No. 690,613. Patented Jan. 7, 1902.

F. L. ROBINSON.

BILLIARD CUE TIP.

(Application filed May 29, 1901.)

(No Model.)

Fig. 1.

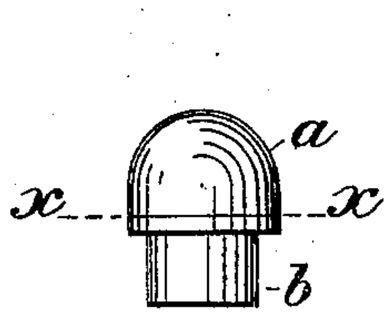


Fig. 2.

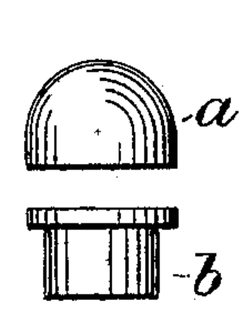


Fig. 3.

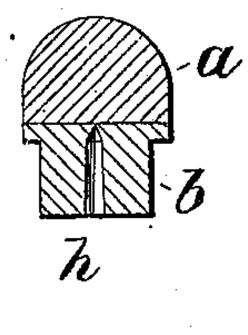


Fig. 4.

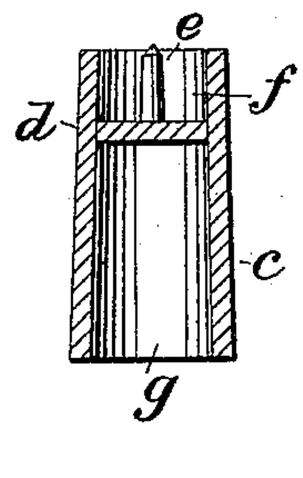
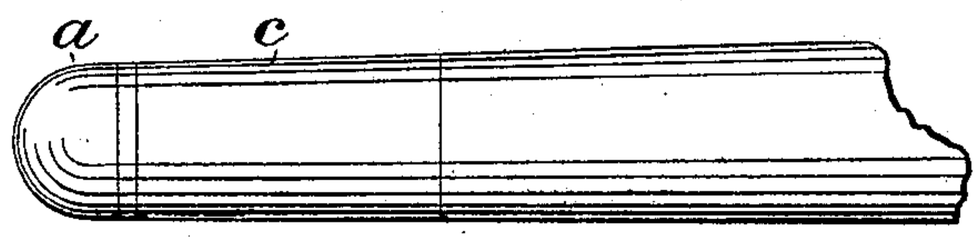


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

FREDERICK L. ROBINSON, OF NEW BEDFORD, MASSACHUSETTS.

BILLIARD-CUE TIP.

SPECIFICATION forming part of Letters Patent No. 690,613, dated January 7, 1902.

Application filed May 29, 1901. Serial No. 62,444. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK L. ROBINSON, a citizen of the United States of America, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented a certain new and useful Improvement in Billiard-Cue Tips and Means for Securing the Same to Billiard-Cues, of which the following is a specification.

Heretofore tips have been secured to billiard-cues generally by cement or glue, and in some instances a metal ferrule has been provided to embrace the front end of the cue, into the outer end of which the tip has been screwed, the ferrule being interiorly screw-threaded and provided with a transverse partition, from the center of which arose a screw-threaded projection adapted to enter the center of said tip when said tip was screwed into the end of the ferrule. Both of these constructions are objectionable—the first, because the tips are insecurely fastened to the ends of the cues and frequently drop off after very little use, and the second is objectionable for the reason that the impact of the tip on the balls causes some slight motion of particles of the leather of which they are composed across the edges of the screw-threads, and this motion many times repeated causes the tips to become loosened and to drop off, and when this occurs without the notice of the user of the cue a ball is liable to be chipped by being struck with the edge of the ferrule. Moreover, when the leather tips are made to screw into the end of a ferrule it is found to be difficult to so adjust the screw-threads in the leather to the interior screw-threads of the ferrule that the tip will go into its seat evenly and set squarely on its bottom.

The object of my invention is to provide an improved tip for a billiard-cue and means whereby said tip may be secured to a billiard-cue in such a manner that it will remain until it becomes so much worn by use as to make it necessary to replace it by a new one.

To this end my invention consists in a ferrule having parallel sides and provided with a transverse partition near one end, from the center of which arises a straight-sided projection adapted to enter a straight-sided aperture in the leather tip, said ferrule being adapted to embrace the end of the cue, and a cue-tip, composed of leather or other suitable material, having a shouldered portion provided with an aperture in its center adapted to be forced within the upper end of said ferrule, said aperture receiving said projection.

The accompanying drawings illustrate my invention, in which—

Figure 1 is a side elevation of my improved tip. Fig. 2 is a view of the same, showing its two parts. Fig. 3 is a view of the same in vertical section. Fig. 4 is a view in vertical section of the device by means of which the tip is secured to the cue, and Fig. 5 is a view of the end of a billiard-cue provided with my improvement.

Similar letters refer to like parts in the several views.

The letter *a* represents the front portion of my improved cue-tip, which is composed of leather or other suitable material and is secured by cement or other suitable means to the shouldered part *b*, which part is also of leather or other suitable material and is provided with a straight-sided aperture *h* in its center.

The letter *c* represents a metallic ferrule having parallel sides and provided near its upper end with a partition *d*, from the center of which rises a straight-sided projection *e*, which projection is somewhat larger in diameter than the aperture in the part *b* of the tip. The end of the billiard-cue is forced within the thimble *g*, so that the surface of the cue shall be even with the outer surface of the thimble. The tip is then forced within the thimble *f*, the projection *e* entering the aperture *h*, the shoulder on the part *b* projecting outwardly, so as to rest on the edge of the thimble *f* and be even with its outer surface. The thimble *f* and the projection *e* having parallel sides, the impact of the tip against the billiard-balls serves to seat the tip in its socket more securely rather than to loosen it, and it thus retains its position until worn out.

When the part *a* of the tip is worn out, it may be removed on the line *x x* and replaced by another, or the whole of the tip may be removed and another substituted therefor. Should the part *a* become loosened from the part *b* by use and drop off unperceived, the ball is protected from injury by the shoul-

dered portion of the part *b* remaining between it and the edge of the thimble *f*.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A cue-tip comprising a substantially cylindrical ferrule, a transverse partition therein separating the said ferrule into a lower socket adapted to receive the end of the cue and an upper socket to receive the base of a cue-tip, a pin having parallel sides projecting from the transverse partition into the upper chamber, and a tip proper comprising the portion *a*, and a base portion *b* adapted to be seated within the upper socket of the ferrule and provided with an aperture arranged to be forced over the projection on the partition whereby the said tip is held securely in operative position.

Signed by me at New Bedford, Massachusetts, this 14th day of May, 1901.

FREDERICK L. ROBINSON.

Witnesses:
EDWARD P. HASKELL,
HENRY W. MASON.