

J. S. BURROUGHES.
 BILLIARD TABLE CUSHION.
 APPLICATION FILED OCT. 25, 1910.

986,543.

Patented Mar. 14, 1911.

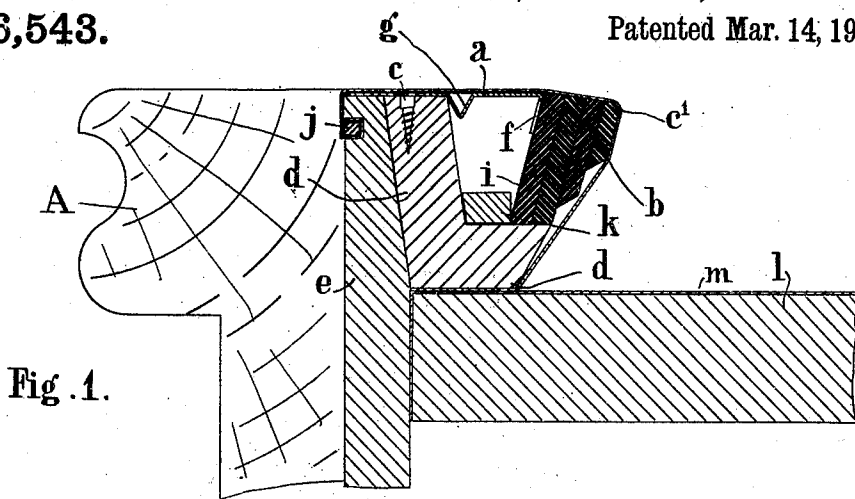


Fig. 1.

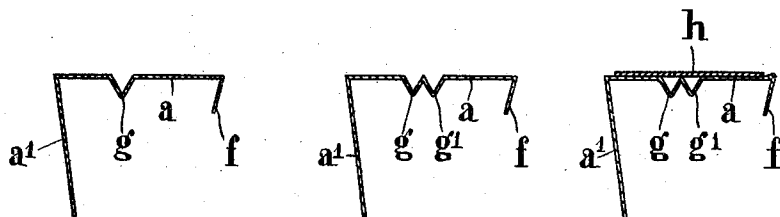


Fig. 2.

Fig. 3.

Fig. 4.

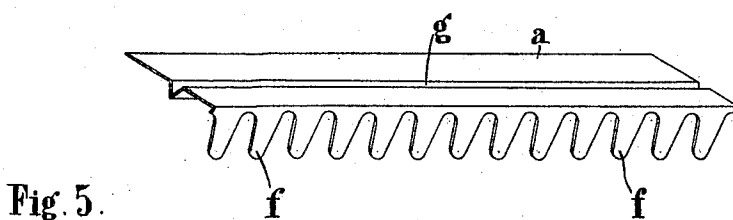


Fig. 5.

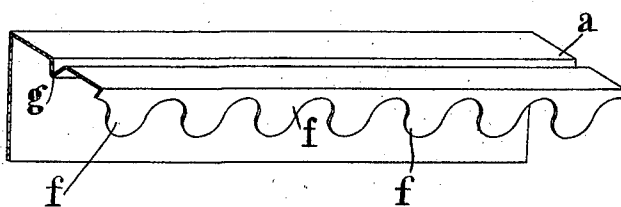


Fig. 6.

Witnesses.
G. Manning
E. Hengstack

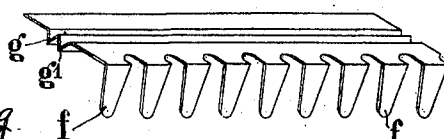


Fig. 7.

Inventor
James S. Burroughes
 By *J. Walter Fowler*
 atty.

UNITED STATES PATENT OFFICE.

JAMES SAMUEL BURROUGHES, OF SEAFORD, ENGLAND.

BILLIARD-TABLE CUSHION.

986,543.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed October 25, 1910. Serial No. 589,025.

To all whom it may concern:

Be it known that I, JAMES SAMUEL BURROUGHES, a subject of the King of England, and residing at Seaford, in the county of Sussex, England, manufacturer, have invented certain new and useful Improvements in Billiard-Table Cushions, of which the following is a specification.

This invention relates to cushions for billiard tables and the like and it consists of certain improvements in that type of cushion in which the rubber is backed by a thin metal angle bar or arm of strip metal projecting horizontally or approximately horizontally over an air space in the cushion.

According to the present invention, the front face of the metal bar or arm which is turned down to form a flange against which the rear of the rubber may bear, is slotted upwardly, serrated or formed in the manner of a comb so that the rubber of the cushion, when struck by a billiard ball, may be displaced to a certain extent into or through the spaces so afforded in this front flange of the bar or arm. Instead of having slots or serrations, the turned-down front flange against which the rubber or an intermediate diaphragm bears, may be scalloped or provided with bay-like recesses for the above purpose. I may also, if desired, continue the slots to the top of the front flange of the bar and even carry them slightly into the horizontal or top portion of the bar. The horizontal or approximately horizontal part of the thin metal strip, which carries the bent-down front portion, is ribbed or corrugated, preferably with a V or double V groove running parallel with the length of the cushion. In this way the metal backing for the rubber provided by the bar or arm is better able to resist downward pressure and on the other hand less rigid and unyielding in action when the cushion is forcibly struck by a ball.

The invention is hereafter described with reference to the accompanying drawings, in which:—

Figure 1 is a sectional elevation of a cushion fitted with one form of the improved metal arm or strip. Figs. 2 and 3 are sectional elevations of other forms of the arm. Fig. 4 shows the corrugated or ribbed arm with a covering piece. Figs. 5, 6 and 7 are perspective views of various methods of constructing the metal backing.

The metal strip or arm *a* which extends

horizontally (or approximately so) over a hollow space in the cushion and is downturned at front to afford the backing for the strip rubber *b*, is mounted in position in any suitable manner. It is secured to a fixed part of the cushion such as the cushion rail A or the wooden block *d* of the cushion, and the part of the cushion to which the arm or angle bar *a* is anchored is in the subsequent portion of this specification referred to as the "cushion block." The arm *a* may, for example, be attached by screws *c* to the top of the wooden cushion block *d*, as shown in Fig. 1 or it may be provided with a downwardly-extending arm *a'* (see Figs. 2 and 3) secured between the wood block *d* and a steel block *e*. The block *d* is shown of L shape so that the air space is afforded between the arms of the block and is covered by the arm *a*. The front flange or face *f* of this strip or arm *a* is serrated, scalloped or otherwise recessed at intervals as clearly shown at *f'* in Figs. 5 or 6, in order that upon the impact of a ball on the cushion, the rubber or other elastic member may be correctly displaced into the recesses so formed and tend to recede or pass through the gaps or spaces in the front flange *f*. The recesses or slots *f'* between the teeth thus formed may be continued upwardly of the flange *f* for any desired height. They may extend up into the top portion of the backing *a*, if desired, as shown in Fig. 7. This provision of gaps in the flange *f* allows the rubber to recede slightly into its backing and lessens the tendency of the nose of the cushion to be struck upward upon the impact of the ball. This advantage becomes even more pronounced where only two or three strips of rubber are employed in the cushion.

The top portion of the thin metal arm *a* may be ribbed or corrugated, as shown, intermediate of its width between the flange *f* and its rearward support. In Figs. 1 and 2 I have shown a single V groove *g*, and in Fig. 3 I have shown a double V groove *g'*. The wooden block *d* preferably abuts against the nearer groove *g*. At its rear, adjacent to the cushion frame or cushion rail A, the arm or strip *a* may be continued over the steel block *e* if desired, as shown in Fig. 1. In some cases I may cover the upper part of the ribbed portion of the arm *a* with a loose strip of metal *h* to prevent the creasing of

the cloth over the groove or grooves between the ribs, and in such case I prefer to extend the flange *f* slightly above the top of the arm *a* to afford a stop for this loose strip, see
 5 Fig. 4. The thin metal arm or backing *a* is by means of the corrugations or ribs strengthened to resist pressure from above and on the other hand is less rigid and unyielding in the direction of its width, that is
 10 to say in respect of the resistance opposed to the impact of the ball upon the cushion.

The flange *f* is made parallel with the strip rubber of the cushion and is shown extending downward for some considerable
 15 portion of the depth of the air space under the arm *a* but any other suitable height of flange *f* may be used. A fabric covering *i* is shown passing over the flange *f*, and extending from the wooden locking slip *j* to
 20 under the fillet *k*. This fabric covering may, however, be secured in position to the lower part of the block *d* in line with the flange *f* in any other convenient manner.

The slate bed of the table is indicated at *l*
 25 and the table cloth at *m*. The cushion cloth covering the elastic member of the cushion is shown at *c'* being secured at one end under the cushion block *d* and at the other end by means of the locking slip *j* in the well
 30 known manner.

Having thus described my invention what I claim as such and desire to secure by Letters Patent is:—

1. In a cushion for billiard tables and the
 35 like, the combination of a cushion block, an arm secured to said block and in advance thereof to cover an air space in the cushion, a downturned flange at the front of said
 40 arm, said flange being recessed at intervals, and a rubber nose to said cushion, said rubber nose being backed against said flange.

2. In a cushion for billiard tables and the like, the combination of a cushion block, a
 45 rubber nose for the cushion, an arm anchored to said block and projecting over an air space in the cushion, a downturned flange at front of said arm and recesses in said
 50 downturned flange, into which recesses the rear of said rubber nose is displaceable.

3. In a cushion for billiard tables and the like, the combination of a cushion block, an
 55 arm projecting over an air space in the cushion and having means whereby it may be secured at rear to the cushion block, said arm having also a downturned flange at
 60 front against which the rubber nose of the cushion is backed, said flange being provided with cut-away recesses at intervals so that said rubber may be displaced into said recesses.

4. In a cushion for billiard tables and the like, an arm projecting over an air space in
 65 the cushion and having at rear means whereby it may be anchored to the rear part of the cushion, and at front a flange which is

turned downwardly and slightly rearwardly, said flange being provided with recesses at intervals.

5. In a cushion for billiard tables and the like, an arm which projects over an air space
 70 in the cushion, said arm having at rear means whereby it may be secured to the cushion block and having at front a downturned flange, said flange being provided at
 75 intervals with upwardly extending recesses and said recesses being continued into the top of the angle bar.

6. In a cushion for billiard tables and the like, a metal arm which projects over an air
 80 space in the cushion, said arm having at rear means whereby it may be secured to the cushion block and at front a downturned flange, said arm being ribbed longitudinally, and said flange being provided with cut
 85 away recesses into which the rubber of the cushion is displaceable.

7. In a cushion for billiard tables and the like, a metal arm which is anchored to the
 90 rear of the cushion and projects over an air space in the cushion, said arm at its forward end having a flange which is turned downwardly and rearwardly, recesses in said flange, and a longitudinal rib in the intermediate portion of the arm.

8. In a cushion for billiard tables and the like, an L shaped cushion block, a metal arm
 95 secured at one end to said cushion block, said arm being ribbed longitudinally and extending over an air space in the cushion and having at its forward end a flange turned downwardly and rearwardly, with recesses at intervals in said flange into which recesses the
 100 rubber of the cushion is displaceable.

9. In a cushion for billiard tables and the like, a metal arm secured at its rear end to
 105 the cushion block and projecting over an air space in the cushion, said arm having a downturned flange at its forward end against which the elastic member of the cushion abuts and said arm being ribbed longitudinally intermediate of its point of contact with the cushion block and its downturned flange.
 110

10. In a cushion for billiard tables and the like, a metal arm secured at its rear end to
 115 the top of the cushion block and projecting over an air space in the cushion, said arm having a downturned flange at its forward end against which the elastic member of the cushion abuts, said arm being corrugated longitudinally and one of the ribs formed by
 120 said corrugations abutting against the edge of the cushion block.

11. In a cushion for billiard tables and the like, an L shaped cushion block, a metal
 125 arm secured by screws to the top of said block so as to project over an air space afforded in said cushion by said L shaped block, said arm being ribbed longitudinally and having at its forward end a downturned
 130

flange bent back rearwardly and upwardly extending recesses in said flange into which the elastic member of the cushion is displaceable.

5 12. In a cushion for billiard tables and the like, an L shaped cushion block, a metal arm secured by screws to the top of said block so as to project over an air space in the cushion, said arm being ribbed longitudinally and having a front flange downturned and bent back rearwardly, against which flange the elastic member of the cushion abuts, said flange having upwardly extending recesses at intervals, said recesses being continued into the upper part of the arm, into which recesses the said elastic member is displaceable.

13. A cushion for billiard tables and the like, comprising a cushion block cut away at its upper front face, a metal arm fastened by screws to the top of said block and projecting over said cut-away portion, said arm having at its forward end a downturned flange, said arm being ribbed longitudinally intermediately of the cushion block and the front flange, the elastic member of the cushion abutting against said flange, and said flange having cut-away recesses therein into which the rear portion of the said elastic member may be displaced.

14. A cushion for billiard tables and the like, comprising an L-shaped cushion block, a metal arm extending the length of the cushion and secured by screws upon the top of said cushion block, said arm projecting over an air space in the cushion, a downturned flange to the front end of said arm, said arm being longitudinally corrugated intermediately of the cushion block and its front flange, a fabric covering stretched over said flange and secured upon the lower part of the cushion block, and a rubber nose to the cushion bearing against said fabric-covered flange, said flange being recessed at intervals to allow the rear of the elastic nose to be displaced into said recesses.

15. A cushion for billiard tables and the like, comprising an arm projecting over an air space in the cushion, a support for the rear end of said arm, a downturned flange at

the front of said arm and cut away recesses in said flange.

16. A cushion for billiard tables and the like, comprising an arm anchored on a support and projecting forward over an air space in the cushion, a downturned flange at the front end of said arm, and cut-away recesses in said downturned flange.

17. A cushion for billiard tables and the like, comprising an arm mounted on a support and projecting over an air space in the cushion, a flange at the front end of said arm, said flange being turned downward and bent back slightly rearwardly, and having upwardly extending slots therein.

18. A cushion for billiard tables and the like, comprising an arm mounted on a support and projecting over an air space in the cushion, a flange at the front end of said arm, said flange being turned downwardly and bent back slightly rearwardly, said arm being also corrugated longitudinally intermediately of its support and its flange, and said flange having upwardly-extending slots therein.

19. In a cushion for billiard tables and the like, a metal angle bar adapted to be secured by screws to a cushion block and having a rib adapted to bear against the face of said block, said angle bar projecting over an air space in the cushion and having a forward flange turned downwardly and rearwardly and provided with slots therein.

20. In a cushion for billiard tables and the like, a metal angle bar adapted to be secured by screws to a cushion block and having a rib adapted to bear against the face of said block, said angle bar projecting over an air space in the cushion and having a forward flange turned downwardly and rearwardly and provided with slots therein, said slots being arranged to extend upwardly of the flange and into the upper part of the arm.

In testimony whereof I affix my signature in presence of two witnesses

JAMES SAMUEL BURROUGHS.

Witnesses:

VICTOR F. FEENY,
VICTOR I. FEENY.