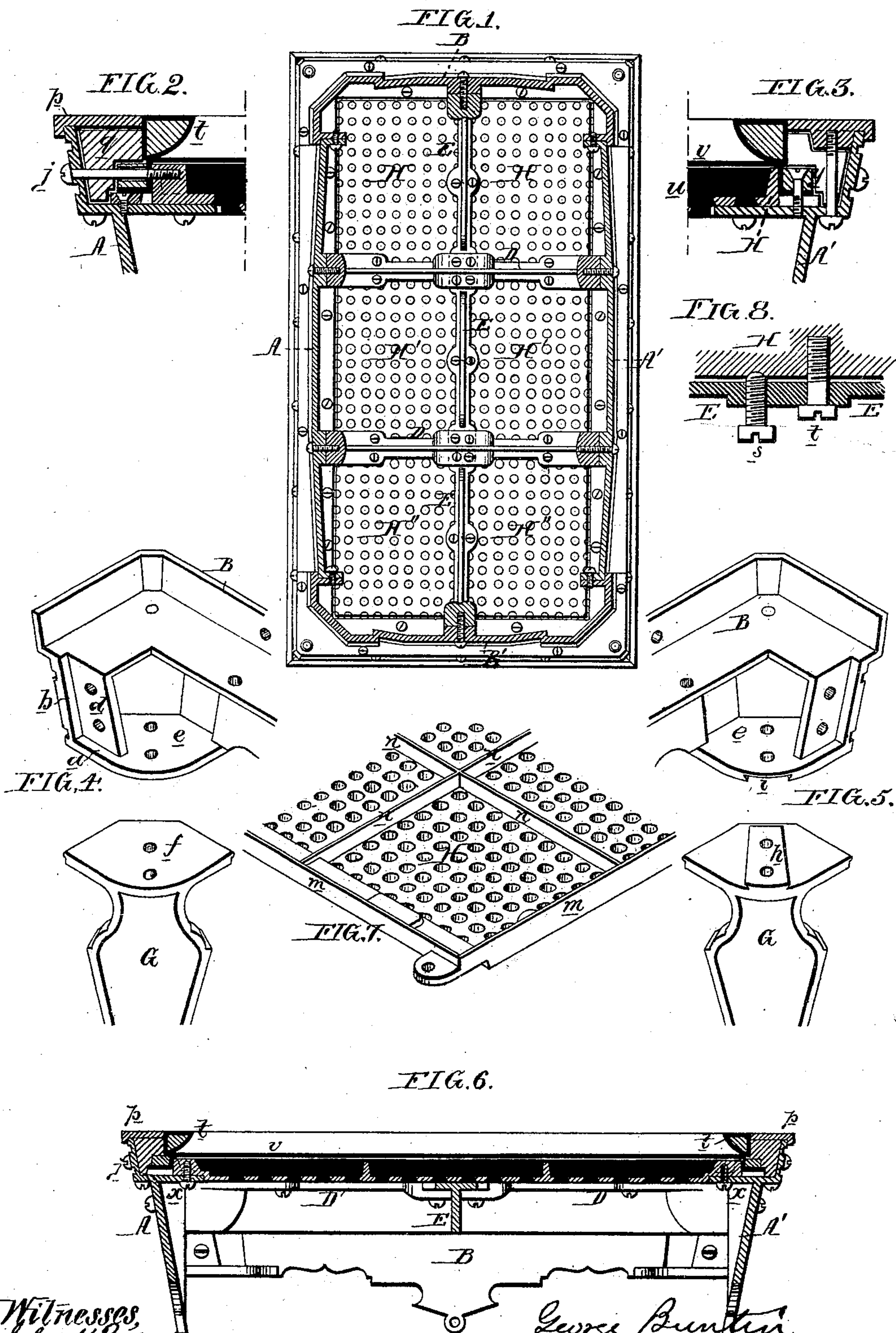


G. BUNTIN.  
Billiard-Tables.

No. 141,539.

Patented August 5, 1873.



Witnesses,  
John K. Rupert,  
Thomas M. Shain

George Buntin  
by his attys.  
Horsman and Son



# UNITED STATES PATENT OFFICE.

GEORGE BUNTIN, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN BILLIARD-TABLES.

Specification forming part of Letters Patent No. **141,539**, dated August 5, 1873; application filed May 21, 1873.

*To all whom it may concern:*

Be it known that I, GEORGE BUNTIN, of Boston, Suffolk county, State of Massachusetts, have invented certain Improvements in Billiard-Tables, of which the following is a specification:

The object of my invention is the construction of a cheap, substantial, and true billiard-table; and this object I attain by making the bed of cast-iron plates, recessed at the top for the reception of cement, as best seen in Fig. 7 of the accompanying drawing, the cement being reduced to a perfectly-level surface for the reception of the usual cloth cover, and the bed being secured to and combined with a cast-iron frame, as shown in the inverted plan view, Fig. 1, the said frame having detachable legs, all as fully described hereafter.

The main frame of the table consists of two opposite side beams or girders, A and A', end beams B and B', intermediate transverse beams DD, and the short beams EE, all being made of cast-iron, and arranged in respect to each other in the manner best observed in the inverted sectional plan view, Fig. 1. The transverse sections, Figs. 2 and 3, illustrate the character of the side beams. The end beams are constructed for attachment to the side beams in the manner shown in the perspective view, Fig. 4, the side beam resting on a ledge, *a*, and against a shoulder, *b*, and being bolted to the flange *d* on the said end beam, while the horizontal flange *e* of the latter is arranged to fit on and to be bolted to the flange *f* of the leg G; or the latter, in addition to the bolts, may have a dovetailed projection, *h*, adapted to a dovetailed recess, *i*, in the under side of the flange *e*, as shown in the perspective view, Fig. 5. The bed of the table, which is the main feature of my invention, consists of three cast-iron plates, H, H', and H'', shown in Fig. 1, a portion of one of the plates being also represented by the perspective view, Fig. 7, where it will be seen that the plate is edged with vertical flanges *m*, which, together with intermediate flanges *n*, form a series of cells, the bottom of the plate being perforated with a number of holes, which are countersunk from the under surface, the latter being perfectly plain. Each plate extends across the table, its ends being secured to the flanges *x*

of the opposite side beams A and A', as best observed in Fig. 6, which is a transverse vertical section drawn to an enlarged scale. After the plates have thus been secured to the end and side beams, and, at suitable points, to the intermediate beams of the main frame, the cells are filled with plastic or ramified plaster, which penetrates the countersunk holes, but is prevented from passing entirely through the same, the plaster being carefully smoothed off at the top to the level, or slightly above the level, of the vertical flanges, so that the top of the bed will present an uninterrupted plane and smooth surface of plaster.

As this plaster, when applied, was forced into the perforations at the bottom of the plate, and as these perforations are countersunk, the plaster cannot be dislodged after it has become hard and dry without chipping it forcibly away.

The material employed for filling the cells and forming the surface of the table may consist of plaster of Paris with other ingredients to render it harder; or it may consist of Portland cement; in fact any composition which will, when dry, present a sufficiently-hard surface, may be used.

Perfectly true and unchangeable beds for billiard-tables may be thus constructed of cast-iron and cement at a much cheaper rate than slate or marble beds, and may be applied to frames of the usual construction; but I prefer to apply them to the cast-iron frame shown in the drawing, as the bed and frame complete can be packed for transportation, and will be ready for use as soon as the legs are secured to their places.

The table is edged on the top with horizontal plates *p*, which are secured to the side and end beams of the frame, as shown in Fig. 2, strips of wood *q* being contained between the edging-plate *p* and flanges of the beams, and the usual cushions *t* being secured to these strips. As a further means of securing the cement-packed plates to the main frame of the table, set-screws *j*, Fig. 2, pass through the side and end beams into the edges of the said plates.

The usual cloth covering may be stretched over the bed, and confined at the edges of the same in the manner shown in Fig. 3, where H is part of one of the perforated plates of the bed, the black portions *u* representing the ce-



ment or plaster packing, and *v* the cloth covering passing over the edge of the plate and beneath wooden strips *y*, which are secured to the frame.

For the purpose of leveling the bed I use the arrangement of set-screws shown in the enlarged sectional view, Fig. 8, one screw, *s*, being adapted to a screw-thread in the frame, and bearing against the under side of the bed; while the other screw *t* is adapted to a threaded hole in the bed, and has a shoulder or head which bears against the under side of the portion of the frame through which it passes.

The bed may be raised by means of the screw *s* after slacking the screw *t*; or lowered by the latter after slacking the screw *s*; one screw in either case serving to lock and retain the bed in the position to which it is adjusted by the other.

The entire bed may consist of one cast-iron cellular perforated plate packed with plaster or other cement; but I prefer the use of three plates in the manner described.

Ornaments of any appropriate design may be screwed or otherwise secured to the exterior of the sides and ends of the table, the screws or other fastenings being preferably concealed by passing them through the frame from the inner side of the same into the ornaments.

I claim as my invention—

1. A billiard-table the bed of which is composed of a cast-iron plate or plates, combined with cement or plaster, substantially in the manner described.

2. The within-described billiard-table bed, composed of cast-iron plates having cells on its upper surface and countersunk holes at the bottom for retaining the cement packed in the cells, all as set forth.

3. A billiard-table frame, consisting of the side beams *A* and *A'*, end beams *B* and *B'*, constructed for receiving detachable legs and intermediate beams, all as described.

4. The cast-iron cement-packed beds of a billiard-table, combined with and secured to a cast frame, substantially in the manner described.

5. The combination, substantially as described, of leveling-screws *s* and *t* with the bed and frame of the table.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE BUNTIN.

Witnesses:

T. ALBERT TAYLOR,  
H. W. LAMWITH.