J. C. BECHTOLD.

CUE TIP HOLDER.

APPLICATION FILED MAY 12, 1911.

1,014,559. Patented Jan. 9, 1912.

Fig 1

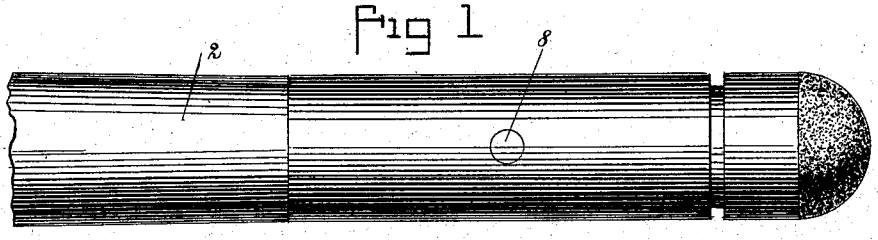


Fig 2

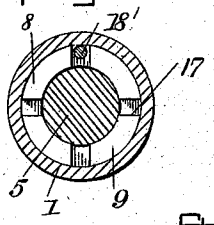


Fig 3

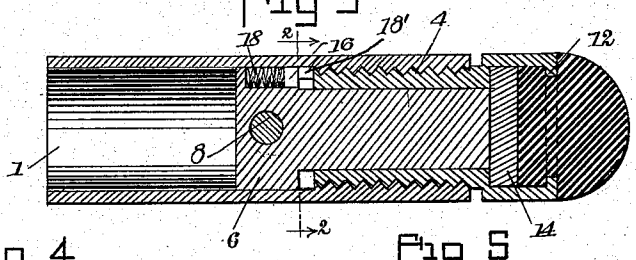


Fig 4

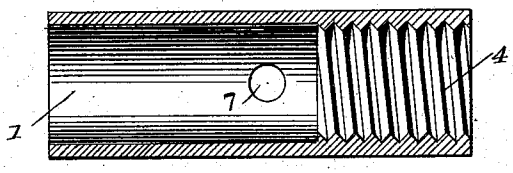


Fig 5

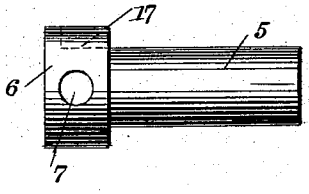


Fig 6

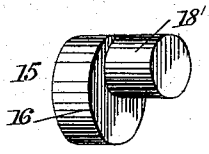


Fig 7

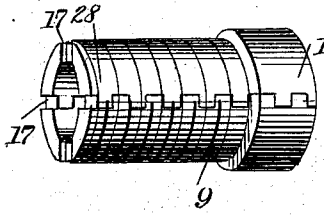


Fig 8

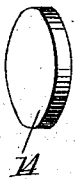
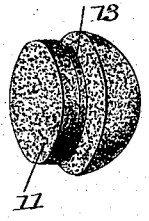


Fig 9



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CUE-TIP HOLDER.

1,014,559. Specification of Letters Patent. Patented Jan. 9, 1912.

Application filed May 12, 1911. Serial No. 626,728.

To all whom it may concern:

Be it known that I, JOSEPH C. BECHTOLD, a citizen of the United States, and a resident of Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Cue-Tip Holder, of which the following is a full, clear, and exact description.

My invention relates to a tip for a billiard cue and the means for securing it to the cue.

The object of my invention is to improve the construction of the tip and to provide an improved holder therefor which may be attached to the end of the cue in such a manner that there will be no danger of portions of the end breaking off, thereby loosening the holder or making it necessary to change the construction of the end when it is desired to place the holder again in position thereon.

Another object of my invention is to provide a new and improved holder for cue tips which is easily adapted to cues whereby the tip is firmly positioned at the end of the cue and loosening of the parts is prevented.

Reference is to be had to the accompanying drawings forming a part of this specification, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a side view of the end portion of a cue fitted with my holder; Fig. 2 is a sectional view, on the line 2—2 of Fig. 3; Fig. 3 is a longitudinal sectional view of the tip and holder; Fig. 4 is a longitudinal sectional view of the ferrule; Fig. 5 is a side view of the core; Fig. 6 is a perspective view of the movable locking member; Fig. 7 is a perspective of the chuck; Fig. 8 is a perspective of the bearing member carried within the chuck; Fig. 9 is a perspective of the tip.

My holder comprises a suitable ferrule 1 adapted to be placed in position on the end of a cue 2, one end portion of the ferrule being interiorly threaded as at 4. Contained within the ferrule 1 is a core 5 having the enlarged head portion 6 of substantially the same diameter as the interior of the ferrule, this head portion being provided with a transversely extending opening 7 whereby a suitable pin 8 may be passed therethrough and into engagement with opposite sides of the ferrule in order to firmly position the core within the ferrule.

The threaded end of the ferrule is adapted to receive a suitable chuck or clamping member made up of the semi-cylindrical parts 28, 9, having screw threads provided at their exterior surface in order to coöperate with the threaded portion 4 of the ferrule whereby the chuck may be retained in position shown in Fig. 3. One end portion of each of the members 28, 9, is provided with a head portion 10, this head portion being interiorly recessed in order to receive the body portion 11 of the tip, the outer end of each of the head portions being provided with an interiorly extending flange 12 adapted to be seated within the peripheral slot 13 contained in the tip, as shown in Fig. 9. In order to provide a suitable bearing for the body of the tip within the recessed head of the chuck I make use of a suitable member 14 made of any suitable material, this member being seated between the end of the body of the tip and the bottom of the recess, shown particularly in Fig. 3.

The locking means for securing the clutch or the clamping members within the ferrule comprises an element 15, shown in Fig. 6, made up of the body portion 16 and the projecting portion 18′, the body portion 16 being adapted to be seated within a suitably shaped recess 17 in the enlarged head 6 of the core 5, there being a helical spring 18 contained within the said recess and bearing against the member 15; the inner end of the clutch members 28, 9, are provided with a plurality of transversely extending slots 17, each of these slots being adapted to coöperate with the extending portion 18′ of the locking member 15 whereby, when this portion 18′ is seated in either of the slots 17, the said clutch with the tip held in position therein is held against turning.

In order to allow the projecting portion 18′ to suitably engage in either of the slots 17 or to permit the chuck to be turned in order to bring it out of engagement within the ferrule and against the sides of the projecting portion 18′, the side walls of the slot 17, or the edge portion of the projecting portion 18′, may be suitably beveled whereby the parts may be separated by applying sufficient pressure thereto; these parts will be held against accidental displacement, thereby insuring that the cue with the tip thereon will always be positioned ready for use.

As shown in Fig. 9 my improved tip com-

prises the body portion 11, the outer end of which is substantially of hemispherical formation, following out the construction of the ordinary tip, there being a peripheral slot 13 in the body of the tip between the outer hemispherical portion and the body portion 11. The ferrule 1 is placed in position on the end of the cue 2, the core 5 being held in position within the ferrule. The spring 18 and the locking member 15 are placed in position within the recess 17 in the head portion of the core and the clutch or locking members 28, 9, with the tip in position in the outer end thereof are then brought into engagement with the threaded portion of the ferrule and the parts turned relatively to each other until the portion 18′ of the locking member 15 engages in one of the slots 17 in the end portion of the chuck when the cue is ready for use. In order to remove the clutch for the purpose of replacing the tip, the clutch is merely turned relatively to the cue in order to bring it out of engagement with the ferrule when the old tip may be removed and a new one inserted.

From the above description it will be seen that I have provided a new and improved form of cue tip holder in which the tip is always secured in proper position. The ferrule portion of the holder is adapted for connection with the end of the cue, it being unnecessary to provide any screw threads on the end of the cue, such a construction resulting in a disadvantage in the stripping of these threads from the constant removal of the holder when it is desired to remove the tip. While I have shown a certain conformation and size of parts, it will be obvious that various changes may be made therein in order to adapt the holder to meet different conditions, without departing from the spirit of the invention.

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

1. In a device of the class described, the combination of a suitable ferrule, a core therein, and means for holding the core and ferrule in engagement, a plurality of jaws within the ferrule and in engagement therewith, other means carried by the core and engaging the jaws for holding them in position within the ferrule, the said jaws being provided with means for engagement with a cue tip.

2. In a device of the class described, the combination of a suitable ferrule, a core therein, a plurality of jaws within the ferrule and in engagement with the core, the said jaws being provided with means for engaging the cue tip, together with independent means within the ferrule for maintaining the fixed relation between the jaws and the ferrule.

3. In a device of the class described, the combination of a suitable ferrule having an interiorly threaded portion, a core within the ferrule carried thereby, a plurality of jaws within the ferrule and surrounding the said core, the said jaws being in engagement with the said threaded portion of the ferrule, the ends of the said jaws having an interiorly recessed portion for engagement with the body portion of a cue tip.

4. In a device of the class described, the combination of a suitable ferrule for engagement with the outer end of a cue, the interior portion of the ferrule being provided with screw threads, a core within the ferrule and in engagement therewith, a plurality of jaws within the ferrule and having threaded portions in engagement with the threads on the ferrule, the outer ends of the jaws being provided with means for holding the cue tip in position therein, together with resilient means within the ferrule for engagement with the said jaws whereby the parts are held in position.

5. In a device of the class described, the combination of a suitable ferrule for engagement with the outer end of a cue, a core within the ferrule and in engagement therewith, a plurality of jaws within the ferrule and engaged thereby, the outer ends of the jaws being adapted to hold a cue tip, together with a spring and a member in engagement with the spring, the said member being adapted for engagement with the end of one of the said jaws whereby the jaws may be held in position within the ferrule.

6. In a device of the class described, the combination of a suitable ferrule for engagement with the outer end of a cue, a core within the ferrule and in engagement therewith, a plurality of jaws having means at their outer ends for engagement with a cue tip, together with a helical spring and a member in engagement therewith for holding the said jaws in position within the said ferrule, the inner ends of the said jaws being provided with slots adapted for engagement with the outer end of the said member whereby when the jaws are placed in position within the ferrule they are maintained in such position.

7. In a device of the class described, the combination of a suitable ferrule adapted for engagement with the outer end of a cue, a cylindrical core within the ferrule and having an enlarged head portion in engagement with the inside of the ferrule, a plurality of interengaging cylindrical jaws adapted to surround the core and engage the inside of the ferrule between the outer end thereof and the aforesaid enlarged head portion of the core, the outer ends of the jaws being adapted to engage a cue tip, a recess in the said enlarged head portion of the core, a helical spring contained within the recess, an element also contained in

the recess and having an extending portion, the spring engaging the said element, the inner ends of the said jaws being provided with a plurality of slots with any one of which the said projecting portion of the said element is adapted to engage in order to hold the jaws in position within the ferrule and the tip at the end of the cue.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH CHARLES BECHTOLD.

Witnesses:
JOHN BOUGHTON,
DANIEL ADAMS.