

(No Model.)

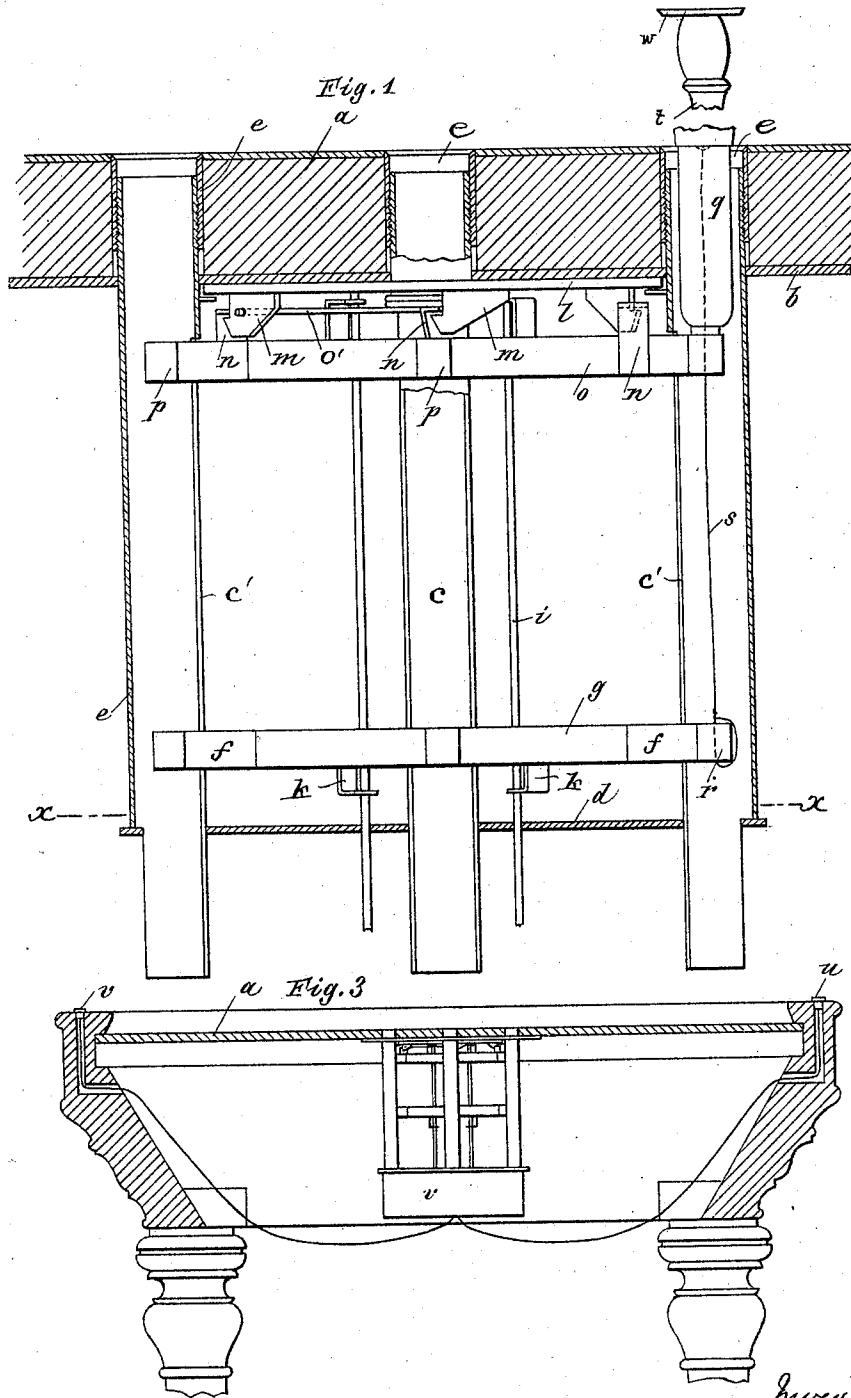
2 Sheets—Sheet 1.

G. SCHULZ.

BILLIARD APPLIANCE FOR PLACING OR REMOVING PINS USED ON  
BILLIARD TABLES.

No. 585,537.

Patented June 29, 1897.



Witnesses:  
J. E. Hutchinson Jr.  
J. S. Barker

Inventor  
Gustav Schulz  
by H. N. Low  
attorney

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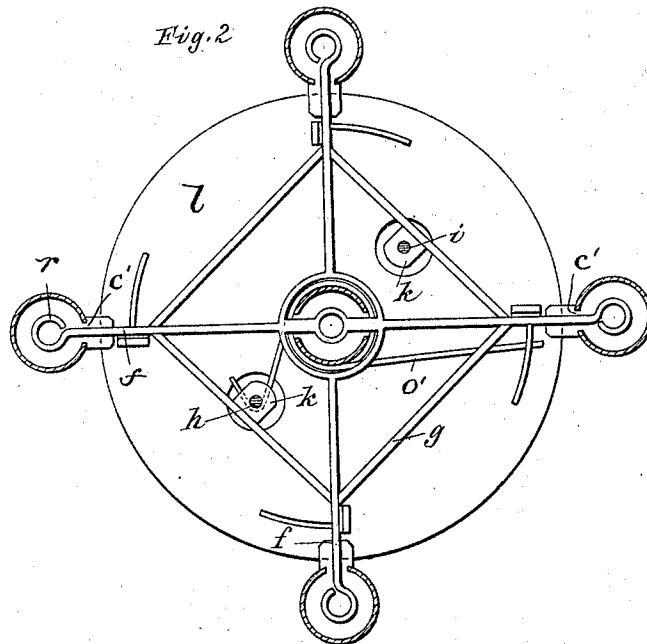
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# UNITED STATES PATENT OFFICE.

GUSTAV SCHULZ, OF BERLIN, GERMANY.

BILLIARD APPLIANCE FOR PLACING OR REMOVING PINS USED ON BILLIARD-TABLES.

SPECIFICATION forming part of Letters Patent No. 585,537, dated June 29, 1897.

Application filed April 16, 1896. Serial No. 587,860. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAV SCHULZ, a subject of the King of Prussia, German Emperor, and a resident of Berlin, in the Kingdom of Prussia and German Empire, have invented certain new and useful Improvements in Billiard Appliances for Placing or Removing the Pins Used on Billiard-Tables, of which the following is a specification.

My invention relates to billiard or game tables in which pins adapted to be knocked down are employed, such as in pin-pool; and the objects of the invention are to provide means for readily setting up the pins and for giving the table a level surface when the pins are dispensed with and the balls alone are employed, as in an ordinary game of billiards.

The invention consists in the parts and combinations thereof hereinafter more particularly described and claimed.

In order to make the invention more clearly understood, I have shown in the accompanying drawings means for carrying it into practical effect without limiting my improvements in their useful applications to the particular construction which, for the sake of illustration, I have delineated.

In said drawings, Figure 1 is a longitudinal section of a portion of a billiard-table, showing my invention applied thereto. Fig. 2 is a horizontal section on line *xx* of Fig. 1. Fig. 3 is a sectional view, on a smaller scale, of a billiard-table with my invention applied thereto.

Referring to the drawings, *a* represents the table-bed, which is provided with a series of openings, in this case five. Secured to the under side of the table-bed is a plate *b*, which serves to support my entire apparatus, and is also provided with openings corresponding in size and shape substantially with those of said table-bed. Secured within these openings by any desired means, such as soldering or screwing, are the tubes *c*. At the bottom of these tubes is a plate *d*, which may form a part of the box containing the clockwork or motor which may be employed to operate my device, although not forming a part of my invention, and therefore not described. The upper portions of the tubes *c* are exteriorly screw-threaded and adapted to receive the interiorly-screw-threaded short tube-sections or sleeves *e*, so that the length of the tubes may be adjusted to billiard-tables of varying thicknesses.

*t* indicates the pins, situated in line with and adapted to be received within the tubes *c*. Fixed on their upper ends are plates *w*, adapted to fit and close the sleeves *e* when the pins are lowered and give the table a level surface. The pins are supported loosely in place for use (see Fig. 1) on tubular posts *q*, and the latter are carried on arms *p* of a central frame *o*, which arms pass within the tubes through slots *c'*. The frame *o* is supported by hooks *n*, engaging hooks *m* on a rotary plate *l*, mounted on the under side of plate *b*. *o'* is a spring tending to move the plate, so that the said hooks will mutually engage and the frame *o* be supported. When it is desired to lower the pins out of use, the plate *l* is rotated and the frame *o* allowed to drop. This rotation is effected by hand or by any known electrical means or clockwork at *v*, which may be set in motion from electrical contact-buttons *u v'* at the edge of the table.

*g* is a vertically-movable frame having arms *f*. This frame *g* engages by loops *k* the rods *h i*, which are fastened to the frame and is thereby guided. Secured to the loops *r* of the frame *g* are cords *s*, which pass through the tubes *c* and are fastened to the bottoms of the pins *t*, and serve, through a lowering of the frame *g*, to set the pins up when knocked down by the balls.

The operation of the device is as follows: When the pins are set up ready for playing, the frame *g* is in its mid-position, so that the cords may remain slack and not interfere with the pins when they are knocked down by the balls. When the pins have fallen and it is desired to set them up, the frame *g* is allowed to drop by the clockwork or motor, which pulls on the cords *s* and draws each fallen pin to its place of standing and then straightens the same to its normal position. When it is desired to use only the balls, as in an ordinary game of billiards, the plate *l* is turned around its center by the clockwork from its position of rest, thereby throwing the lugs or hooks *m* out of engagement with the projections or hooks *n* and allowing the frame *o* to drop. By so causing the said frame to

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fall the pins *t* are also dropped down through the tube *c*. Thus the plates *w* are caused to fit within the spaces adapted for the same and thereby give the table-bed a smooth and level appearance. If desired to again use the pins, the frame *g* may be so moved upward by the clockwork that it will carry with it the frame *o* and cause the hooked projections *n* to press against the beveled edges of the lugs or hooks *m*, which gives plate *l* a partial rotation and allows the hooks *n* to pass above the lugs or hooks *m*, and by the spring *o'* the said plate is brought back again to its position, thereby holding the frame *o* firm.

15 I claim—

1. The combination of the tubes, the pins, a vertically-movable pin-carrying frame, a second frame adapted to be depressed, and cords connecting the pins with said second frame for resetting them.

2. The combination of the tubes, the pins, a vertically-movable and rotary pin-carrying frame, a spring for turning the latter, and hooks *m* and *n* for sustaining the frame.

3. The combination of the tubes having extensible sleeves adapted to be fitted to a table, a pin-carrying frame, means for moving the same, and pins having the plates adapted to fit said sleeves.

4. The combination with the tubes and extensible sleeves, of the pins having plates *w*, means for supporting the pins, and devices for withdrawing said supports.

In witness whereof I have hereunto set my hand in presence of two witnesses.

GUSTAV SCHUEZ.

Witnesses:

PEREGRINE VARNALS,  
KATE STYLES.