



*Collinson v. Lane et al.*

*Defts Exhibit No. 22.*

*G. W. E.*

*Sp. Ex.*



A.D. 1846 . . . . . N° 11,455.

S P E C I F I C A T I O N

OF

WILLIAM BROCKEDON  
AND  
THOMAS HANCOCK.

MANUFACTURE AND APPLICATION OF INDIA  
RUBBER, GUTTA PERCHA, &c.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,  
PRINTERS TO THE QUEEN'S MOST EXCELLNT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,  
25, SOUTHAMPTON BUILDINGS, HOLBORN.

*Price 5d.*

1855.



*Collins v. Leane & al.*

*Exhibit No 22*



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A.D. 1846 . . . . . N° 11,455.

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**Manufacture & Application of India Rubber, Gutta  
Percha, &c.**

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**BROCKEDON AND HANCOCK'S SPECIFICATION.**

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, WILLIAM BROCKEDON, of Devonshire Street, Queen Square, Gentleman, and THOMAS HANCOCK, of Stoke Newington, Gentleman, send greeting.

WHEREAS Her present most Excellent Majesty Queen Victoria, by Her  
5 Royal Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Nineteenth day of November, (One thousand eight hundred and forty-six,) in the tenth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto us, the said William Brockedon and Thomas Hancock, our eñors, adñors, and assigns, Her especial licence, full power,  
10 sole privilege and authority, that we, the said William Brockedon and Thomas Hancock, our eñors, adñors, and assigns, or such others as we, the said William Brockedon and Thomas Hancock, our eñors, adñors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should and lawfully  
15 might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, our Invention of "IMPROVEMENTS IN THE MANUFACTURE OF ARTICLES WHERE INDIA-RUBBER OR GUTTA PERCHA IS USED;" in which said Letters Patent is contained a proviso, that we, the said William Brockedon and Thomas Hancock, or one of us, shall cause a particular description of the  
20 nature of our said Invention, and in what manner the same is to be performed, by an instrument in writing under our hands and seals, or under the hand and seal of one of us, to be enrolled in Her said Majesty's High

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Court of Chancery within six calendar months next and immediately after the date of the said in part recited Letters Patent, as in and by the same, reference being thereunto had, will more fully and at large appear.

**NOW KNOW YE**, that in compliance with the said proviso, we, the said William Brockedon and Thomas Hancock, do hereby declare that the nature of 5 our said Invention, and the manner in which the same is to be performed, are fully described and ascertained in and by the following statement thereof:—

The improvements we have made in the manufacture of articles where india-rubber or gutta percha is used consists of peculiar means of applying these substances to a variety of purposes to which they have not heretofore 10 been so applied, by means of the processes described in the Specification of a Patent granted to Mr. Alexander Parkes, dated the Twenty-fifth day of March, One thousand eight hundred and forty-six, entitled “Improvements in the Preparation of certain Vegetable and Animal Substances, and in certain Combinations of the same Substances alone or with other Matters.” The processes 15 enumerated in this Patent produce certain changes in the qualities of caoutchouc and gutta percha, some of them similar to those produced by sulphur and heat in the process now termed “vulcanizing,” in others purifying and colouring those substances, and by these means rendering them suitable to a great variety of purposes. 20

In this Specification we propose to follow Mr. Parkes generally in calling these substances by the names of caoutchouc and gutta percha, which will be found convenient, but we wish to be understood that when using these terms we intend to comprehend all those peculiar hydrocarbon substances known to botanists as a vegetable constituent, under the various names 25 by which “caoutchouc” or “india-rubber” is known. Some of these are derived from the country from which they are obtained, as Para, Assam, West Indian, Madagascar, Java, &c.; some names given by the natives, such as saikwah, juitawan, gutta tuban, gutta percha, dolla, &c.; others from the condition in which it is received, as liquid, cake, bottle, root, sheet, scrap, &c.; 30 and they differ also in color, some being black, others white, red, brown, yellow, mottled, &c. Many of these varieties are reported by Dr. Roxburg, Lieut<sup>t</sup>. Veitch, and others in the Transactions of the Agricultural and Horticultural Society of India; and these products also vary in their hardness from that of solidity of wood to that of the soft and viscous state of birdlime, which 35 does not harden naturally. And we would state that india-rubber, or the peculiar property of the vegetable matter first introduced into this country under that name, consists in this, that it is tapped from a tree or plant, and for the most part it coagulates, part of the fluidity being evaporated;

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the product thus obtained is not soluble in water, and in this particular it differs from ordinary gums. Sugar and starch, and, further, india-rubber and all other of the vegetable products, having the properties above mentioned, will on distillation produce caoutchoucine. These substances, under whatever  
5 name and however mixed and compounded, are all liquified by the same solvents, and all require in their preliminary manipulations and manufacture the same, or simple modifications of the same, modes of treatment as ordinary india-rubber, these being solvents also destructive distillation to obtain the spirit called caoutchoucine; also to rollers, masticating, spreading, cutting, and  
10 other machines; also to processes for coloring, embossing, printing, moulding, &c. &c., which are well known and been before described in the Specifications of other Patents, amongst others, in the Specifications of the Patents granted to the within-named Thomas Hancock, dated the Eighteenth of April, One thousand eight hundred and thirty-seven, the Twenty-third day of January,  
15 One thousand eight hundred and thirty-eight, the Twenty-first of November, One thousand eight hundred and forty-three, and the Eighteenth of March, One thousand eight hundred and forty-six, as well as to the first-named Patent of Mr. Parkes. The details of manipulation which are described in these Patents will be found amply sufficient for the guidance of any workman  
20 conversant with such manufactures, and we have found the proportions enumerated therein to answer well for general operations, and for the several purposes for which they may be required. With regard to dissolving varieties apparently different, such as ordinary india-rubber and gutta percha, it may be necessary to mention that the process is precisely the same in all respects with  
25 both during summer; and although the former may be dissolved at any of the ordinary temperatures of the atmosphere, yet the process is facilitated by heat, and may therefore at all times be carried on advantageously in the same room with gutta percha, which should have a temperature of from 80° to 90° Fah<sup>t</sup>. It is also necessary to keep both the spreader and the  
30 bed of the spreading machine heated when using gutta percha or compound, and the same remark applies to the masticating machine, say, from one hundred and ninety to two hundred degrees Fahrenheit. The principal defect of gutta percha consists in this, that, although much harder than ordinary india-rubber (meaning by that name that description which was  
35 first brought into this country) when at low temperatures, it becomes inconveniently yielding and plastic at comparatively low temperatures when compared with ordinary india-rubber; but it is found by treating it according to Mr. Parkes' Patent this property is materially obviated, both in respect to its hardness and capability of bearing heat. We would here observe, that when

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we hereafter adopt from Mr. Parkes' Specification the word "change," we use it to denote the same process or processes, and also that by the word "immersion" the mode of producing the change by immersing articles in solvents capable of producing such "change" is meant, which process we generally prefer. We render leather, cloth, linen, silk, and other fabrics and 5 materials partially or entirely waterproof by coating their surfaces, or uniting two or more of them together with caoutchouc, gutta percha, or a compound of these matters in a state of solution, or otherwise, as described in the Patents of the said Thomas Hancock before referred to, and we make the coated surfaces of these cloths either plain, colored, embossed, printed, or otherwise 10 ornamented, and then produce the "change" by immersion; these manufactures differing from those of Mr. Parkes' and Mr. Hancock's Invention, only inasmuch as operating on the manufactured article, in place of acting on the raw material of caoutchouc, gutta percha, or the compounds of these materials. A convenient mode of immersion with printed or dyed fabrics coated on one 15 side only, is to join up the selvages the whole length and the ends, and render the seam waterproof, and then immerse it in this bag-like form. When it is necessary to protect fibrous and other substances liable to injury by contact with the changing solvents, we coat or saturate them with glue size, and remove it afterwards by rinsing in warm water; or we employ an aqueous 20 solution of lac, which we afterwards remove by any suitable alkaline solution. By the same means we stop out the effect of the changing solvent in any part of an article formed of caoutchouc, gutta percha, or a compound thereof. These manufactures we introduce into a great variety of articles, such as cloaks, capes, coats, overalls, fishing stockings, collars, stocks, hats, caps, 25 bonnets, hat linings, hatbands, aprons, and other articles of dress or to be worn about the person, also table cloths, wrappers, carriage roofs, seats, and linings, portable baths, diving dresses, life preservers, beds, cushions, pads, and other pneumatic articles, printers' blankets, sieve cloths, card backs, draperies, hangings covering walls. These articles are made up by modes similar to 30 those commonly practised in making up caoutchouc goods. When these articles require seams or to be otherwise sewed together, the waterproofing substance (solutions of the above materials) employed to such parts will require afterwards to undergo the "change" by applying the converting solvent with a brush or otherwise. We sometimes make up garments or other articles of 35 dress, such as gloves, gaiters, shoes, boots, leggings, galoshes, overalls, aprons, portmanteaus, and other similar articles, either of leather, cloth, or other material, and then apply coatings of caoutchouc, gutta percha, or of their compounds in a state of solution, colored or plain, by dipping or by hand, with a brush or

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other means, and afterwards "immerse" them to obtain the change. We would here remark, that although gutta percha is improved by the "change" in respect to its electricity, it is still inferior in that respect to ordinary india-rubber, and still possesses so little elasticity that it should be introduced sparingly if at all, when that quality is required. Articles intended for inflation, such beds, cushions, pads, and other similar manufactures, we first make in the manner commonly practised in similar caoutchouc manufactories, employing either that substance or gutta percha, or a compound thereof, and "immerse" them afterwards. We prefer caoutchouc to gutta percha, the latter being too rigid for most of these purposes. When the exterior of the article is required to be of cloth or other texture, we protect the fabric when producing "the change" from the action of the changing agent by forming the air-proof lining in such a manner as to cover the whole interior surface of such fabric, and obtain the "change" by pouring in the changing solvent, allowing it to remain only for the necessary period. When the exterior of the article is to be formed of caoutchouc, gutta percha or a compound thereof, we stop up the orifice and immerse the article; and in all cases the coloring, embossing, printing, or otherwise ornamenting, we prefer to execute previously to effecting the "change." We also manufacture vessels intended to contain air, water, or other fluids, composed entirely of caoutchouc or gutta percha, or of a compound thereof, by the modes described in the Patents before referred to of the within-mentioned Thomas Hancock, and afterwards we immerse them to produce the change. We also manufacture caoutchouc, gutta percha, or a compound thereof, with or without gritty or coloring matters and fibrous substances, and form them into sheets of any required thickness by means similar to those described in the Patents of the said Thomas Hancock before referred to, and employ them in the formation of any of the articles herein described, producing the "change" either when in the form of sheets or after making them up into such articles as may be thought most convenient. From these sheets, whether combined with fabrics and fibrous and other substances or not, we manufacture straps for driving machinery, deckle straps, reins, traces, and other parts of harness, horse collars, horseshoe linings, and horse furniture, such as knee caps, fetlock boots, parts of saddles and saddling, soles of shoes and boots, portmanteaus, balls, belts, gaiters, trouser straps, braces, shoulder straps for stays, waistcoat and waistbands, springs, shoe and boot fastenings, shoes, boots, galoshes, uppers, quarters, and vamps, air chambers, bottles, and other vessels for containing fluids, printers' furnishes, covering and lapping rollers, bowls, and other similar articles, roofing, sheathing, washers for water, steam, and other joints, hose pipe, and tubing

*elasticity*

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railway valves and packing blocks or springs to prevent the recoil of guns,  
 pump valves and buckets, covering stoppers and bungs, covers of pickle jars,  
 capsules for bottles, bandages, knee-caps, ligatures, and other surgical appa-  
 ratus; a variety of embossed articles such as fancy articles of dress, bracelets,  
 ornamental edgings and borders, imitations of crape, fringe, and lace, picture 5  
 frames, ornaments for the decoration of furniture, forms and impressions to  
 print from type. We also manufacture cushions for billiard tables, by uniting  
 any number of sheets together either entirely of caoutchouc, or of a compound  
 of caoutchouc, gutta percha, or intermixtures of sheets of both, in alternate  
 layers, to modify the degree of elasticity, and immerse them to produce the 10  
 change. These sheets we also apply to cover and protect plates of metal and  
 to the lining of metallic and other vessels and to chests and tanks of wood or  
 other material, effecting their union either by heat or by means of the ordinary  
 solution of caoutchouc, or of the compounds, and produce the "change" after  
 the sheets are applied, or if the "change" be first produced to the sheets we 15  
 apply the cement hereafter described. From these sheets we also manufacture  
 springs for carriages and railway buffers, in the forms and by similar means to  
 those described in the Patent of the said Thomas Hancock, of One thousand  
 eight hundred and forty-six, uniting the parts by means therein directed, or as  
 regards gutta percha and the compound thereof, by the means hereafter 20  
 mentioned, and we then "immerse" them to produce the change. We also  
 manufacture caoutchouc, gutta percha, and compounds thereof, into thread,  
 and produce new manufactures of such threads by combining the changing  
 process of Mr. Parkes' Patent in this manufacture, and we produce different  
 degrees of elasticity by varying the proportions of the compound. The time 25  
 of applying the changing process may be either before or after cutting the  
 substance used into thread. We prefer, however, to make sheets of the  
 desired thickness of the thread, then to obtain the "change," and then to cut  
 the same into thread, which we do by coiling a sheet thereof around a cylinder  
 of wood or other fit material, using a solution of shellac over the whole surface 30  
 of the sheet, by which the coiled mass will be retained together. This  
 cylinder we put on centres and cause it to revolve against a knife constantly  
 supplied with water, by which successive discs of thread are cut off, the  
 cement being afterwards discharged by boiling in a solution of potash. When  
 the sheets are of considerable thickness for coarse thread, we find it only neces- 35  
 sary to use the cement towards the outer coil or end of the sheet. India-rubber  
 or gutta percha thread or threads, of their compounds, may be made into cords,  
 ropes, braidings, plaitings, webs, whips, and other similar articles, and then  
 immersed, by which we not only effect the change but firmly unite all the threads



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into one mass, and in doing so different colored threads may be combined. The handles of whips or parts of the articles may have wood or other material introduced during their manufacture to give those parts additional strength or stiffness. If elastic thread is first woven up with other thread of animal fibre,

5 I take the woven fabric in the elastic state and extend its length and retain it stretched during the immersion, and also after it is removed until the solvent taken up is evaporated; the thread when liberated will contract considerably. We manufacture caoutchouc, gutta percha, and the compounds thereof, into various forms and patterns, by making such forms in or upon moulds, plates,

10 and engraved or otherwise wrought and figured surfaces, sunk or in relief, by means similar to those described for caoutchouc in the aforesaid Specification of Thomas Hancock, and afterwards immerse them either before or after removing them from the moulds or forms when immersed. Moulded or other articles which have fine impressions, or are of a delicate or light construction,

15 we find it convenient to give them a dip in the changing solvent and out again immediately to harden the surface, and when dry to immerse them for the required period. We manufacture gutta percha, or compounds thereof, into gun or pistol stocks, umbrella, knife, sword, and other handles, by means of moulds, on which we engrave any pattern or design, or we make them of any

20 desired color or color them after leaving the mould. We sometimes form a foundation of wood or metal or other material, which we introduce into the interior of such articles before it is moulded, and when all is completed we immerse them. If the article is made entirely of gutta percha without the use of solvents, we proceed to operate in the manner directed in the notice

25 issued by Doctor Montgomery, in November, One thousand eight hundred and forty-three, when he introduced this substance into this country thro' the Society of Arts, by whom several manufacturers and other persons were furnished with samples and an account of his mode of treating it. We cannot give it better than in his own words:—

30 “The gutta percha, when dipt in water near boiling, can then be readily united  
 “ and becomes quite plastic, so as to be formed before it cools to 130° or 140°  
 “ in any required form, which it retains at any temperature below 110°.”  
 We “take as much of it as is necessary, throw it into hot water, when it  
 “ soon softens and becomes as plastic as putty, when it can be moulded as  
 35 “ required.”

It is desirable to warm the moulds to about a blood heat. When the simple gutta percha is required to be made into sheets the process is of the most simple kind, as it is only necessary to bring it to this plastic state by heat and treat it by the means directed in similar operations, with compounds, in

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the Specification of the said Thomas Hancock's Patents of One thousand eight hundred and thirty-seven, and One thousand eight hundred and thirty-eight, before referred to; they may then be immersed, or they may be first employed for making up any article and immersed to produce the change. Thus by combining the mode of making sheets invented by the said Thomas Hancock with 5 the process of Mr. Parkes an improved manufacture of sheets of gutta percha will result. Black lead, gritty or coloring matters, and fibrous substances may, if wished, be worked in previously. To prevent the gutta percha, or its compounds, adhering to the rollers, we cover them with calico or other fabric, and keep the fabric moistened with a solution of soap or soda. The sheets are more evenly 10 rolled and buckle less when the gutta percha contains coloring matters, such as ochre or plaster of Paris. We sometimes use gutta percha not previously formed into sheets, and when softened by heat to the consistence of putty, as recommended by D<sup>r</sup>. Montgomery, and employ it in the formation of a great variety of articles by moulding with the hand or otherwise, and then 15 immerse them to produce "the change." When gutta percha alone, or compounds thereof, containing but a small proportion of caoutchouc, is formed into blocks by the means before referred to, shavings and sheets can be readily taken therefrom with a common joiner's plane, and such planes may be made of any required size and strength, and set to produce varied thick- 20 nesses of sheets. We form gutta percha, or compounds, into cylindrical blocks and cut by the plane or other cutter straps helically therefrom. These narrow sheets when immersed and thereby "changed" form straps for driving machinery and other uses; but we would state the fault of gutta percha driving straps is their being liable to suffer by abrasion and heat; this, however, is 25 much obviated by "the change." And in some cases these articles may with advantage receive a coating of caoutchouc, or compound thereof, previously to immersing them. Blocks of this material cut up more freely when they contain a considerable portion of finely pulverized pigment or earthy matter, such as ochre or pipe clay. These blocks may be drilled with a common 30 drill; portions of them may be turned in a lathe, screws cut and holes tapped for them by common screw tools. Gutta percha, and compounds thereof, may be carved and morticed, and various articles of furniture made from it, and then immersed to produce "the change." We find that some articles formed of gutta percha are improved by being coated with caoutchouc, colored or plain, 35 and then immersed to produce the change, and the same remark applies to the coating of caoutchouc with gutta percha or compound. For any articles of great delicacy, and when a light color is desirable, we purify the gutta percha in the manner described in Mr. Parkes' Patent. We employ caoutchouc,

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gutta percha, or compound in binding books, portfolios, and similar articles in the manner commonly practised with caoutchouc, and immerse the necessary parts, or otherwise apply the changing solvent to them; by this means we obviate the great defect in caoutchouc bookbinding, that of stiffening in cold  
5 weather, as we render the backs always alike flexible and elastic. Leather or cloth coated and embossed, colored, printed, or otherwise ornamented as before described, we employ for the surface of the covers of books and other similar articles. We manufacture a material from caoutchouc, gutta percha, or compound suitable for many purposes, by cutting out with punches, or by other  
10 means, from sheets of different colors, patterns, or designs, so formed and arranged that the pieces cut from a sheet of one color, say, red, shall exactly fit and coincide with that cut from another, say, black, in the manner of buhl-work; these pieces of different colors are placed one within another, and cemented to cloth or other material, and submitted to pressure with a gentle  
15 heat, and then immersed to produce the change. Instead of placing these pieces within each other they may be placed singly upon plain or colored sheets, or coated cloth, so as to form patterns sunk, or in relief, and then immersed to produce the change; any of these, when cemented to cloth, are suitable for table cloths, or to be glued or attached to furniture, and other uses. When  
20 made thicker, and from bolder designs, and of cheaper colors, or cloth, or other material, some of them are suitable for covering floors, staircases, &c. We cover, or completely case and envelope, so as if necessary to seal hermetically, articles or vessels made of wood, metal, leather, paper, cast plaister, cord, string, and other substances, by dipping them in a thin solution  
25 of caoutchouc, gutta percha, or compound, and when dry immerse them to produce the change. The coatings may be repeated before immersion until any required thickness is obtained. Other articles variously compounded, such as of treacle and glue, or the like matters, after being made of the required form, may be dipped into the solutions of caoutchouc, or gutta percha, or their  
30 compounds above mentioned, and thereby rendered impermeable, and then immersed to produce the change. Various substances, such as wood shavings or dust, cork, leather, pulp, and similar matters mixed and cemented with glue, paste, or gum, and formed into any desired shape, and when dry may be dipped in a solution of caoutchouc, gutta percha, or compound thereof, and  
35 immersed to produce the change. We manufacture an article very much resembling sponge, by mixing with a solution of caoutchouc, gutta percha, or a compound thereof, a solution of chloride of sulphur, as described by Mr. Parkes; after a short time the whole becomes coagulated or gelatinized; it is then exposed to be exposed to a temperature of about two hundred and

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twelve degrees in water or otherwise, until the solvents are evaporated, and if greater stiffness is desired it may be immersed in the changing solution. We prefer caoutchouc to gutta percha for these purposes.

Another mode of proceeding is to subdivide into larger or smaller pieces, either caoutchouc or a compound, or both, preferring the former, and filling 5 rather loosely with these pieces a vessel of any open or net-like construction of the required form, and immerse it to produce the change, (allowing the superfluous solvents to run off,) by which means the pieces will be sufficiently united to form a compressible and elastic mass suitable for cushions, pads, and other purposes. We manufacture hose-pipes and tubing of caoutchouc, gutta 10 percha, and compound in various ways. We take threads made of either of the above of a size proportioned to the hose, and braid it upon a core formed of rope which has previously been coated with treacle and glue, or glue and whitening, and made perfectly smooth. The braiding may be repeated, or a coating of either of the solutions may, if necessary, be given, and when dry 15 rolled under pressure with a gentle heat; we finish by immersing the whole, and thereby produce the change and unite all the coatings; the core is afterwards removed by boiling in water. For fancy tubing the threads may be of various colours.

By another mode we take woollen or worsted yarn of a size proportioned 20 to the strength of the required hose or tubing, and saturate and coat it with a solution of caoutchouc, gutta percha, or a compound thereof, until the fibres are all covered, and when dry we braid it upon a core as above; we then roll it under pressure with heat, or, if necessary, give it a previous coat or two of either of the solutions, and then immerse it to produce the change. 25 We manufacture these articles also by winding these threads or narrow strips spirally round the core, keeping the edges quite close, and, if necessary, wind another tape or thread over the first in the contrary direction; we then roll them well under pressure and heat, and immerse them to produce "the change," removing the core as before mentioned. Woven hose and hose 30 and tubing manufactured of leather, of felt, coated or lined with the above, or any other mode in which caoutchouc or gutta percha are employed, we treat by immersion to produce the change, either during their manufacture or when finished. We also coat the exterior or interior surface of ordinary caoutchouc hose and tubing with either of the above solutions in their ordinary state, or 35 colored, and immerse them afterwards to produce the change. Silk or wool, or other animal fibre, is most suitable when used in combination with these substances in articles intended for subsequent immersion to produce the change. For some purposes we cover or coat the surfaces of caoutchouc, gutta percha,

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or compound with ground flock or other suitable powdery substance, by giving the article to be flocked a coating of caoutchouc varnish, and then dusting or spreading the flock or powder over it; when dry we immerse the article to produce the change. Such surfaces among many other uses are particularly  
5 suitable to the linings of vamps and the interior of shoes, galoshes, &c. Sheets or other articles formed wholly or in part of vulcanized or ordinary caoutchouc, we color by dipping or otherwise coating them with colored caoutchouc varnish, and then immerse them for a short period, thus producing colored surfaces to vulcanized india-rubber or caoutchouc. [As the union of these substances,  
10 caoutchouc and gutta percha, can be so readily effected before "the change," we prefer to do so when convenient; but when joinings are necessary to be made after "the change," we employ the cement by which we unite vulcanized caoutchouc, composed of vulcanized caoutchouc melted by heat, and when nearly cold add to and mix with it an equal quantity of the changing solvent;  
15 these are to be well stirred together at a gentle heat. We prefer to apply it warm in thin coatings, and when dry, if necessary, we give both surfaces a second coat; the union should take place when the cement is nearly dry, and the parts kept under gentle pressure for some time in a warm place. It is difficult to describe the exact condition required in the state of the cement as  
20 the best moment of junction, but it should be nearly dry; a little practice will, however, enable a workman to accomplish the object. When articles made of caoutchouc, gutta percha, or a compound thereof, are required of considerable thickness, Mr. Parkes recommends a weaker solution of the chloride of sulphur, and the article to be immersed for a somewhat longer time; and we  
25 have also found that caoutchouc and the compounds may, for many purposes, be made of any required thickness by uniting sheets or other forms together by pressure as they come wet, or only partially dried, out of the immersion. If the surface of any inflexible or other article, coated or otherwise, treated with or made of caoutchouc, gutta percha, or a compound thereof, requires in  
30 whole or in part to be more or less indurated, this may be done by frequently immersing the article in the changing solvent (allowing it to become nearly dry each time) until it becomes, if necessary, as hard or harder than ivory, and may then be filed and wrought with tools and highly polished; for such purpose we have found that the proportion of chloride of sulphur in the  
35 changing solvent may be increased so as to expedite the hardening. For producing "the change" we wish always to be understood to prefer employing the chloride of sulphur dissolved in bisulphuret of carbon or other fit solvent of caoutchouc in the proportions mentioned by Mr. Parkes, but do not confine ourselves thereto, immersing the articles for the periods mentioned by

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him, varying them in both respects according to the thickness of the articles or the degree of change we wish to produce. We have also found that equal parts of bisulphuret of carbon and coal naptha to answer well, but in this case the naptha must be very pure.

In witness whereof, we, the said William Brockedon and Thomas Hancock, 5  
have hereunto set our hands and seals, this Nineteenth day of May,  
in the year of our Lord One thousand eight hundred and forty-seven.

WILLIAM (L.S.) BROCKEDON.

THOMAS (L.S.) HANCOCK.

AND BE IT REMEMBERED, that on the Nineteenth day of May, in the 10  
year of our Lord 1847, the aforesaid William Brockedon and Thomas Hancock  
came before our said Lady the Queen in Her Chancery, and acknowledged  
the Specification aforesaid, and all and every thing therein contained and  
specified, in form above written. And also the Specification aforesaid was  
stamped according to the tenor of the Statute made for that purpose. 15

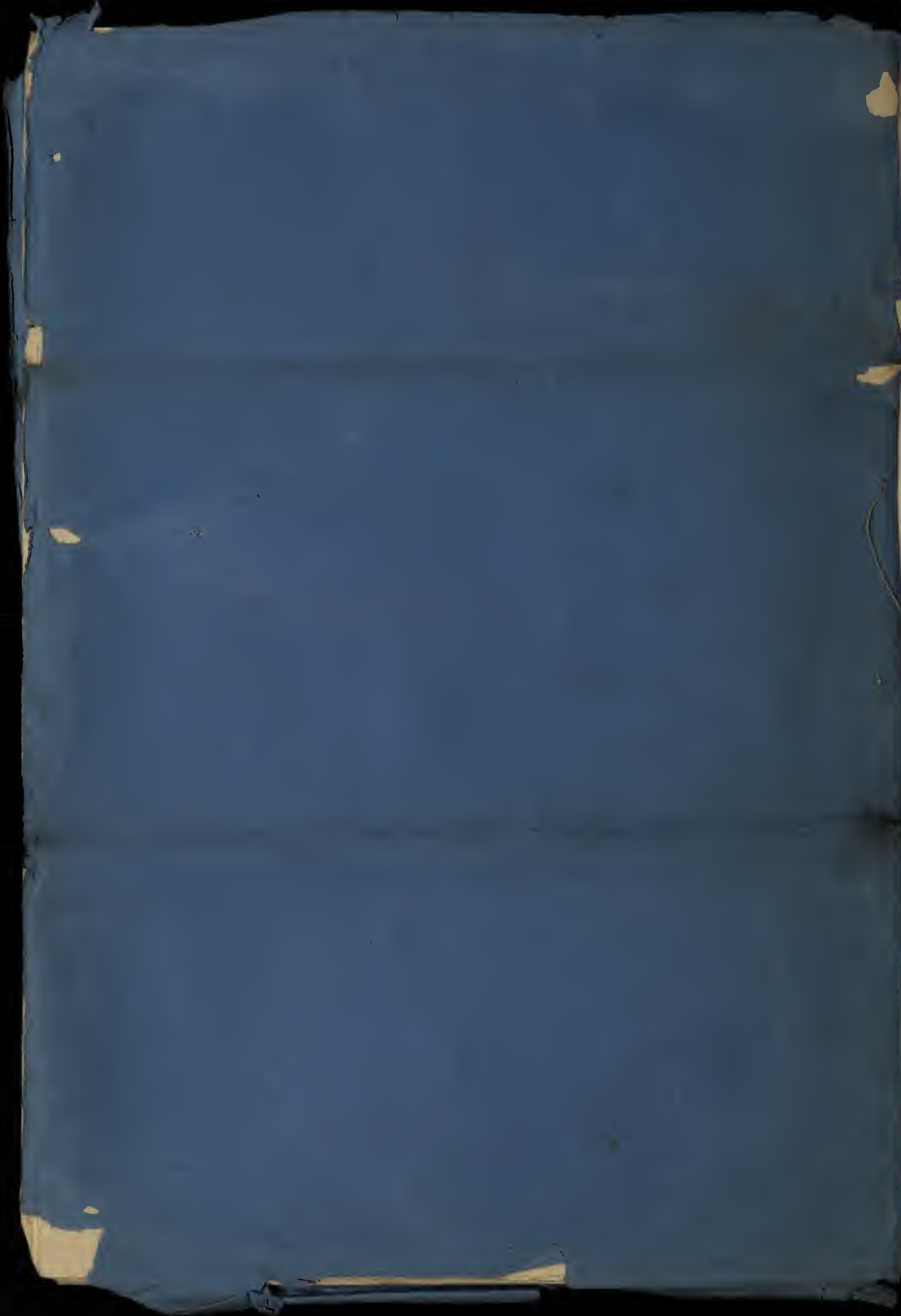
WILSON.

Enrolled the Nineteenth day of May, in the year of our Lord One thousand  
eight hundred and forty-seven.

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1855.







U. S. C. C. }  
Mass list }

Collender vs. Same

Complainants Exhibit  
Same Patent.

Richard Case

(21)

J. E. GAME.

Billiard-Table Cushions.

No. 142,435.

Patented September 2, 1873.

FIG. 1.

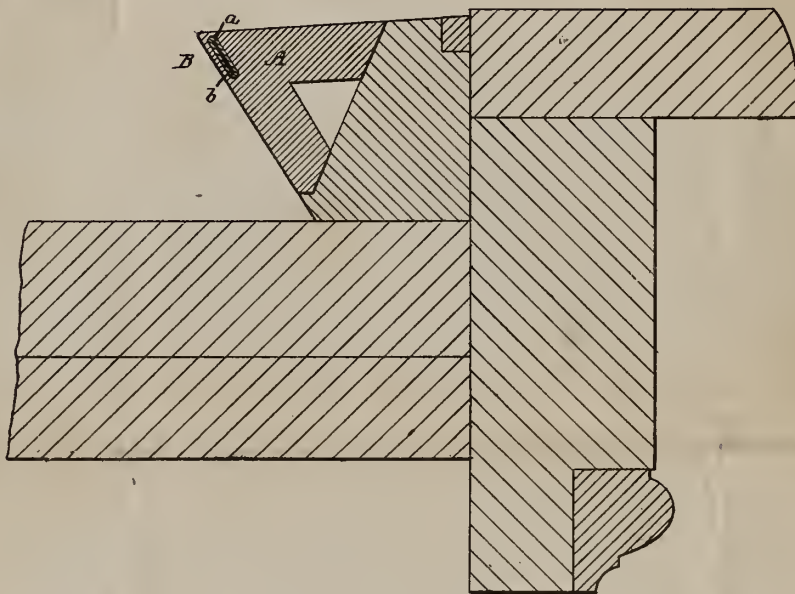


FIG. 2.



WITNESSES.

*J. M. Eloy.*  
*John J. Baran.*

INVENTOR.

*John E. Game*  
*per*  
*Brown Brothers*  
*Attorneys.*

Compliments of the Patent Office  
Letters Patent of the United States No 142435.

# UNITED STATES PATENT OFFICE.

JOHN E. CAME, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN BILLIARD-TABLE CUSHIONS.

Specification forming part of Letters Patent No. **142,435**, dated September 2, 1873; application filed May 13, 1873.

To all whom it may concern:

Be it known that I, JOHN E. CAME, of Boston, Suffolk county, State of Massachusetts, have invented an Improvement in Billiard-Cushions, of which the following is a specification:

The main object of this invention, as of many other prior inventions heretofore patented, is to construct the cushion of billiard-tables so as to prevent any substantial or practical embedment of the balls therein, and, at the same time, not detract materially from its necessary properties of reaction under the impact of the balls, thus, as is well known, insuring a more accurate and perfect deflection of the balls by the cushions. For this object among other constructions the cushions have been provided with a metallic spring-band or wire, located in some cases on and against the impact face of the cushion, and in other cases within the body of the rubber of which the cushion was made, and by such constructions the object sought has been, to a greater or less extent, secured. Use, however, has demonstrated that, while such bands or wires are practically the best resistant to the embedment of the ball, with a proper preservation of elasticity to the cushion, yet, owing to the imperfect union heretofore made between the metallic wire or band and the rubber, the wire or band soon loosens in, or it opens from, the rubber, or the rubber loosens about or opens from it, causing not only a grinding away and deterioration of the rubber, but, also, as the said separation of the rubber and metallic wire or band necessarily does not occur evenly at all points of the cushion, a proportionate uneven and imperfect elastic action of the cushion, at different points of its length. The object, therefore, of this invention is to substantially and and practically unite the metallic wire or band and the rubber, or sufficiently so, as in the use of the cushion, to prevent their separation, and thus the resulting deterioration of the cushion and its consequent inaccuracy in action under the impact of the balls. This object I accomplish by the use, within the rubber body of a billiard-cushion, of a metallic band or wire that, from end to end, is provided with a woven fabric casing or covering. This has such a

close and tight contact upon the wire or band as, under any practical strain between the two—that is, either by a lengthwise pull upon the wire, band, or casing, or upon both wire and casing, by a lateral pull, or by a wrenching or twisting of casing wire or band, or both—to substantially prevent the separation of the metal wire or band from its casing, thereby preventing, through the union of the rubber and the woven casing, the separation of the wire or band from the rubber.

In the accompanying plate of drawings a billiard-cushion constructed according to the present invention is shown, Figure 1 being a vertical cross-section, and Fig. 2 a face view, of a metallic band cased or covered with a woven fabric.

A in the drawings represents a billiard-cushion for billiard-tables, which cushion may be made of India rubber in any of its ordinary elastic compounds, and as to shape of the general outline shown, or otherwise, as is now common for billiard-cushions, the shape, compound, and mode of attachment to the table forming no part of this invention. *a* is a band made of spring-steel or of any other suitable spring metal, and *b* a woven fibrous casing or covering to band *a*. This fibrous casing *b* tightly and closely fits and hugs the band, so that, under any practical strain, the band will not move in the casing, and the casing will not slip or move upon the band, and one mode of securing this close fit and hug of the fibrous casing on the band is to weave the casing directly on the band in any of the well-known looms or machines adapted for such weaving.

In the manufacture of the cushion A the compound band *a b* (metal *a* and woven case *b*) is to be entirely surrounded by rubber, and it is to be along the length of and just within the cushion in a line parallel to its face B, against which, in the use of the table, the balls strike. The location, as above stated, of the compound band *a b* is obtained by suitably securing it in the rubber-cushion mold before vulcanization; and, obviously, by vulcanizing the rubber, a union is made between it and the woven casing of sufficient strength to practically resist all strains at such line of joint resulting from the impact of the balls on the

cushion-face B, the woven casing under such strains being held to the band by its tight and close fit and hug thereof herein above stated.

A cushion constructed as herein described obviously not only prevents the embedment of the ball, but also prevents a separation between the resistant used to prevent said embedment of the ball and the rubber of which the cushion is made—a result of much importance.

In lieu of using a flat metal band, *a*, a round band or wire may be employed, but a flat band is preferable.

Having thus described my invention, I do not claim, broadly, the use of a metal band, *a*, in a rubber billiard-cushion; but

What I do claim as my invention is—

An India-rubber billiard-cushion constructed with an embedded spring-band, *a*, having woven about it a tight and close fitting fibrous casing or covering, *b*, all substantially as described, for the purpose specified.

JOHN E. CAME.

Witnesses:

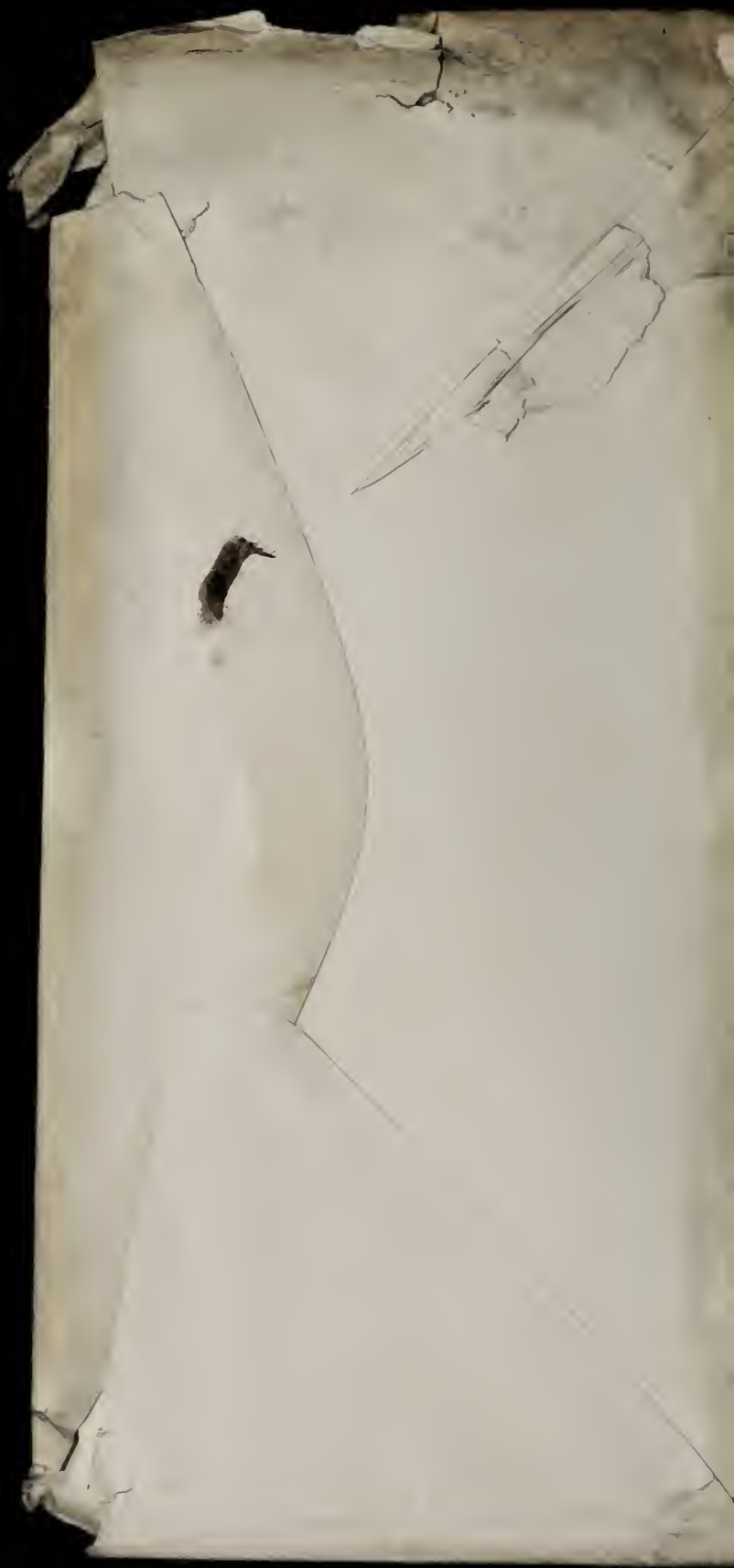
ALBERT W. BROWN,  
EDWIN W. BROWN.

597

Collection

of

Patents



10

Answer,  
Filed Oct. 4, 1875  
United States Circuit Court,  
Massachusetts District

Hugh W. Collander  
v.  
John E. Came et al } In Equity

*Plat*  
The answer of John E. Came and James E. Came defendants, to the bill of complaint of Hugh W. Collander.

These defendants reserving to themselves all right of exception to any and all matters contained in the said bill of complaint, for answer thereto or to so much thereof as they are advised is material to be answered say:—

*James*  
3 That they are informed and believe that letters patent of the United States bearing date the 12th day of January 1858, and purporting to grant to the said Hugh W. Collander for the term of fourteen years from the said date thereof, the full and exclusive right and liberty of making, constructing, using and vending to others to be used, a certain alleged improvement in billiard table cushions were issued from the Patent Office of the United States; but they deny that the said Collander was the original and first inventor of the billiard table cushion attempted to be therein described and claimed as new; deny that the same had not been known and used before the alleged invention thereof by the said Collander; and deny that by the issue of the said letters patent the complainant acquired or ever became possessed of any lawful or valid grant.

And these defendants are further informed and believe that the said letters patent were





thereafter surrendered and cancelled, and that new letters patent, bearing date the 19th day of March 1867, and purporting to be for the same invention upon an amended specification were issued to the complainant for the residue of the term of fourteen years from the said 12th day of January 1858; but deny that the said original letters patent were inoperative by reason of such a defective specification as was or could be lawfully corrected by the said surrender and reissue; deny that said original letters patent were surrendered to correct any defect thereof, but aver that the same were surrendered to claim other inventions and improvements not made by the complainant and that the said reissued letters patent are not for the same invention and improvement as the said original thereof; but are invalid and void.

And these defendants are also informed and believe that a certificate was afterwards made by the Commissioner of Patents upon the said letters patent, purporting to renew and extend the same for for the further term of seven years from the expiration of the first term of fourteen years from the 12th day of January 1858; but deny that the proceedings had in respect thereto were in accordance with the Statutes of the United States in such case made and provided, and aver that the grant of the said extension was contrary to law and was and is invalid and void.

And these defendants further answering upon knowledge, information and belief, deny that the complainant has, since the issue of the said letters patent been in the exclusive possession and enjoyment of the invention



purporting to be secured thereby, or would be now except for the doings of these defendants and others; and deny that the said alleged right has been or is of great value.

And these defendants further answering upon their knowledge, information and belief, deny that they have since the 19th day of March 1857, or at any other time injured or contrived to injure, the complainant, or defrauded him of any profits or advantages, if such there could have been, which might or would have accrued to him from the exercise of any rights and privileges secured by said letters patent; deny that they have at any time at the City of Boston or elsewhere in the United States, unlawfully and wrongfully made, used, and sold any number whatsoever of cushions for billiard tables, made in accordance with the description contained in the specification annexed to said letters patent or embodying in their construction and mode of operation the alleged invention or any substantial or material part thereof described in the said letters patent; or that they have made, sold and used any number whatsoever of the new cushions for billiard tables described in the specification annexed to said letters patent, or are now unlawfully and wrongfully making, selling, and vending to others to be used any number whatsoever of cushions for billiard tables made in accordance with the description contained in the said specification; or in the manner and mode described therein; but aver that the cushions for billiard tables which they have made and sold and are now making and selling are constructed in accordance with letters patent of the United States granted to the defendant John C. Case September 2d, 1873.



And these defendants further answering upon knowledge information and belief, deny that they have derived and received or are deriving and receiving, great gains and profits or any profits whatsoever from the sale and use of cushions for billiard tables, made in accordance with the specification of the said letters patent of the complainant; and deny that they have deprived him or are still depriving him from receiving the gains and profits from the exclusive right, if any he has, to use the alleged invention and improvement claimed in his said letters patent.

And these defendants further answering upon knowledge, information and belief, deny that the complainant has sustained damages in the sum of ~~five~~ thousand dollars or in any sum whatsoever, by reason of their infringement of any rights alleged to be secured by his said letters patent, as charged in the said bill of complaint.

And these defendants further answering upon knowledge, information and belief, aver, that the alleged invention or substantial and material parts thereof set forth and claimed as new in the said issued letters patent, were before the alleged making or discovery thereof by the complainant, described in the specification of letters patent of the United Kingdom of Great Britain and Ireland, granted to William Brockedon and Thomas Hancock November 19th, 1846, and numbered 11455 for that year; and known to and used by the following named persons at the places specified, to wit: Philip Dorr of Roxbury now a part of Boston at said Boston; John Cortwell, George Thompson, Jeremiah S. Stevens, Anasa W. Bailey, Joseph Gardner and Theodore Mitchell all of and at said Boston; Daniel D. Winant of Williamsburgh in the State of New York, Levi Decker of Belleville in the State of New Jersey and Henry



4  
Declar

V. Moore of the City of New York all at the said City of New York, and Nathaniel Delaney of the said City of New York at Camp <sup>Pres in the State of California.</sup>  
 And these defendants for the reasons hereinbefore recited, submit that they ought not to be decreed to account with and pay over to the complainant any profits whatsoever, or to be restrained as in the complainant's said bill is prayed; but without admitting that any other matter contained in the said bill of complaint, material to be answered unto and not herein sufficiently answered, is true to their knowledge or belief, submit that the complainant is not entitled to any relief whatsoever against them; all of which these defendants are ready to aver, maintain and prove, as this Honorable Court shall direct and may to be hence dismissed with reasonable costs and charges, in this behalf most wrongfully sustained.

John. C. Coane  
 James E. Coane

Geo. Roberts & Bro.  
 Solicitors <sup>at</sup> of Counsel.  
 County of Suffolk  
 State of Massachusetts  
 Circuit Court United States

Subscribed and Sworn  
 to before me this Second day of  
 October A. D. 1875  
 Edwin W. Brown  
 Notary Public.

597  
Hugh W. Tallman.  
vs  
John E. Lane et al.

(2)

~~Deputy Sheriff~~





Hillard, Hyde & Dickinson,  
Attorneys and Counsellors at Law,  
No. 14 Pemberton Square,

Geo. S. Hillard.  
Henry D. Hyde.  
M. F. Dickinson, Jr.

Boston, May 2 1877

Clerk U. S. Circuit Court

Please deliver to the bearer  
the pieces of evidence used  
as exhibits in the case  
of Colman v. Canine -  
In Equity

J. E. Maynard

Del'd to messenger with instructions  
to deliver to Mr. Maynard -  
all exhibits (a box) all checked &  
found correct -

A. N. J.

Edlender

v.

Same

Facilitate

Law Offices of,  
Geo. L. & R. L. Roberts.  
34. School Street.

Boston. Feb. 4th, 1876.

J. G. Stetson Esq.,

Dear Sir;

In Collman v. Lane et al

Will you please send me the exhibits  
sent from New York? Nos. 7, 8 & 9  
I believe.

Yours Very Truly

R. L. Roberts.

Collman v. Lane et al.

Feb 4th, 1876

Received of J. G. Stetson Esq., exhibits  
Nos. 7, 8 and 9 in the above entitled  
cause.

Geo. L. Roberts & Bros.

J. S. Titson Esq.,  
140 Dumont St.,

Ballou  
St.  
Barnes & Co.

Collender

vs.  
Carne

Exhibits in Judge's Package:

Compl'ts Ex. Carne Patent - No 142,435 - Sept. 2<sup>nd</sup> 1873  
Dependants " No. 24 - Let. Pat. Collender No 19074 - Jan. 12, 1855  
Compl'ts " Collender Reissue. No. 2511 - March 14, 1867  
No. 22 - Spec. Sup. Let. Pat. Brockedon & Hancock No. 11,455

March 1, 1877

Recd from files exhibits  
No. 24 & Collender Reissue  
J. E. Maynard  
Cry

Colburn 547

James

Miss J  
Guy's Package

Receipt

Circuit Court of the United States  
District of Massachusetts

No. 597.

In Equity

Hugh W. Colander

v.

John E. Cane et al.

Amendment to Defendants Answer.

These defendants further answering upon knowledge, information and belief aver that if the complainant ever had any cause of action or was ever entitled to any equitable relief against them by reason of any practise by them of the mode of constructing billiard cushions set forth and claimed in the complainants said visseu letters patent, or by reason of their use of billiard cushions manufactured in accordance with such mode of constructing prior to the twenty-sixth day of July in the year eighteen hundred and sixty-nine, the said cause of action or ground for relief did not arise or accrue within six years before the complainants said bill was filed or these defendants served with process thereon; nor have these defendants at any time within six years before the complainants bill was exhibited or process thereon sued out against them or at any other time or times promised or agreed to come to any account or acknowledged or acquiesced in any claim or claims of the complainant concerning or in respect to the mode of constructing billiard cushions

practised by them or the billiard cushions resulting there  
 from; that in and by virtue of a certain statute law of  
 the Commonwealth of Massachusetts, enacted on the thirtieth  
 day of February, in the year 1787, and entitled "An act for  
 the Limitation of Personal Actions and for avoiding Suits at Law,"  
 it was provided, among other things, that all actions of account  
 and upon the case, other than such accounts as concern the  
 trade of merchandise between merchant and merchant, their  
 factors or servants, shall be commenced and sued within  
 six years next after the cause of such actions or suits and  
 not after; that the said law continued in force until  
 reenacted in substance as part of the Revised Statutes  
 of the said Commonwealth, Chapter 120, Section 1, passed  
 on the fourth day of November, 1835, and has since  
 become a part of the General Statutes of the said Com-  
 monwealth, Chapter 155, Section 1, passed on the twenty-  
 eighth day of December, 1859, and still in force; that in  
 and by virtue of a certain statute law of the United States  
 enacted on the twenty-fourth day of September, in the year  
 1789, and entitled "An Act to establish the judicial Courts  
 of the United States," it was provided that the laws of the  
 several States, except where the Constitution, treaties or stat-  
 utes of the United States shall otherwise require or provide,  
 shall be regarded as rules of decision in trials at common  
 law in the courts of the United States in cases where they  
 apply; that such law has ever since continued in force,  
 and was, on the twenty second day of June, in the  
 year 1874, reenacted with the Revised Statutes of  
 the United States, Title XIII, Chapter 12, Section 721;  
 that the laws of the Commonwealth of Massachusetts  
 limiting personal actions, and adopted by the statutes  
 of the United States aforesaid as rules of decision



in trials at common law in the courts of the United States, apply, in like manner, to cases in equity over which the said courts have concurrent jurisdiction at law; that this court, within its equity jurisdiction, is governed by rules conformable to the statutes of limitation, aforesaid, and that by force of the same and the principles of equity, the complainant is not entitled to any account as prayed for in his said bill prior to the 29th day of July in the year 1869, and is barred from maintaining and prosecuting this suit to recover any damages or profits for or by reason of any acts of the defendants prior to the said 29th day of July in the year 1869.

By their Solicitors  
Charles Robertson Esq.

Joseph W. Blandin

John S. Bane et al.

Announcement to

Deponents Answer.



Circuit Court of the United States.  
District of Massachusetts

No. 597.

In Equity

Hugh W. Colander

v.

John E. Cane et al.

Motion for leave to amend Answer.

The defendants in the above entitled cause hereby move this honorable Court for leave to amend their answer to the complainants bill by pleading the statutes of limitation and the rules of equity conformable thereto in respect to so much of the relief prayed for as concerns the acts of the defendants prior to the 26th day of July 1869.

And the defendants further pray this honorable Court to amend its interlocutory decree in the above entitled cause, by limiting the inquiries and report under the order of reference to the Master to periods of time subsequent to the 26th day of July 1869.

By their Solicitors  
C. S. Roberts & Co

George W. Colburn

1877

or

John S. Lane et al.

Motion for leave to

amend answers.



157

U. S. Circuit Court  
District of Massachusetts }

Hugh W. Hollender In Equity

vs.

John E. Lane et al.

Replication  
Filed Nov 3 1887

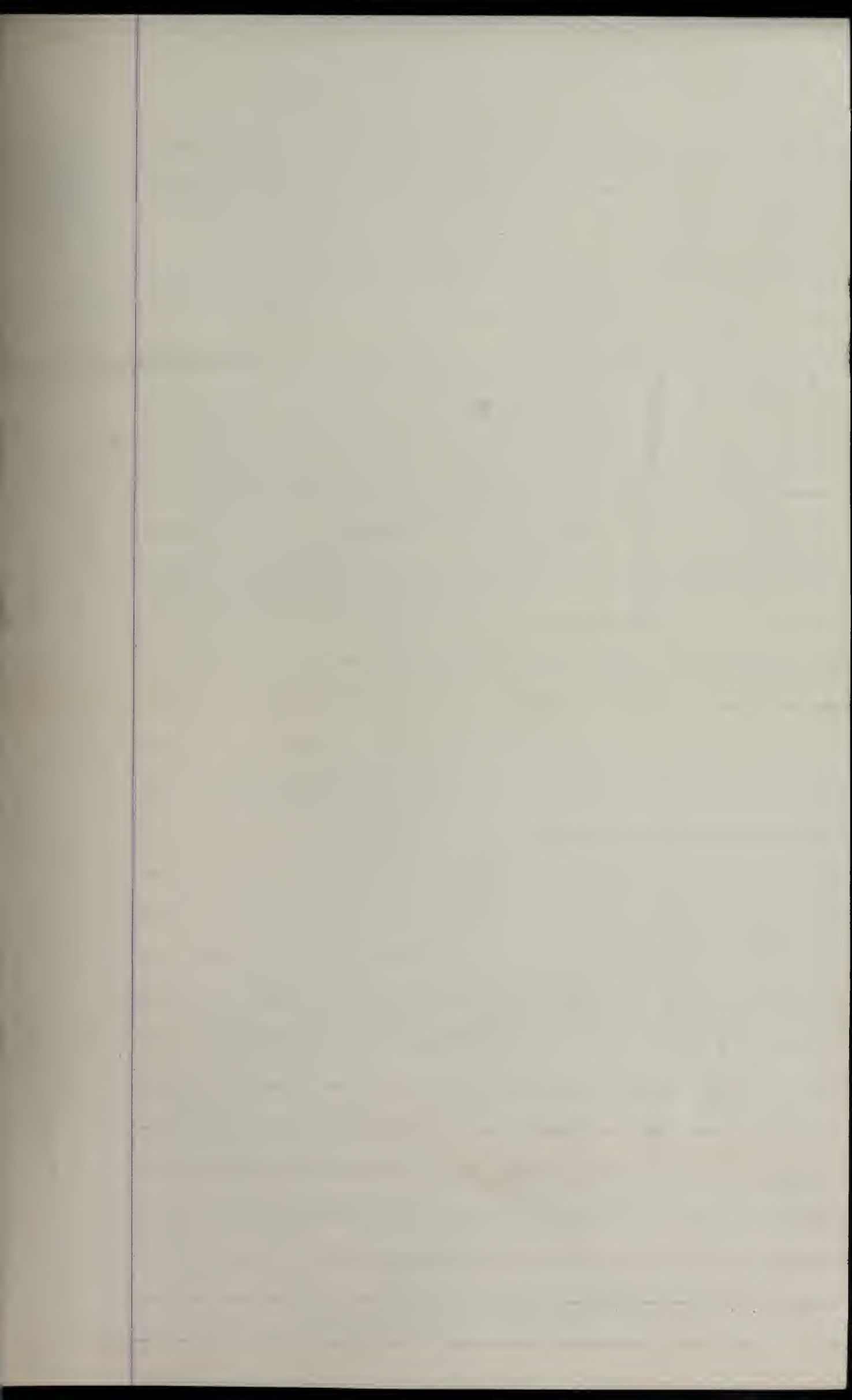
The replication of Hugh W. Hollender, Complainant, to the answer of John E. Lane and James E. Lane, respondents to the Bill of Complaint of the said Complainant.

This repliant, saving and reserving unto himself all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto says: That he will aver and prove his said bill to be true, certain and sufficient in the law to be answered unto; and that the said answer of the defendants is uncertain, untrue and insufficient to be replied unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual, in the law to be replied unto, confessed and avoided, traversed or denied, is true; all which matters and things this repliant is and will be ready to aver and prove as this Honorable Court shall direct, and

humbly prays as in and by his said <sup>14</sup> Bill  
of Complaint he has already prayed.

By ~~their~~ <sup>his</sup> Solicitor

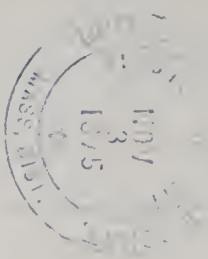
J. S. Maynard



597  
George W. Roseman in Ex  
as  
John G. Lane et al.

(3)

Replications





United States Circuit Court.  
Massachusetts District

In Equity.

Hugh W. Collender v. John E. Cane et al.

Amendments to Answer.

[Filed by consent May 21 1875]

And these defendants further answering upon their knowledge, information and belief aver that the alleged "improvement in cushions for billiard tables," set forth and claimed as new in the said issued letters patent or in the said original thereof was not, at the time ~~of the time~~ of the assumed invention thereof by the said Hugh W. Collender a subject matter of invention, nor a novelty proper to be secured by the grant of valid letters patent within the meaning and intent of the statutes of the United States in such case made and provided.

And these defendants further answering upon knowledge, information and belief deny that the said alleged invention is useful according to the requisition of law in that behalf made and enacted; and aver that neither the said complainant nor anyone claiming under him ever used or employed the said alleged invention or any substantial and material part thereof in the manner or for



the purpose set forth or suggested in the said letters patent, for any practical purpose; that said complainant never in fact reduced his said alleged invention to practise and that a billiard table cushion constructed according to the descriptions and directions contained in the specifications of the said issued letters patent or of the said original thereof, would not be capable of being practically used or employed upon a billiard table or of subserving any useful purpose or result as alleged or suggested in the said letters patent.

By their Solicitor.

Roubin L. Roberts.

594  
Thos W. Follen

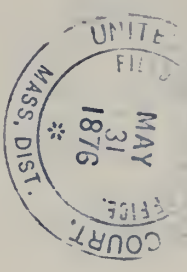
John C. Lane

Amendments to Amour.

May 31 1876

Mary & John

J. B. May



U. S. Circuit Court  
District of Massachusetts } In Equity

Hugh W. Colender  
vs.  
John C. Lane et al.

Stipulation.

The parties to the above entitled suit respectfully request the Court to assign as the time within which the the Complainant shall take his evidence in support of the bill December 15<sup>th</sup> 1875; and as the time within which the defendant shall take their evidence in defence February 15<sup>th</sup> 1876, and as a time within which the Complainant shall take his evidence in reply April 15<sup>th</sup> 1876.

Geo. B. Platts & Bros.  
Attys.

J. E. Maynard  
Scrib. for Compt

597  
Hugh W. Bottenderwig

os.  
John L. Lane et al.

Stipulation.

UNITED STATES OF AMERICA.

Massachusetts District, ss.

THE PRESIDENT OF THE UNITED STATES OF AMERICA,

To John E. Carne of Boston and James E. Carne of Malden, both within said District

Your Agents and Servants, GREETING.

WHEREAS

Hugh H. Colender of the City and State of New York

has exhibited his Bill of Complaint before the Justices of our Circuit Court of the United States for the First Circuit, begun and holden at Boston, within and for the District of Massachusetts, on the Fifteenth day of May A.D. 1876, against you the said

John E. Carne and James E. Carne praying to be relieved touching the matters therein complained of, and whereas, by an Order from said Court, made on the second day of September A.D. 1876, it was ordered that a Writ of Injunction issue under the Seal of the said Court, to restrain you, and each and every of you, from doing all the matters and things from the doing of which you are prayed to be restrained in said Bill, according in full with the prayer of said Bill.

WE therefore, in consideration thereof, ENJOIN AND COMMAND you, each, and every of you that from and immediately after the receipt and notice of this our Writ, by you, or any of you, you shall not directly or indirectly make or cause to be made, use or sell to others to be used in any manner any cushions for billiard tables described and claimed in Revised Letters Patent of the United States bearing date the nineteenth day of March A.D. 1867, granted to said Hugh H. Colender for a new and useful improvement in billiard table cushions, - or any substantial part thereof

WHEREOF you are not to fail on pain of ten thousand dollars, to be levied on your and each of your goods, chattels, lands and tenements, to our use.

Witness the Honorable Morrison A. White, at Boston, this fourth day of September in the year of our Lord one thousand eight hundred and seventy - six -

Alonzo H. Troubridge Deputy Clerk.

United States of America,  
MASSACHUSETTS DISTRICT, ss.

Boston Sept 5th 1876

I HEREBY CERTIFY that I have notified the within-named respondents of the issuing of this injunction by this day giving in hand to James E Kane a true and attested copy of this precept and by giving on the Eleventh day of and September a like copy <sup>in hand</sup> to John E Kane

*R. E. Lusk*

Fees -  
Served to 4.12  
copies 1.00  
5.12

992  
579

*Joseph M. Callahan*

IN EQUITY.

DEPUS

*John E. Cannon*

WRIT OF INJUNCTION.

*J. E. Maguire*



Circuit Court of the United States  
District of Massachusetts

Hugh W. Colman }  
John E. Leane et al } In Equity

Consent is hereby given that Geo. Wm. Estabrook, Esq., of Boston counsellor at law and Notary Public, be appointed by the Court to be special examiner in the above entitled cause to take evidence introduced therein on behalf of the defendants under and pursuant to the sixty seventh rule of the Supreme Court of the United States, in equity, as amended

Boston Jan'y. 31<sup>st</sup>. 1876.

J. E. Maynard  
Attorneys for Plaintiff.  
Geo. Roberts & Bros.  
Solicitors for defendants.

By consent of counsel for the respective parties the Court hereby appoints the said Geo. Wm. Estabrook to be special examiner to take evidence introduced in the above entitled cause on behalf of the defendants under and pursuant to the sixty seventh rule of the Supreme Court of the United States in equity as amended.

594  
Hugh W. Hollander  
v.

John P. Lane et al

Amount to Applicant  
&  
Order of Court for  
- Special Examiners -



UNITED STATES OF AMERICA.

Massachusetts District, ss.

To John E. Carne of Boston  
and James E. Carne of Malden both  
within said District

GREETING:

FOR CERTAIN CAUSES, offered before the Circuit Court of the United States of America, for the first Circuit, within and for the Massachusetts District, as a Court of Chancery, WE COMMAND AND STRICTLY ENJOIN YOU, laying all other matters aside, and notwithstanding any excuse, that you personally be and appear before our said Circuit Court at the Rules, to be holden at the Office of the Clerk of our said Court, in Boston, in said District, on the first Monday, being the *sixth* day of *September* next, to answer to a Bill of Complaint exhibited against you in our said Court, wherein

*Hugh H. Colander of the City and State of New York, a citizen of the State of New York*

*is* Complainant and you are Defendants; and to do further and receive that which our said Circuit Court shall consider in this behalf. And this you are in no wise to omit, under the pains and penalties of what may befall thereon.

Witness, the Honorable *Morrison P. Waite* at Boston,  
this *twenty sixth* day of *July* A. D. 187*7*, in  
the *sixty* *100th* year of the Independence of the United States of America.

*Alex. H. Troubridge*  
Deputy Clerk.

MEMORANDUM. The defendant is to enter his appearance in the suit in the Clerk's Office on or before the day at which the writ is returnable, otherwise the bill may be taken *pro confesso*.

United States of America,  
MASSACHUSETTS DISTRICT, SS.

Boston 25<sup>th</sup> July 1875

I hereby certify that I have served the within Subpoena by giving in hand to each of the within named John E. Carne and James E. Carne a true and attested copy of the same.

Fees  
Served 4.12  
Copies 1.  
5.12

Edward P. Usher  
Deputy  
United States  
Marshal.

2272  
279

In Equity,

August P. Colburn

John E. Carne et al

**SUBPOENA,**

RETURNABLE, *Sept 6* RULES,

To wit, *Sept 6* 1875.

J. L. Maynard  
Attorney.

United States Circuit Court  
District of Massachusetts.

In Equity,  
Hugh W. Colender

v.  
J. E. Gagne et al.

It is agreed before the Master that the Complainant is entitled to the sum of two thousand dollars in full for all damages and profits and that Final Decree be entered at once that the Complainant recover of the defendants that sum together with the costs of suit, and that said damages and costs are fully satisfied and paid.

J. J. Maynard  
Clerk of Court.

Geo. Roberts & Bros.

Attorneys for Defendants.

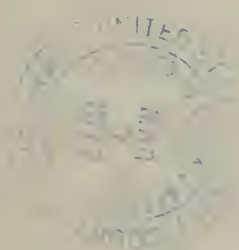
No. 597.

Wm. Hugh W. Hollister

or

J. S. Lane et al.

Stimulation for Deane.



Supreme Court of the United States  
District of Massachusetts

In Equity

Hugh W. Colver v. John E. Combs et al

Master's Report

To the Honorable the Justices of said  
Circuit Court:

After a partial hearing before me under the decree in this cause entered Sept. 2, 1876, the parties agreed that the complainant is entitled to the sum of two thousand dollars as profits and damages, and stipulated that a final decree be entered at once. I accordingly report that upon the accounting under said decree of Sept. 2<sup>d</sup> 1876 the complainant is entitled to the sum of two thousand dollars profits and damages and I return said stipulation hereto annexed into Court.

Respectfully submitted  
Frank Stetson

Master.

Master's fee \$50.00

High W. Allen

John L. Comstock

Charles Phelps



General Court of the United States  
District of Massachusetts

Heretofore

Thos W Colburn v Geo E Case et al

In Civ

March 5, 1847

Loosey, And now writ March 5, 1877

upon the coming in of the report of the Master  
and upon consideration of the stipulation  
of Counsel returned with said report,  
The Court doth adjudge and decree  
that the said complainant receive of  
the said defendants the sum of two  
thousand dollars as and for his profits  
and damages from the infringement  
complained of together with his costs  
of suit taxed at four hundred and  
eighty dollars and sixty cents.

By the Court:

Franklin C. Johnson, Clerk

Keogh W. St. Louis

Mar 2. Same shoe

Deers

March 5, 1893

Witness Fees - New York		days
Jacob. W. McIntire	3 Trains to Boston 730 miles @ 10 <sup>00</sup>	4
John Murphy - N.Y.	1 mile	1
	<u>961</u>	<u>5</u>
	25 <sup>10</sup>	
	<u>10</u>	<u>1.50</u>
	23.10	
\$	<u>961</u>	
	25 <sup>10</sup>	
	<u>750</u>	
\$	<u>693.00</u>	
	<u>693.00</u>	
	7.50	
	<u>700.50</u>	
	<u>76.80</u>	

Remaining fees:  
 Stetson 2 days depo of McIntire 30<sup>00</sup>  
 Sleeper 3 " " Colquhoun 1, McIntire 2 days  
 Blankie 1 " " Murphy 1 day



C. B. & S.  
 Mass. Dist.

No 597

Collender v. Larned et al

Complete Costs

Bill entry fee		4.00
Marshal's fees, service &c		5.12
Tr. 4 Terms @ 2.64	10.56	
at 3 " @ 33	99	
" May 5, 1876, 10 days @ 33	3.30	
Tr. 3 Rules	7.92	
at " "	<u>99</u>	23.76
Continuances 3 Terms @ 30		90
Injunction & service of 5.12		6.12
City fee Income \$20.00		
" " on 19 deposes	<u>47.50</u>	67.50
Collier's fees:		
Fil 4.40		
D.C. 6.60		
D.F. 3.00		
con M. .90		
Doc. 1.00		
Rec. 9.00		24.90
Examiners fees (Nelson, Sleeper & Blaikie)	\$30    \$60.00    \$7.50	97.50
Witness fees		76.80
Printer bill &c		217.00
Copy answer paid		2.00
Master fees		50.00
Copy of record		5.00
		<u>\$580.60</u>

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See below

Remedy

Book for sample

Circuit Court of the United States.

District of Mass., *May* Term, 1876

IN EQUITY.

*Hugh H. Colender* Complainant  
*John E. Lane et al* Defendants

DECREE

For Perpetual Injunction, and for Reference to a Master.

This cause came on to be heard at the *present* Term, upon the pleadings and proofs, and was argued by Counsel for the respective parties;

And now upon consideration thereof, to wit; *Sept. 2<sup>nd</sup> 1876* It is ORDERED, ADJUDGED AND DECREED, as follows, viz.: that the Letters Patent referred to in the complainant's bill, being <sup>Received</sup> Letters Patent of the United States, granted unto *the Complainant numbered 2511* for *an improved and useful improvement in Billiard Table cushions*, dated *March 19, 1867* is a good and valid patent; and that the said *Hugh H. Colender* was the original and first inventor of the improvement described and claimed therein; and that the said defendants have infringed the said patent, and upon the exclusive rights of the complainant under the same.

And it is further ORDERED, ADJUDGED AND DECREED, that the complainant recover of the defendants the profits which *they* have received or made, or which have accrued to *them* from said infringement by the manufacture, use or sale of the improvement described, and secured by said Letters Patent at any and all times since the *19<sup>th</sup> day of March A. D. 1867* and also the damages which the complainant has sustained thereby.

And it is further ORDERED, ADJUDGED AND DECREED, that it be referred to *John G. Stebbins Esq* a master of this Court, to take and report to the Court an account of the profits which the said defendants have received, or which have arisen or accrued to *them* from the manufacture, use or sale of said improvement, or from said infringement, and to ascertain and report the damages which the complainant has sustained thereby since the *19<sup>th</sup>* day of *March* A. D. 18 *67*

And it is further ORDERED, ADJUDGED AND DECREED, that a perpetual injunction be issued against the defendants according to the prayer of the bill.

And it is further ORDERED, ADJUDGED AND DECREED, that the complainant recover of the defendants his costs of suit.

By the Court, *Alfred H. Trowbridge* Deputy Clerk.  
Clerk.

A true copy,

Attest:

*Remain the Decree and do not copy to the form of Defendants -*

Joseph H. Hollander

11.

John B. Hancock

Deer

;

Sept. 2nd 1876 -



In the Circuit Court of the United States  
For the District of Massachusetts.

~~In Equity~~  
Hugh W. Colender ~~in Equity~~

~~vs.~~  
John E. Came et al.

Bill of Complaint

[Filed July 26, 1875]

To the Judges of the Circuit Court of the United  
States for the District of Massachusetts.

Hugh W. Colender of the City and State  
of New York and a citizen of the State of New  
York brings this his bill of complaint against  
John E. Came of Boston and James E. Came of  
Malden both within said District of Massachu-  
setts, and citizens of the State of Massachusetts,  
and thereupon your orator complains and says:  
That your orator is the original and first in-  
ventor of a new and useful improvement in  
billiard table cushions fully described in the  
letters patent hereinafter mentioned, the same  
being a new and useful improvement which  
was not known or used before his said inven-  
tion and was not at the time of his applica-  
tion for a patent as hereinafter mentioned, in  
public use or on sale with his consent and  
allowance and on the twelfth day of January  
1858 upon due application therefor your orator  
did obtain certain Letters Patent of the United  
States signed by the Secretary of the Interior



and countersigned and sealed with the seal  
of the Patent Office by the Commissioner of Patents  
and bearing date the day and year aforesaid,  
whereby there were granted to your orator, his  
heirs, administrators and assigns for the term of  
fourteen years from and after the date of said  
Letters Patent, the full and exclusive right and  
liberty of making, constructing, using and vending  
to others to be used, the said improvement, and  
by virtue thereof your orator became and was the  
sole owner of all the rights and privileges granted  
and secured or intended to be granted and secured  
in and by said Letters Patent, as by the Recites  
of said Letters Patent hereinafter mentioned or by  
a duly authenticated copy thereof now in Court  
to be produced and shown to your Honours will  
more fully appear.

And your orator further shows unto your Honours  
that afterwards to wit before the 19<sup>th</sup> day of March  
1867 said Letters Patent were duly surrendered and  
cancelled on account of a defective specification, in  
accordance with the statute; and that thereupon  
new letters patent for the same invention, bearing  
date upon the day and year last above mention-  
ed were issued and delivered to your orator,  
whereby there were granted to your orator his heirs,  
administrators and assigns for the term of four-  
teen years from the 12<sup>th</sup> day of January ~~in the~~  
year 1858, the full and exclusive right and

liberty of making, constructing, using and  
vending to others to be used the said  
invention; all which by said renewed letters  
patent, or by a duly certified copy thereof  
now in Court produced and shown to  
your Honours will more fully appear.

And your orator further shows unto  
your Honours that afterwards and before  
the expiration of the term of fourteen years  
from the 12<sup>th</sup> day of January 1858 your orator  
duly made application to the Commission-  
er of Patents for an extension of this  
patent beyond the original term of its  
limitation; and that thereupon said patent  
was renewed and extended for the term of  
seven years from the expiration of the  
first term all which by the certificate  
made thereon by the Commissioner of  
Patents, or by a duly certified copy there-  
of now in Court produced and shown  
to your Honours will more fully appear.

And your orator further shows unto  
your Honours that since the issue to  
him of said Letters Patent as aforesaid  
he has put into use the invention  
secured to him thereby, and that your  
orator has ever since, and now is except  
for the doings of said defendants as  
hereinafter mentioned, and of other



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wrong doers in the premises, in the exclu-  
sive possession and enjoyment thereof  
and that said right has been, and  
is of great value to your orator

And your orator further shows  
unto Your Honour upon information  
and belief, that since the 19<sup>th</sup> day of  
March, 1877 the defendants well know-  
ing the premises, and the rights and  
privileges secured to your orator in  
and by said Letters Patent contriving to  
injure your orator and to defraud him  
of his profits and advantages which  
might and otherwise would have ac-  
crued to him, at the city of Boston within  
said District of Massachusetts and at  
other places within the United States  
and without the permission and licence of your  
orator, have unlawfully and wrongfully made, used  
and sold large numbers of cushions for billiard tables  
made in accordance with the description contained  
in the specification annexed to said Letters Patent  
and embodying in their construction and mode of  
operation the invention therein described and  
have made, sold and used large numbers of the new  
cushions for billiard tables described in the speci-  
fication annexed to said Letters Patent, and are  
now unlawfully and wrongfully making, selling  
and sending to others to be used, large numbers

of cushions for billiard tables made in accordance  
with the description contained in the specification  
of said Letters Patent, and that said cushions for  
billiard tables so made, used and send to others  
to be used, are made in the manner and mode de-  
scribed in the specification of said Letters Patent.  
But what number of cushions for billiard tables  
made in accordance with the specification of said  
Letters Patent have been made, used or sold or have  
been caused to be made, used or sold by said de-  
fendants, your orator does not know and cannot  
state; but, upon information and belief, your orator  
avows that they have made, used, and sold, and  
send to others to be used large numbers of the  
same; and are now making, using, selling and  
sending to others to be used large numbers of  
the same; and that they have derived and received,  
and are still deriving and receiving, from such  
sales and use great gains and profits; but to  
what extent your orator is ignorant and cannot  
state and prays that the defendants may be com-  
pelled to make a disclosure of such gains and  
profits.

And your orator in like manner avows, that  
the defendants continued to make, use and sell,  
and send to others to be used, said cushions  
for billiard tables though warned and requested  
to desist from said manufacture, use and sale;  
and refused and still refuse to desist therefrom  
and to say to your orator the said gains and profits



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by means whereof the defendants have greatly injured and are still greatly injuring your orator, and have deprived and are still depriving your orator from receiving the gains and profits from the exclusive right to use the invention and improvement claimed in the said Letters Patent, which your orator otherwise, and but for said wrongful acts of the defendants, would have obtained and received.

And your orator further shews unto your Honors, that he has sustained damages, to wit, the sum of fifty thousand dollars, by reason of the infringement of the defendants as aforesaid, of your orators rights, secured by said Letters Patent, as aforesaid.

All of which actings and doings of the defendants are contrary to equity and good conscience, and tend to the manifest injury of your orator in the premises.

In consideration whereof, and for as much as your orator can only have adequate relief in this Honorable Court where matters and things of this kind are made cognizable by statute, your orator prays.

That the said defendants may be compelled by a decree of this Court to account for and pay over to your orator all such gains and profits as have accrued to or have been earned or received by said defendants, and all such gains and profits as have been received by them, or to which they may

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be entitled by reason of such manufacture, use or sale by them of cushions for billiard tables made in accordance with the specification of said Letters Patent, and in infringement thereof, and all such gains and profits as your orator would have received but for the unlawful acts and doings of said defendants; and also in addition to the profits to be accounted for by said defendants, that they pay the damages your orator has sustained by reason of such infringement, and that your Honors shall assess said damages, or cause said damages to be assessed under the direction of the Court.

And that the said defendants, their attorneys, solicitors, agents, servants and workmen may be enjoined pending this suit and also may be perpetually enjoined and restrained by the decree and injunction of this Court from directly or indirectly making or causing to be made, or using or selling or vending to others to be used in any manner, any cushions for billiard tables made and described in the specification of said reserved Letters Patent and from using the invention or improvement described and claimed in said Letters Patent, in the manufacture or use of cushions for billiard tables, and from infringing upon or violating the said Letters Patent, issued to your orator in respect of the exclusive rights vested in your orator.

And that all such infringing cushions for billiard





tables may be forthwith destroyed or delivered up  
to your orator and that the defendants may be  
decreed to pay the costs of this suit, and that your  
orator may have such other and farther relief  
as the equity of the case may require, and to your  
Honors may seem meet.

To the end therefore, that the defendants may  
if they can, show why your orator should not  
have the relief prayed, and may full, true  
direct and perfect answer make, according to  
the best of their respective knowledge, information  
and belief, to the several matters hereinbefore aver-  
ed and set forth as fully and particularly, as if  
the same were here repeated paragraph by para-  
graph, and they specially interrogated thereto,  
may it please your Honours to grant unto your  
orator not only the writs of injunction as above  
prayed, but also a writ of subpoena ad responde-  
ndum, issuing out of and under the seal of this  
Honourable Court, directed to the said defendants  
John E. Lane and James E. Lane commanding  
them to appear and make answer to this bill  
of Complaint, and to perform and abide by such  
farther orders and decrees herein as to your  
Honours may seem meet.

And your orator will ever pray &c.

J. Maynard  
Scrib. & Counsel

Wm. W. Collender

Jan 20

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Southern District of New York.

Wm. W. Collender being  
sworn deposes and says that he has read  
~~a bill~~ and the foregoing Bill of  
Complaint by him subscribed, and that  
the same is true of his own knowledge  
except as to such matters therein ~~contained~~ <sup>stated</sup>  
to be on information or belief, and  
as to those matters he believed the  
same to be true.

Subscribed and sworn  
before me this 22<sup>d</sup>  
July 1875

Wm. W. Collender

J. C. [Signature]

U.S. Court for Southern  
District of New York

597  
H. W. Hollenden in Eq.

28.

John E. Lane et al

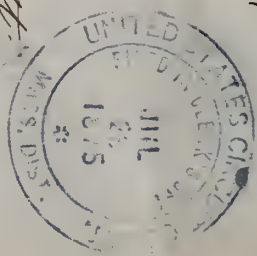
Oct. Term 1876.

Remitted

Bill of Complaint

(1)

Order paid. rec'd  
W. H. P. Smith. Oct. 6 1876



Att.

W. H. P.

