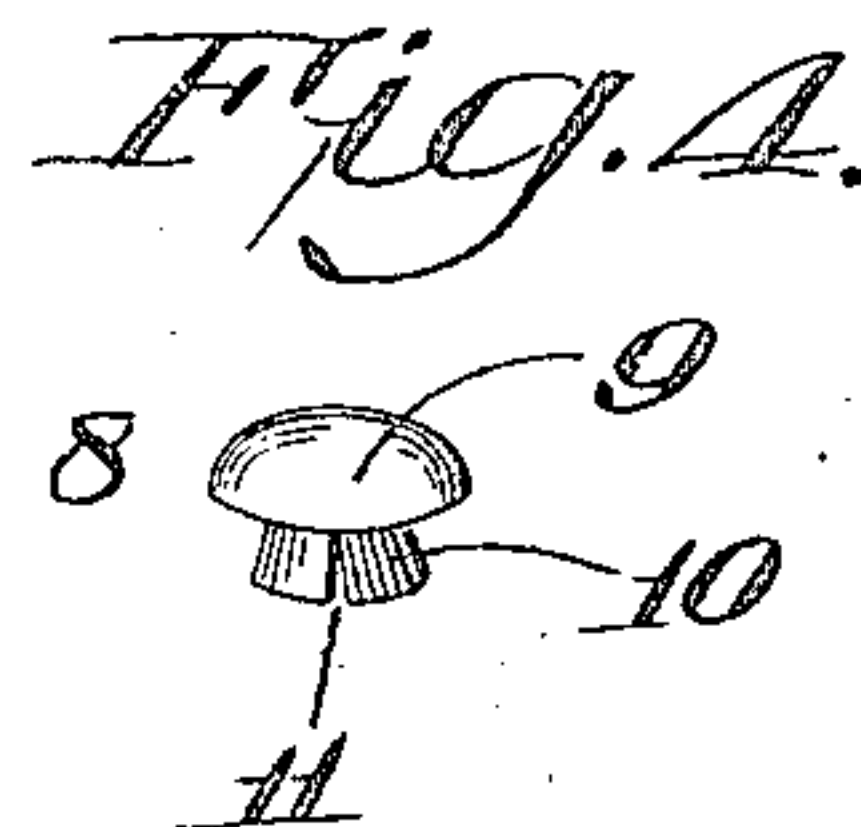
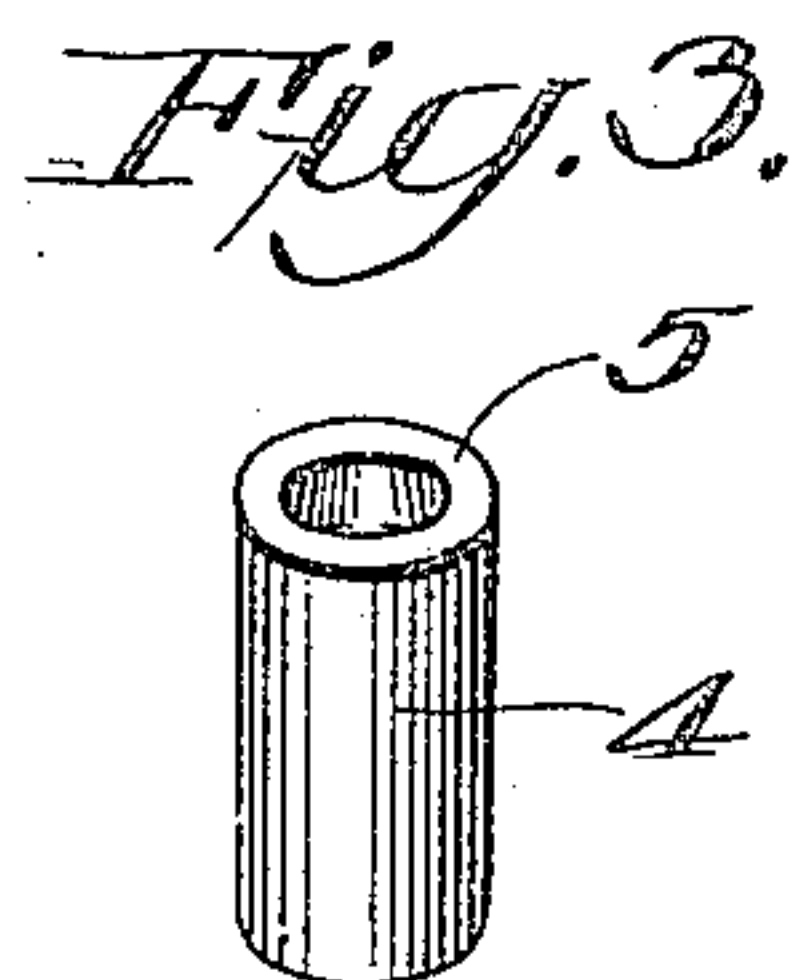
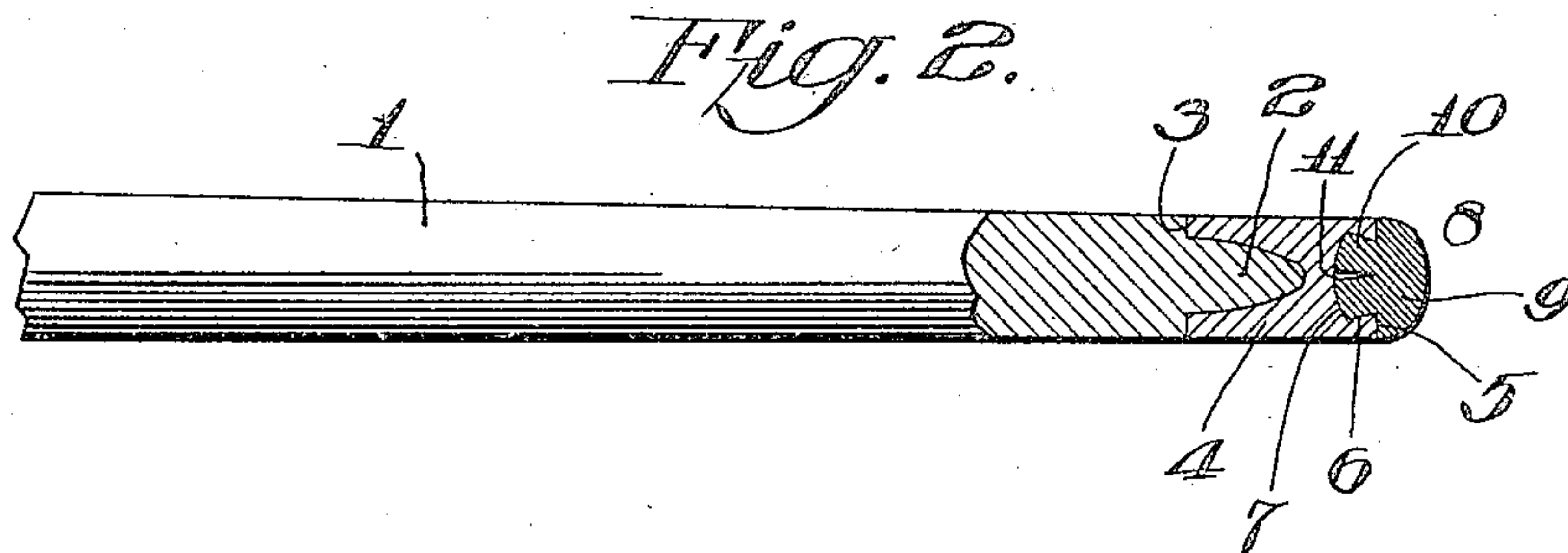
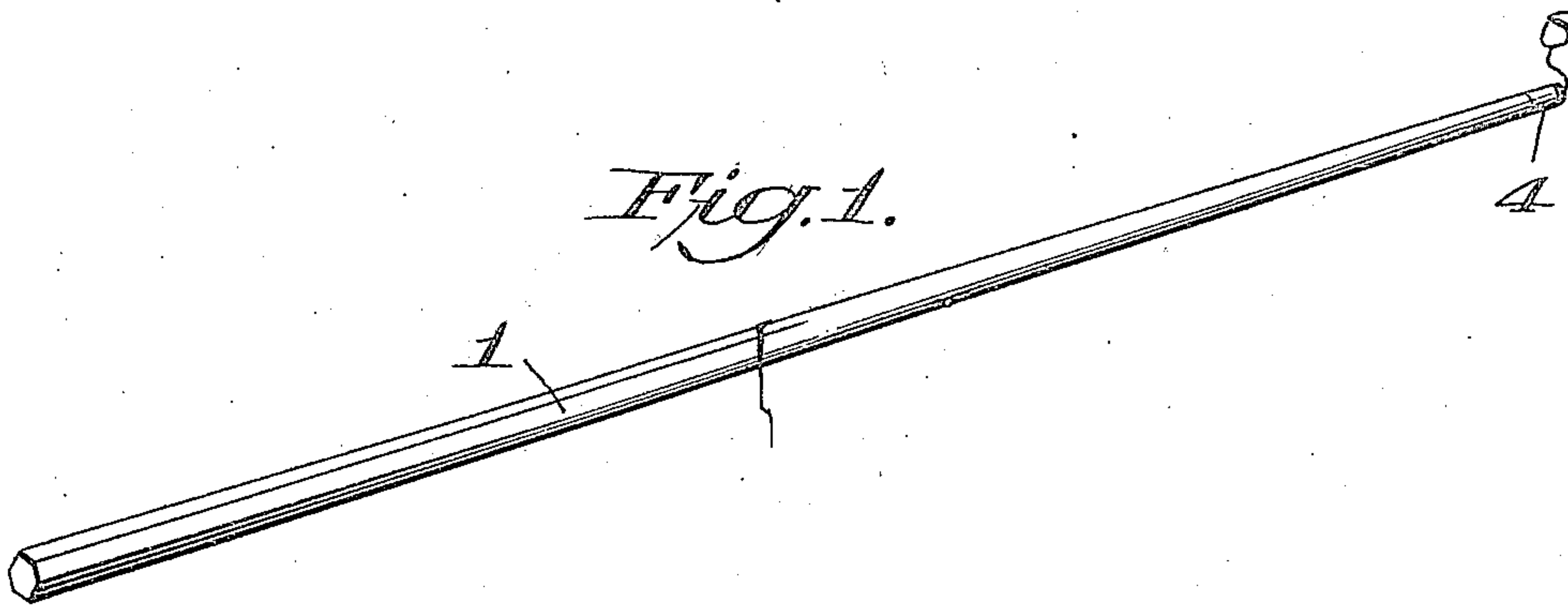


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E. M. ATKINS.
BILLIARD CUE.
FILED Nov. 16, 1920.



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BILLIARD CUE.

Application filed November 16, 1920. Serial No. 424,387.

To all whom it may concern:

Be it known that I, EUGENE M. ATKINS, a citizen of the United States, residing at Bustleton, in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Billiard Cue, of which the following is a specification.

In billiard cues as heretofore constructed, it has been customary to secure the elastic tip to the end of the cue by means of adhesive or to provide means to interlock said tip with the cue. In cases wherein the tip is secured to the end of the cue by adhesive, it soon becomes separated from the cue and the action of the adhesive is destroyed if dampness is present, such as occurs due to climatic conditions and especially where the cues are employed at the seashore. In cases wherein the elastic tip has been cemented with the cue, as heretofore practiced, an impact at certain points of the tip tends to loosen the tip securing means, or else some type of locking member has been deemed necessary to secure the tip in position, and in many cases, the action of such locking member tends to split the forward end of the cue.

It is the object of my present invention to devise a novel construction of a billiard cue, which will overcome the above-noted defects.

To the above ends, my invention comprehends a novel construction of a billiard cue wherein the elastic tip is secured in assembled position with respect to the ferrule at the end of the cue in a novel manner.

It further comprehends a novel construction of a ferrule and a novel construction of a cue tip.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description of my invention.

For the purpose of illustrating my invention, I have shown in the accompanying drawing, one form thereof which is at present preferred by me since the same will give in practice satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists may be variously arranged and organized and that my invention is not limited to the precise arrangement and organi-

zation of these instrumentalities, as herein shown and described.

Figure 1 represents in perspective a billiard cue embodying my invention.

Figure 2 represents on an enlarged scale the forward end of the cue, a portion of the cue, ferrule and tip being broken away for the sake of clearness of illustration.

Figure 3 represents in perspective and in detached position the ferrule.

Figure 4 represents in perspective and in detached position the cue tip.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:—

1 represents the wooden or other cue, which is provided at its forward end with the tapered extension 2, which forms a shoulder 3 against which the rear end of the ferrule 4 seats, it being understood that the ferrule is recessed in order to receive the extension 2. The forward end face of the ferrule 4 is preferably substantially flat, as indicated at 5, and is provided with a recess 6, the walls of which converge outwardly so that the forward end of the ferrule is, so to speak, undercut.

The bottom wall of the recess 6 is rounded, as indicated at 7.

8 designates an elastic cue tip, which is provided with a head 9 and with a rearward extension or shank 10, which is split as indicated at 11. The shank 10 has its walls converging forwardly towards the head 9 and its rear wall is preferably rounded, as will be understood by reference to Figure 2.

Assuming now that the ferrule 4 has been secured in any desired or conventional manner with respect to the wooden cue 1, and that the elastic tip 8 has been formed, as shown, the sections 10 of the shank are brought together and forced through the narrow neck at the open end of the recess 6 and due to the split 11 when the cue tip 8 is forced into position, the shank will expand laterally and substantially fill the recess 6, the rear end of the shank preferably abutting the rear wall of the recess 6, as is apparent.

It will be seen that when a tip is secured to the cue in this manner, there will be no tendency of the tip to become disengaged from the ferrule when a sidewise or glanc-

ing blow is imparted to the side wall of the tip by the billiard ball.

It will also be seen that any central blow imparted to the tip will also tend to tighten the cue tip in position.

I have found in practice that when an elastic tip is secured to a cue in the manner herein set forth, that it will always stay in place, and there is no play between the tip and the cue as the end of the tip becomes worn by its impact with the billiard ball.

When it is desired to remove the tip from the cue, all that is necessary to do is to forcibly move the tip outwardly, whereupon the shank will be drawn through the narrow neck at the forward end of the recess.

It will be further apparent that there will be no appreciable loss of time in replacing a cue tip in case the same should be unduly worn or destroyed, while in case the tips are cemented on, it is necessary to let them dry for about twenty-four hours before they are ready for use.

The tip may be made of rubber, leather, cork or other suitable material, but is preferably formed from a material which is comparatively elastic.

It will now be apparent that I have devised a novel and useful billiard cue which embodies the features of advantage enumerated as desirable in the statement of invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which will give in practice satisfactory and reliable results, it is to be understood that

the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

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

1. A billiard cue having a ferrule provided at its forward end with a recess, the bottom wall of which is unapertured and the walls of which converge forwardly, and a tip formed of a compressible material and provided with a rearwardly extending compressible shank adapted to be inserted into and substantially fill said recess, said shank being split transversely across it to provide for its lateral expansion.

2. A billiard cue having a ferrule provided with a recess, the bottom of which is rounded and the side walls of which converge forwardly to form a narrow neck, and an elastic tip having a head and a rearwardly extending shank, the side walls of the shank converging towards said tip, the rear end of said shank being rounded to engage the rear wall of said recess and said shank being split, so that when it is forced into said recess it will expand laterally, whereby the impact against said tip will tend to cause the lateral expansion of said shank and serve to more tightly secure it in said recess.

E. M. ATKINS.

Witnesses:

MARGUERITE M. LITZKE,
JESSIE A. DAVIS.