

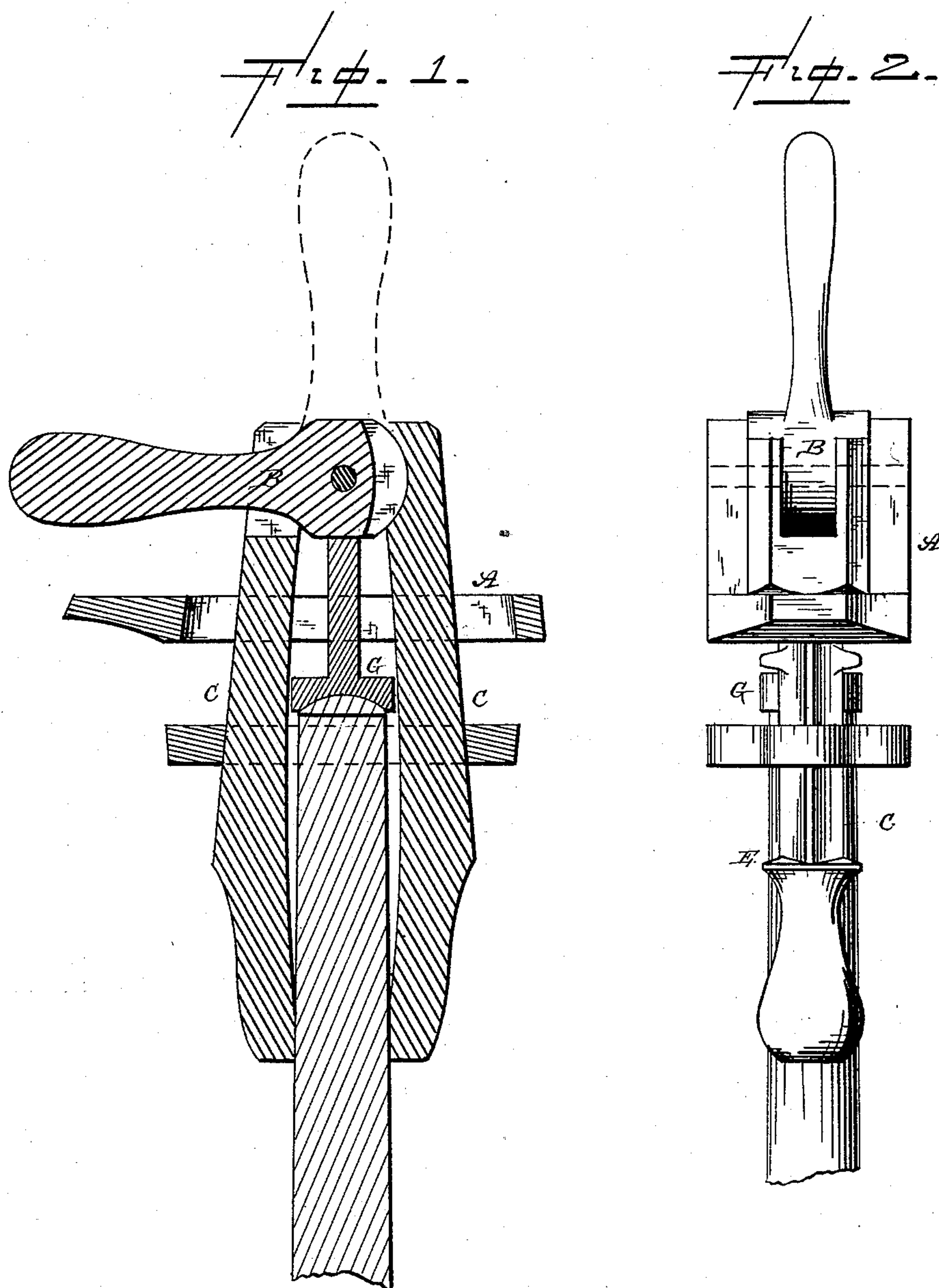
(No Model.)

C. MUNZNER.

CLAMP FOR BILLIARD CUES.

No. 285,360.

Patented Sept. 18, 1883.



— Witnesses. —

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UNITED STATES PATENT OFFICE.

CHARLES MUNZNER, OF CHICAGO, ILLINOIS.

CLAMP FOR BILLIARD-CUES.

SPECIFICATION forming part of Letters Patent No. 285,360, dated September 18, 1883.

Application filed March 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHAS. MUNZNER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Clamps for Applying Tips to Billiard-Cues; and I do 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 pertains to make and
10 use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in clamps for attaching tips to billiard-cues; and
15 it consists in the combination of a suitable frame in which is pivoted a cam-shaped lever with two jaws which are passed through two openings or slots in the frame, a slide for clamping the lower ends of the jaws together,
20 and an endwise moving die or plunger which forces the tip down upon the cue after it has been clamped between the two jaws, as will be more fully described hereinafter.

The object of my invention is to provide
25 a cheap and simple device by means of which tips can be held in contact with the end of the cue with any desired amount of pressure while the cement which is to hold the tip in place is drying.

30 Figure 1 is a vertical section of my invention complete, and Fig. 2 is an edge view of the clamp.

A represents the frame, of any desired shape or size, to the upper end of which is pivoted
35 the cam-lever. Through the bottom of this frame are formed suitable slots, through which pass the upper ends of the clamping-jaws C. These jaws have suitable stops and shoulders formed upon them to prevent them from be-
40 coming detached from the frame, and also have suitable shoulders or stops, E, formed near their lower ends, for the purpose of holding the clamp rigidly in position.

Passing through the center of the frame A
45 is the shank or plunger G, which plunger is made concave on its under side, so as to correspond to the shape of the tips which are being applied to the cues. This plunger has an

endwise movement, and its shank projects through the frame just under the cam-lever B. 50 While the lever is in a vertical position the plunger is moved upward as far as it will go; but when the lever is depressed from a vertical to a horizontal position, or any point between the two positions, the plunger is forced 55 downward upon the tip upon the top of the cue, so as to clamp it rigidly in place, while the cement, by which it is to be fastened, is drying.

The operation of my device is as follows: 60 The end of the cue, having a tip applied to it, is first inserted between the two jaws and forced upward as far as it will go. The tip then rests in the recess in the bottom of the plunger, and the plunger is forced upward 65 against the under side of the frame. The slide is forced downward over the two jaws, so as to clamp them rigidly against the side of the cue, and then the cam-lever is forced downward from a vertical to a horizontal position, or any 70 desired point between the two. In proportion as the cam-lever is forced downward the plunger is forced down upon the tip, so as to exert any desired amount of pressure upon it. The cue with the clamp is then set away until 75 the cement is perfectly dry, when the clamp is removed.

Having thus described my invention, I claim—

1. The combination of the frame, carrying a 80 cam-lever, and the plunger, with the jaws, and a slide for clamping the lower ends of the jaws against the cue, substantially as shown.

2. The combination of the frame, the cam-lever pivoted in its upper end, the clamping- 85 jaws provided with suitable shoulders or stops to secure them to the frame, the plunger which is operated by the cam-lever, and the slide which clamps the jaws against the cue, substantially as specified. 90

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

CHARLES MUNZNER.

Witnesses:

WILLIAM H. CASS,
M. B. WESTCOTT.