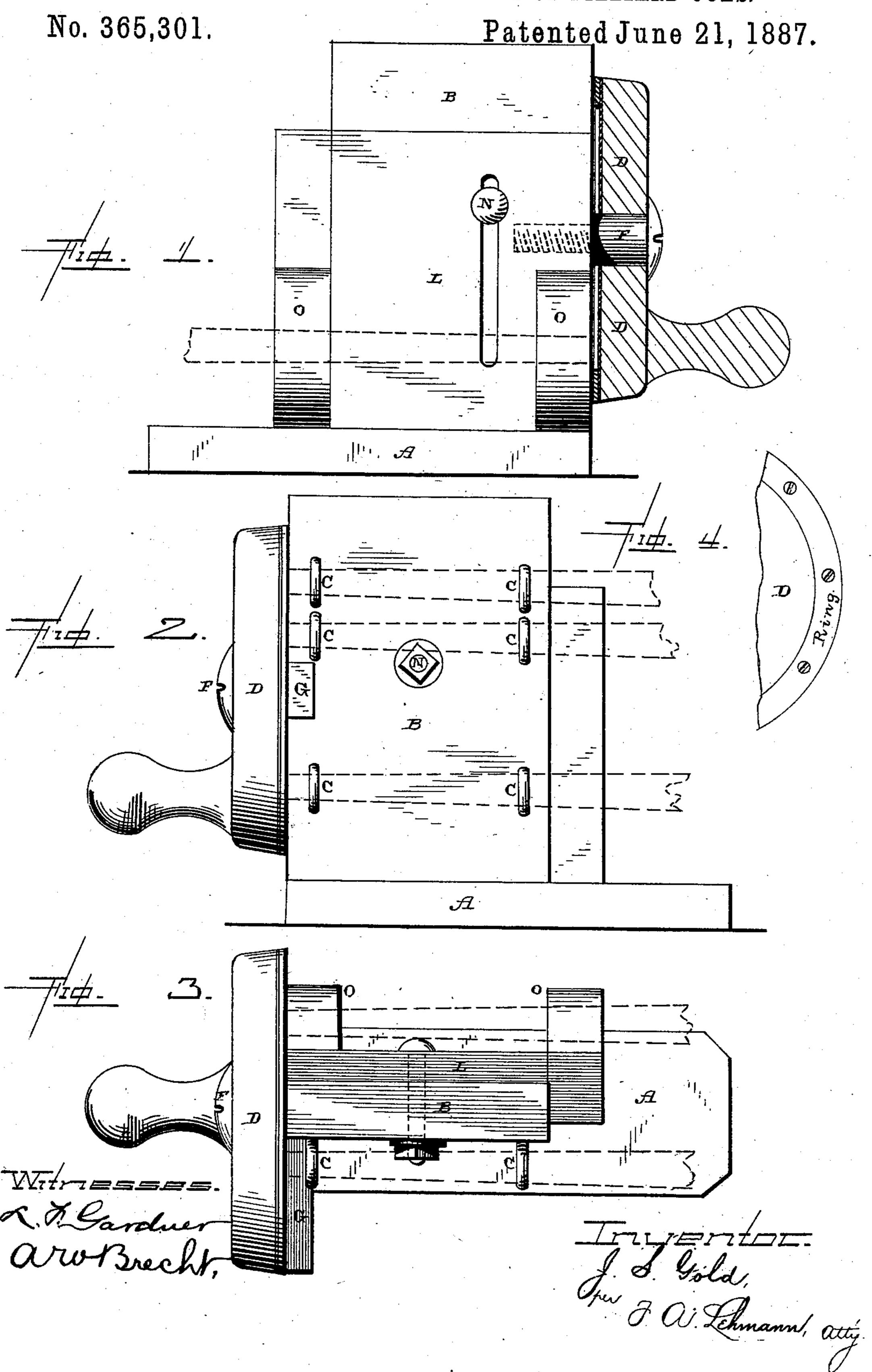
J. S. GOLD.

MACHINE FOR TRIMMING THE ENDS OF BILLIARD CUES.



United States Patent Office.

JOSEPH S. GOLD, OF COLUMBUS, OHIO, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO WILLIAM H. MUELLER AND HENRY BUTLER, BOTH OF SAME PLACE.

MACHINE FOR TRIMMING THE ENDS OF BILLIARD-CUES.

SPECIFICATION forming part of Letters Patent No. 365,301, dated June 21, 1887.

Application filed July 1, 1886. Serial No. 206,841. (No model.)

To all whom it may concern:

Be it known that I, Joseph S. Gold, 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 the stationary vertical frame provided with means for holding the cues in position, a revolving wheel or disk having its inner surface roughened, with a slide which is vertically adjustable upon the standard, all of which will be more fully described hereinafter.

The object of my invention is to provide a machine for squaring the ends of billiard-cues, and which is provided with a vertical slide for carrying or holding additional cues, whereby the whole surface of the grinding-surface upon the wheel may be utilized at the same time.

Figures 1 and 2 are side elevations taken from opposite sides of the frame, the wheel being shown in section. Fig. 3 is a plan view. Fig. 4 is a detail view showing the ring for securing the abrading material to the wheel.

A represents the base, upon the top of which the stationary standard or support B is mounted. Upon one side of this standard are secured a number of rings or holding devices, C, of any kind, and through which the ends of the cues are passed, so as to hold them in position while the ends are being squared by being pressed against the inner grinding surface of the wheel or disk D. This wheel D is journaled upon a suitably shaped bolt, F, which is provided with a shoulder, as shown, so as to prevent the wheel from being clamped

so as to prevent the wheel from being clamped so tightly as to prevent its freely operating. This bolt passes through the wheel and the cross-piece G, which is recessed in the edge of the standard B, and thus supports the wheel in position. This cross-piece projects outward beyond one side of the standard, and

serves as a bearing or brace against which the inner surface of the disk bears, and thus steadies the wheel in its movement. The wheel or disk D is made to revolve by any suitable 55 means, and has secured to its inner surface a sheet of sand-paper, emery-cloth, or other similar material, and this material is secured to the wheel by means of the ring which is applied around the outer edge of the disk, as 60 shown. When the sand paper or other similar material becomes worn out, it is only necessary to unscrew the bolt to remove the wheel. The ring is taken from the disk and the paper is removed and replaced by another piece. 65 The cues being passed through the holding devices are made to bear at their smaller ends against the grinding surface, and are thus squared perfectly.

Applied to the opposite side of the standard 70 from the holding devices C is a slotted slide, L, which is clamped to the standard by means of the bolt N, and which slide is vertically adjustable the full length of the slot. Upon this slide are formed suitable holding devices, 75 O, through which the ends of the cues are passed, and which cues can be moved so as to bring their end or ends either near to or away from the center of the grinding-surface of the wheel, as may be desired. There may be any de-8c sired number of these holding devices upon the slide, so that a greater portion of the grindingsurface of the wheel will be brought into play at the same time. By this construction a larger number of cues can have their ends 85 squared at the same time than if the holding devices were applied to one side only of the standard.

Having thus described my invention, I claim—

The combination of the standard, the revolving disk or wheel provided with a roughened surface upon its inner side, and an adjustable slide provided with holding devices for the cues, substantially as set forth.

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

JOSEPH S. GOLD.

Witnesses:

CHAS. S. CHERINGTON, E. L. DE WITT.