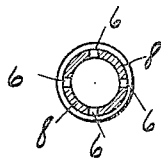
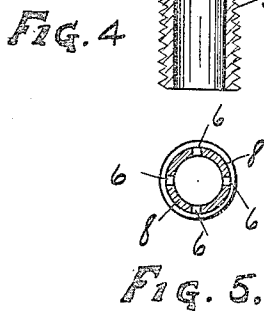
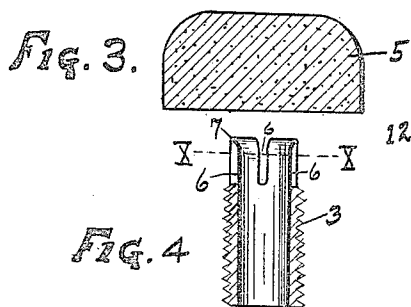
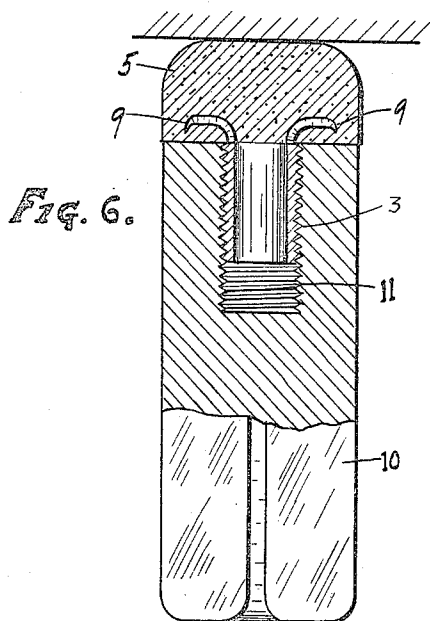
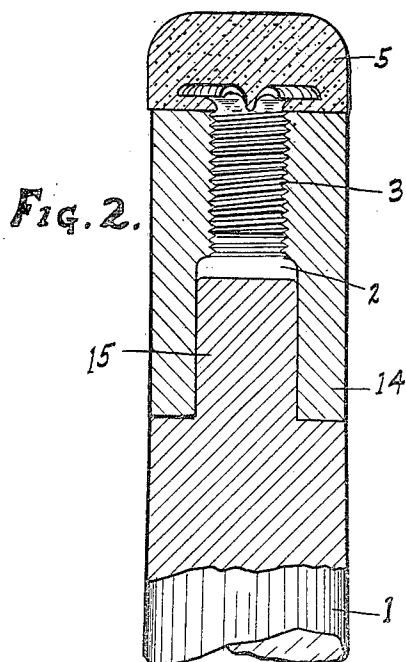
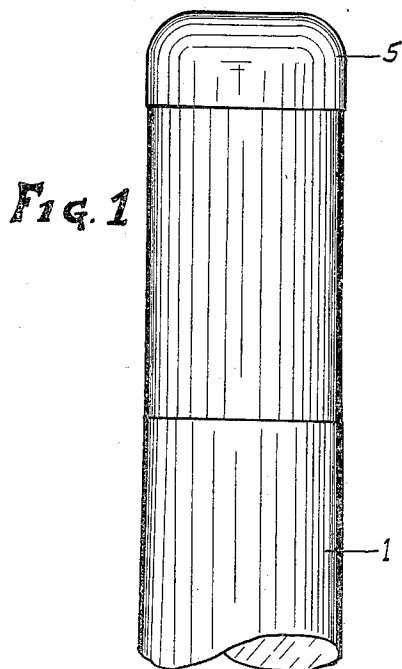


J. BAEUMLE.
 BILLIARD CUE.
 APPLICATION FILED MAR. 17, 1909.

951,790.

Patented Mar. 15, 1910.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN BAEUMLE, OF MILWAUKEE, WISCONSIN.

BILLIARD-CUE.

951,790.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed March 17, 1909. Serial No. 483,886.

To all whom it may concern:

Be it known that I, JOHN BAEUMLE, a citizen of the United States, residing at Milwaukee, county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Billiard-Cues, of which the following is a specification.

My invention relates to improvements in billiard cues, and it pertains more especially, to the device for fastening the tip to one end of the staff.

The construction of my invention is explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view of one end of the staff provided with my improved tip. Fig. 2 is a longitudinal section of the device shown in Fig. 1. Fig. 3 is a section of the tip as it is made preparatory to being fastened to the hollow fastening screw. Fig. 4 is a longitudinal section of the hollow screw by which the tip is secured to the staff. Fig. 5 is a transverse section, drawn on line $x-x$ of Fig. 4; and Fig. 6 is a longitudinal section of the tip and hollow fastening screw in connection with a metallic driving tool, which is attached to the hollow screw preparatory to securing it to the tip and by which the tip retaining prongs are up set in the process of driving the same into the tip.

Like parts are identified by the same reference figures throughout the several views.

1 is a staff which is of ordinary construction and the same is provided at one end with a cylindrical recess 2 for the reception of the hollow screw 3. The recess 2 is provided with a screw thread for the reception of the threaded surface on said hollow screw.

5 is the tip, which is preferably made of leather or other equivalent material.

The screw 3 is provided with a plurality of longitudinal slits 6, while the slitted end of the hollow screw is provided with an outwardly curved beveled edge 7, whereby as the end of the hollow screw is forced into the tip, the outwardly curved beveled edge has the effect to curve the several sections 8 of the tube outwardly from the position shown in Fig. 4 to that shown in Figs. 2 and 6, and whereby the sections 8 form the curved tip retaining prongs 9, whereby the

tip 5 is rigidly and permanently secured to the hollow screw 3.

For convenience of manufacture, I preferably secure the threaded portion of the hollow screw to the fastening tool 10 preparatory to driving the prongs of the screw into the leather. The tool 10 is preferably made of a block of iron which is provided with a hollow screw threaded recess 11 for the reception of the hollow screw. The hollow screw is then turned down to the bottom of the recess 11, whereby it is rigidly held in place. When this is done, the several prongs are placed against the flat surface 12 of the tip, when by a few strokes of the hammer upon the opposite end of the tool, said prongs will be caused to penetrate the tip and at the same time to be curved over as stated, from the position indicated in Fig. 4 to that shown in Figs. 2 and 6. When the tip has been thus secured to the screw, the screw is removed from the tool 10 and turned down in the recess 2 of the staff until the flat surface 12 of the tip is brought in contact with the end of the staff.

To prevent the liability of the screw turning in its threaded bearings, I preferably apply a small quantity of glue, or other adhesive substance to the opposing surfaces of the tip and staff, whereby the liability of such screw turning in its bearings and the tip becoming loose, is avoided. While the recess 2 may be formed, as stated, in the end of an ordinary wooden staff as thus far described, I preferably provide the end of the staff 1 with a separate sleeve 14, formed of metal, ivory or the like, which is adapted to fit over a cylindrical projection 15 formed on the end of the staff, in which case the opposite end of the sleeve 14 is provided with a screw threaded bearing for the reception of said hollow screw, as shown in Fig. 2, when the sleeve 14 is secured to the staff with glue or other adhesive substances in the ordinary manner.

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

In a billiard cue of the described class, the combination of a staff provided at one end with a screw threaded recess, a cue tip, a hollow screw having threaded bearings lo-

cated in the recess of said staff and provided
at its protruding end with a plurality of
prongs the ends of which are beveled out-
wardly, whereby as they are driven into
5 said tip, they are caused to curve over and
form separate radial retaining hooks, sub-
stantially as specified.

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

JOHN BAEUMLE.

Witnesses:

JAS. B. ERWIN,
O. R. ERWIN.