(No Model.)

H. PLATTS.

METHOD OF FASTENING TIPS TO BILLIARD CUES.

No. 263,955. Patented Sept. 5, 1882.

Fig. 1.

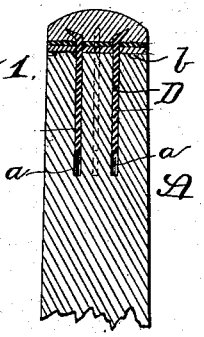


Fig. 2.

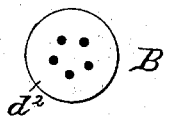


Fig. 3.

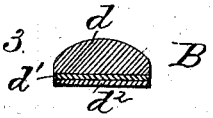


Fig. 4.

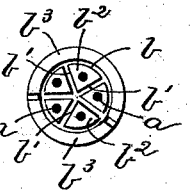
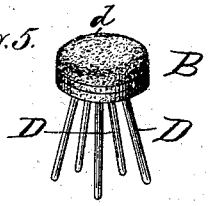


Fig. 5.



Witnesses.
Emma Bagley
William D. Taylor

Inventor.
Henry Platts

UNITED STATES PATENT OFFICE.

HERVEY PLATTS, OF ITHACA, NEW YORK.

METHOD OF FASTENING TIPS TO BILLIARD-CUES.

SPECIFICATION forming part of Letters Patent No. 263,955, dated September 5, 1882.

Application filed March 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, HERVEY PLATTS, of Ithaca, in the county of Tompkins and State of New York, have invented a new and useful Improvement in the Method of Fastening Tips to Billiard-Cues; and I do hereby declare that the following is full, clear, and exact description of the same, and such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the annexed drawings, making a part of this specification.

My invention relates to billiard-cue tips; and it consists in the construction and arrangement of its several parts, as will be hereinafter fully set forth, and pointed out in the claims.

In the drawings, Figure 1 is a vertical longitudinal section of the upper portion of the cue. Fig. 2 is a bottom plan view of the tip; Fig. 3, a vertical longitudinal section of the same; Fig. 4, a view of the end of the cue, and Fig. 5 is a perspective view of the tip with its attaching-pins.

A represents the upper portion or end of the cue. It has holes *a* running from its end into the body of the cue parallel with its length, as shown. The face of the cue, as shown in Fig. 4, is formed with an annular groove, *b*, and with grooves *b'*, which run from different points around the circumference of the grooves *b* and meet at a point in the center of the cue-face, as shown. These grooves *b* and *b'* leave small projecting blocks b^2 and an annular outer ring, b^3, for the tip to rest upon.

B is the tip. It consists of the rounded portion *d* of the soft-leather disk *d'*, and of the hard-leather disk d^2, which rests upon the face of the cue, as shown.

D are the pins which secure the tip to the top of the cue. They pass through the disks *d'* and d^2 and into the portion *d* of the tip, wherein they are firmly secured by having their ends bent outwardly, as shown. The pins D enter the holes *a* in the cue and hold the tip in place. In the outer annular ring are formed grooves *e*, into which are inserted levers to pry the top away from the cue.

The advantages of this method of attaching the tip to the cue are that by reason of the grooves *b* and *b'* air-chambers distributed around the face of the cue, where the concussion of striking the ball is heaviest, are formed, and that by reason of the projecting blocks b^2 and outer ring, b^3, the tip is firmly supported upon the face of the cue, the outer ring supporting the edges of the tip and the blocks the central portion of the tip.

When it is desired to remove the tip small levers or pries are inserted in the grooves *e* and the tip pried up.

What I claim is—

1. The cue A, provided with holes *a*, and having grooves *b b'* cut in its face, whereby projecting blocks b^2 and an annular outer ring, b^3, are formed, substantially as shown and described.

2. The combination of a cue formed with holes *a*, grooves *b* and *b'*, projecting blocks b^2, and an annular ring, b^3, with the tips B, adapted to rest upon the said blocks and ring, and to be secured to the tips by the pins D, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HERVEY PLATTS.

Witnesses:

FRANK BUCKLEY,

WILLIAM D. TAYLOR.