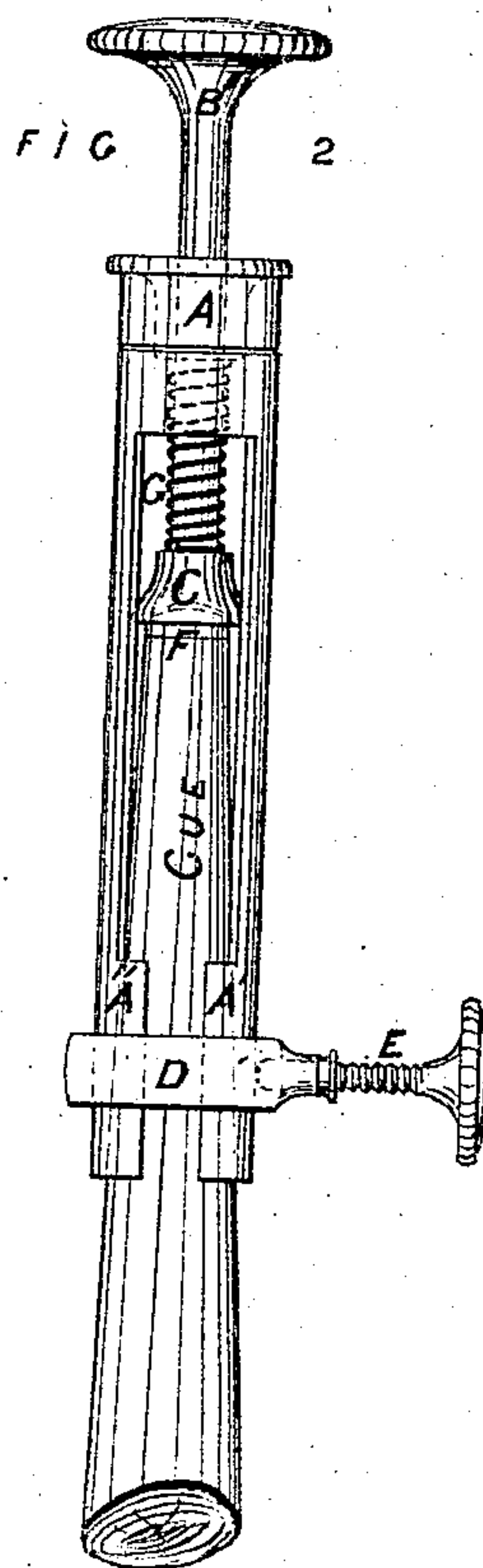
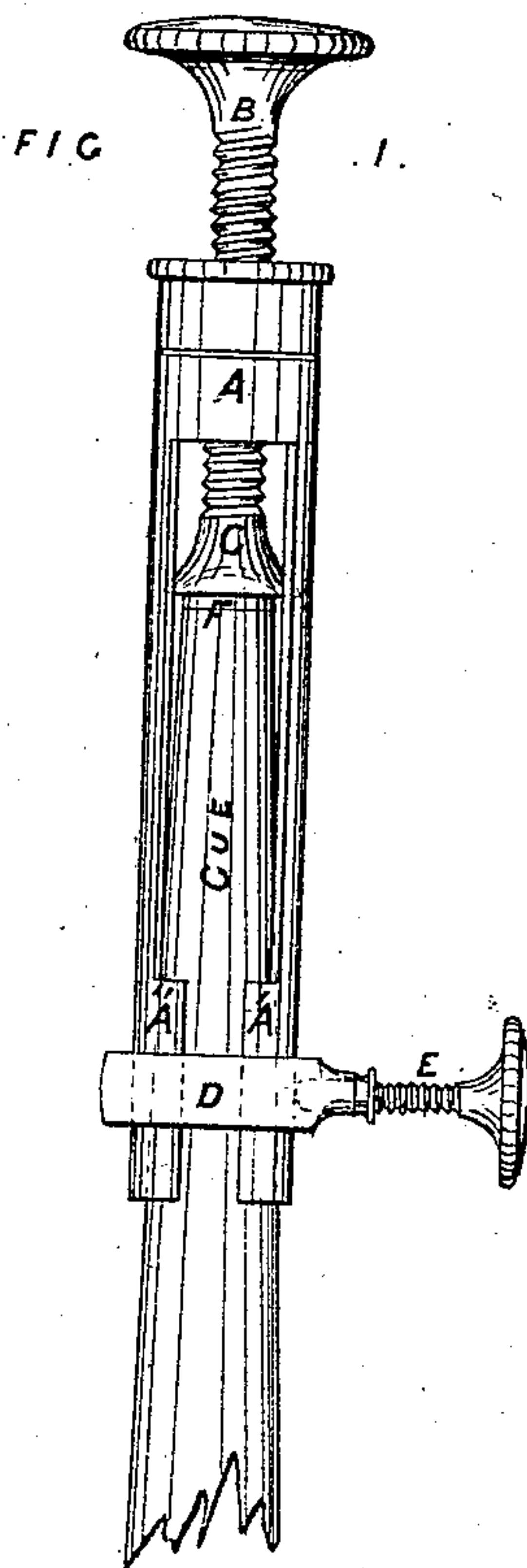


T. FULLER.
Billiard Cue Tip Fasteners.

No. 153,433.

Patented July 28, 1874.



Witnesses

John Temple Reynolds
Walker Philip Reese Manley

Inventor

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UNITED STATES PATENT OFFICE.

THOMAS FULLER, OF LONGCROFTS, NEW SHOREHAM, ENGLAND.

IMPROVEMENT IN BILLIARD-CUE-TIP FASTENERS.

Specification forming part of Letters Patent No. **153,433**, dated July 28, 1874; application filed February 14, 1874.

To all whom it may concern:

Be it known that I, THOMAS FULLER, of Longcrofts, New Shoreham, in the county of Sussex and Kingdom of England, have invented certain Apparatus to be Used in Fitting Tips to Billiard-Cues, of which the following is a specification:

The tip or striking-point of a billiard-cue is usually glued or cemented to the cue, and the two surfaces brought together in forming the joint must be plain surfaces, or the cue will be imperfect. These tips are often struck off, or require to be renewed, and the object of my invention is to enable any person to replace an old tip, or substitute a new one, with the greatest facility and in the most perfect manner.

The main difficulty in fitting a tip to a cue is to obtain a perfectly-equal pressure of the glue or cementing material between the two surfaces forming the joint; and the essential feature of my invention consists in the combination with a tube, the lower part of which is divided vertically into two branches, of a collar and horizontal press-screw, whereby the mechanical pressure of a vertical screw or plunger passing through the top of the tube is brought on the cue-tip invariably in a direct line with the axis of the cue, whatever may be the diameter of the cue, a perfect joint between the cue and its tip being thus obtained.

Figure 1 of the accompanying drawing is an elevation of a cue-tip fastener embodying my invention, and Fig. 2 is a modification thereof.

A, tube or cylinder cut out to form a guide with two branches, A' A''; B, vertical screw, having at its lower end a plate or cap, C; B', Fig. 2, plain stem, carrying cap C; D, collar attached to the branch A' of the guide A, the branch A'' playing freely therein; E, horizontal screw; F, cue-tip; G, Fig. 2, spiral spring substituted in lieu of screw-tapping in stem B'.

The operation is as follows: In fitting a tip onto a cue, the glue, cement, or other material used to make the joint being in a soft state,

the tip is placed on the cue and the point of the cue passed into the tube A from the bottom until it meets the flat or cupped plate C. The branches A' and A'' of the guide A are then drawn toward each other and pressed against the cue by tightening the screw E until the cue is firmly gripped in the tube between A' and A'', and in a perfectly true line with the vertical axis of the screw B. The flat or cupped plate C is then screwed down onto the cue-tip F by turning screw B with a degree of pressure which will cause the adhesive material to spread evenly and insure a perfect joint. It will be evident that at Fig. 2 this pressure upon the cue-tip is obtained by the spiral spring G, but I give preference to the screw-pressure, as at Fig. 1. When sufficient time has elapsed for the proper drying of the glue or cement, the screw E is loosened and the cue withdrawn.

If preferred, the tip to be fitted might be first laid on the flat or cupped plate C, and the glued head of the cue be brought onto it in this position.

I am aware that pressure has been brought onto the cue-tip by means of a vertical screw, as above described, but not in combination with a sure and easy means of invariably bringing the vertical axis of the cue in a true line with the vertical axis of the said screw; and I would have it understood that I lay no claim to any particular means of bringing the mechanical pressure upon the screw-tip.

I claim as my invention—

In billiard-cue-tip fasteners, the combination, with the branches A' A'', of the collar D and press-screw E, substantially as and for the purpose specified.

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Witnesses:

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