No. 861,158. PATENTED JULY 23, 1907.

W. H. BUCKNUM.

CUE.

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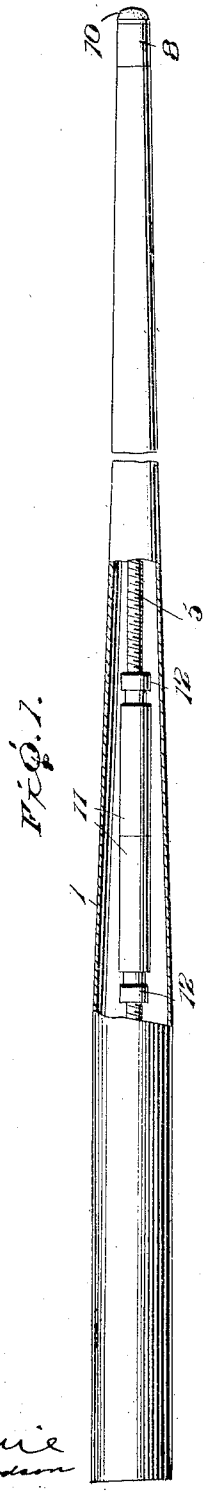


Fig. 1.

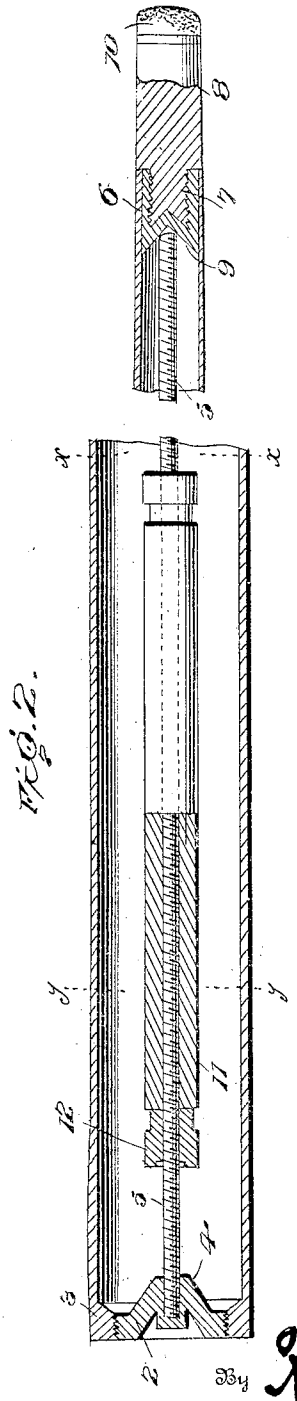


Fig. 2.

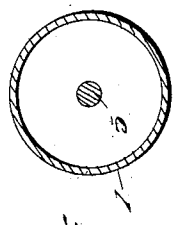


Fig. 4.

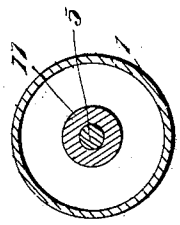


Fig. 3.

Witnesses

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CUE.

No. 861,158. Specification of Letters Patent. Patented July 23, 1907.

Application filed March 7, 1907. Serial No. 361,078.

To all whom it may concern:

Be it known that I, WILLIAM H. BUCKNUM, a citizen of the United States, residing at Morrisville, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Cues, of which the following is a specification.

Cues for driving the balls in playing billiards, pool and like games embodying a table, balls, and a staff-rod or like stick for setting the balls in motion, are usually constructed of wood, hence warp. To overcome this tendency to warp and get out of line the best grade cues are composed of different sections of wood arranged with the grain running in various directions so that the tendency of one section to warp in one direction is compensated for by the tendency of another section to warp in an opposite direction, with the result that the cue maintains an alinement.

Cues of the composite or sectional type, such as hereinbefore specified, are costly and involve skilled labor in their manufacture and it not unfrequently happens that such cues do not at all times and under varying conditions maintain a perfect alinement.

The present invention aims to provide a cue which will preserve a perfect alinement, which can be accurately balanced and weighted to suit the requirements of the player and which may be placed upon the market at about the same cost as ordinary wooden cues and considerably cheaper than the composite or sectional cue.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a side view of a cue embodying the invention, a portion of the shell or body being broken away. Fig. 2 is a central longitudinal section of the cue showing the parts on a larger scale, the middle portion of the cue being broken away. Fig. 3 is a transverse section on the line x—x of Fig. 2. Fig. 4 is a cross section on the line y—y of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The cue is hollow and consists of a body or shell 1 tapered throughout its length and provided at its small end with the usual tip and at its large end with a base. The body or shell 1 is preferably of tubular steel one-sixty-fourth ($\frac{1}{64}$th) inch in thickness and about fifty (50) carbon in hardness and tapering from one and one-fourth ($1\frac{1}{4}$) inches at the base to one-half ($\frac{1}{2}$) inch at the tip. It is to be understood that the material and dimensions may be varied according to specific nature and size of the cue.

The base 2 is preferably threaded into a ring 3 affixed to the large end of the body or shell in any substantial way thereby admitting of the base being removed to gain access to the interior of the cue when it is required to adjust the weights thereof either for balancing the cue or to vary the weight by adding heavier or lighter weights.

A socket 4 is provided centrally of the base 2 and is threaded to receive a light rod 5. The outer side of the base 2 is made hollow with the result that the socket 4 is set in from the end of the cue. A bushing 6 is provided at the small end of the cue and is threaded to receive the threaded stem 7 of the tip 8. The bushing 6 is secured within the shell or body of the cue in any substantial way and its inner end is closed and its outer end is open, the opening extending inward and being threaded to correspond with the thread of the stem 7. A conical depression 9 is provided in the inner end of the bushing 6 and receives one end of the rod 5 and centers the same and maintains it in place.

The tip 8 may be of vulcanite, glass, bone or other material commonly employed in connection with devices of this character. The usual pad 10 is fitted to the extremity of the tip 8 and may be secured thereto in any accustomed way. One or more weights 11 may be provided to balance and weight the cue and may be arranged at any position in the length thereof as may be found most advantageous according to the requirements of the player. In the preferred construction the weight or weights 11 are strung upon the rod 5 and are adjustable thereon being held in the adjusted position by set nuts 12 which are threaded upon the rod 5 and act in the capacity of jam nuts to hold the weight in place. The weight or weights 11 may either slide freely upon the rod 5 or may be threaded thereto as found most advantageous. When it is required to either shift the position of the weight upon the rod 5 or to replace the same by a lighter or a heavier weight, the base 2 is removed from the shell or body 1 and with it the rod 5 carrying the weight thereby admitting of adjustment of the weight upon the rod to suit the requirement or caprice of the player, after which the rod with the weight is placed in position together with the base 2.

It is to be understood that special machinery may be devised for constructing the cues commercially, thereby admitting of the same being placed upon the market at about the same cost so as to compete with the usual wooden cue and at a less cost than the composite or sectional cue. The present cue has a great advantage since it admits of varying the weight without altering the size, and also provides for shifting the weight to any

desired point in the length of the cue whereby any required balance may be obtained. The cue being constructed of metal is not affected by climatic changes, hence will preserve a perfect alinement.

It is to be understood that the surface of the cue may be enameled, ornamented, or finished in any way thereby preserving the same and admitting of any desired embellishment.

A further advantage resides in the fact that the cue being of non-porous and non-fibrous material will not absorb moisture or neutralize the blow when driving a ball, which is of material consequence in skilled and close play.

Having thus described the invention, what is claimed as new is:

1. A billiard cue comprising a hollow shell, a longitudinal rod arranged within the shell, a closure for one end of the shell, the said closure carrying a tip and engaging an end of the rod to center the same within the shell, a closure for the opposite end of the shell engaging the opposite end of the rod, and a weight mounted upon the rod.

2. A billiard cue comprising a hollow shell, a closure for one end of the shell, a rod carried by the said closure and extending through the shell, a weight mounted upon the rod, and a closure for the opposite end of the shell loosely engaging the rod to center the same within the shell.

3. A billiard cue comprising a hollow shell, a base removably closing one end thereof, a bushing closing the opposite end of the shell and having a conical depression in its inner face, a rod arranged within the shell and secured at one end to the aforesaid base while its opposite end is received loosely within the conical depression of the bushing and centered within the shell thereby, and a weight mounted upon said rod.

4. A billiard cue comprising a hollow shell, a bushing fitted to one end of the shell and having the inner face thereof formed with a conical depression, a tip carried by said bushing, an internally threaded ring fitted to the opposite end of the shell, a base threaded into said ring and formed with a socket, a rod arranged within the shell and having one end received by the socket in the base while the opposite end is fitted within the conical depression in the bushing and centered within the shell thereby, and a weight adjustable upon said rod.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. BUCKNUM. [L. S.]

Witnesses:
MORGAN ROCKHILL,
LEWIS R. BOND.