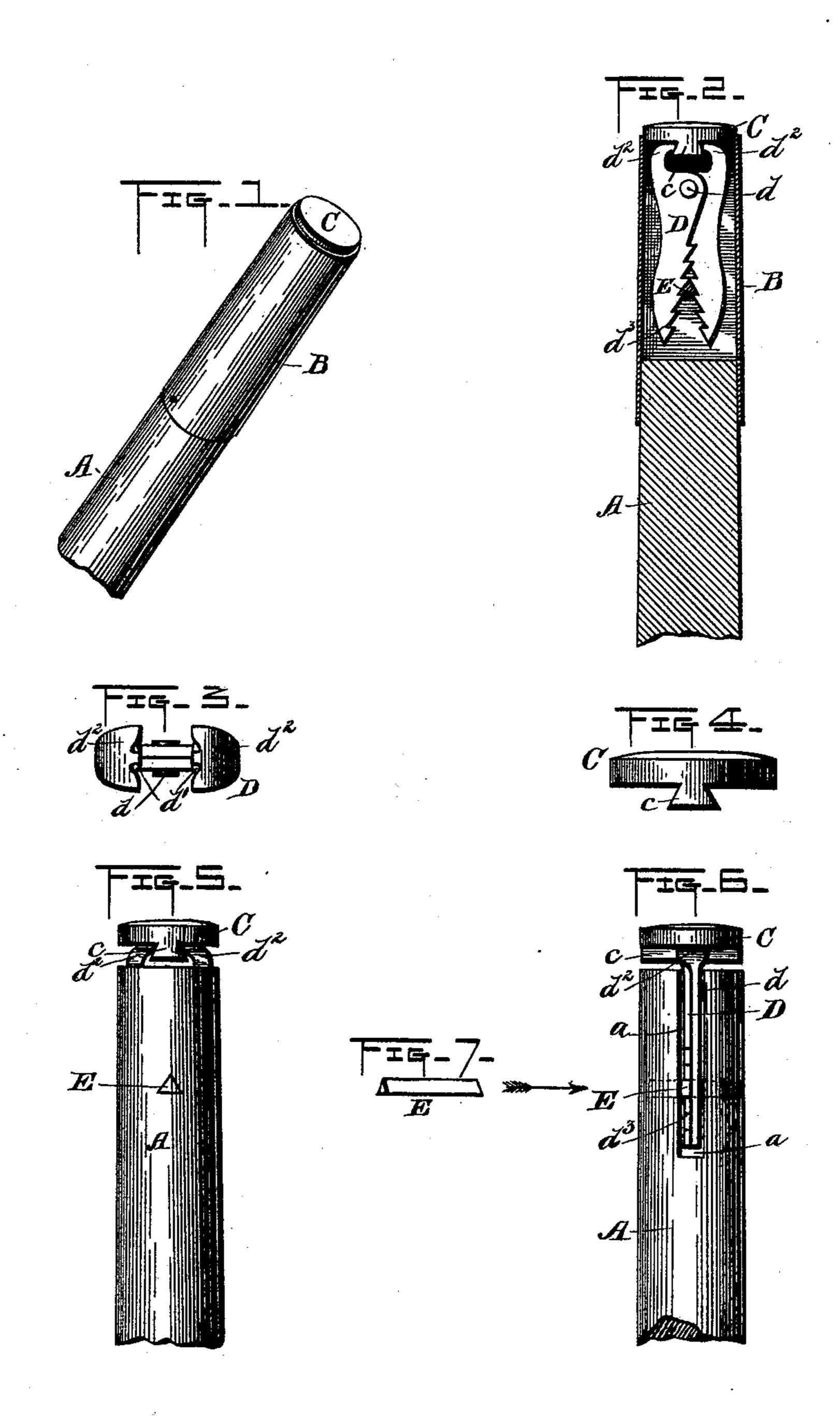
(No Model.)

## W. E. OWENS. BILLIARD CUE.

No. 403,856.

Patented May 21 1889.



Witnesses

Inventor Will E. Owens,

Deace.

his Attorney

## United States Patent Office.

WILL. E. OWENS, OF SPRINGFIELD, DAKOTA TERRITORY.

## BILLIARD-CUE.

SPECIFICATION forming part of Letters Patent No. 403,856, dated May 21, 1889.

Application filed November 30, 1888. Serial No. 292,294. (No model.)

To all whom it may concern:

Beitknown that I, WILL. E. OWENS, anative-born citizen of the United States, residing at Springfield, in the county of Bon Homme and 5 Territory of Dakota, have invented certain new and useful Improvements in Billiard-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 which it appertains to make and use the same.

Figure 1 is a perspective view of this device as ready for use. Fig. 2 is a vertical sectional view of the device on line in front of the jaws; Fig. 3, a top plan view of the fastener detached; Fig. 4, a detail showing the tip separated from the cue; Fig. 5, a side elevation, the ferrule removed; Fig. 6, a like view, showing the slot in which the jaws fit. Fig. 7 is a detail showing the helt.

20 ing the bolt. This invention belongs to that class known | as "billiard-cues." Heretofore many attempts have been made to provide a construction adapted for easily attaching the tip to the 25 cue, so that the tip could be readily and quickly applied, and with little delay, and as quickly and easily removed when necessary; but, so far as I know, all attempts hitherto made to secure this highly-desirable result 30 have failed. The aim, consequently, of the present invention is to produce such a device as shall embody the following points, viz: A cue in general appearance and adaptation for use similar to the one now in common use; a tip which, in use, cannot under any ordinary condition get out of place or be knocked off; a tip which can in the simplest and quickest manner be attached or fixed in place, and as readily, when desired, be removed and re-

tached or attached at will to the cue.

Having now stated in general terms the nature and scope of my invention, I will proceed to describe it in detail, reference being had to the accompanying drawings.

placed; a tip secured to the cue so as to pro-

ject beyond the material of which the cue-

body is composed; a tip locked on the end of

the cue; a tip-fastener capable of being de-

In the drawings, A represents the cue, which so is of any usual or ordinary description. Over

the end of the cue the metal ferrule B is fitted and secured, its top or outer end extending slightly beyond the end of the cue proper, so as to form a close joint with the tip and a guard for the lower edge of the tip C. Enough 55 of the tip will project beyond to afford all necessary and proper exposure of the tip for use in playing. The ferrule thus forms a casing to protect and cover the end of the cue, as well as the tip-fastening mechanism, to be 60 hereinafter described

hereinafter described. To secure the tip in place, there is provided the metal fastener D, made in two parts, pivoted together at d, serrated at d' on the inner faces of its jaws  $d^2$ , so as to grasp firmly upon 65 the dovetailed part c on the under or inner side of the tip. The lower end of each member of the fastener is serrated at  $d^3$  on the inner face. The dovetail c of the tip being placed between the jaws  $d^2$ , and the lower 70 ends of the fastener brought together as closely as possible, they are then placed in the slot a of the cue proper. This slot is cut into the end centrally about an inch and a half, more or less. Here the fastener can be locked 75 in place by means of the bolt E, which passes through the cue across the slot and between the serrated ends  $d^3$  of the fastener. These serrations are of such a shape and so adjusted relative to each other as to afford in this po-\$80 sition a sufficient opening between the ends for the bolt to fit snugly into, as is illustrated in Fig. 2. The bolt in passing thus between the serrated ends causes the jaws at the opposite end to be brought close and tight upon 85 the tip, and thus forces said serrated ends as wide apart as is possible consistent with the interposition of the tip between the jaws. The bolt makes the fastener secure in its place, and also the tip in its place. When 90 the fastener has been thus placed and secured, the ferrule B is put over the end of the cue and pushed down till its lower end comes nearly to the lower edge of the tip, so as to make a close joint, and covers the slot and 95 fastener and its bolt, and is secured in place, and thus makes a neat finish with the body of the cue and with the tip.

It readily will be seen, without extended description, that the tip can be readily removed 100

when worn out by merely withdrawing the brads that hold the ferrule and then taking it off, knocking out the bolt E, and withdrawing the fastener. This done, the old tip is taken out and a new one put in, and then the parts are again put in place, as before.

All these manipulations can be readily accomplished in about the length of time it has taken to write the description of them.

While the ferrule is preferred for nicety of finish and general appearance, it is evident that the cue and tip could be used without it.

By this invention is afforded a neat, cheap, and excellent desideratum in this class of goods. While the prime cost is not much, if any, increased by my invention, the saving in time in replacing the tips and the durability of the same when applied, as has been above set forth, render this device in the end by far the cheapest and most desirable of any now known.

Having now described my invention, what I wish to claim is—

1. A billiard-cue provided at its end with

a tip-fastener made in two parts pivoted to- 25 gether and having jaws, and a locking-bolt passing between them to hold and secure the tip, substantially as described.

2. In combination with a cue slotted at its end, a tip-fastener placed in said slot and 30 composed of two parts pivoted together and having jaws above and serrated lower ends, and a bolt to spread the serrated ends of the parts and hold the fastener in the cue, as well as secure the tip, substantially as described. 35

3. In combination with the cue slotted at its end, the tip-fastener made in two parts pivoted together and having jaws above serrated and the bolt to spread the lower ends of said fastener, the ferrule B, to cover the end of 40 the cue, and the tip-fastening mechanism, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILL. E. OWENS.

Witnesses:

A. T. BRIDGEMAN, J. P. HUTCHINSON.