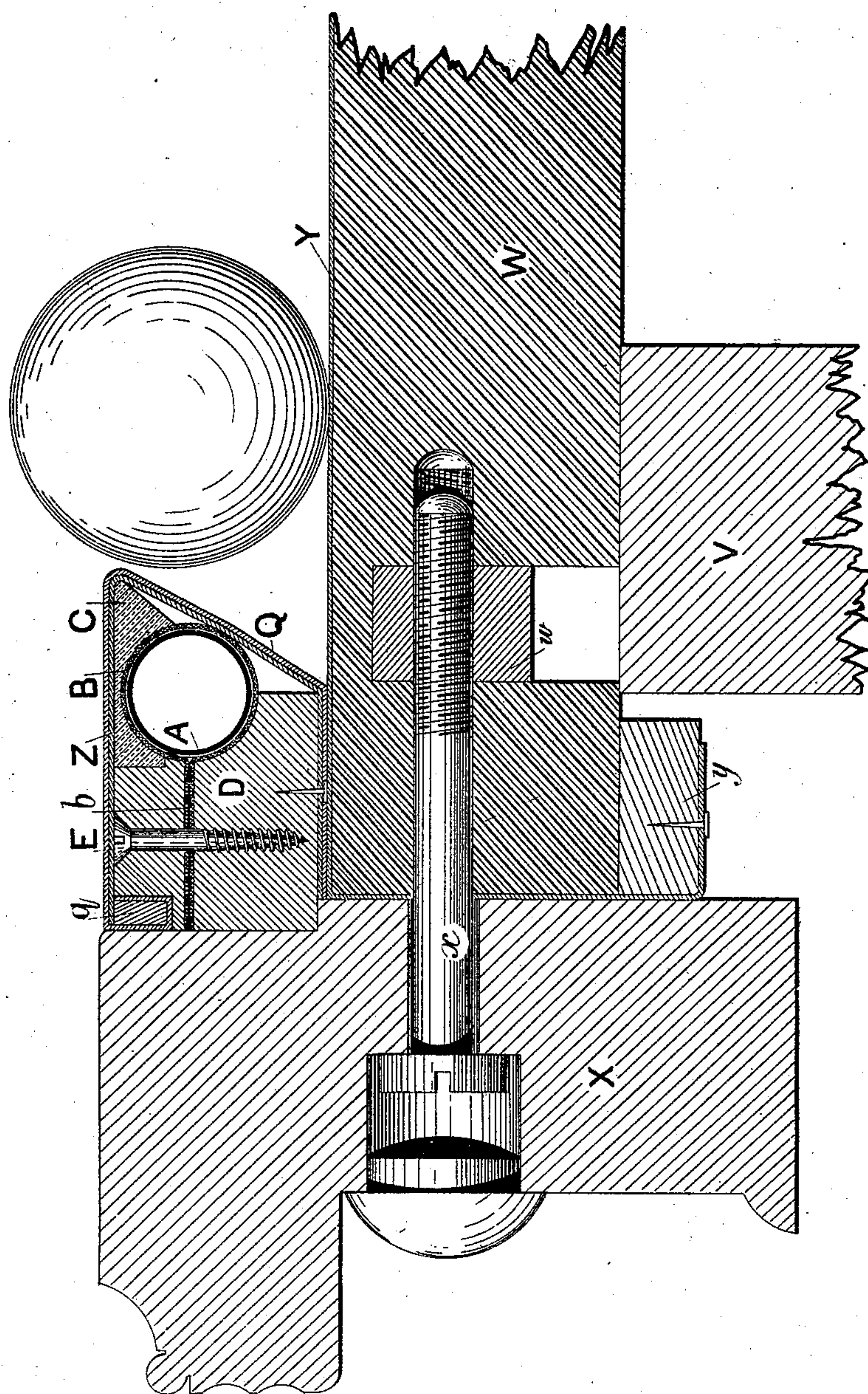


(No Model.)

A. C. IVES.  
BILLIARD TABLE.

**No. 572,545.**

Patented Dec. 8, 1896.



**WITNESSES:**

E. H. Sturtevant  
E. B. Bolton

INVENTOR.

*Albert Chester Ives*

*By his Attorney.*

By his Attorney.



# UNITED STATES PATENT OFFICE.

ALBERT CHESTER IVES, OF LONDON, ENGLAND.

## BILLIARD-TABLE.

SPECIFICATION forming part of Letters Patent No. 572,545, dated December 8, 1896.

Application filed March 11, 1895. Serial No. 541,339. (No model.) Patented in England September 25, 1894, No. 18,199.

*To all whom it may concern:*

Be it known that I, ALBERT CHESTER IVES, a citizen of the United States of America, residing at 3 Adelaide Street, London, in the county of Middlesex, England, have invented a new and useful Improvement in Billiard and Like Tables, (for which I have obtained Letters Patent in Great Britain, No. 18,199, and bearing date the 25th of September, 1894,) of which the following is a full and complete specification.

This invention relates to the cushions of billiard and like tables; and it consists in certain improvements in the construction and arrangement of pneumatic or air-inflated cushions whereby the same are rendered of practical utility.

All pneumatic cushions heretofore applied to billiard-tables have been failures, owing to the fact that the balls when they struck the cushions had a tendency to jump the table. Such cushions were also imperfect, inasmuch as if they were made large enough to hold the requisite volume of air to stand the impact of a smartly-driven ball the height of the cushion was increased beyond the limit considered desirable.

By my improved construction I obtain an inflatable tube of a sufficient size to give the desired cushioning effect under all conditions, I am able to reduce the height of the cushion lower even than that of cushions made of rubber, and I entirely overcome the tendency of the balls to jump the table. I also obtain a cushion which is faster than anything yet made and is also unaffected by change of climate or temperature, and this latter result alone is of considerable importance and utility, for as my improved cushion never becomes hard from change of temperature it does not require such care to keep it in perfect working order as the ordinary solid-rubber cushions.

I attain the object of my invention in the manner illustrated in the accompanying drawing, which is a view in transverse section of one of the cushions of a billiard-table embodying my invention.

The frame V, bed W, and rail X are all of the usual construction. The bed W is made of slate or other suitable material and is covered with a cloth Y, stretched over and fastened to a strip of wood y in the usual man-

ner. The rail X also is fixed to the bed W by means of the bolt or screw *x*, threaded into the nut *w* in the bed W in the usual manner.

The cushion consists, essentially, of an inflatable tube A, of rubber or other suitable material, inclosed in a pocket B, of canvas or other textile fabric, having a web *b*, formed on or attached to it, and of a rubber nosing or cap C of the shape shown.

The block D is formed with a grooved recess on its inner face, as shown, to receive the inflatable tube, and in order that the position of the tube may be absolutely accurate with the bed of the table it is preferably produced by a molding-machine of the exact form required, and it is then afterward cut in two to receive the web *b* of the pocket B by means of a saw which leaves a space between the two parts just equal to the thickness of the said web, so that when the top of the block D is fixed to the lower part by means of screws, such as E, the position of the inflatable tube is accurately determined.

Onto the top of the canvas pocket B, carrying the inflatable tube A, is fixed the nosing or cap C. This cap is shown as formed to fit over the upper surface of the tube, and thus partially to inclose it, whereby the cap is firmly seated on the tube. The rear of the cap is also supported against a shoulder in the block. The upper surface of the tube is thus brought very near the upper surface of the cap, which is flush with the block, and the inner edge of the cap extends over the tube, forming the projecting edge against which the ball strikes. The cushion so formed is then covered in the usual manner with a piece of flannel Z and cloth Q, the latter being fixed in the usual manner by means of a strip *q*, fitting in a recess in the top of the block D. The block D is fixed to the rail X in any convenient manner.

The fabric pocket B may be either woven in the form of a tube with the web on it or it may be made out of a strip of material sewed up, the web being formed by the free edges of the strip.

The air-tube A is provided in any convenient place with a nozzle and valve for inflation.

As a modification I may make the inflatable tube A and the pocket B with its web *b* all in



one piece as a compound tube, and as a further modification I may make the nosing or cap C in one piece with the compound tube A B, but I prefer to make them separately, 5 as I am thereby enabled to insure greater accuracy in the size of the tube when inflated.

I wish it to be particularly understood that I do not limit myself to the precise details of construction hereinbefore described, and 10 illustrated by the accompanying drawings, but that I hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

I am aware that pneumatic or air-inflated 15 cushions have already been used on billiard-tables, and I do not therefore claim such broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

20 1. A cushion for billiard-tables comprising a tube seated in a recess in the edge of the table, and a nosing or cap supported directly upon the tube providing a flush surface and a contact edge projecting beyond the face of 25 said tube, substantially as described.

2. A cushion for billiard-tables comprising

a tube seated in a recess in the edge of the table and a nosing or cap surmounting the tube, having a concave lower face conforming to the tube and a plane upper face with 30 a contact edge projecting beyond the face of said tube, substantially as described.

3. A cushion for billiard-tables comprising an inflatable tube A and a fabric encircling the tube, the ends of the fabric being laid together and confined between clamping devices, substantially as described. 35

4. In combination, the divided block D, the tube A inclosed by pocket B, having web *b* extending between the parts of the block D, 40 and the cap C formed to seat upon and partially cover the tube and abutting against a shoulder on the block D, together with the covering Q, the whole forming a cushion for billiard-tables, substantially as described. 45

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

ALBERT CHESTER IVES.

Witnesses:

ROBERT C. PHILLIPS,  
T. F. BARNES.