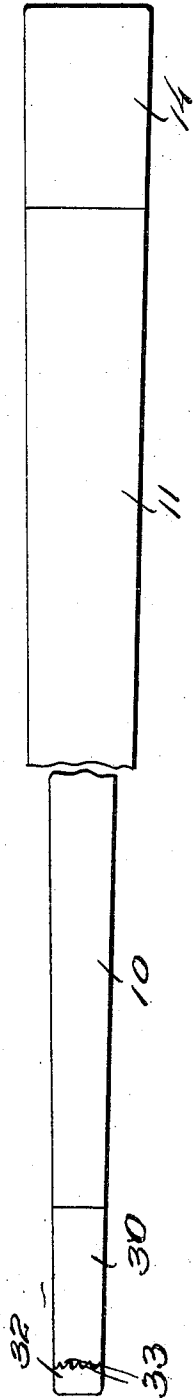


E. E. MOORE.
 BILLIARD CUE.
 APPLICATION FILED MAY 28, 1909.

935,218.

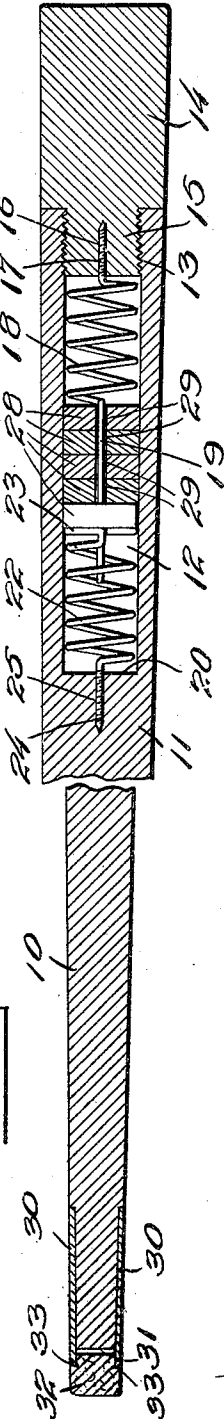
Patented Sept. 28, 1909.

FIG. 1--



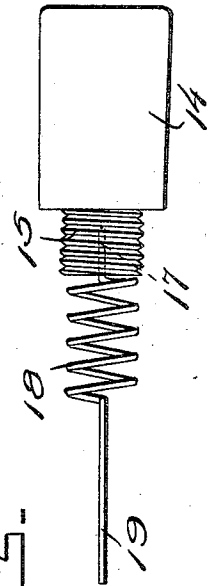
Witnesses
E. L. Armstrong
E. L. Chandler

FIG. 2--



By *Woodward & Chandler*

FIG. 3--



Edwin E. Moore, Inventor

Attorneys

UNITED STATES PATENT OFFICE.

EDWIN E. MOORE, OF McLUNEY, OHIO.

BILLIARD-CUE.

935,218.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed May 28, 1909. Serial No. 498,811.

To all whom it may concern:

Be it known that I, EDWIN E. MOORE, a citizen of the United States, residing at McLuney, in the county of Perry and State of Ohio, have invented certain new and useful Improvements in Billiard-Cues, of which the following is a specification.

This invention relates to certain new and useful improvements in billiard cues.

10 The object of my invention is, to construct a straight tapering rod, tipped at the smallest end with a soft pad crimped within a ferrule, while within the hollow larger end, is carried a resilient member, yieldingly and
15 movably carrying a plurality of weight disks, so that the handle or base end of the cue, may be given any desired weight.

With these and other objects in view, the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described and particularly pointed out in the appended claims, it being understood that changes in the specific structure shown and described may be
25 made within the scope of the claims without departing from the spirit of the invention.

In the drawing forming a part of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 shows a broken elevational view of a cue embodying my invention. Fig. 2 is a longitudinal sectional view through the cue. Fig. 3 is a detail of the yielding carrying member.

35 In the playing of billiards, pool and similar games, the cue, in order that the player may accurately balance the same is weighted at its base or handle forming end. As different players use differently weighted cues it is necessary to have with each billiard or pool table a variety of variously weighted cues. To obviate this requirement, and provide a cue that a player can accurately weight or load to meet his requirements, is the primary aim of this invention.

45 In the drawings, the numeral 10, designates a billiard cue, which has its handle end 11, provided with a centrally positioned bore 12, which at its end is threaded, as shown at 13. Threading into this bore, is the butt 14, having the threaded collar portion 15, so that the butt is securely held to the end of the cue, which is in the form of a straight, slightly tapering rod. The butt 14, has a centrally positioned opening 16, and securely
55 held within this opening 16 is the straight

stem 17 projected centrally and axially from the coil spring 18, the remaining end of which also terminates in a straight axially extending stem 19. 60

Securely held to the bottom 20, of the bore 12, is the buffer spring 22, ending at one end in the ring 23, of a diameter so as to snugly slide within the bore 12. The remaining end of this spring 22, ends in the threaded point 24, arranged to screw into the opening 25 within the bottom 20. By this means, this buffer spring forms a part of the cue 10, while the spring 18, forms a part of the butt 14. 70

Now in order to provide the counterpoise, I employ a system of weight units, as of one ounce for instance, and these units are in the form of disks 28, having an outer diameter, so as to be held within the bore of the cue. Each disk has a central opening 29 of a size to frictionally receive the carrying stem 19 which is of such a length, as to hold a suitable number of these weights. 75

Now when a player picks up a cue constructed according to my invention, and finds the same too light, he unscrews the butt. The carrying spring 18 with the connected weight units is then removed from the cue, when the operator proceeds to add such additional weight units as will suit his requirements. The butt 14 is then again inserted within its slot. In doing this, the stem 19, enters the buffer spring 22, the outer ring 23, of which forces the weights 28 against the outermost coil, of the carrying spring 18. In removing or securing the butt, the cue is held in an upwardly inclined position. From this it will be seen that the weights are yieldingly held within the cue, in such a manner that any one or more weights may be inserted or removed at the will of the player. 80 85 90 95

My cue construction insures what I term a cushioned stroke. Where the weight is fixed within the cue, on striking the ball, the stroke is hard. With my cue however, as the cue tip contacts with the ball, the weights, owing to the momentum, move in the direction of the motion of the cue, and against the resilience of the buffer spring 22, so that while I have retained the weight I have eliminated the shock incident to the use of a cue having a fixed weight. In my cue construction the momentum of the weights is spent against the buffer spring. 100 105 110

The tip of a cue forms an important part, and in my invention I employ a metallic

ferrule 30, secured to the tip of the cue, and this ferrule 30 has its upper edge serrated, to provide an encircling ring of sharp points 33 which extend a short distance beyond the flat tip 31 of the cue. Held upon this cue tip, is a soft leather pad 32, having its upper edge rounded. After placing the pad in position the teeth 33 are crimped inwardly and into the pad, and thereby securely hold the pad to the cue tip.

Having thus described my said invention, what I claim as new and desire to secure by United States Letters Patent is:

1. A cue having a bore at its largest end, a spring secured within said bore, a butt, a spring carried by said butt, and a plurality of weight units removably carried upon said butt spring.

2. In combination, a cue having a central bore at its largest end, a spring within said bore, a removable butt fitting said bore, a spring secured to said butt having a projecting stem, and a plurality of weight units each having a central opening arranged to contain the stem.

3. A cue having a central bore, a spring within said bore ending in a ring, a butt to fit into said bore, a spring carried by said butt having a projecting stem, and a plurality of weight units carried by said butt spring.

4. In combination, a cue having a central bore ending in a threaded portion, a buffer spring having one of its ends secured within the bottom of said bore, the remaining end of said spring ending in a ring, a butt threaded into said bore, a spring having a straight stem portion secured within said butt, the remaining end of said spring being in the form of a stem to be held within said buffer spring, and a plurality of weight units in the form of disks each having a central opening carried upon said stem and held between said two springs.

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

EDWIN E. MOORE.

Witnesses:

JOHN W. DUGAN,
T. J. SMITH.