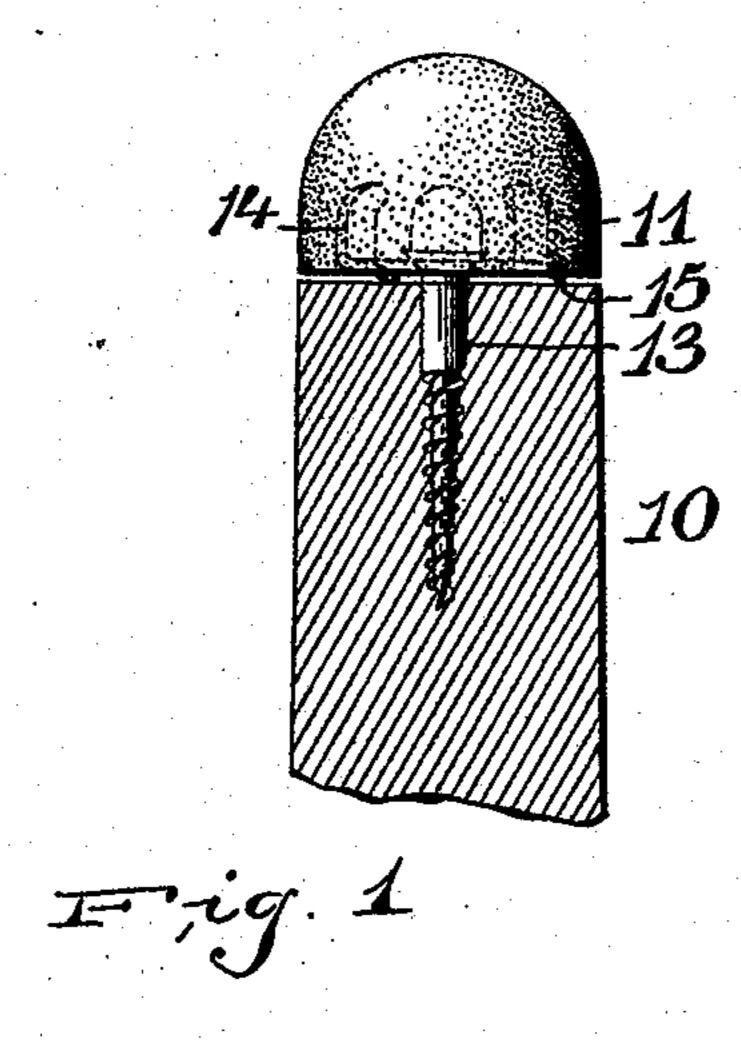
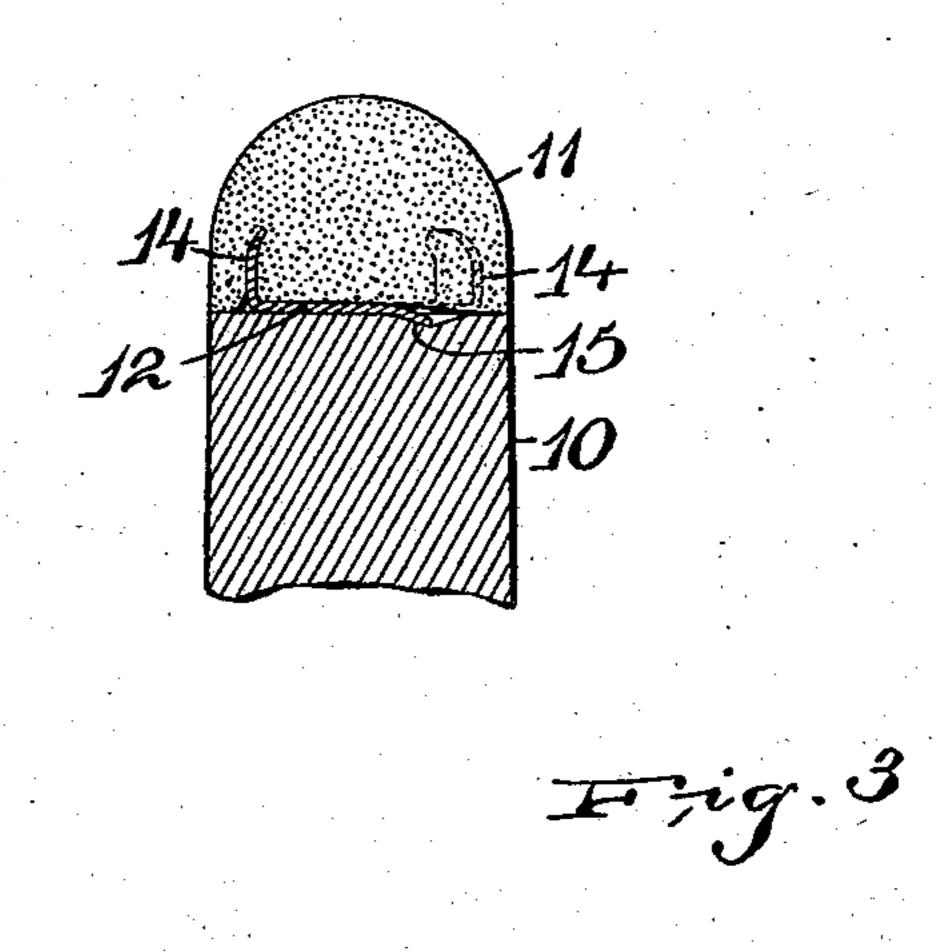
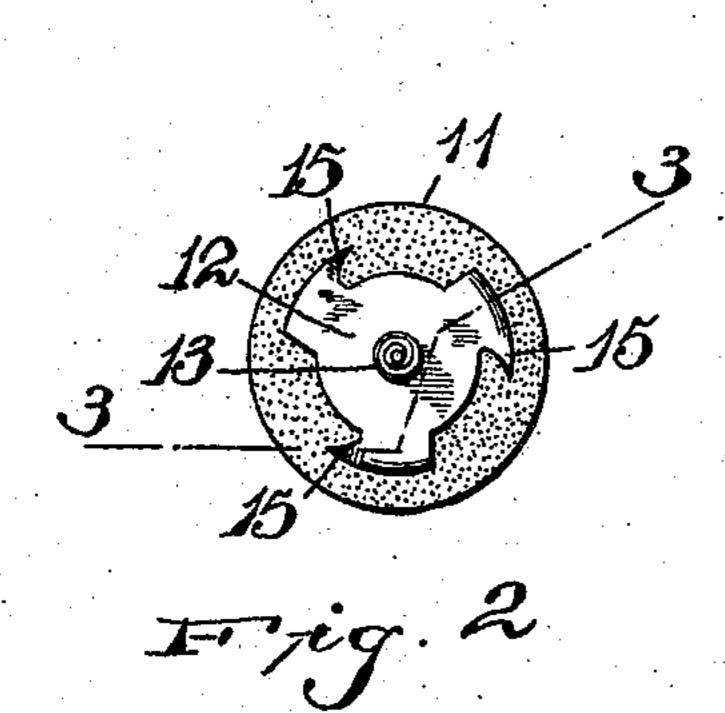
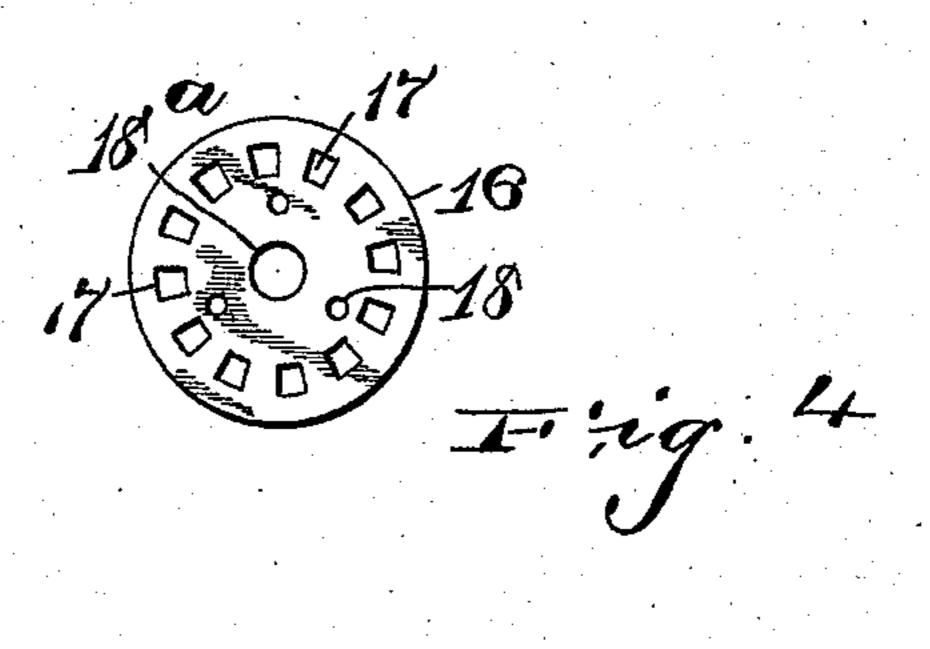
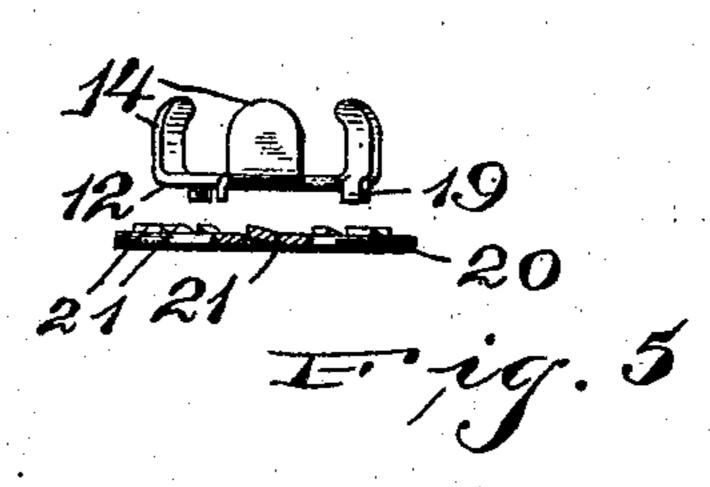
## A. PAUL. TIP FOR CUES. APPLICATION FILED JAN. 29, 1907.











WITNESSES: E. Q. Lee R. Johnson.

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## UNITED STATES PATENT OFFICE.

ARTHUR PAUL, OF NEWARK, NEW JERSEY.

## TIP FOR CUES.

No. 855,127.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed January 29, 1907. Serial No. 354,757.

To all whom it may concern:

Be it known that I, ARTHUR PAUL, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jer-5 sey, have invented certain new and useful Improvements in Tips for Cues; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to ro which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved means for securing a cue tip to the end of a cue, and is designed to provide a tip that is screwed into the cue, on its end, and is designed to provide means for preventing the 20 unscrewing of the screw from the cue after it has once been secured, unless the tip is destroyed. This is the method of eventually taking off the cue tip after it is worn out, and until then there is no possibility of the cue 25 becoming loosened or removed in an accidental manner, while it is in good condition.

The invention is illustrated in the accom-

panying drawings, in which

Figure 1 is a section of a cue end with the 30 tip in elevation. Fig. 2 is a bottom view of the tip. Fig. 3 is a section on line 3, 3, in Fig. 2. Fig. 4 is a plan of a plate that can be used, with the device, to secure the end of the cue against mutilation, and Fig. 5 is a modi-35 fied form of fastening means.

The cue 10 is supplied with a tip 11, of the usual shape and conformation, and a plate 12 has a screw 13 projecting therefrom, which screw is turned into the end of the cue. The 40 plate 12 is fastened to the tip by means of the wings 14 which extend out from the plate 12 and integral therewith, and are then turned upward, as shown in Figs. 1, 3 and 5, to be embedded in the tip by being forced in by 45 hammering or any other suitable process. It will thus be seen that when the cue tip 11 is turned, the plate 12 and consequently the screw 13 are also turned to securely fasten the parts together. Projecting at a slight 50 angle from the plate 12, and preferably at the juncture of the plate 12 and the wings 14, are the spring teeth 15 that are integral with the plate, and have an inclination opposed to the pitch of the screw-thread of the screw 13, so 55 that when the screw 13 is screwed in the cue

far enough to make the tip and the cue meet,

the teeth 15 have become embedded in the end of the cue sufficiently to prevent the unscrewing of the screw 13. This will be noted more particularly in Fig. 3, and the only way 60 the cue tip can be removed from the cue is to tear it away from the wings 14, by a suitable tool, and then the teeth 15 can be bent up out of engagement with the end of the cue, and the whole device can then be removed. 65

In Fig. 4 I show a plate 16 that can be secured by pins driven through perforations 18. This plate is installed on the end of the cue, and the perforation 18<sup>a</sup> allows the passage of the screw 13. Perforations 17 are concen- 70 trically arranged on the plate 16, and these are disposed to be in the path of the teeth 15 to engage them if they are turned to unscrew the screw, and in this way considerable wear on the end of the cue is dispensed with, and 75 no mutilation of the wood of the cue is liable to take place when the plate 16 is used, if it is desired to forcibly remove the tip. A modification of this fastening means is shown in Fig. 5, where the plate 12, with its wings 14, 80 is supplied with short perpendicular fingers 19, and a plate 20 in lieu of the plate 16 is placed on the end of the cue, and spring lips 21, concentrically arranged, are adapted to allow the fingers 19 to snap over them when 85 the tip is screwed into place, and to prevent the unscrewing when any reverse motion is attempted. These devices, of course, are subject to small changes, and these can be embodied, if desired, without affecting the 9° limits of the present invention.

It will be understood that the number of wings projecting from the plate can be altered to suit circumstances or the size of the tip, and the method of inserting the wings in 95 the tip is preferably by puncturing the tip, with a suitable tool to nearly the size of the wings, so that very little driving will be necessary so that the plate will not become distorted.

Having thus described my invention, what I claim is:—

1. The combination with a cue, of a tip having a screw arranged thereon, and spring teeth secured to the tip and being inclined at 105 an angle opposed to the pitch of the screwthread of the screw to engage the end of the cue to lock the tip on the end of the cue.

2. The combination with a cue, of a tip having a plate secured thereto, a screw at- 110 tached to the plate, and pointed spring teeth projecting from the plate and being inclined

at an angle opposed to the pitch of the screwthread of the screw to lock the tip on the cue.

3. The combination with a cue, of a tip, a plate having wings to enter the tip, a screw 5 attached to the plate, spring teeth projecting from the plate, the teeth having pointed ends and being inclined at an angle opposed to the pitch of the screw-thread of the screw.

4. The combination with a tip having a screw arranged thereon, and teeth secured to the tip and being inclined at an angle op-

posed to the pitch of the screw thread of the screw, of a cue adapted to receive the screw of the tip and having its end adapted to receive the teeth of the tip.

In testimony, that I claim the foregoing, I have hereunto set my hand this 26th day of

January 1907.

ARTHUR PAUL.

Witnesses:

WM. H. CAMFIELD, E. A. Pell.