(No Model.)

G. L. WILLIAMS & H. RUNDLE.

BILLIARD CUE.

No. 250,861. Patented Dec. 13, 1881.

Fig. 1.

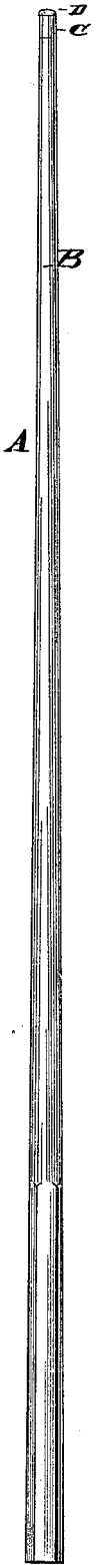


Fig. 2.

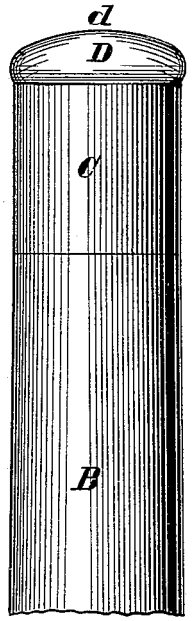


Fig. 4.

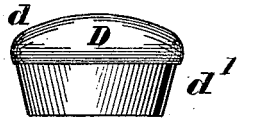


Fig. 5.

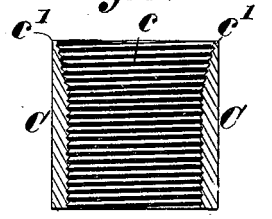


Fig. 3.

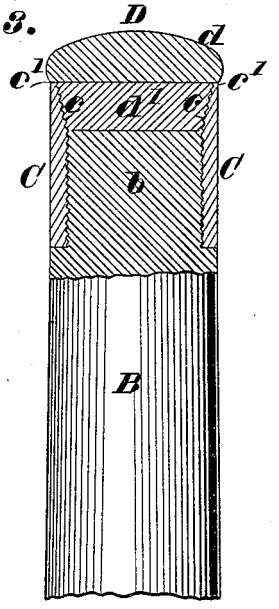
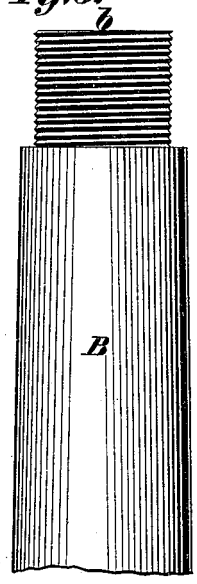


Fig. 6.



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by C. D. Moody, atty.

UNITED STATES PATENT OFFICE.

GEORGE L. WILLIAMS AND HENRY RUNDLE, OF EDWARDSVILLE, ILLINOIS; SAID WILLIAMS ASSIGNOR TO SAID RUNDLE; SAID RUNDLE ASSIGNOR OF ONE-TWENTIETH TO CHARLES D. MOODY, OF ST. LOUIS, MISSOURI.

BILLIARD-CUE.

SPECIFICATION forming part of Letters Patent No. 250,861, dated December 13, 1881.

Application filed June 27, 1881. (No model.)

To all whom it may concern:

Be it known that we, GEORGE L. WILLIAMS and HENRY RUNDLE, residents of Edwardsville, Illinois, have jointly made a new and useful Improvement in Billiard-Cues, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is an elevation of the improved cue; Fig. 2, an elevation, upon an enlarged scale, of the tip end of the cue; Fig. 3, a sectional elevation of the tip end of the cue; Fig. 4, a side elevation of the tip; Fig. 5, a longitudinal section of the coupling used in attaching the tip to the cue; and Fig. 6 an elevation of the tip end of the cue, the tip and tip-coupling not being attached.

The same letters denote the same parts.

The present improvement relates especially to the tip upon the end of the cue, to the tip itself, and to the mode of connecting it with the cue.

Heretofore it has been customary to make the tip in a hemispherical shape, and to attach it to the cue by cementing its base to the square end of the cue. This mode is objectionable. It requires considerable time and care to properly glue the tip to the cue, and in use the tip is very apt to come off. The cue also wears away at the end from the sandpapering and filing incident to the renewal of the tips. The cue is also apt to splinter at the end when the tip becomes thin. This is not only the occasion of injury to the cloth of the billiard-table, but it requires the cue to be shortened in repairing it. Thus the size, shape, and weight of such a cue are frequently changed—something objectionable to billiard-players, who, having become accustomed to certain cues, dislike them to be changed in any particular.

Attempt has been made to obviate the frequent renewal of the tips by inserting the shank of the tip in a split plug and then screwing the plug into a ferrule on the end of the cue-stick. This mode is also objectionable. The leather tip bears against metal when it should bear directly against wood; and, secondly, the plug, being metal, works loose in the metallic ferrule when the cue is used. The repeated shock from striking the billiard-balls prevents one metallic part from keeping in place in another metallic part, and there should not be any metal interposed between the wooden cue-stick and the leathern tip.

To obviate the various difficulties named, and to provide means by which tips can be more readily and securely attached to the cues, and at the same time providing a more durable and more elastic tip, and also enabling the original size, shape, and weight of the cue to be retained, as well as preventing it from becoming roughened at its end and liable to injure the cloth of the table, is the aim of the present improvement.

In the annexed drawings, A represents a billiard-cue, saving the present improvement, of the usual description. The cue, however, in place of consisting of a stick of wood tapering regularly from the handle to the tip end, and having a leathern tip of hemispherical shape glued directly to the tip end, is made up substantially of three parts: the tapered stick, but having a tenon at its tip end; a band that fits and is attached to the tenon, but made longer than the tenon, so as to project therefrom; and a tip having a base or shank which abuts against and bears against the end of the stick and confined thereto by engaging at its side in the projecting portion of the band.

B represents the cue-stick, having the tenon *b*.

C represents the band, which is attached to the tenon, the outer end of the band projecting from the tenon.

D represents the tip, consisting of the hemispherical portion or tip proper, *d*, and the shank *d'*. The tip is inserted in the band, the shank *d'* bearing upon the tenon, and being held against it by being screwed into the band C. The latter is fastened to the tenon, preferably by being screwed thereto. The tenon *b* and the corresponding part of the band C are cylindrical; but the shank *d'* of the tip and the seat *c* in the band, into which the shank is screwed, are preferably made tapering.

The band C is of metal, and is screwed di-

rectly onto the wooden tenon. The exterior of the band conforms to the shape and size of the cue-stick above the tenon, so that there is no projection or shoulder to scratch the table-cloth. The band, at its extreme outer end, *c'*, is made preferably very thin, it being the intent that the thrust in use upon the tip shall be sustained mainly by the tenon *b*.

The tip D is of the usual material—leather. As the outer part, *d*, requires to be of a leather somewhat too soft to engage well with a thread such as in the seat *c*, the shank *d'* is made of harder, denser leather, preferably, than the part *d*. The two parts *d* and *d'*, in such case, are cemented together, as seen in Fig. 4. The tip proper, *d*, in diameter is larger than the shank *d'*, and also than the band C.

The tips D can be made a separate article of merchandise. The tip is very readily and firmly attached to the cue by screwing it into the seat *c*, and as shown in Figs. 2 and 3. In practice, it remains secure in its place until worn out, the use of the cue tending to fix it more closely in the band. It can, however, be easily removed by unscrewing it in the seat *c*.

It will be observed that, practically, no wear comes upon the cue-stick, so as to cause it to broom up or splinter at the end, the tenon being confined within the band, and the shock upon the tip not being, to an appreciable extent, transmitted to the band C. The life of the cue is therefore materially prolonged. By screwing the band directly onto the wooden tenon *b*, these parts are united more permanently for the purposes for which they are intended than if the band were screwed onto a metal bearing.

We claim—

1. The combination of the cue-stick B, having the tenon *b*, the band C, and the tip D, having the shank *d'*, said shank bearing directly against the wooden tenon *b*, substantially as described.

2. The combination of the band C, having the tapering seat *c*, the tip D, having the tapering shank *d'*, and the wooden tenon *b*, said shank bearing directly upon the tenon, and the edge *c'* of the band being very thin, substantially as described.

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Witnesses:
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W. LEE DRUMMOND.