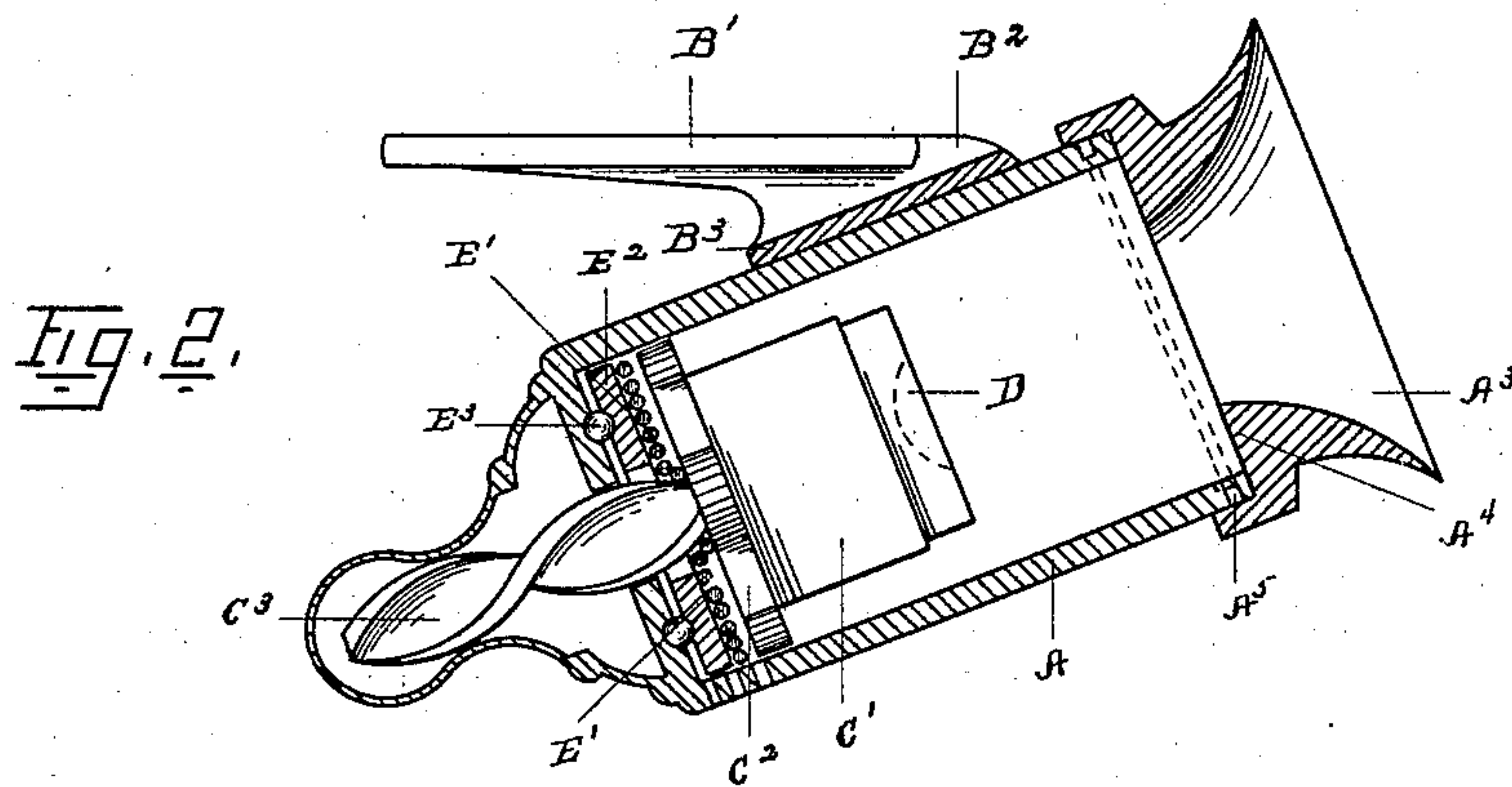
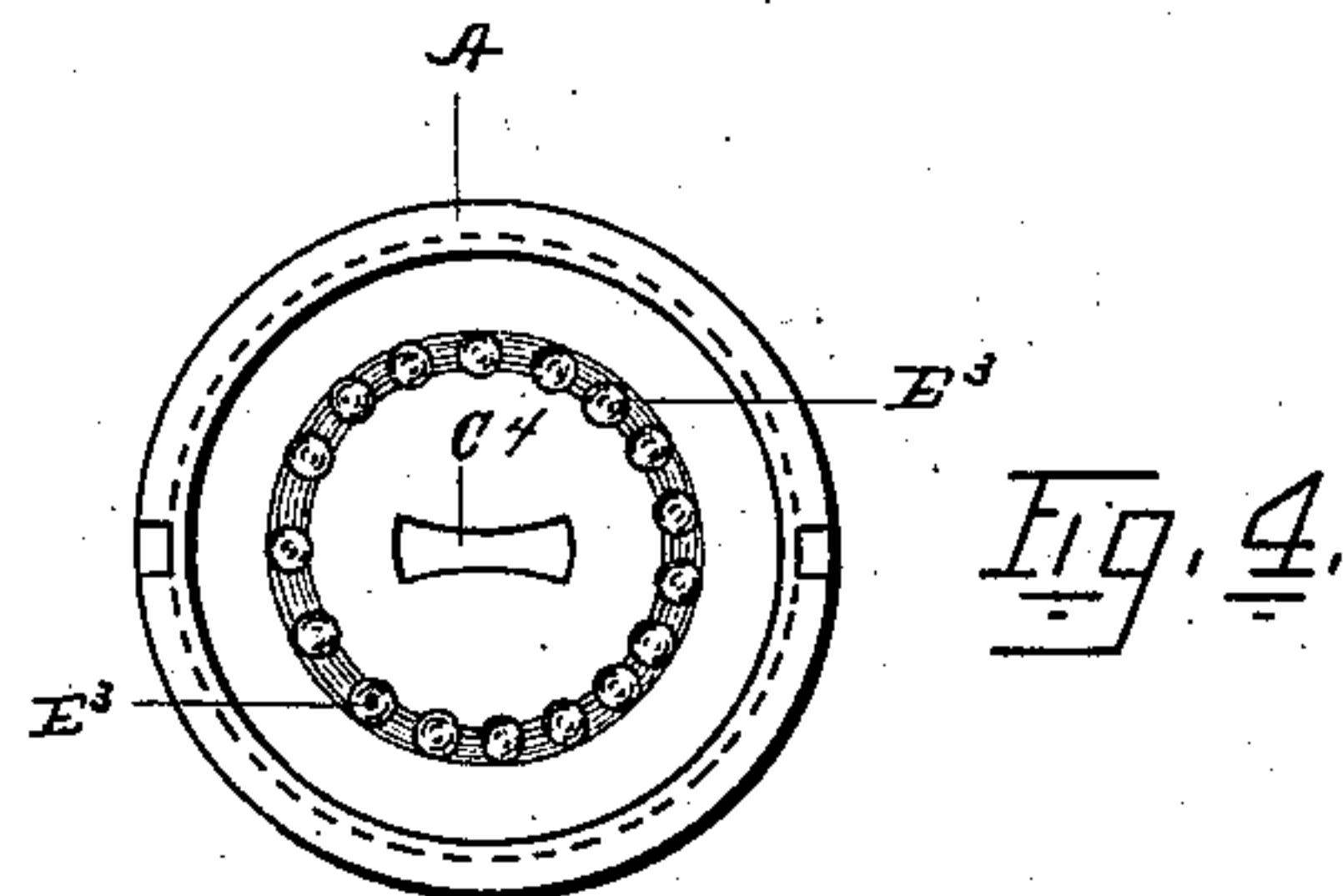
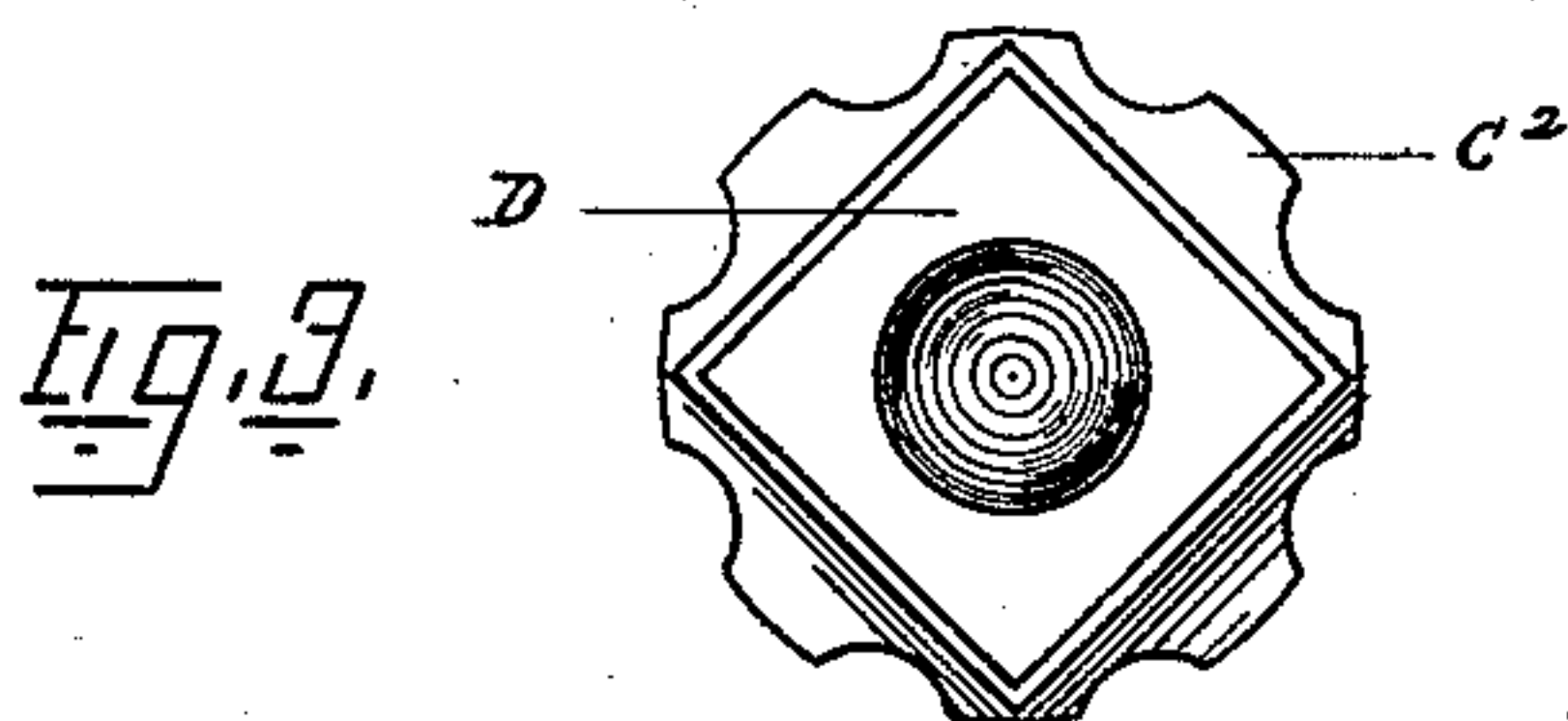
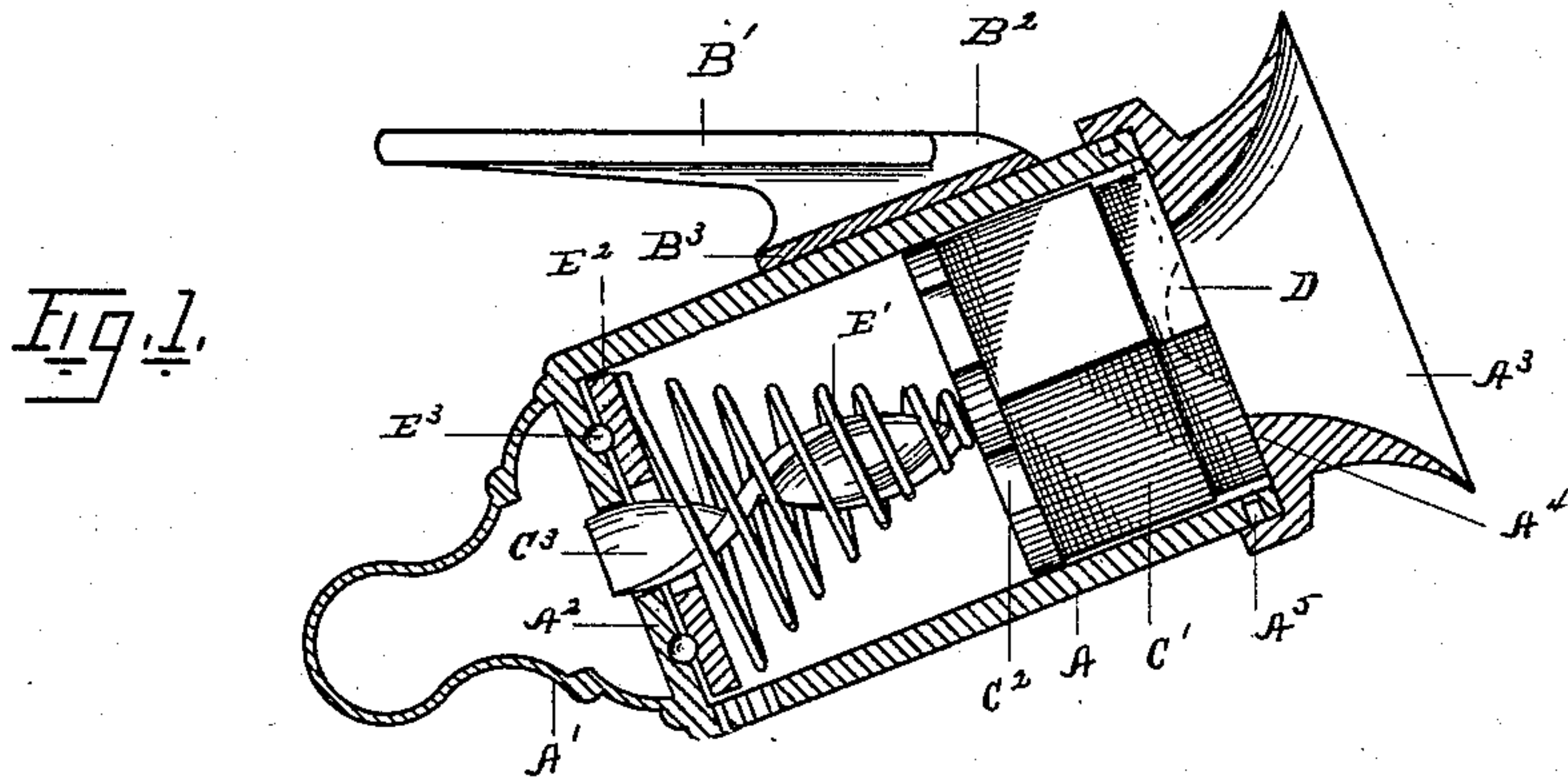


(No Model.)

C. SALMOND.
BILLIARD CUE CHALKER.

No. 576,897.

Patented Feb. 9, 1897.



WITNESSES:

Baldwin Vale

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UNITED STATES PATENT OFFICE.

COLIN SALMOND, OF SAN FRANCISCO, CALIFORNIA.

BILLIARD-CUE CHALKER.

SPECIFICATION forming part of Letters Patent No. 576,897, dated February 9, 1897.

Application filed November 9, 1896. Serial No. 611,522. (No model.)

To all whom it may concern:

Be it known that I, COLIN SALMOND, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Billiard-Cue Chalkers; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

This invention relates to billiard-cue chalkers; and it consists in the novel construction and arrangement of the parts, as hereinafter set forth.

The principal objects which this invention has in view are to produce an automatic chalker which will spread the chalk on the cue-tip evenly and smoothly, to prevent the accumulation of chalk powder or dust in the device, to form as compact a device as possible, to provide a mouthpiece for the device which will regulate the position of chalk and will permit the introduction of the cue at different angles against the chalk, and to provide suitable fastenings for securing the device under the edge of billiard-tables.

In the drawings, Figure 1 is a longitudinal section of the device embodying this invention, showing the chalk in its advance and normal position. Fig. 2 is a similar view with the chalk in its full depressed position. Fig. 3 is a detail view in plan of the chalk-holder and guide-plate for the same. Fig. 4 is an end view of the containing-chamber, showing the bottom of the same as having antifriction-bearing for the spring-holding plate.

Referring to the drawings, we will letter the containing-chamber A. This chamber is cylindrical and forms a runway or guide for the chalk-holder. It is provided at the inner end with an extension A' to receive the twisted rod which imparts the rotary motion to the chalk-holder. Between the extension A' and containing-chamber is a partition A², the center of which is pierced by a perforation C⁴ to receive the twisted rod of the chalk-holder, as shown in Fig. 4 of the drawings. At the outer end the mouthpiece A³ is detachably secured. The means of securing this mouthpiece may be any of a number of known means, but that preferred by me is shown, which consists in

the two pins A⁵, mounted on opposite sides of the mouthpiece and adapted to be inserted into inclined slots cut around the chamber A, which tend to draw the mouthpiece down firmly on the outer edge of the said chamber when rotated until the said mouthpiece is set firmly in position. By this attachment the mouthpiece may be quickly attached or removed. The mouthpiece is provided with an inwardly-extended shoulder A⁴, which is adapted to receive the chalk against it, so that the chalk is maintained in the same position relatively to the opening in the mouthpiece under all conditions of wear.

The chalk D is of the ordinary shape now produced. It is inserted in the chalk-holder C', which is of suitable shape to receive it, by removing the mouthpiece, which when replaced presses the chalk down to its correct position. The chalk-holder is mounted on the guide-plate C², which is hollowed out or scalloped about the periphery, as shown in Fig. 3. These scallops leave spaces between the wall of the containing-chamber and guide-plate for the passage of the chalk-dust to suitable perforations at the lower end of the containing-chamber to escape therefrom. The chalk-holder and guide-plate are mounted on the end of a twisted rod C³, which extends downward through the perforation C⁴ in the partition A². When now the chalk-holder is depressed, the twisted rod C³, passing through the perforation C⁴, rotates the chalk-holder and chalk. When the chalk is pressed against by the cue to so retreat it, the rotating chalk spreads a thin surface on the cue-tip.

To return the chalk and holder to their normal position, I have provided the special cone-shaped spring E'. This spring is so constructed that when compressed one convolution lays within the other in the shape of a coil, as shown at Fig. 2. By means of a spring of this shape I am enabled to contract the size of the containing-chamber to a very neat and slightly size, while obtaining the full movement necessary to rotate the chalk-holder without much friction on the rod C³, that is, without forming the pitch of the twist of the rod too steep.

It is to overcome any tendency to cramp the spring E that I have provided the plate E², which rests upon the balls E³ at the bottom

of the containing-chamber A' . These balls rest in a groove formed in the partition A^2 . The expansion of the spring E' maintains the plate E^2 constantly pressed against the balls.

5 When the chalk-holder is now depressed, the rotary motion which is imparted to it does not produce a strain on the spring by the tendency to rotate it on its axis, as the spring, resting, as it does, on the plate E^2 , yields and
10 rotates without strain. The ball-bearing overcomes any friction which otherwise would be produced by the base and apex of the spring resting against unyielding surfaces, the one of which is stationary and the other rotary.
15 This permits the chalk to retreat easily and smoothly.

The chalker is attached to the billiard-table by means of a bracket, which consists of the flange B' , through which the fastenings
20 screws extend, the web B^2 , and the rounded attaching-plate B^3 . When attached to the table, the chalker slightly extends beyond the edge at an angle, substantially as shown.

By constructing the mouthpiece A^3 with
25 the flared sides, as shown, the cue may be inserted against the chalk at an angle, so that the tip may be chalked on the sides, as desired in "English" and "draw" shots.

Having thus described the invention, I
30 claim—

1. In a billiard-cue chalker a cylindrical

containing-chamber to form a runway for a chalk-holder, in combination with a chalk-holder adapted to carry a piece of chalk, a flattened twisted rod attached to said chalk-
35 holder, a partition in said chamber having a perforation to receive said rod and rotate the same as it passes through it, a spiral cone-shaped spring interposed between the said partition and chalk-holder to raise the same,
40 a circular plate upon which the base of the said spring rests, and a ball-bearing interposed between the said circular plate and said partition, substantially as described.

2. In a billiard-cue chalker the combination of the cylindrical chamber, A , having an extension, A' , and partition, A^2 , with a flared mouthpiece, A^3 , having an inwardly-extended
45 shoulder to determine the advance of the chalk, the chalk-holder, C' , having the guide-plate, C^2 , and twisted rod, C^3 , which extends
50 into the extension, A' , through a suitable perforation in the partition, A^2 , the spiral cone-shaped spring, E' , the plate, E^2 , and the balls, E^3 , forming a bearing in the bottom of the con-
55 taining-chamber, substantially as described.

In testimony whereof I have hereunto set my hand this 4th day of November, 1896.

COLIN SALMOND.

Witnesses:

E. F. MURDOCK,
BALDWIN VALE.