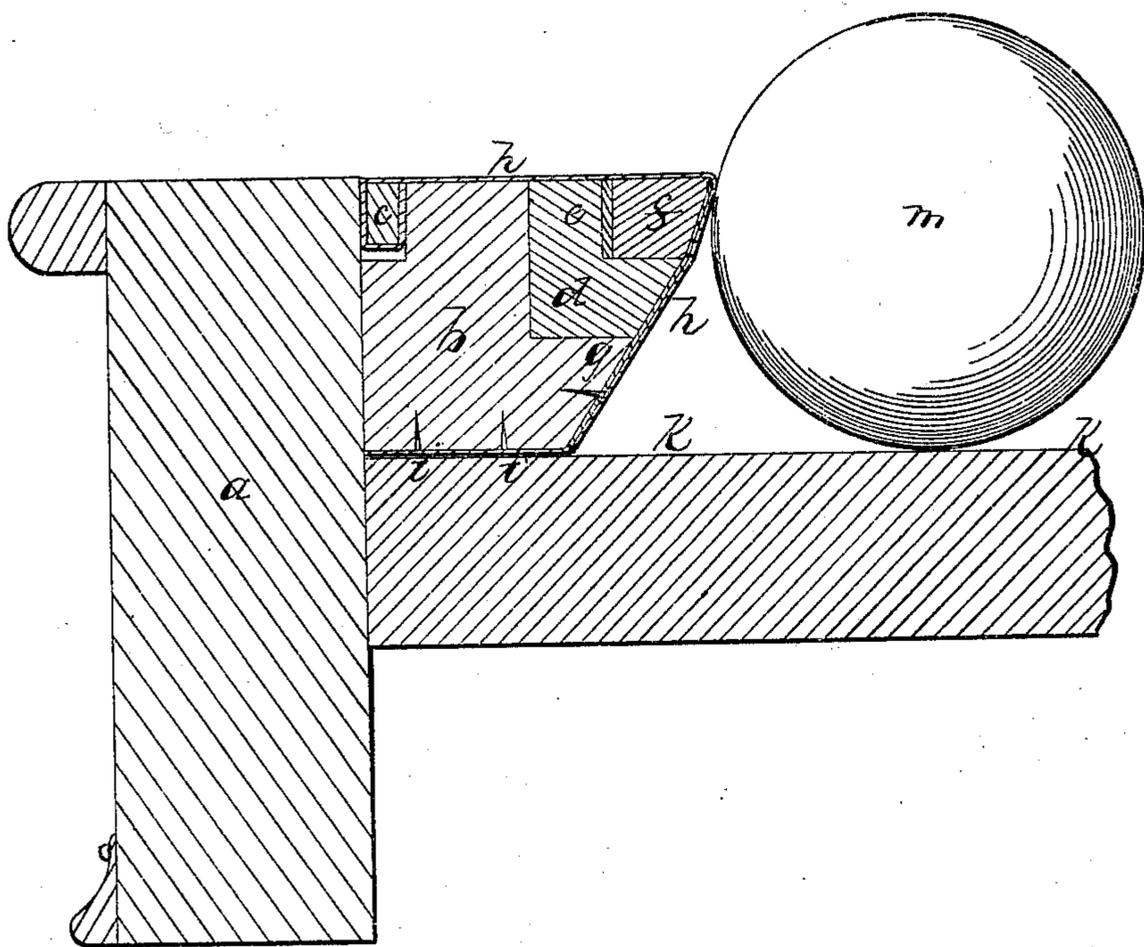


*A. Bassford,
Billiard Cushion.*

N^o 61308.

Patented Jan. 22, 1867.



Witnesses:

*Joseph Coombs
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Inventor:

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Att'y.*

United States Patent Office.

ABRAM BASSFORD, OF NEW YORK, N. Y.

Letters Patent No. 61,308, dated January 22, 1867.

BILLIARD CUSHION.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ABRAM BASSFORD, of New York, in the county and State of New York, have invented certain new and useful improvements in Cushions for Billiard Tables; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which represents a transverse section of the cushion rail of a billiard table with my improved cushion attached.

The object of my invention is to correct the defects inherent in billiard cushions now in use, so as to obtain more correct angles of reflection or rebound. And that the importance of my improvement may be understood, I will premise by stating the principal defects which are intended to be obviated.

First. In all cushions possessing sufficient elasticity to reflect the ball the desired number of times, the angles have been found to depart from the proper or true line, and in proportion as the elasticity of the cushion is increased the angle of reflection becomes more obtuse.

Second. In cushions where it has been sought to remedy the above defect by reducing the elasticity, a reverse order of departure from the true line of reflection has invariably been the result. And a mode of constructing cushions, whereby they may be endowed with the requisite elasticity, and at the same time reflect the ball at true and proper angles, *i. e.*, compensating for too much softness and flexibility, and too much hardness and inelasticity, so as to insure a uniform result from a number of cushions as well as throughout the whole length of the cushions of any one table, has not hitherto been satisfactorily accomplished.

In order to construct a cushion of uniform quality throughout its whole length which will afford angles of reflection nearer to the true line, and to insure uniformity in cushions of different tables, I have combined two blocks or strips of vulcanized India rubber of different qualities, one highly elastic, the other moderately so, with an intermediate strip of metal between them. After these parts have been properly adjusted to the cushion rail, I stretch over the face of the cushion thus formed a sheet of rubber packing, which is held in place by the usual linen or cotton cloth which is stretched over the cushion and fastened by tacks to the upper and under side of the cushion rail. This cushion is elastic and springy, and its angles of reflection much more correct and true than those of ordinary cushions. The rubber packing which is spread over the face of the cushion, by slightly deadening the force of the blow which the cushion receives from the ball, prevents the latter from "hopping" or jumping at the moment when it is reflected from the cushion.

To enable others to understand and use my invention, I will now proceed to describe it by reference to the accompanying drawing.

a b represents the cushion rail of the table; *d e f* are the three parts which, in combination with the rubber packing *g*, compose the cushion; *g* is "rubber packing," consisting of a thin sheet of India rubber between two sheets of cloth, the whole being cemented together so as to form one cloth; *h* is the green cloth covering of the whole cushion; *c* is "the tongue" for fastening the green cloth covering at the top of the cushion; *i i* represent the tacks for fastening the lower edge of the green cloth to the cushion rail; *k* is the bed of the table, and *m* is an ivory billiard ball. The parts embodying my improvements are represented by *d e f g*, which together form the cushion. The rubber-block or strip, which rests upon a shelf formed for its reception in the cushion rail, represented by *d*, is made of any compound of India rubber and the pigments commonly employed by manufacturers to give greater firmness and solidity to the rubber. This block of rubber should possess only medium or about half the elasticity of pure vulcanized caoutchouc. *f* is another block of rubber fitting in a recess or shelf made in the strip *d*, and is composed of the most elastic vulcanized caoutchouc, *i. e.*, pure India rubber, combined with the necessary amount of sulphur to effect vulcanization. *e* represents a steel spring ribbon or strip placed vertically between the highly elastic rubber *f* and the less elastic rubber *d*. When these three parts have been placed together, as shown in the drawing, the packing *g* is first tacked to the bottom of the cushion rail, and then over this the green cloth is placed by tacking it at *i i* (also on the bottom rail) and stretched around and over the whole and fastened by the "tongue piece" *c*, which consists of a strip of wood fitting in a groove, as shown in the drawing. By employing the two qualities of India rubber, of unequal elasticity, and the ribbon of steel, in the manner described and represented, and binding the whole with rubber "packing," as designated, a cushion is obtained which reflects the ball at all points more nearly at the correct angle than can be obtained from any other arrangement of cushion known previously.

Having thus described my invention, I claim—

1. In a billiard cushion I claim the use of a metallic ribbon or other hard and elastic strip interposed between two pieces of vulcanized India rubber, of different degrees of elasticity, or within a rubber cushion, substantially as herein set forth.

2. In billiard cushions, constructed substantially as set forth, I claim the arrangement herein described and represented, whereby one block of India rubber is backed and supported by the other.

3. I claim the two blocks or strips of vulcanized rubber, of unequal degrees of elasticity, as described, in combination with the spring steel ribbon and rubber packing, arranged substantially as and for the purposes herein set forth.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

A. BASSFORD.

Witnesses:

C. R. DISOSWAY,
JAMES M. MILLER.