

Case No. 3,726.

DECKER V. GROTE ET AL.

[10 Blatchf. 331; 3 O. G. 65; 6 Fish. Tat Cas. 143; Merw. Pat. Inv. 134.]¹

Circuit Court, S. D. New York.

Jan. 2, 1873.

PATENTS—CONSTRUCTION
CLAIM—INFRINGEMENT—EQUIVALENTS—ANTICIPATION—ABANDONED
EXPERIMENTS—EVIDENCE—BILLIARD TABLE CUSHIONS. OP

1. The claim of the reissued letters patent granted to Levi Decker, March 9th, 1869, for an “improvement in cushions for billiard tables,” the original patent having been granted to him December 18th, 1866, namely, “the catgut or other cord, E, partially or fully embedded, or otherwise attached, at the angle, a, of the rubber cushion, C, so as to protect said cushion against the impact of the ball, substantially as herein shown and described, and for the purposes set forth,” covers the placing, and firmly securing, along the upper edge or corner of the rubber cushion, a strong, narrow cord, to receive the impact of the ball, and protect the cushion against such impact, by reason of its being placed at the point against which, and against which alone, the ball strikes, the stiff cord receiving such impact, in substantially a horizontal direction, and preventing the cushion from giving way under such impact, and from allowing the ball to ride over it and leave the table, while, at the same time, there is little friction from the impact and the elastic force of the rubber acts fully, through the cord, interposed between it and the ball, to repel the ball, in substantially a horizontal direction. Such claim is infringed by embedding the cord in the rubber cushion at the upper edge of it, and securing it there by placing it therein while the rubber is plastic, and before it is vulcanized, and having a thin portion of the rubber interposed between the cord and the outside of the edge.

[Cited in Decker v. Griffith, Case No. 3,725.]

2. Adding a device to give tension to a wire run through the edge of the elastic cushion, or using a new mode of introducing such wire, by a perforation near the edge of the rubber, does not, even though such devices may be patent,

able justify the use of the substance of the plaintiff's invention, or the employment of an equivalent for the plaintiff's cord, either in respect of material used, or in respect of the manner of securing the cord, so that it may perform its office.

3. Such claim is not anticipated by an arrangement in which a stiff piece of elastic material was put along the upper face of the rubber, so as to be lifted by the force of the ball, when the ball embedded itself in the rubber beneath, and to act as a spring, to hug the ball down [to] the table, and prevent its hopping or jumping.
4. The testimony of a witness to prove prior Knowledge of the plaintiff's invention, stricken out, at the hearing, on motion, on the ground that his place of residence at the time of putting in the answer was not given in the answer.

[Cited in *La Baw v. Hawkins*, Case No. 7,960.]

5. Abandoned experiments, commented on.
6. A reissued patent sustained, against objections as to its variance from the original patent, In what were mere matters of mechanical adaptation.

[Followed in *Decker v. Griffith*, Case No. 3,724.]

Final hearing upon pleadings and proofs.

Suit brought [against Frederick Grote and others] on letters patent [No. 60,657] for "improvement in cushions for billiard tables," granted to the complainant [Levi Decker] December 18, 1866, and reissued March 9, 1869 [No. 3,323]. A description of the invention, quoted from the specification, together with the claim, will be found in the opinion of the court.

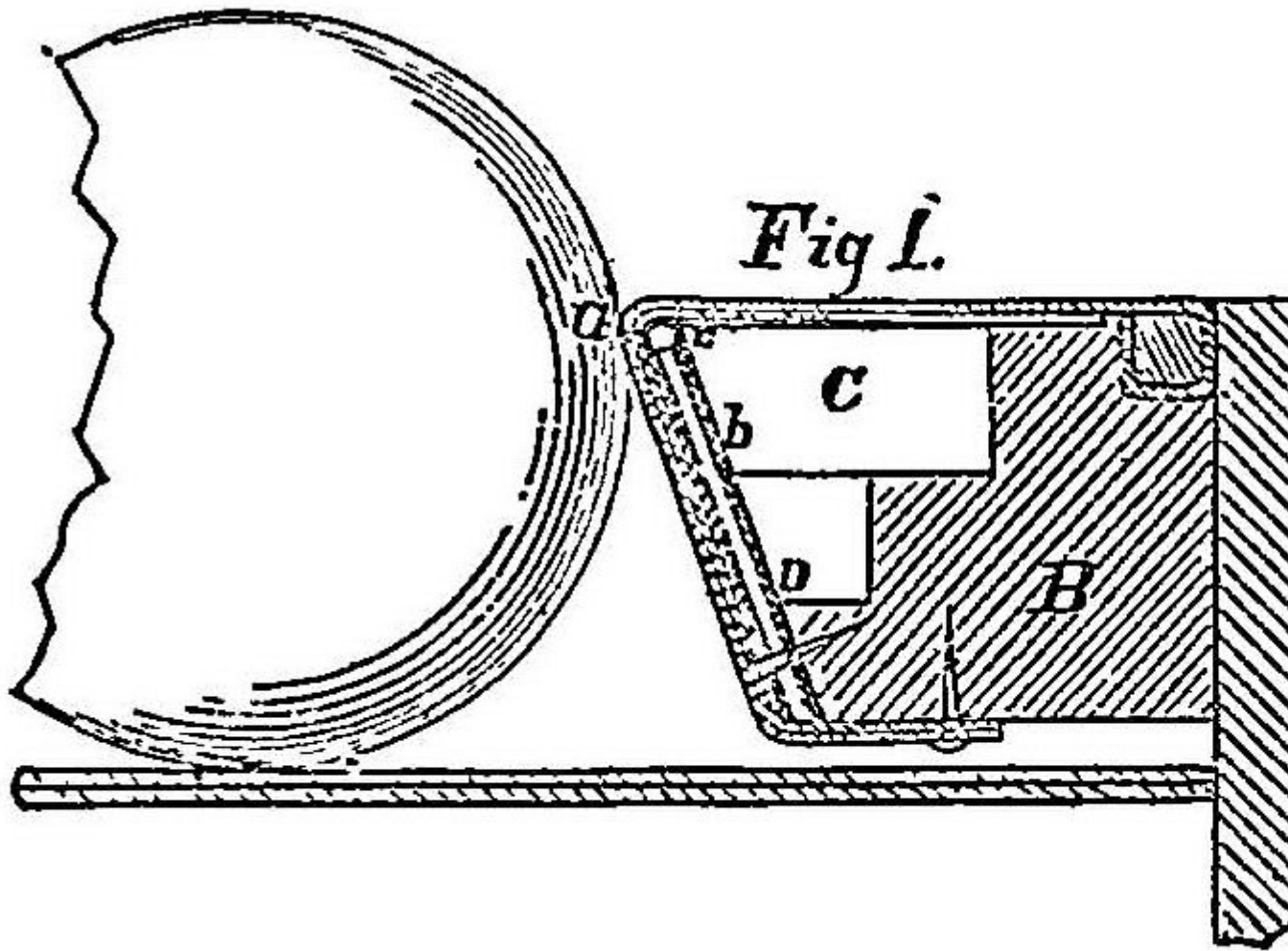
In the accompanying engravings, figure 1 shows the complainant's cushion in cross-section. Figure 2 shows more fully the arrangement of the elastic cloth. This cloth, inclosing a cord of catgut or other material, is cemented to the face of the cushion, and supports its upper edge; the whole being then covered with the ordinary cloth of the cushion. The various parts are described by letters of reference in the opinion below. Figure 3 shows the cushion patented by John Sycher. The arrow indicates a strip of horn inserted in the cushion. Figure 4 shows the device described in the rejected application of W. B. Carpenter, having a piece of wire or whalebone along the edge of the cushion.

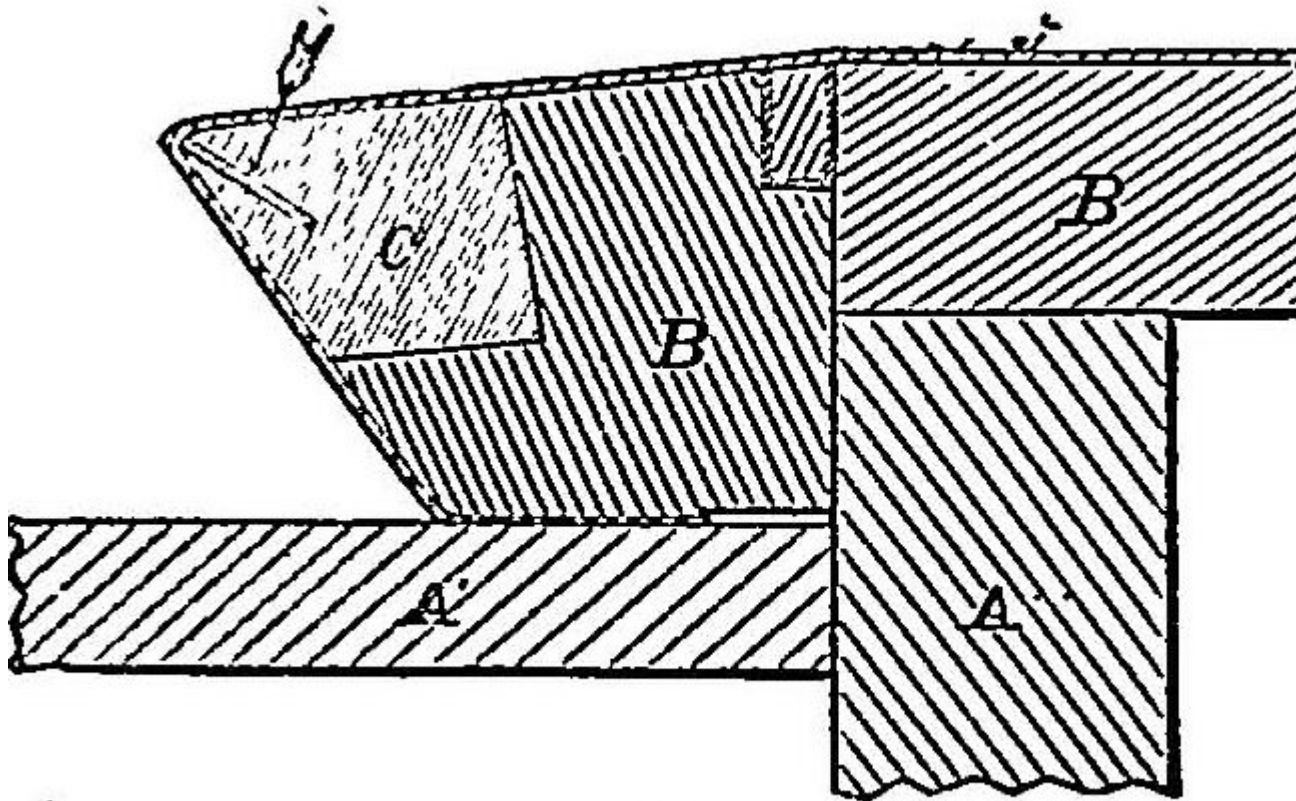
Mr. Abbott and William J. A. Fuller, for complainant

Benjamin F. Lee and Anthony Pollak, for defendants.

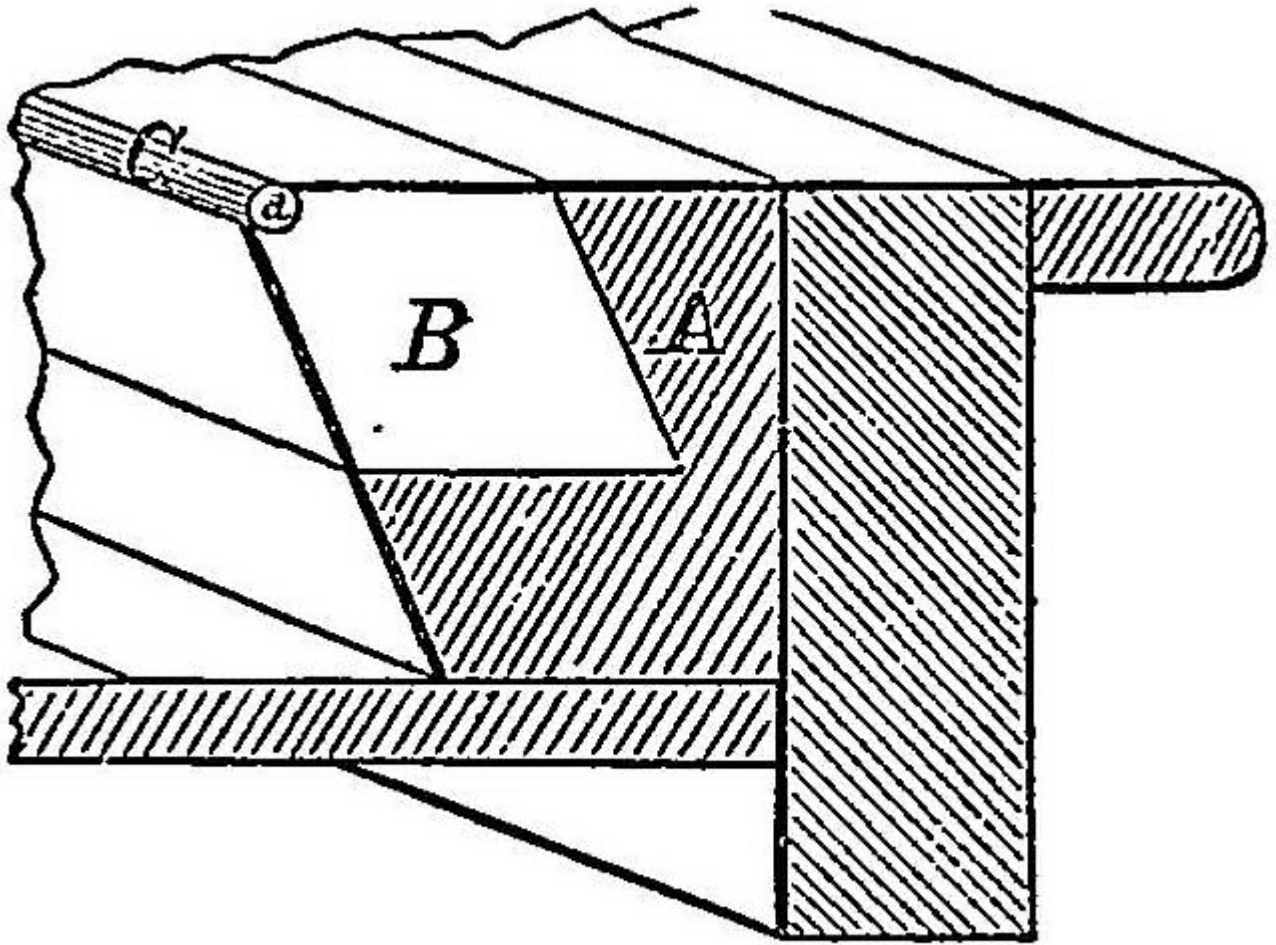
BLATCHFORD, District Judge. This suit is brought on reissued letters patent granted to the plaintiff, March 9th, 1869, for an "improvement in cushions for billiard tables," the original patent having been granted to him December 18th, 1866. The specification of the reissued patent says: "My invention has for its object the preservation of cushions for billiard tables against the impact of the ball. The nature of my invention consists in the employment or use of a catgut or other strong cord, located in or at the upper corner or edge of the cushion, and immediately at the point against which the ball strikes when the game of billiards is played. * * * C is a body of rubber, which forms a cushion against which the ball strikes. This said rubber cushion has its inner or face side bevelled in such

a manner that the ball strikes, at about its centre, against the upper corner or point of the cushion, as clearly shown at a, Fig. 1. For the purpose of protecting the upper corner or





No. 3.



No. 4

edge of the cushion, C, against the impact of the ball, I make a small concave or bed, immediately, or as near as may be, in the upper corner of the cushion, so that a suitable cord, E, or other support, may be fitted longitudinally the whole length of the said cushion, around the table, so that the cushion is fully protected, on all sides of the table, against the impact of the ball. For this cord and support of the cushion I usually employ catgut, or cord may be used for the same purpose, but experience proves that catgut is most suitable for the purpose, as it is best adapted to prevent the cushion from giving way, or yielding, under the impact of the ball, it being understood that the ball only comes in contact with the cushion at a, the bevel or inclination being given the face of the cushion in order that all other parts of it will be kept clear of the ball. This cord, B, may be more thoroughly secured in its position by moulding it, or embedding it, entirely within the rubber, near the corner, so as to perform the functions for which it is designed, or it may be secured by gluing a strip of cloth, b, over it, when not fully embedded in the rubber, or it may be secured by any other well-known means. D is a strip of elastic cloth, which is cemented to the face side of the rubber strip or cushion, C, and attached, at its lower edge, to the lower part of B," (elsewhere described as a strip or cleat, behind C,) "so as to support the upper edge, a, of C. It will be understood, that the cord, E, is attached to D, before the latter is secured to the cushion, C, and cleat, B. To make the whole more secure, I usually cover the whole with the cloth, F, and after cover the whole again with the usual green cloth, G. This cord, E, performs two very important functions, viz.: it gives stiffness to the angle or corner, a, of the cushion G, so that it cannot yield or give way under the impact of the ball, to allow the latter to pass over it; and it also gives prominence to the said angle, so as to present, under the yielding of the cushion, a stiff, narrow line to the ball, thus obviating much friction, so as not to impede the motion of the latter, and still not interfering in the least with the elastic effects of the cushion upon the ball." The claim is in these words: "The catgut or other cord, E, partially or fully embedded, or otherwise attached, at the angle, a, of the rubber cushion, C, so as to protect said cushion against the impact of the ball, substantially as herein shown and described, and for the purposes set forth."

It is quite apparent, that the invention set forth is the placing, and firmly seeming, along the upper edge or corner of the rubber cushion, a strong, narrow cord, to receive the impact of the ball, and protect the cushion against such impact, by reason of its being placed at the point against which, and against which alone, the ball strikes. When the impact comes, the stiff cord receives it, in substantially a horizontal direction, and prevents the cushion from giving way under such impact, and allowing the ball to ride over it and leave the table, while, at the same time, there is little friction from the impact, and the elastic force of the rubber acts fully, through the cord, interposed between it and the ball, to repel the ball, in substantially a horizontal direction.

The great utility of the invention, in tending towards perfection in the billiard table, is shown by the evidence. The inventor was an experienced manufacturer of billiard tables. The cushion had, up to the time of his invention, in the latter part of 1864, been faced with a fiat facing, made of various materials. But, the fiat facing failed to add the necessary greater proportional strength to the upper corner or edge, and the plaintiff sought to do that, while, at the same time, the rubber below the edge, not being faced, would have its elastic action left unimpaired. The idea of a cord of catgut, to be secured to the upper edge, suggested itself to him. He arranged it, in the manner described in the specification of the reissue, and shown in the drawing, by laying the catgut along the edge of the elastic cloth which he had been using as a facing, and securing it there by wrapping a piece of cloth around it, and attaching that to the elastic cloth, and cementing the latter to the rubber. The moment the invention became known, it went extensively into use, and the cushion thus made superseded all other forms. A resulting feature of the arrangement is shown by the evidence to be, that a larger amount of the elasticity of the cushion is brought to bear at the point of contact of the ball with the cord, than when, in the absence of the cord, the ball strikes the rubber itself. The cushion is, also, protected from wear. Greater accuracy, also, results in respect to the direction the ball takes in rebounding.

In the defendants' arrangement the cord is embedded in the rubber cushion at the upper edge of it, and is secured there by being placed in it while the rubber is plastic, and before it is vulcanized, and by having a thin portion of the rubber interposed between the cord and the outside of the edge. There is no doubt that the defendants' arrangement embodies the invention claimed in the plaintiff's reissued patent, and has the same mode of operation, in use.

The novelty of the invention is attacked, by reference to an application filed in the patent office, January 18th, 1858, by William B. Carpenter, for a patent for an "improvement in billiard cushions," and which was rejected April 10th, 1858. The specification filed by Carpenter says: "The nature of my invention consists in providing a block of India rubber, cut or moulded in the desired shape, with a groove, which groove is to be made along the entire upper and outer edge, in which groove is to be placed a wire, composed of whalebone, steel, brass, or other elastic material, suitable for the purpose." Carpenter then proceeds to say, in the specification, that

he makes a groove at the outer, and along the entire upper, edge of the rubber, and inserts in the groove, along its length, a round piece, the size of the groove, of whalebone or steel or brass wire. The drawing shows the wire lying in the groove, and not otherwise secured, and with its upper face exposed to view. The specification says, that the cushion is to be "covered with cloth, in the usual manner of billiard cushions," and is then ready to be used. It then states, as the reasons for such arrangement of cushion, that, if a ball is played against a square-edged cushion of rubber, all parts of the same being equally elastic, the momentum of the ball, if the stroke be an energetic one, will be liable to so far overcome the resistance of the rubber, as to cause the ball to jump or hop either on or off of the table; that he wishes to preserve the delicate elasticity of the rubber, and, at the same time, to keep the ball, at all times, upon the table and free from hopping or jumping; that, to accomplish this, he makes the groove in the rubber, and inserts therein the whalebone or wire; and that this has the effect of stiffening the entire upper edge, and prevents the momentum of the ball from overcoming the weakest part of the rubber, because, "when the ball advances with considerable force, and is embedded into rubber, the whalebone or wire is lifted, the ball acting as a wedge, and, from the natural tendency of the wire to resume its former position, it hugs the ball firmly upon the table, which allows the rubber to repel the ball without hopping or jumping." The drawing accompanying Carpenter's specification corresponded therewith, in showing the rod of whalebone or wire as being laid in a groove cut in the top surface of the rubber, along the upper and outer edge. But, the model he sent therewith showed the groove as cut just below the top surface, and in that face of the cushion which would be towards the bed of the table. The patent office, in a letter to Carpenter, of January 20th, 1858, called his attention to this discrepancy, and stated, that the model showed the groove "along that face of the rubber cushion against which the ball strikes," and, suggested to him, that, if his specification and drawing were correctly understood, a different model would be necessary. In reply, he wrote to the office, saying, that the specification exactly described what was meant to be described, and that the drawing agreed therewith; that there was a discrepancy between the specification and drawing and the model; and that he would make another model, showing the invention truly, as he wished it to be shown, that is, with the groove and wire "at the upper and outer edge of the rubber, and not at the inner edge, immediately in contact with the ball." The new model, constructed to correspond with the specification and drawing, was sent, and filed January 26th, 1858, and the application was rejected, as before stated. The ground of rejection was a patent granted to the present plaintiff, December 15th, 1857, "for the combination of a steel spring with India rubber, for the same purpose." The claim asked for and rejected was, "the forming, in a block of rubber for billiard cushions, the groove, and inserting therein the round whalebone, steel, or other wire, substantially and

for the purpose as herein described.” On the 5th of June, 1858, Carpenter wrote to the office that he withdrew his application.

It is impossible to regard this application as anticipating the plaintiff’s invention. The invention of Carpenter, as shown in his specification and drawing and correct model, was one of a wholly different character from that of the plaintiff. Carpenter shows that he intended that the ball should be played against the rubber, and should embed itself “into the rubber,” and that the rubber should not receive the impact of the ball through the medium of the whalebone or wire. His device was one merely to put a stiff piece of elastic material along the upper face of the rubber, which should be lifted by the force of the ball, when the ball embedded itself in the rubber beneath, and should, by its action as a spring, hug the ball down to the table, and prevent its hopping or jumping. This is a different arrangement, and for a different purpose, from that of the plaintiff. In Carpenter’s arrangement, the whalebone or wire does not receive the impact of the ball, and does not protect the cushion against such impact, and is not placed at the point against which, and against which alone, the ball strikes; the whalebone or wire has no effect to reduce the friction of the impact of the ball; the elasticity of the rubber is not, by the wire, concentrated at the point of impact of the ball; the cushion is not protected by the wire, from wear at the point where the ball strikes; and no greater accuracy of direction, in the ball, in rebounding, results from the use of the wire. These are all features of the plaintiff’s arrangement. The only feature that is common to the two arrangements is, that the stiffening of the edge of the rubber has the effect to prevent the ball from jumping. But this, while it is an incident of the plaintiff’s arrangement, does not cover other features which the claim of his patent read in connection with the body of his specification, sets forth as inherent in his arrangement; and those features, so set forth, are not found in Carpenter’s arrangement.

Another difficulty in Carpenter’s arrangement is, that he neither shows nor describes any mode of fastening or securing the whalebone or wire in the groove, except, that, after it is “placed,” or “inserted,” in the groove, the cushion is to be “covered with cloth, in the usual manner of billiard cushions.” It is evidently not intended to be secured or fastened, so as to become, as is necessary in the plaintiff’s arrangement, an integral part of the structure of the rubber cushion, for Carpenter describes it as intended to be lifted

by the action of the ball, as a wedge, when embedded in the rubber beneath it Hence, in Carpenter's arrangement the wire does not receive a practically horizontal blow from the ball, and, in yielding, compress the rubber behind it, and bring the elastic force of such rubber into action to repel the ball in a horizontal direction. That is an essential feature of the plaintiff's arrangement, for he says, in the specification of his reissue, that the face of the rubber cushion is so bevelled, that the ball strikes, at about its centre, against the upper corner or edge of the cushion, along and in which the cord lies, and that the ball does not come in contact with the cushion at any other part of the cushion. A lifting of the cord, as in Carpenter's arrangement would entirely destroy the plaintiff's arrangement. Hence, the plaintiff firmly secures his cord in place, so that it may receive the horizontal blow. No such arrangement is found in Carpenter's specification. But, such arrangement is found in the defendants' structure. The thin edge of rubber, interposed between the defendants' cord and the outer extremity of the cushion merely acts to hold the cord in place, so that it may be always in position to receive a practically horizontal blow, and is a mere equivalent for the cloth in which the plaintiff wraps his cord. There is an advantage, as respects' utilizing the elastic force of the rubber to the greatest possible degree, in having the cord as near to the ball as possible, but if it makes too prominent an edge, its covering is apt to wear too rapidly. But, that is a question only, of durability. The invention of the plaintiff is employed, if the cord is found in the place indicated, so firmly secured, and so arranged, as to act always, in the manner indicated, in combination with the cushion behind it, in reference to a blow from the ball, delivered in the manner stated. The defendants make and sell a structure of that kind, and no such structure is found in Carpenter's arrangement.

As respects what appears in Carpenter's first or incorrect model, (both of the models being now in the patent office,) it is manifest, that he never pretended to have made an invention of anything shown in it, if it shows anything different from what is shown in his second model. He expressly says, in his letter to the office, that the first model does not show his invention "truly." Whatever there is in the first model, therefore, that is different from what is in the second model, was, at most, a mere abandoned experiment, not amounting to an invention. It is manifest, moreover, that a structure like that represented by such first model would be open to many of the objections, before specified, to which one like such second model is open.

Carpenter was examined as a witness on the part of the defendants. His name is not set forth in the answer as that of a person to or by whom the plaintiff's invention was previously known or used. His application of January 18th, 1858, is referred to in the answer, as containing the plaintiff's invention. But his place of residence at the time of putting in the answer is not given in the answer. After he was sworn as a witness, and before any questions were put to him, an objection was entered on the record, on the part

of the plaintiff, to his being examined, on the ground that he had not been named in the answer, and that the notice required by the statute had not been given of his examination. The bill in this suit was; filed in August, 1871. He was cross-examined de bene esse, under the same objection so made to his direct examination. Such objection to the testimony of Carpenter, so far; as it tends to prove prior knowledge or use of the plaintiff's invention, was insisted on at the hearing, and a motion was made by the plaintiff to strike out such testimony, in such respect. The motion must be granted.

But, even if the testimony of Carpenter were to be admitted in such respect, it adds nothing to what appears in his application. I He says, that he made experiments with "the cushions" shown in the two model before he applied for a patent; that those experiments were using "a cushion" two feet, I or less, long, screwed to the bed of a table, and tested for about half a day by various I parties; that such experiments were considered satisfactory enough, in hindering the ball from jumping, to apply for a patent; and that the cushion stood the blows of the ball, and the wire was not dislodged. It does not appear that any billiard table, provided with such cushions as Carpenter's, was ever made by him or any one else. The whole matter, so far as Carpenter testifies to having done anything, was an abandoned experiment

What is found in letters patent granted to John Syrcer, November 10th, 1803, for a "billiard cushion," is adduced to destroy the novelty of the plaintiff's invention, Syrcer, uses thin strips of horn, cut spirally, in connection with hard or soft rubber, to form a cushion. The strip of horn is used as a facing to the rubber pad, or is inserted into a long slit cut in the pad, and made fast therein by rubber cement The grain of the horn, in the spiral strip, runs crosswise of the strip, so that, when the ball strikes the cushion, the spring action of the horn, although crosswise of the strip, is with the grain, and not crosswise of the grain. When the strip is inserted in the pad, it is shown as extending downward from the upper exterior corner of the pad, in a slanting direction, away from the face of the pad. A facing to the pad presents nothing in common with the plaintiff's invention. In the case of the inserted strip of Syrcer, the action of the cushion, under the impact of the ball, is different from what it is in the plaintiff's arrangement. The cushion does not yield in substantially

a horizontal direction, because of the interposition of the strip of horn. For the same reason, the resilience of the rubber is not returned to the ball in substantially a horizontal direction. By inserting the strip, Syrcher destroys the homogeneous character of the cushion. The plaintiff preserves the homogeneous character of the cushion. From this difference results the different action of the two cushions under the impact of the ball, and in response thereto. It follows, that nothing in Syrcher's arrangement anticipated the plaintiff's invention.

As to what Delaney did in California, he details a series of abortive and abandoned experiments. He himself calls them experiments. One of them he describes as the use of rubber, with "whalebone and drum snares cut into the upper edge, and there fastened into the groove with court plaster, to hold the whalebone or drum snares put into the rubber." He says, that he inserted the drum snare as close as possible to the upper edge of the cushion, along such edge, "and about one-fourth of an inch from the face where the ball strikes;" that he discontinued the use of drum snares and commenced using whalebone because he thought it was better, as having more elasticity; that he discontinued the use of whalebone because some one offered to furnish him strips at less money than he was paying, if he would use such strips; and that he did not apply for a patent for inserting drum snares or whalebones in rubber billiard cushions, because he did not think it was of any value at the time.

The answer sets up that the reissued patent granted to the plaintiff is void, for the reason that it describes and claims an invention different from any invention described or claimed, or intended to be, in the original patent, or shown in the model, drawings or application on which the original patent was granted. The drawings of the reissue are the same as those of the original patent.

It is objected, (1) that the original patent states that the invention consists in applying a cord "to" the upper angle of the cushion, while the reissue states that it consists in using a cord located "in or at" the upper corner or edge of the cushion; (2) that the reissue states that a small concave or bed is made immediately, or as near as may be, in the upper corner of the cushion, in which the cord may be fitted, while the original specification and the drawings disclose no such concave or bed; (3) that the reissue states that the cord may be more thoroughly secured in its position by moulding it, or embedding it, entirely within the rubber, near the corner, while the original specification and the drawing do not suggest any such tiling; (4) that the reissue suggests the embedding the cord partially in the rubber, while nothing to that effect is found in the original specification or in the drawing; (5) that the partially or fully embedding the cord, found in the claim of the reissue, is not suggested in the original specification or by the drawing. The specification of the original patent describes the cord as applied to the edge or angle of the cushion, by enclosing it in a strip of cloth, cemented to a strip of elastic cloth, which itself is ce-

mented to the face side of the rubber cushion. Whether this cord is wholly external to the rubber cushion, and so requires to be firmly attached to such cushion by applying means of adhesion, or is partly within such cushion, and so can be more easily attached with firmness thereto, or is wholly within the cushion, and so is kept firmly in its place by the rubber which is exterior to it, is a mere matter of mechanical adaptation, having no relation to the real invention. Each arrangement is an equivalent for the other, as respects such invention. One may involve more durability than the other, but that is a point aside from the invention. The plaintiff testifies, that, when he arranged the cord wholly external to the rubber cushion, as described in the specification of his original patent, it "wore the cloth a little faster than it would otherwise;" and that he then had a set of moulds made in such a way as to leave a groove in the upper edge of the cushion, to receive the cord, which obviated the objection of wearing out the cloth. This groove admitted of a partial embedding of the cord in the rubber. Embedding the cord wholly in the rubber was a mere question of degree. The plaintiff was entitled to use all these forms, within his invention, as modifications resulting from experience in its use, not involving any new or further invention. Within the rule laid down in *Seymour v. Osborne*, 11 Wall. [78 U. S.] 516, it cannot be said, in this case, that it is apparent, on the faces of the two patents, that the commissioner has exceeded his authority in granting the reissue, or that there is such a repugnancy between the two patents, that it must be held, as matter of legal construction, that the new patent is not for the same invention as that embraced and secured in the original patent.

It results, from these considerations, that there must be a decree for the plaintiff, for a perpetual injunction, and an account of profits, and an ascertainment of damages, with costs.

{NOTE. For other cases involving this patent, see *Decker v. Griffith*. Cases Nos. 3,724, 3,725; *Decker v. New York Belting Co.*, Case No. 3,727.}

¹ [Reported by Hon. Samuel Blatchford, District Judge, and here reprinted by permission. Merw. Pat Inv. 134, contains only a partial report]