No. 784,090. PATENTED MAR. 7, 1905.

J. N. WHITEHOUSE & J. BENDER.

BILLIARD CUE.

APPLICATION FILED OCT. 15, 1903.

Fig. 1.

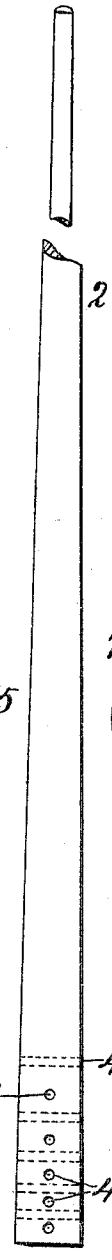


Fig. 2.

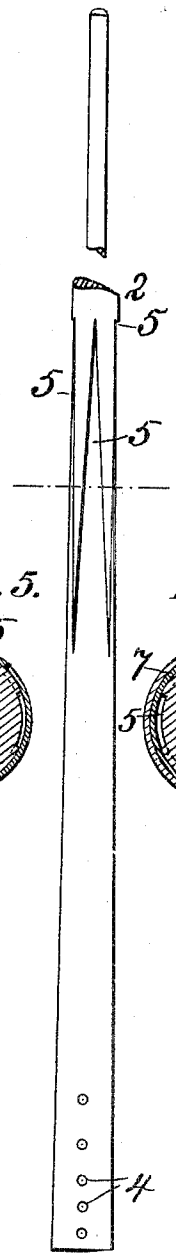


Fig. 3.

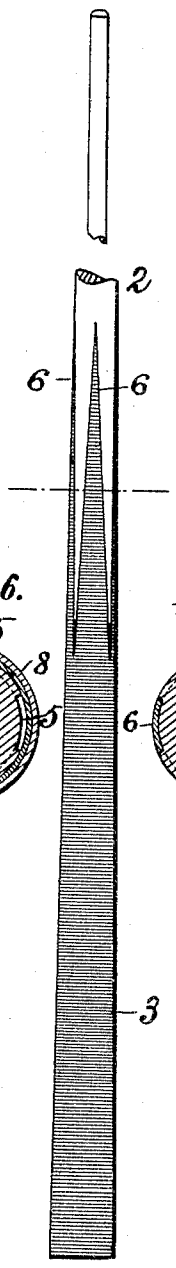


Fig. 4.

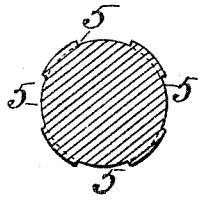


Fig. 5.

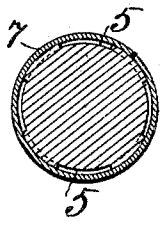


Fig. 6.

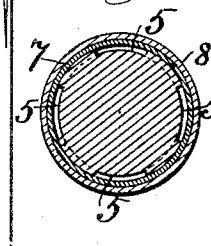
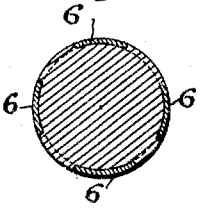


Fig. 7.



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No. 784,090. Patented March 7, 1905.

UNITED STATES PATENT OFFICE.

JOHN N. WHITEHOUSE AND JACOB BENDER, OF NEW YORK, N. Y.

BILLIARD-CUE.

SPECIFICATION forming part of Letters Patent No. 784,090, dated March 7, 1905.

Application filed October 15, 1903. Serial No. 177,165.

To all whom it may concern:

Be it known that we, JOHN N. WHITEHOUSE and JACOB BENDER, citizens of the United States, and residents of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Billiard-Cues, of which the following is a specification.

Our invention relates to the balancing of billiard-cues and to the construction of the handle end of the same, so that when complete the cue will have the same appearance and effect as if made in the usual way of two pieces of different kinds of wood, the object being to produce at small cost a single-piece cue equal to or better than the two-piece cues in common use.

In the accompanying drawings, to which reference is made, and which form a part of this specification, Figure 1 is a side elevation of a cue, showing the balancing-weights, Fig. 2 illustrating the first operation. Fig. 3 illustrates the completed cues; and Figs. 4, 5, 6, and 7 are enlarged cross-sections illustrating the steps of manufacture, the sections being on the dotted lines in the other figures.

In the drawings, 2 designates the body of the cue, made of a single piece of wood. The butt of the cue has a covering 3, of celluloid, hard rubber, or other similar material, preferably celluloid, of any desired color. The cue is balanced by transverse plugs 4 4, of metal, inserted in holes bored in the cue. These may be distributed as experience dictates, and a greater or less number of plugs may be used to produce cues of different weights, and the plugs may be of uniform or of different sizes, so that not only accurate weights of cues may be produced, but so that by differentiating the location of the plugs accurate balancing of the cue may be attained. By preference the plugs are put in alternately along different diameters. The stick is then formed with shallow depressions 5 in its surface in any form desired, preferably flashed in points 6, as shown in Figs. 2 and 3. These depressions are, by preference, formed by compression, as by squeezing in a die or press with proper mandrels under heavy pressure. After the depressions have been formed a strip 7 of thin celluloid, hard rubber, or similar material is wrapped around the cue, so as to cover the depressions 5, as shown in Fig. 5. Then around the sleeve of celluloid is wrapped a covering 8, of some proper and suitable material for the purpose—such as cloth, leather, or the like—and pressure is then applied to the covering 8 around the stick, which forces the material 7 down into the depressions, where they adhere, as shown at 6 6, Fig. 7. This done, that portion of the outside material over the raised portion of the cue between the depressions is removed by sandpapering, grinding, or in any other suitable way. In this way we produce a cue of a single piece of wood and which cue is the same in appearance as if made in the usual and more expensive way of two different kinds of wood. Furthermore, our new cue is superior to the two-piece cue, for the reason, first, that the covering at the butt of the cue presents a permanent, smooth, and attractive surface for the player to grasp and which can be easily kept cleaned and polished, and, second, the plugs of metal inserted for balancing and weighting the cue are covered by the outside permanent covering of celluloid or like material and held firmly in place thereby.

All standard cues which are made of a single stick of wood must be weighted and balanced by metal inserted at the butt; otherwise the butt would have to be too large in diameter. When the cue is made of two pieces of wood, the butt is made of more dense and heavier wood than the front portion of the cue, so that this in itself properly weights and balances the butt of the cue. By our invention we are enabled to produce a single-stick cue of standard size at the butt and one of standard weight and balance at comparatively small cost, and at the same time the cue is attractive in appearance, smooth, clean, durable, and in all respects meets the requirements of a practical and fastidious billiard player.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A billiard-cue made of one piece of wood

and having the tapering butt thereof overlaid with celluloid said overlay being formed with spaced extended portions 6, 6 which are inlaid into the material of the cue, substantially as described.

2. A billiard-cue made of one piece of wood and having the tapering butt thereof overlaid with celluloid, said overlay being formed at its smaller end with spaced and tapering extended portions which are inlaid into the material of the cue, substantially as shown and described.

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