J. N. McINTIRE.

CONVERTIBLE SOFA BILLIARD TABLE.

APPLICATION FILED NOV. 13, 1909.

954,757.

Patented Apr. 12, 1910.

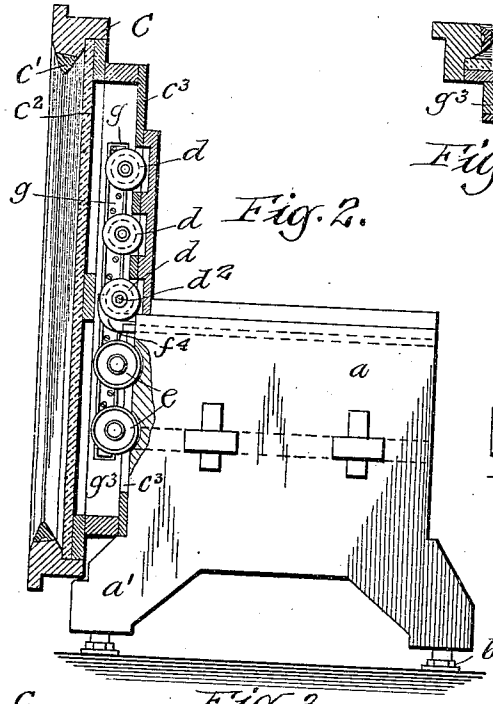

Fig. 2.

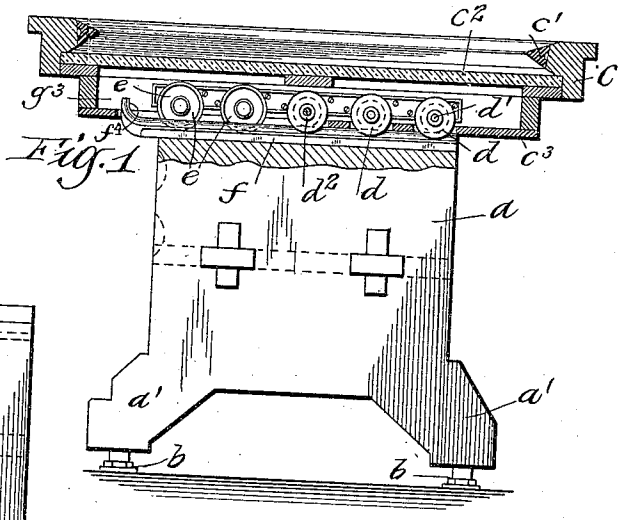

Fig. 1

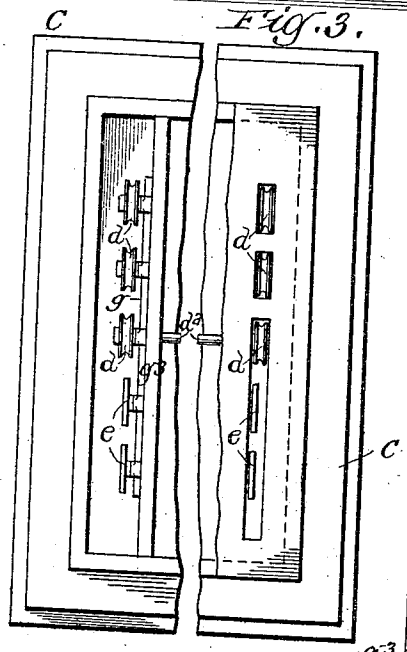

Fig. 3.

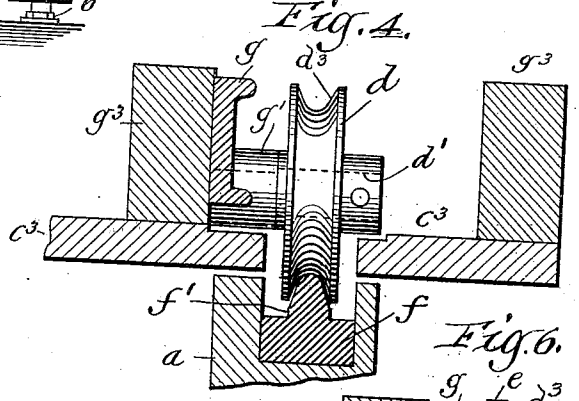

Fig. 4.

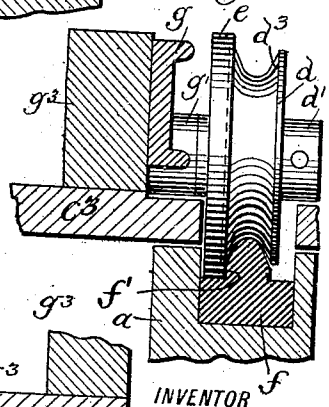

Fig. 6.

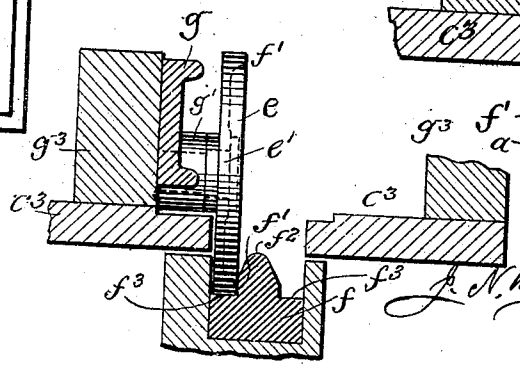

Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JACOB N. McINTIRE, OF NEW YORK, N. Y., ASSIGNOR TO THE BRUNSWICK-BALKE-COLLENDER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

CONVERTIBLE SOFA BILLIARD-TABLE.

954,757. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed November 13, 1909. Serial No. 527,942.

To all whom it may concern:

Be it known that I, JACOB N. McINTIRE, a citizen of the United States, residing in the city of New York, in the county of New York and State of New York, (whose post-office address is box 1089, New York city, New York,) have invented a new and useful Improvement in Convertible Sofa Billiard-Tables, of which the following is a specification, reference being had to the accompanying drawing, forming a part thereof.

My present invention relates to that genus of convertible sofa-billiard table; or combined settee and billiard or pool table on which several patents have been granted to me, and especially to that species of this genus, which will be found fully shown and described in U. S. Letters Patent granted to me on the 18th day of May, 1909, and numbered 921,725. And my present invention, or improvement consists mainly in a novel form of the "track-rails," and the peculiar arrangement therewith of the "flat-faced track wheels," of my said patented sofa-table, that will be found, hereinafter, fully described; which different form of flat-faced track wheels; novel form of track-rails; and peculiar coöperative arrangement together of these parts will be found most particularly pointed out, in the claim of this specification.

To enable those skilled in the art to practice my present invention, I will now proceed to describe it as I have, so far, successfully practiced it, in the precise form of sofa-tables which I have made and sold.

In the accompanying drawing, which forms part of this specification, Figure 1 is a vertical cross sectional elevation of my improved sofa-table, showing the parts set in or adjusted to those relative positions which they occupy (the same as in the case of my patented construction) when the article is to be used as a sofa, or settee. Fig. 2 is a similar sectional view, but with the parts adjusted for the use of the article as a billiard or pool table. Fig. 3 is a partial bottom view of the table bed, detached,—a middle portion of the bed being shown as broken out and the end portions moved near together, to make this figure occupy less space. Figs. 4; 5; and 6 are respectively detail, sectional views, drawn on a somewhat larger scale than the other three figures, and illustrating particularly the novel structural features that constitute the changes and improvement in and over my said patented sofa-table, that form the subject matter of this application.

And in all these views or figures, the same part will be found always designated by the same letter of reference.

a are the two end-portions of the sofa or settee part of the device, which support the seat, and are themselves supported (on the floor of the room) by caster-like supporting devices *b;* and which sustain, in either its horizontal or its vertical position (accordingly as it may be set in either of these positions) the billiard or pool table bed, which, when adjusted to the position seen at Fig. 1, is used, at its topmost surface as a game-table; and when in the position seen at Fig. 2 serves, at its opposite surface, as the back of the settee; one side or surface of this oscillatory part of the article or structure having a slate slab c^2, (covered with the usual billiard cloth) for the playing surface of the game table, and suitably attached billiard cushions c'; all as in the case of my said patented table; while the other side is a plain wooden sofa back as in the case of the patented structure. And like the latter this convertible game-table-sofa back part is provided with two series of track-wheels, mounted thereon, as will be presently explained, that travel, respectively, on two track-rails *f* that are mounted in, or on the tops of the two settee end-pieces *a;* all in such manner that in transforming the concrete structure from the game-table (seen at Fig. 1) into the settee, (shown at Fig. 2) and vice versa, the game-table bed is first rolled backwardly, in a horizontal plane, and then oscillated into the vertical position, and the reverse of these movements effectuated to make the other transformation; substantially after the fashion of changing the conditions in my patented article, though in both specific construction and mode of operation the details in the two things are different.

In both the patented and my present article there are track-rails formed with upwardly projecting ribs, and with up-turned rearmost ends on the ribs of which travel peripherally grooved track-wheels mounted in the table bed, that ride on the said ribs, and also flat-faced track-wheels that travel on the top surfaces of the rail bases; but,

while in the patented structure the flat-faced wheels contact only, at their peripheral surfaces, with the track-rails, in the present structure the ribs of the track-rails *f* are slabbed off, to form vertical bearing surfaces, as shown at *f'*, (see Figs. 4, 5 and 6,) and the flat-faced wheels *e* not only bear at their peripheries on the horizontal top surfaces of the track-rails (as in the case of my patented construction) but also bear, laterally and forcibly, for a portion of the side surface of each wheel, against the vertical walls, at *f'*, of the track-rails. And this difference in structure and coöperative action of these parts, in the two constructions of table, I have found to render the structure made the subject of this application quite superior to and a marked improvement on that of the patented table: in this—that, while in the latter, in rolling the up-tilted bed forward on the track-rails and after the peripherally grooved wheels *d* have traveled forward a little ways, (during the and final horizontal movement of the bed) there is very liable to occur a sidewise play, or movement in the bed (especially if it be not pulled or pushed by hand power applied at a point midway of its two ends) that operates to cramp, and impede a free and easy movement; in the present improved structure, this defect, or objection is wholly overcome, by reason of the flat-faced wheels *e* (at each end portion of the moving bed) bearing, at their side surfaces, on the oppositely disposed vertical walls *f'* of the two track-rails; which bearing operates to force the bed, at all times, during its rolling along on the track-rails, to travel without any cramping or impediment and thus renders a perfect manipulation of the bed possible with greater ease, or in other words, with the exercise of less muscular power by the person making the transformation. And as the greatest possible ease of manipulation, of this bed, (which often weighs three hundred or more pounds) is a great desideratum, it will be understood, of course, that the change in structure I have herein shown and described possesses marked utility and merits protection.

Another variation or change in the structure herein disclosed, and that seen in my said patent, lies in this:—that in the improved sofa-table, it will be seen, I have mounted all the axes, or arbors of all five of the track-wheels *d*, *d*, *d*, and *e*, *e*, at each end of the bed, in a single channel-iron bar *g*, (see Figs. 1 to 6 inclusive) that is securely fastened to the wooden cross beam g^3 of the bed structure; while in my patented table each one of the studs of all the track-wheels is separately, individually, secured to said wooden cross beams.

As it is most important, in constructing or building the sofa-table to have all the arbors of each set (of five) track wheels in perfect alinement; and also important to have such perfect alinement maintained during any extended use of the sofa-table, I have found this structural change to possess, in actual practice, marked advantage over the form of sofa-table disclosed in my said patent and manufactured thereunder, prior to the making of the article according to the construction I have herein set forth.

Having now so fully explained the construction and operation of my improved sofa-table that those skilled in the art, and referring to my patented sofa-table structure, can readily make and use a structure embodying my invention; and fully understand the nature of the latter, what I claim herein as new and desire to secure by Letters Patent is:—

In a convertible sofa-billiard table of the type shown, the combination, with the settee portion, and the convertible settee back and billiard table portion, of a set of track-rails each of which is formed with a rib having at one side a vertical, wall-like, bearing surface, and both of which are mounted on the tops of the end-portions; a set of peripherally grooved track-wheels, mounted in the said billiard table portion, that travel on each of said track-rail ribs; and a set of flat-faced track-wheels, also mounted in the table bed portion, which bear at their peripheral surfaces on the tops of the bases of said track-rails and which also bear at their sides against the vertical surfaces of the said ribs; all substantially as and for the purpose set forth.

It witness whereof I have hereunto set my hand this 12th day of November, 1909.

J. N. McINTIRE.

In the presence of—
THOMAS ADAM,
SADIE ROSENSWEIG.