(No Model.)

W. E. TAFT.

PNEUMATIC BILLIARD CUSHION.

No. 576,238. Patented Feb. 2, 1897.

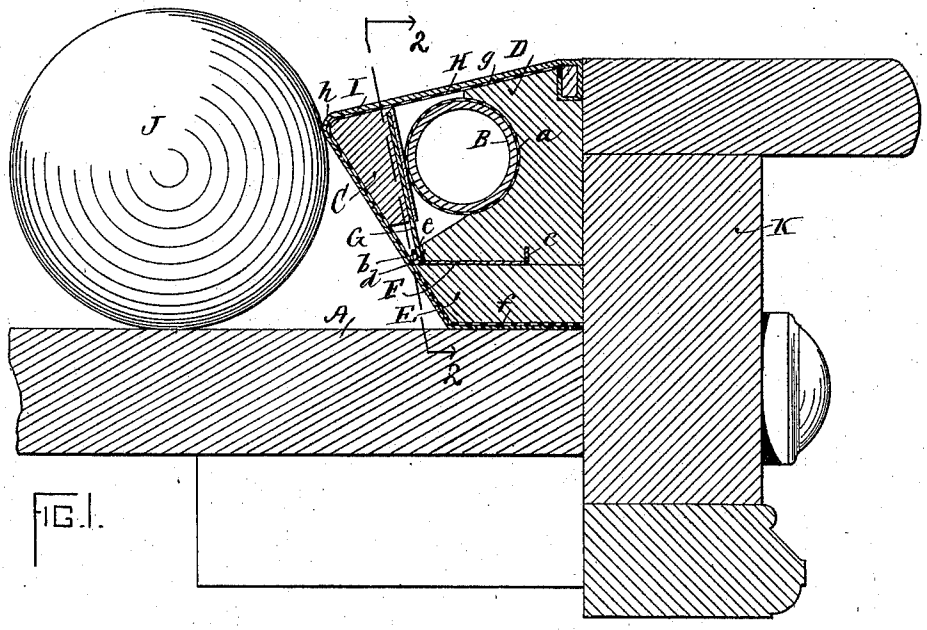

FIG. 1.

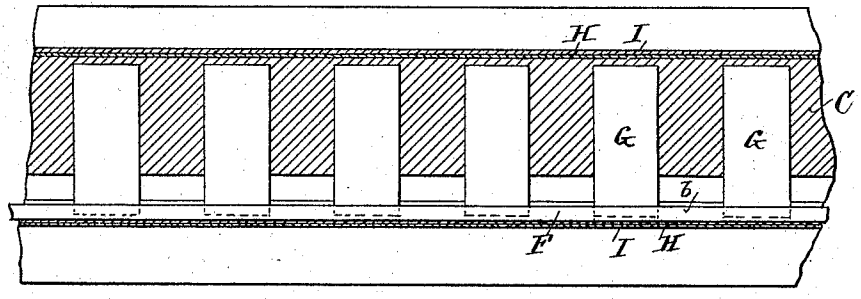

FIG. 2.

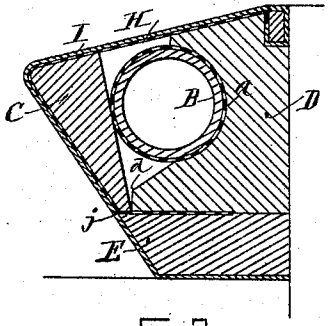

FIG. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WALTER E. TAFT, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO JOHN A. CARTER, OF SAME PLACE.

PNEUMATIC BILLIARD-CUSHION.

SPECIFICATION forming part of Letters Patent No. 576,238, dated February 2, 1897.

Application filed August 24, 1896. Serial No. 603,758. (No model.)

To all whom it may concern:

Be it known that I, WALTER E. TAFT, a citizen of the United States, residing at Providence, in the State of Rhode Island, have invented a new and useful Improvement in Pneumatic Billiard-Cushions, of which the following is a specification.

The object of my invention is to provide a billiard-cushion having great elasticity and resilience, whereby the billiard-balls may be caused to travel for a long distance upon the expenditure of a slight amount of force; and my invention consists in the combination and arrangement of the air-tube with a pivotally-supported engaging strip, by means of which the impact of the ball will be transmitted to the air-tube and its full reacting impulse be imparted to the ball.

In the accompanying drawings, Figure 1 represents a detail section of the edge of a billiard-table, showing the transverse section of a cushion embodying my improvement. Fig. 2 represents a section taken in the line 2 2 of Fig. 1. Fig. 3 represents a transverse section of the cushion, showing a modification.

In the drawings, A represents the billiard-table, B the air-tube of the cushion, and C the engaging strip, placed in the front of the cushion, as shown in the section, Fig. 1. The engaging strip C is preferably made of rubber, molded in the form of cross-section required for the proper engagement of the billiard-balls therewith, but the said strip may be made of any other suitable material and extend from end to end of the cushion. The air-tube B is held in the groove *a* of the wooden strip D, and between the strip D and the wooden strip E is placed the sheet-metal strip F, which is turned up at its opposite edges to form the narrow flanges *b* and *c*, the rear flange *c* serving to hold the strip F in position and the flange *b* to provide in conjunction with the shoulder *d* of the wooden strip D a groove or recess *e*, adapted to loosely receive the lower ends of the steel plates G, which are attached by vulcanization to the engaging strip C, and by this means the engaging strip will be so supported as to be capable of a slight rocking movement upon the impact of the billiard-ball therewith.

The wooden strip D is first firmly secured to the rail K, and the wooden strip E and metallic strip F secured to the under side of the strip D, and the textile fabric H, which is preferably vulcanized onto the engaging strip C, glued to the under surface *f* of the strip E, and also to the upper surface *g* of the strip D, thus holding the air-tube B and the engaging strip C in position. The cushion-cloth or outer covering I is then to be secured to the cushion as usual, and the rail K then secured in position, as shown in Fig. 1. When the billiard-ball J strikes against the engaging strip C at the point *h*, the said strip will be forced backward against the resilience of the confined air in the air-tube B, and the reaction of the air in the tube B will cause the ball to rebound with great speed from the edge of the cushion, the air-tube being so arranged relatively to the strip C that the required resilient action will be developed at the point of impact *h*.

A desirable modification is shown in Fig. 3, in which the steel plates G and the metallic strip F are dispensed with and the engaging strip C is made to extend downward to the corner *j* of the strip E in front of the shoulder *d*, the lower edge of the strip E being held to its turning seat *j* by means of the textile fabric H. The engaging strip E and the billiard-ball J will thus be free to receive the resilient action of the air in the tube B without waste of energy.

I claim as my invention—

1. In a billiard-cushion, the combination of the air-tube, with the pivotally-held engaging strip arranged in front of the air-tube, substantially as described.

2. In a billiard-cushion, the combination of the air-tube, with the pivotally-held engaging strip arranged in front of the air-tube, and the flexible fabric for holding the engaging strip in contact with the air-tube, substantially as described.

3. In a billiard-cushion, the combination of the air-tube, with the pivotally-held engaging strip arranged in front of the air-tube, the flexible fabric for holding the engaging strip in contact with the air-tube, and the outer covering of the cushion, substantially as described.

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Witnesses:
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