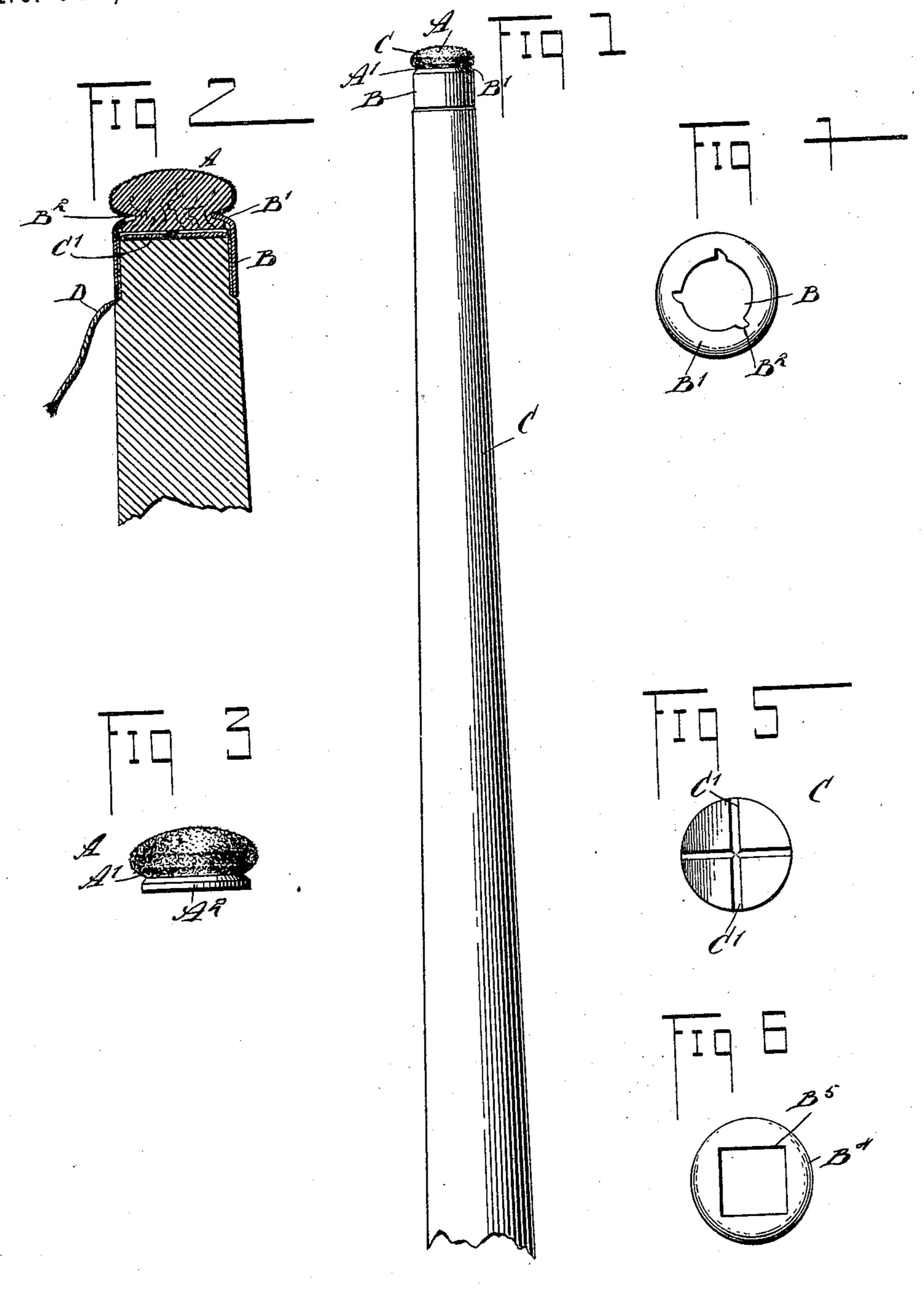
(No Model.)

## R. GHEZZI & F. BERTONCINI. BILLIARD CUE.

No. 587,195.

Patented July 27, 1897.



INVENTORS.

RESPECTIVE

BY

MELLEN

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

ROMEO GHEZZI AND FERDINANDO BERTONCINI, OF NEW YORK, N. Y.

## BILLIARD-CUE.

SPECIFICATION forming part of Letters Patent No. 587,195, dated July 27, 1897.

Application filed February 27, 1897. Serial No. 625, 273. (No model.)

To all whom it may concern:

Be it known that we, ROMEO GHEZZI and FERDINANDO BERTONCINI, of the city, county, and State of New York, have invented a new 5 and Improved Billiard-Cue, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved billiard-cue arranged in such a manner as to permit of conveniently, ro securely, and quickly fastening the tips in

place on the stick.

The invention consists principally of a tip formed with an annular groove at its sides and engaging a notched flange on the top of 15 the ferrule or cap, the inner end of the tip being hammered to form a head, so as to securely hold the tip in place in the cap and to prevent it from turning by the material engaging the notches in the ferrule or cap.

The invention further consists of a stick formed with one or more grooves at its end, each groove being adapted to receive a strip or thread of a soft material extending to the sides of the stick to be engaged by the sides 25 of the ferrule or cap, so as to securely hold

the same in place.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then

30 pointed out in the claims. Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is an enlarged sectional side elevation of the same. Fig. 3 is a side elevation of the tip. Fig. 4 is a plan view of the ferrule or cap. Fig. 5 is a similar view of the 40 stick, and Fig. 6 is a plan view of a modified

form of cap. The tip A for the billiard-cue is preferably made of leather or other like material and is formed at its side with an annular groove A' and with the lower or base portion A2, adapted to be squeezed together to pass through the opening in the flange B' of the ferrule or cap B, adapted to be secured to the upper end of the stick C. On the inner edge of the flange B' 50 are formed notches B2, adapted to be engaged |

by the tip material after the latter is inserted in the cap, and the base A2 is hammered so as to form a rivet-head on the under side of the flange B', the said hammering process causing the material to expand into the 55 notches B2. By this arrangement the tip is securely fastened in position on the ferrule B, and at the same time the tip is prevented from turning in the ferrule by its material extending into the notches B2.

In order to securely hold the ferrule B in place on the end of the stick C, we provide the tip-surface thereof with one or more transverse notches C', each of which is adapted to receive a strip or thread D, of a suitable soft 65 material, with the ends extending down the sides of the stick C. Now when the ferrule B is driven over this end of the stick it engages the downwardly-hanging ends of the strips or threads D, which form wedges for 7° securely fastening the ferrule in place on the end of the stick, it being understood that the ferrule is of a size corresponding to the end of the stick, so that the force of driving the ferrule into place over the threads or strips 75 D causes the latter to securely wedge the ferrule in place.

It will be seen that by the arrangement described the tip is securely fastened in place on the ferrule, and the latter is very securely 80 attached to the end of the stick, so that there is no danger of either working loose.

As shown in Fig. 6, the cap B4 is formed with a square opening in its top flange  ${\rm B}^{\rm 5}$  instead of a round opening with notches, the 85 corners of the square opening having the same functions as the notches—namely, to prevent the top from turning in the cap after the base is hammered into a head and the material expanded in the square opening.

Having thus fully described our invention we claim as new and desire to secure by Let-

ters Patent— 1. A billiard-cue provided with a stick, formed at its top with notches, resilient strips 95 held in the said notches and extending over the sides of the stick, and a ferrule carrying the tip and driven over the end of the stick and the said strips, substantially as shown and described. 2. A billiard-cue comprising a stick formed at its upper end with notches for receiving resilient strips adapted to extend along the sides of the stick, a ferrule formed with a 5 notched top annular flange, and driven over the said strips at the end of the stick, and a tip formed with an annular recess registering with the said flange and having its material

driven into the notches of the flange, substantially as shown and described.

> ROMEO GHEZZI. FERDINANDO BERTONCINI.

Witnesses: VITANTONIO SERRITELLA, GENNARO B. BELLAROSA.