid bodies of the form shown in Fig. 2, adapted to fit or coöperate with the pockets or recesses of the nucleus, although the material may be placed in the recesses of the nucleus in powdered form without departing from the spirit of my invention. These parts are assembled as shown in Fig. 5 and united by heat and pressure—let us say, a pressure of four thousand pounds to the square inch. There is thus produced the double-stripe ball shown in Fig. 6.

Referring to Figs. 1, 3, and 4, the nucleus shown therein is formed of a plastic moldable substance compressed into solidified form in a mold under heat and pressure and preferably consists, as shown, of a plurality of wedge-shaped bodies *a b*, placed at right angles to and intersecting each other, with their broadest or base portions *c d* opposite to each other, so that the said nucleus presents the appearance of two intersecting wedge-shaped bodies having between them the pockets or recesses *e*, whose bounding sides or facets *f g* meet at an angle along the lines *h*, the said recesses being of greater length than width and having their facets *f g* placed opposite to or opposing each other. These recesses *e* are adapted to be filled by the segmental bodies *h*, (most clearly shown in Fig. 2,) although the said recesses may be filled with a powdery substance and the whole compacted into a solid body without departing from the spirit of my invention.

In Fig. 5 I have shown the nucleus and the segmental pieces assembled immediately prior to the application of heat and pressure to unite the parts. In this figure and in the preceding figures the rib or fin *i* is extra material which is turned off when the ball is turned or dressed down prior to polishing, which is effected subsequently in order to give the ball a finished appearance. It will thus be seen that the form of the recesses greatly facilitates the ready formation of the ball with the least amount of heat and pressure, as pieces of a general wedge shape will most readily fit into and be amalgamated with the nucleus without being subjected to such enormous pressure as to endanger the definition or line of demarcation between the nucleus and the segmental pieces, which, as before stated, are or may be of different colors or tints.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As a new and useful article of manufacture, a ball consisting of a nucleus of moldable material having pockets therein of greater length than width extending less than the circumference of the ball with opposing facets of substantially-equal extent and masses of moldable material filling the said recesses, the whole being structurally united into an integral structure.

2. The herein-described ball consisting of a nucleus of moldable plastic material having pockets therein bounded by converging opposing facets of substantially-equal extent and masses of plastic material filling the said recesses, the said nucleus and masses being structurally united into an integral whole.

3. The herein-described ball consisting of the oppositely-placed intersecting wedge-shaped bodies *a*, *b*, having between them segmental wedge-shaped recesses *e* and masses of moldable material filling the said recesses and united to the nucleus, substantially as described and for the purposes set forth.

4. A pool-ball composed of plastic material having a nucleus of a general cross shape, the arms of the cross extending entirely through the ball and giving a surface effect of intersecting double stripes extending entirely around the ball and masses of moldable material contrasting in appearance with the stripes filling the pockets intervening between the arms of the cross substantially as described.

GEORGE H. BURT.

Witnesses:
GEO. E. MORSE,
OTTO V. SCHRENK.