

No. 710,279.

Patented Sept. 30, 1902.

W. H. LANE.
BILLIARD CUE.

(Application filed Feb. 24, 1902.)

(No Model.)

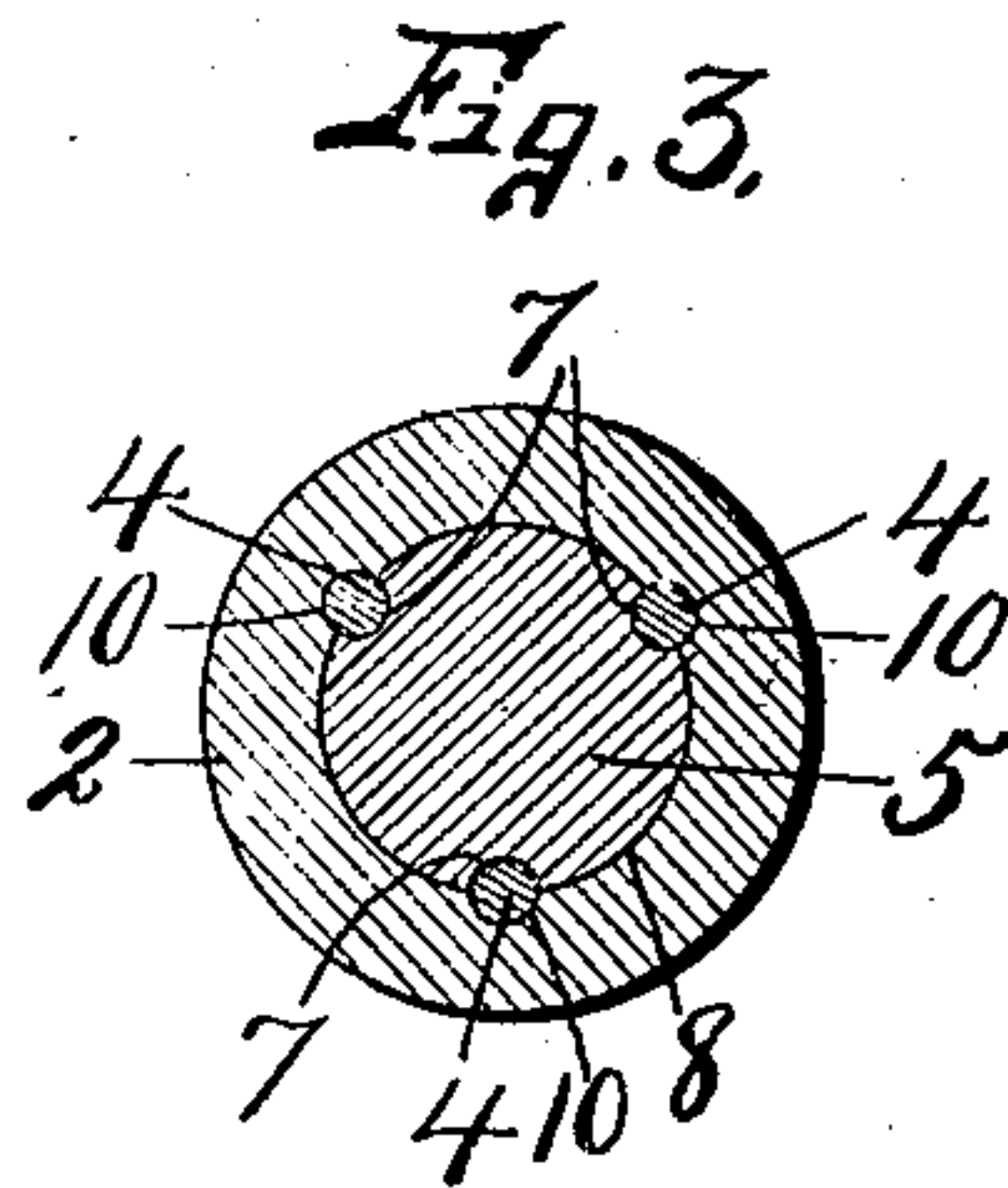
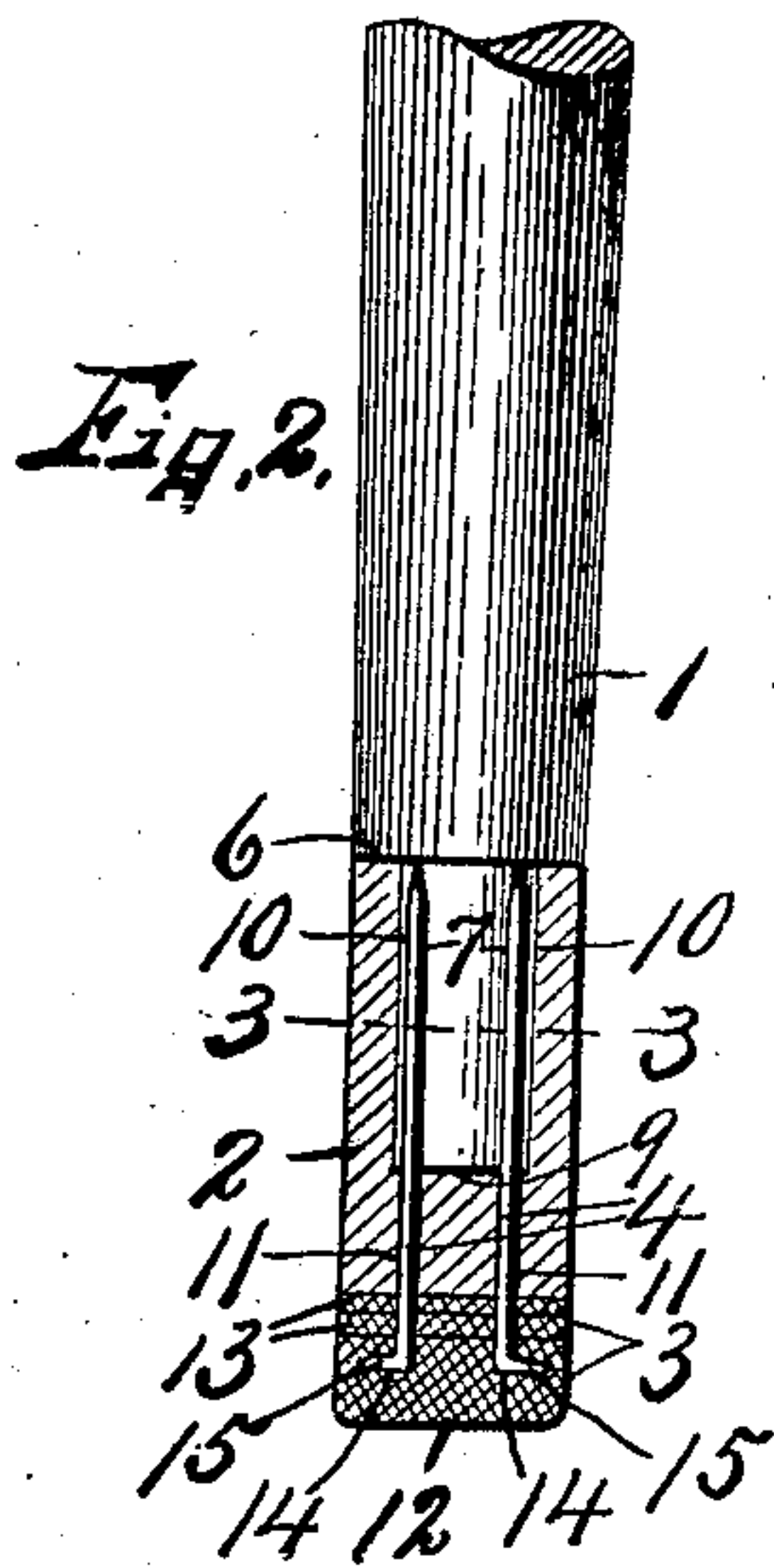
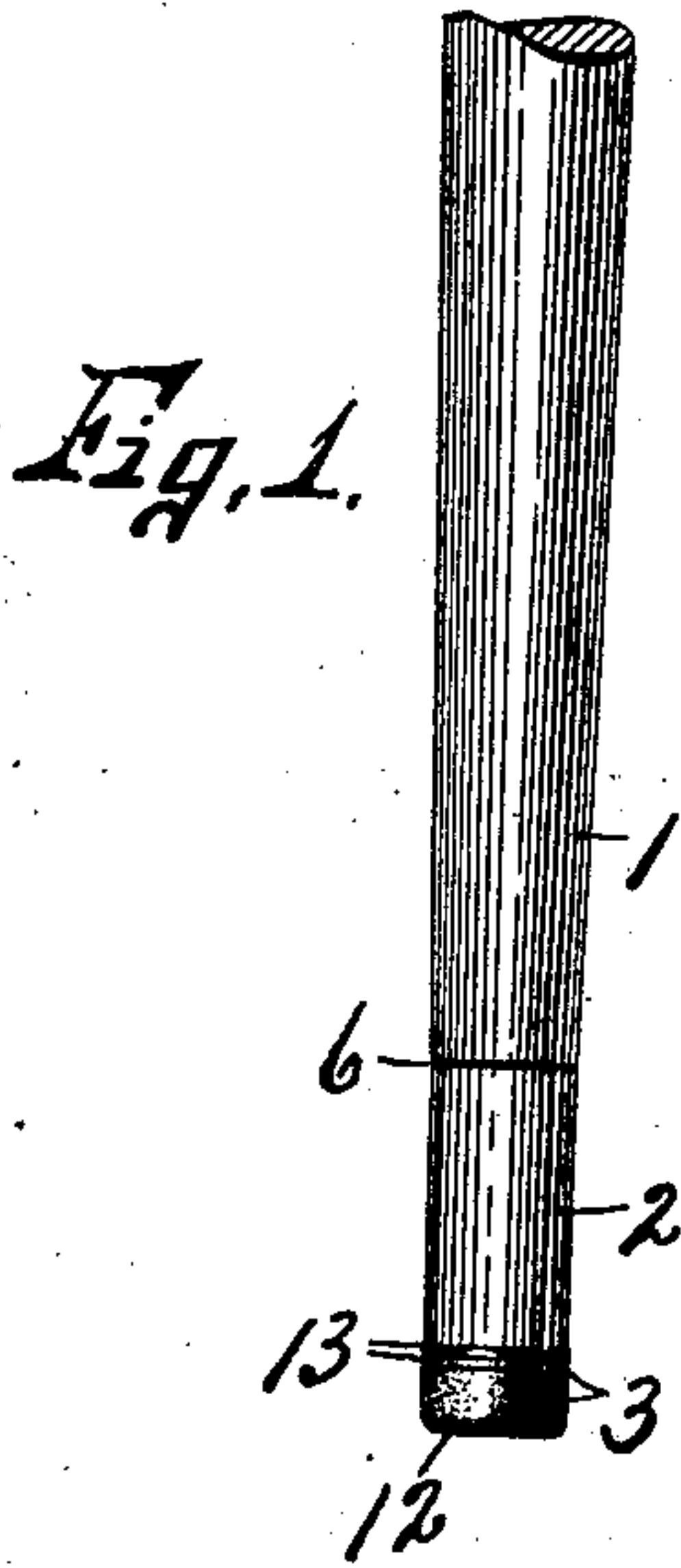


Fig. 4.

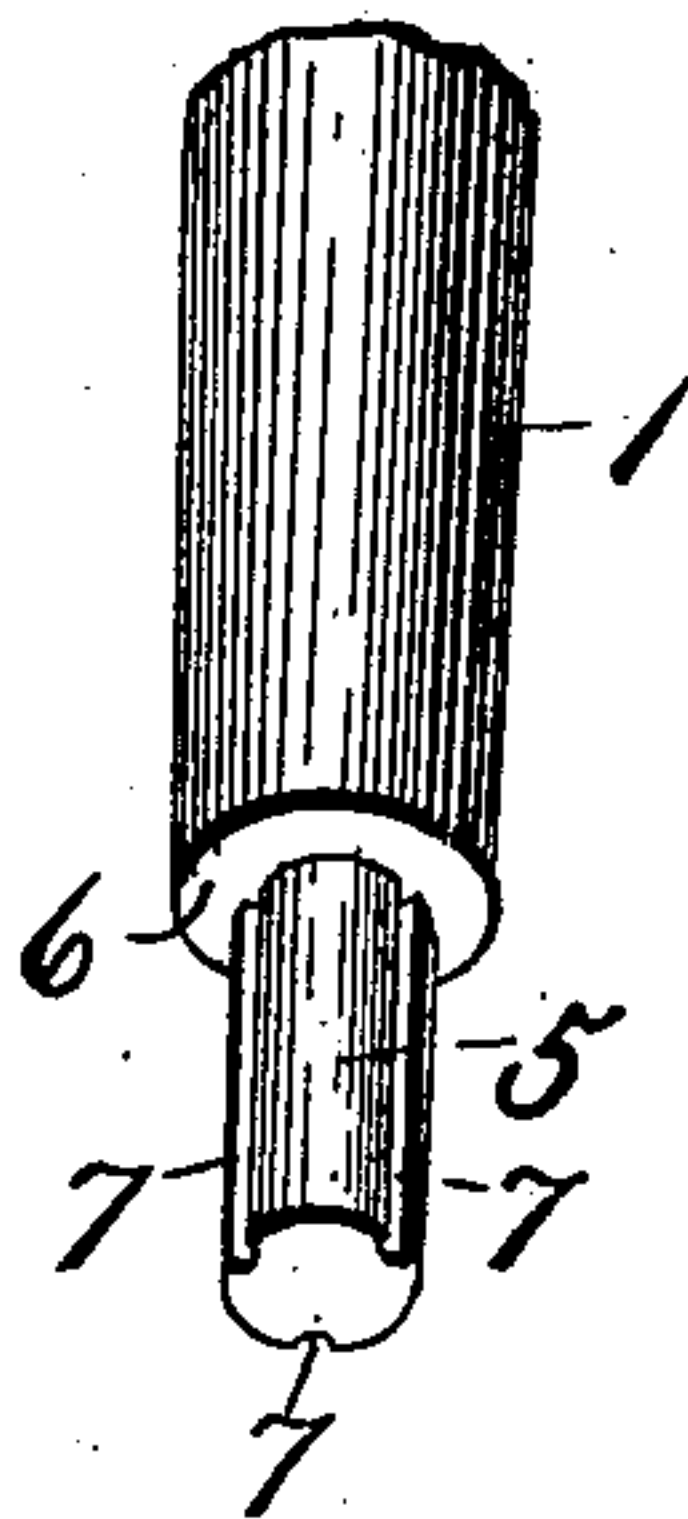


Fig. 5.

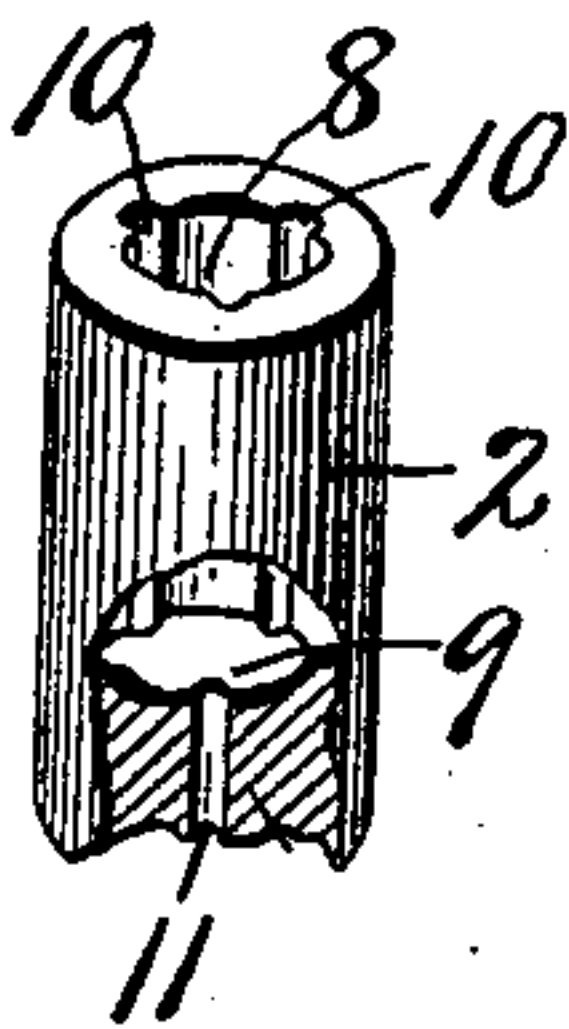


Fig. 6.

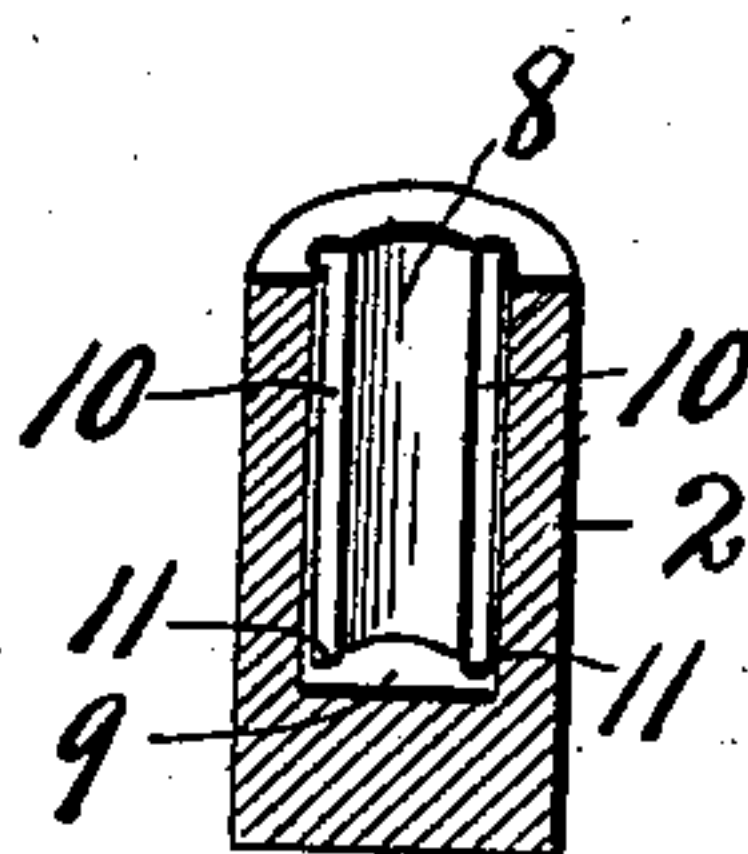
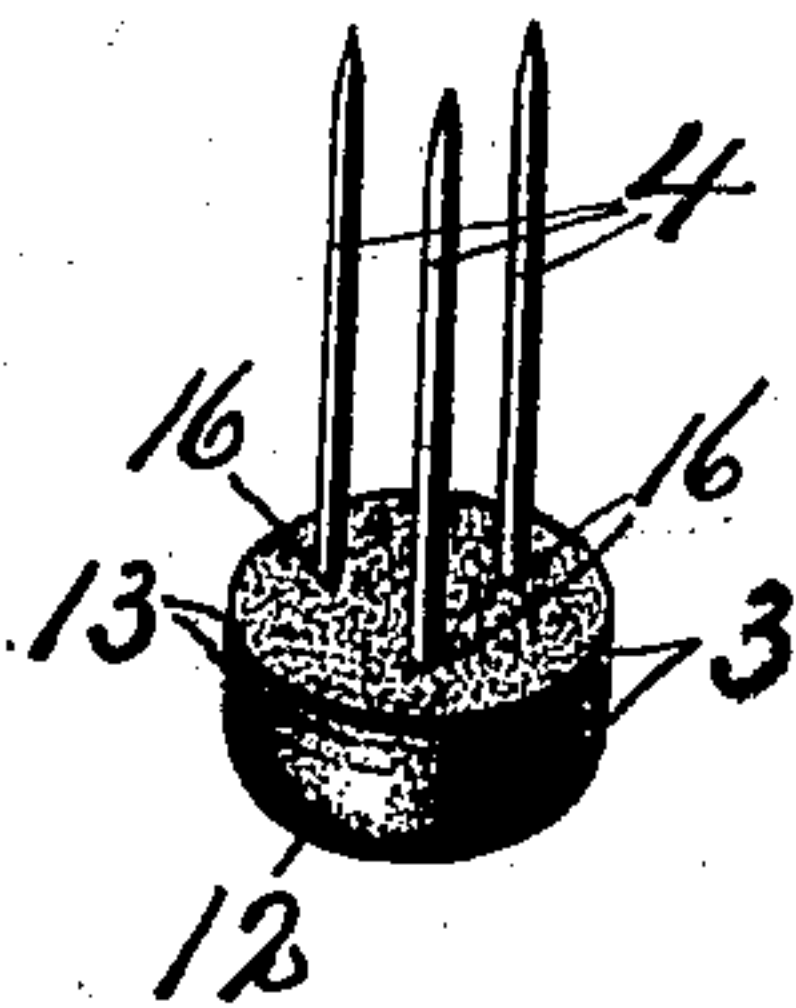


Fig. 7.



WITNESSES:

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WILLIAM H. LANE, OF ITHACA, NEW YORK.

BILLIARD-CUE.

SPECIFICATION forming part of Letters Patent No. 710,279, dated September 30, 1902.

Application filed February 24, 1902; Serial No. 95,385. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. LANE, of Ithaca, in the county of Tompkins, in the State of New York, have invented new and useful
5 Improvements in Billiard-Cues, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to improvements in
10 billiard-cues, having more particular reference to means for holding the tip in position.

The object of this invention is to provide means whereby the tip of the cue may be readily and quickly placed in position and securely
15 held from rotary or endwise displacement and at the same time the tip may be readily removed and a new one inserted when it becomes battered or worn or otherwise impaired.

A further object is to prevent undue abra-
20 sion or battering of the tip or splitting of the cue.

To this end the invention consists in the combination, construction, and arrangement of the parts of a cue, as hereinafter fully de-
25 scribed, and pointed out in the claims.

Referring to the drawings, Figure 1 is an elevation of a cue embodying my invention. Fig. 2 is an enlarged elevation, partly in section, of the device seen in Fig. 1. Fig. 3 is an
30 enlarged transverse sectional view taken on line 3 3, Fig. 2. Fig. 4 is a perspective view of the reduced end of the cue, showing particularly the longitudinal grooves therein. Fig. 5 is a perspective view of the detached
35 sleeve, partly broken away. Fig. 6 is a longitudinal sectional view through said sleeve. Fig. 7 is a perspective view of the detached tip and the prongs secured thereto.

Similar reference characters indicate corre-
40 sponding parts in all the views.

This invention consists, essentially, of a cue 1, a sleeve or cap 2, a tip 3, and a series of prongs 4, secured to the tip.

The cue 1 may be of any desired construc-
45 tion and is provided at one end with a tenon or reduced portion 5, which forms a shoulder or abutting face 6, said reduced portion being provided with lengthwise grooves 7 in its periphery and extending inwardly from its
50 end face preferably to a point in proximity to the shoulder 6. The cue and its reduced end 5 are preferably formed of wood and may be

integral with each other, or the reduced end may be formed of a separate piece suitably secured to the body of the cue. The grooves 55 7 are formed in the periphery of the reduced end 5, and each forms a half or other fractional portion of suitable sockets for receiving the prongs 4, presently described.

The sleeve or cap 2 is preferably of ivory 60 or other refractory material adapted to receive the impact of the blow or contact of the tip against the ball and is provided with a socket 8, extending inwardly from one end to a point in proximity to the opposite end, but
65 not extending through the sleeve, thereby forming an end wall 9 in the opposite end of the sleeve or cap. The socket 8 is substantially central in the sleeve, being of substantially the same size as the reduced portion 5
70 of the cue 1, so as to fit closely upon said reduced portion, and its walls are provided with a series of grooves 10, corresponding in number to the number of grooves 7, and are similarly disposed circumferentially for the pur-
75 pose of alining the grooves 7 and 10 with each other. The grooves of both the tenon 5 and sleeves 2 are preferably arranged equidistant from each other circumferentially in order that they may be readily alined without spe-
80 cial care. The depth of the socket 8 is of substantially the same length as the tenon 5, so that the open end face of the sleeve and shoulder 9 abut, respectively, against the
85 shoulder 6 and the end face of the tenon 5 when the sleeve is placed in operative position. This latter feature tends to greatly stiffen the tenon and forms a substantially integral portion of the cue. The closed end
90 of the sleeve or cap 2 is provided with apertures 11, which are alined with the grooves 10 and also receive the prongs 4, it being understood that the grooves 10, together with the grooves 7, form continuations of the ap-
95 ertures 11 to receive said prongs.

The tip 3 is preferably formed of leather or equivalent material and consists of a head 12 and one or more washers 13, interposed be-
100 tween the head and the adjacent end face of the sleeve or cap 2, said head being provided with sockets 14, extending inwardly from its inner face, these sockets being each formed with a lateral offset and are adapted to receive the angular ends of the prongs 4, Fig. 2.

The prongs 4 are preferably formed of metal, as wire, and correspond in number to the number of apertures 11 and the grooves 7 and 10, alined therewith, being inserted in 5 said apertures and grooves when the parts of a cue are assembled, the free ends of the prongs being preferably tapered slightly for permitting the same to be readily inserted in position. Corresponding ends of these prongs 10 are secured to the tip and are preferably angular for forming lateral shoulders 15, which are inserted in the sockets 14 and their lateral offsets, the washers 13 being formed with apertures 16, which receive the prongs and 15 permit the washers to lie in close contact with each other and with the inner face of the head 3, to which the washers may be cemented if desired.

It is evident from the foregoing description 20 that the lateral arms 15, entering the lateral offsets of the sockets 14, firmly hold the prongs in operative position and that the washers 13 serve to reinforce the adjacent face of the tip or head 3 and also tend to prevent displacement of the prongs from the tip. It is also 25 apparent that by forming the tenon 2 and walls of the socket 8 with alined grooves the prongs 4 when placed in operative position serve to lock the sleeve and tenon from independent rotary movement one upon the other 30 and also serve to lock the tip firmly in position.

The operation of my invention will now be readily understood upon reference to the foregoing description and the accompanying 35 drawings.

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

40 1. A cue having one end formed with a lengthwise groove, a sleeve fitting said end of the cue and having a groove alined with the former groove, a tip, and prongs secured to the tip and inserted in the alined grooves 45 for locking the sleeve and tip to the body of the cue.

2. A cue having a reduced end provided with lengthwise grooves in its periphery, a sleeve fitting the reduced end and having 50 lengthwise grooves on its inner face alined with the former grooves, a tip and prongs se-

cured to the tip and inserted in the grooves for the purpose described.

3. A cue having one end reduced in diameter and formed with lengthwise grooves, a 55 sleeve having a socket in one end and its other end closed, the walls of the socket being formed with lengthwise grooves alined with the former grooves and the closed end of the sleeve having apertures alined with the lat- 60 ter grooves, a tip and prongs secured to the tip and inserted in the apertures and grooves for the purpose described.

4. A cue comprising a main body having a reduced end provided with lengthwise grooves 65 in its periphery, a sleeve or cap having one end formed with a socket and its other end closed the walls of the socket having lengthwise grooves alined with the former grooves, and the closed end being provided with aper- 70 tures alined with the latter grooves, a tip having sockets with lateral offsets extending inwardly from its inner face, prongs having lateral shoulders inserted in said sockets and lateral offsets, a washer having apertures for 75 receiving the prongs, said prongs being inserted in the apertures of the sleeve and also in the grooves of the sleeve and said reduced portion of the cue for the purpose described.

5. A billiard-cue comprising a main body 80 having a reduced end for forming an abutting face, said reduced end being provided with lengthwise grooves in its periphery, a sleeve or cap having one end closed and its 85 other end provided with a socket of substantially the same length as said reduced portion whereby the end face of the sleeve abuts against said abutting face and the end wall of the socket abuts against the end of said reduced portion, the walls of the socket being 90 provided with lengthwise grooves alined with the former grooves and the closed end of the sleeve or cap being formed with apertures alined with said grooves, prongs inserted in the grooves and a tip secured to the prongs 95 for the purpose described.

In witness whereof I have hereunto set my hand this 14th day of February, 1902.

WILLIAM H. LANE.

Witnesses:

MONROE M. SWEETLAND,
EUGENE TERRY.