

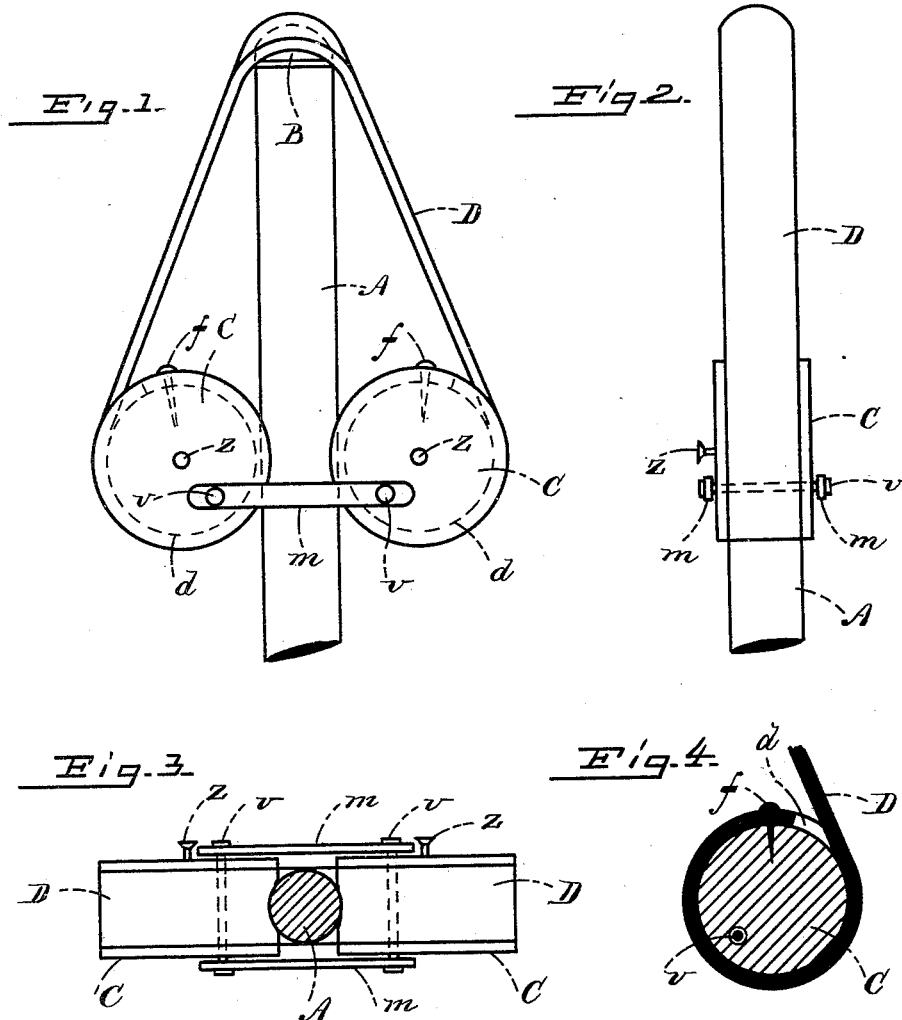
(No Model.)

F. A. LEAVITT.

CLAMP FOR ATTACHING TIPS TO BILLIARD CUES.

No. 419,205.

Patented Jan. 14, 1890.



WITNESSES:
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CLAMP FOR ATTACHING TIPS TO BILLIARD-CUES.

SPECIFICATION forming part of Letters Patent No. 419,205, dated January 14, 1890.

Application filed May 9, 1889. Serial No. 310,142. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. LEAVITT, of Somerville, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Clamps for Attaching Tips to Billiard-Cues, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation showing my improved clamp in use, the cue being represented as broken off; Fig. 2, an edge elevation of the same; Fig. 3, a bottom plan view, and Fig. 4 a vertical section of one of the rollers.

In attaching leather tips to billiard-cues it is frequently the custom of the workman to rest them upon their tip ends or force or spring the cue under a cleat or shelf secured to a wall of the room, in order to compress the tip and hold it in position until the cement or glue has become dry. This often causes the cue to warp or become crooked and the tip to be secured unevenly thereon. My invention is designed to overcome these and other objections, and in carrying it out I make use of means which will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the cue; B, the tip; C C, the clamp-rolls, and D the strap. The cue and tip are of the ordinary form and construction. The rolls C are grooved peripherally at *d*, and in the groove of each roll is secured at *f* one end of the flexible or elastic strap D. The rolls C are journaled to revolve in the same plane in the opposite ends of two parallel bars *m* by means of pivots *v*, which pass transversely through said rolls at a point outside their centers. A stop-pin *z* is disposed at the center of the rolls in position to engage a bar *m* and prevent said rolls from being revolved inward between the bars sufficiently far to unwind the whole of the strap therefrom.

In the use of my improvement the rolls are

turned outward on their pivots, affording sufficient space between them for the insertion of the cue A. The strap D is then placed centrally over the tip B and said rolls forced downward on the cue, distending the strap. The contractile force of the elastic strap D, exerted on the outer edge of the rolls, as shown in Fig. 1, causes them to tend to turn inward or toward each other, and being eccentric, as described, they bind or grip the cue between them, and are thereby prevented from slipping. The tension of the strap upon the tip B forces it securely against the cue-head, and as said strap is elastic it readily conforms to the shape of the outer face of the tip and affords an equal pressure on all sides thereof. The strap being an elastic substance and interposed between the rolls and the cue, as described, the friction thereof aids greatly in preventing said rolls from slipping. By turning the rolls outward, thereby disengaging them from the cue, the clamp may be easily removed in a manner readily understood without a more explicit description.

Having thus explained my invention, what I claim is—

1. A clamp comprising two rolls pivoted eccentrically in connecting-bars, and a flexible strap having its ends respectively secured to said rolls, substantially as described.

2. A clamp for billiard-cue tips, consisting of the eccentric rolls C, pivoted in the bars *m*, and the strap D, secured to said rolls, substantially as and for the purpose set forth.

3. A clamp for billiard-cue tips, comprising two eccentric rolls pivoted in the same vertical plane to a connecting-bar and grooved peripherally, and an elastic strap having an end secured in the groove of each roll, substantially as described.

4. In a clamp of the character described, the combination of the bars *m*, the rolls C, pivoted eccentrically in said bars and provided with the grooves *d*, and the strap D, having its ends secured in said grooves, substantially as described.

5. In a clamp of the character described, the combination of two rolls journaled eccentrically to revolve in the same vertical plane

with a flexible strap having its ends secured, respectively, to said rolls, and stops on the rolls to limit their inward revolution, substantially as described.

5 6. A clamp consisting of two rolls journaled eccentrically to revolve in the same plane, and an elastic strap having its ends

secured, respectively, to said rolls, substantially as and for the purpose set forth.

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Witnesses:

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