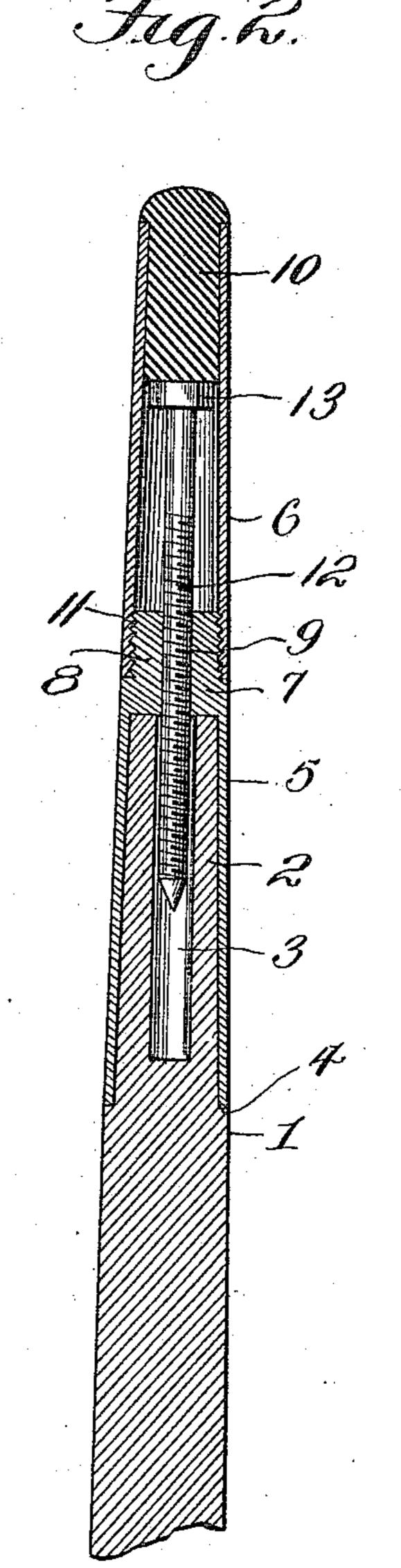
## C. WINNING. BILLIARD CUE.

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983,189.

Patented Jan. 31, 1911.



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## UNITED STATES PATENT OFFICE.

CARL WINNING, OF MUSCATINE, IOWA.

## BILLIARD-CUE.

983,189.

Specification of Letters Patent. Patented Jan. 31, 1911.

Application filed June 7, 1910. Serial No. 565,481.

To all whom it may concern:

Be it known that I, Carl Winning, a citizen of the United States, residing at Muscatine, in the county of Muscatine and State 5 of Iowa, have invented new and useful Improvements in Billiard-Cues, of which the

following is a specification.

This invention relates to billiard cues. and particularly to means for securing and 10 adjusting the tips thereof, the object of the invention being to provide a construction which obviates the necessity of gluing the tips in place, which insures the firm retention of the tip in position, and which per-15 mits of the ready and convenient adjustment of the tip as occasion requires.

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and 20 claimed, reference being had to the accom-

panying drawing, in which:—

Figure 1 is a view in elevation of a portion of a billiard cue embodying my invention. Fig. 2 is a longitudinal section

25 through the end of the cue.

Referring to the drawing, 1 designates a billiard cue of ordinary general construction, said cue being provided with a reduced forward end 2 having a longitudinal bore so or recess 3 and forming at its points of juncture with the body of the cue an annular shoulder 4.

Fitted upon the reduced end 2 is a sleeve or ferrule comprising an inner or body sec-35 tion 5 and an outer or cap section 6. The body section 5 surrounds and incloses the reduced end 2 and abuts at its inner end against the shoulder 4. It may, if desired, have a frictional engagement with the por-40 tion 2 or be detachably or permanently secured thereto in any preferred manner.

As shown, the ferrule section 5 has an end portion 7 provided with an externally threaded tubular projection 8, the said end 45 7 and projection 8 being provided with a bore or opening 9 in alinement with the bore or opening 3 in the part 2 of the cue. The cap section 6 preferably tapers, so as to snugly receive and firmly hold the tip 10 by | with the ferrule, a tip fitted within the for- 105 50 frictional engagement therewith, said tip being made of leather or other suitable material. The inner end of said tip section is internally screw threaded, as at 11, to receive and engage the threaded projection 8 55 of the body section 5.

The bore or passage 9 is screw threaded

to receive a stem 12 which is partially threaded for engagement therewith and extends inwardly and enters the bore 3 of the reduced portion 2 of the tip, the outer end 60 of said stem being provided with a head or contact portion 13 to bear upon the inner end of the tip 10 and reinforce the latter against the concussions or blows sustained by the tip on contacting with the ball. By 65 the adjustable connection of the stem with the body section of the ferrule, the stem may obviously be adjusted inwardly and outwardly to regulate its effective length of projection, by which it may be turned out- 70 wardly at different times during the life time of the tip 10 for the purpose of projecting the latter as it gradually wears away, to maintain a sufficient projection of the tip at the front of the cue. In applying a tip, 75 the cap section 6 is removed and the tip 10 inserted through the inner end of said section and forced forwardly until it projects to the desired extent beyond the cap, whereby it is frictionally held against possibility 80 of displacement. The stem 12 is then adjusted to cause its head to bear against the tip and the cap section reapplied when the tip is ready for use. When the tip becomes worn, the cap section is removed and the 85 stem simply turned out to a slightly greater extent, after which the cap section is reapplied, whereby in its application, the pressure of the stem upon the tip will force the latter outwardly to the desired extent.

It will thus be seen that my invention provides a simple means whereby a tip may be readily and conveniently applied for use and adjusted as the occasion requires, and that if the tip should be broken or injured 95 in use, a new one can be conveniently sub-

stituted therefor.

Having thus described the invention, what I claim is:

1. A billiard cue having its end portion 100 provided with a bore, a ferrule inclosing the end of the cue and having a threaded passage communicating with the bore therein, a cap having a screw threaded engagement ward end of the cap, and a stem having a screw threaded engagement with the passage of the ferrule and entering the bore of the cue, said stem being provided with a contact portion to bear upon the tip.

2. A billiard cue having a reduced portion formed with a longitudinal bore, a fer-

rule fitted upon said reduced portion, and having a threaded projection at its outer end formed with a threaded passage in line with the bore, a tapering cap having a screw threaded engagement at its inner end with said projection, a tip frictionally fitted within the outer end of the cap, and a threaded stem engaging the threaded pas-sage in the ferrule and entering the bore of

the cue and provided at its outer end with 10

a contact portion engaging the tip.
In testimony whereof I affix my signature in presence of two witnesses.

CARL WINNING.

Witnesses:

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