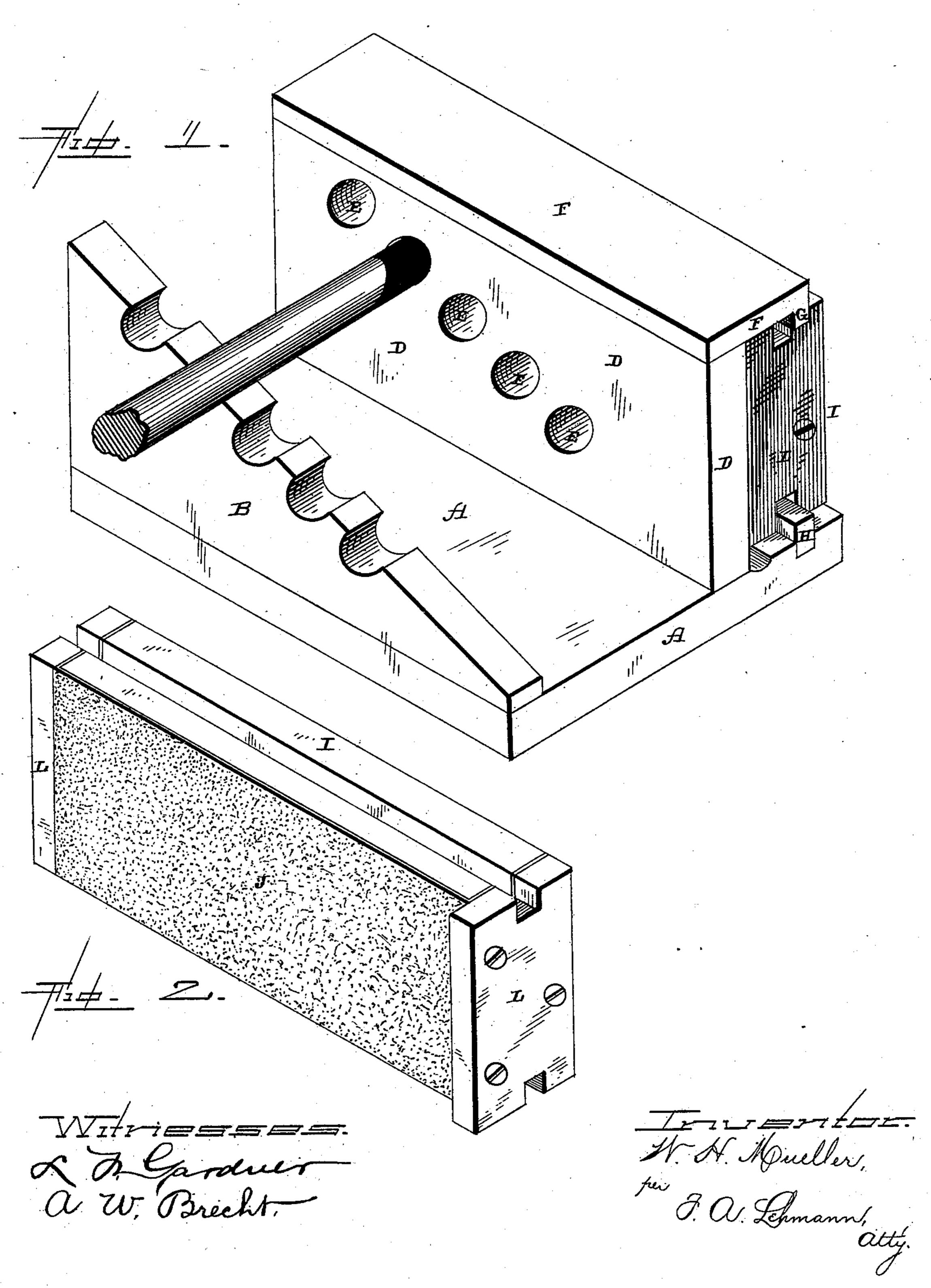
(No Model.)

## W. H. MUELLER.

MACHINE FOR TRIMMING THE ENDS OF BILLIARD CUES.

No. 362,526. Patented May 10, 1887.



## United States Patent Office.

WILLIAM H. MUELLER, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO HENRY BUTLER, OF SAME PLACE.

## MACHINE FOR TRIMMING THE ENDS OF BILLIARD-CUES.

SPECIFICATION forming part of Letters Patent No. 362,526, dated May 10, 1887.

Application filed July 13, 1886. Serial No. 207,885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. MUELLER, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Machines for Trimming the Ends of 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in machines for trimming the ends of billiard15 cues; and it consists in the combination of a suitable base, upon which is placed a support for the cues, a frame through which the ends of the cues are passed and held, and the slide to which the sand-paper or other grinding20 surface is attached, as will be more fully described hereinafter.

The object of my invention is to provide a machine by which the ends of a number of billiard-cues may be squared at the same time, and in which the cues are so arranged while being operated upon that every part of the sand-paper or other wearing surface which is attached to the slide will be operated upon.

Figure 1 is a perspective of a machine em-30 bodying my invention. Fig. 2 is a perspective of a slide taken by itself.

A represents a suitable base, to one edge of which is secured the vertical support B, which has a number of recesses formed in its top 35 edge, so as to hold the cues while being operated upon. Upon this base, a suitable distance from the support, is also mounted the frame D, which is provided with a number of perforations, E, for the ends of the cues to pass 40 through. Upon the top of this frame is secured the board F, which has a guide or way, G, secured to its under side, and which corresponds to a second way or guide, H, which is placed upon the base. In between the two 45 guides is placed the endwise-moving slide I, to the inner side of which is clamped a piece of sand-paper, emery-cloth, or other similar substance, J, and against which the ends of the billiard-cues are pressed while being squared 50 or dressed. This sand-paper or other rough-

ened surface J is clamped in position upon the slide by means of the two end pieces, L, which are fastened to opposite ends of the slide, one of the pieces projecting beyond the end of the slide sufficiently far to form a stop by strik- 55 ing against the end of one of the cues, and thus preventing the slide from being moved too far in one direction. A suitable space is left between the inner side of the frame and the inner side of the slide, and at the base of these 60 two parts is formed a suitable groove, in which the sawdust is caught, in order to prevent it from clogging the action of the slide. As the dust can fall freely down into this groove, it does not in any way interfere with the operation of 55 the machine. The openings through the side of the frame are arranged in suitable relation to each other, so that when the cue is passed through each one of them nearly every portion of the surface of the sand-paper or other 70 material J is brought into operation, and thus there is as little waste of material as possible.

The slide will be worked back and forth by hand or machinery, as may be desired. If moved back and forth by a crank or other 75 similar mechanical appliance, the operator has nothing to do but to place the cues in position and press them against the surface J with sufficient force to have the ends of the cues rapidly and quickly squared.

I am aware that a revolving disk has been journaled in a frame provided with rests to receive the billiard cues which are having their ends squared, and this I disclaim. My invention differs from this both in the use of 85 a slide which gives a greater abrading-surface and in the construction of the frame and slide.

Having thus described my invention, I claim—

1. The combination of the base, the support B, provided with recesses to hold the cues in position, the frame provided with a series of openings through which the ends of the cues are passed, suitable guides attached to the 95 frame and the base, and the slide which has a roughened surface of any kind for the ends of the cues to bear against, substantially as shown and described.

2. The combination of the base, the support 100

B, provided with recesses in its edge, the vertical perforated frame, suitable guides, the presence of two witnesses. slide which moves between the guides, the roughened surface J, which is applied to the 5 slide, and the clamping-pieces which are applied to opposite ends of the slide, one of the clamping-pieces being made to form a stop for the slide, substantially as set forth.

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In testimony whereof I affix my signature in

WILLIAM H. MUELLER.

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 $\mathbf{Witnesses}$ :

CHAS. S. CHERINGTON, E. L. DEWITT.