No. 720,446. PATENTED FEB. 10, 1903.

P. LAPP.

RETURN BALL ATTACHMENT FOR POOL TABLES.

APPLICATION FILED JULY 29, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

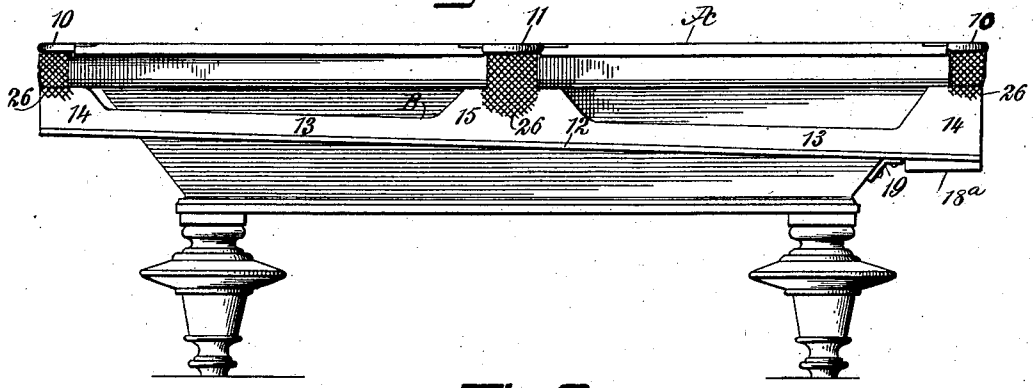


Fig. 2.

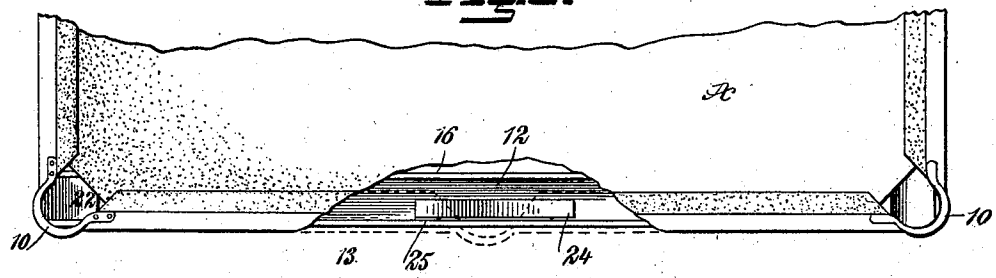
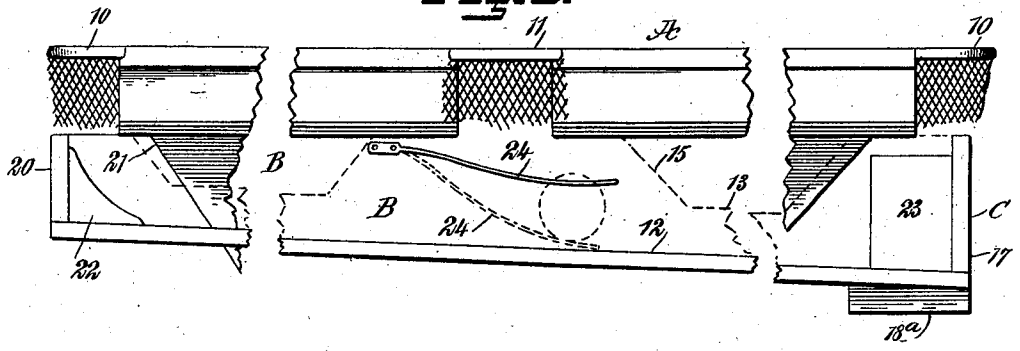


Fig. 3.



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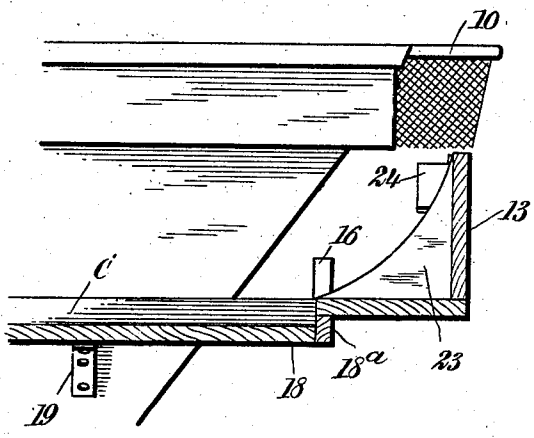
P. LAPP.

RETURN BALL ATTACHMENT FOR POOL TABLES.

APPLICATION FILED JULY 29, 1902.

NO MODEL. 2 SHEETS—SHEET 2.

Fig. 4.



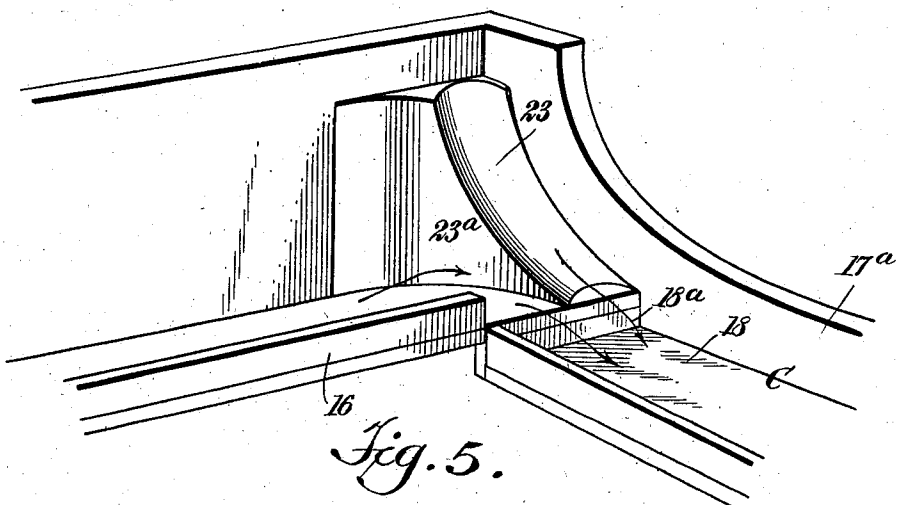


Fig. 5.

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UNITED STATES PATENT OFFICE.

PETER LAPP, OF BROOKLYN, NEW YORK.

RETURN-BALL ATTACHMENT FOR POOL-TABLES.

SPECIFICATION forming part of Letters Patent No. 720,446, dated February 10, 1903.

Application filed July 29, 1902. Serial No. 117,519. (No model.)

To all whom it may concern:

Be it known that I, PETER LAPP, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Return-Ball Attachment for Pool-Tables, of which the following is a full, clear, and exact description.

The purpose of my invention is to provide runways at each side of a pool-table extending from one corner-pocket at a side to the other corner-pocket at the same side and beneath the center pockets, which side runways incline downward from the rear end of the table in direction of the front end, at which latter end the runways are connected by a box receptacle adapted to receive and retain the balls which pass down the runways, and to so connect the pockets, which are open at their bottoms, with the runways that a ball entering a pocket will immediately drop into a runway and will be received in the box receptacle to be removed at pleasure.

Another purpose of the invention is to so construct the attachment that it will not extend out beyond the vertical plane of the side and end sections of the bed of the table, thus not interfering with the players, and so that convenient access may be had to the runways and box receptacle from the sides and ends of the table to remove any obstacle that may accidentally fall therein.

A further purpose of the invention is to provide devices in the runways beneath each pocket which will insure the balls rolling down the incline of the runways immediately upon leaving the pockets, thus obviating stoppage of a second ball quickly following, and to so construct the runways that they may be readily attached to any table without injury thereto and so that the runways will offer the least possible resistance to the rolling of the balls.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the pool-table and the attachment applied thereto. Fig. 2 is a sectional plan view of a portion of the table, illustrating the application of the device. Fig. 3 is a side elevation of the table and a runway, drawn upon a larger scale, the outer longitudinal board or side section being removed and appearing in dotted lines to show the interior of the runway, the spring for the center pocket, which is attached to the removed section, appearing in position; and Fig. 4 is a view of a part of the right-hand front corner portion of the table, the right-hand runway being shown in transverse section, and a longitudinal section through a part of the receiving box receptacle. Fig. 5 is an enlarged detail perspective view showing the arrangement of one of the blocks in the corner of one of the runways, the path of travel of the ball being indicated by arrows.

A represents a pool-table of the ordinary type, being provided with the usual corner-pockets 10 and center pockets 11. Beneath each side flange of the bed of the table a runway B is suitably supported, and each runway extends from one corner-pocket to the other beneath said corner-pockets and beneath the center pocket. Each runway is given a downward and forward inclination, said inclination extending from end to end of a runway, as is best shown in Fig. 1. These runways are so constructed that when balls are dropped therein through the pockets the balls will meet with comparatively no resistance and will rapidly roll to the lower ends of the runways.

Preferably the runways are constructed as illustrated, consisting of a flat bottom section 12 and outer side sections 13, extending upward from the bottom sections, which side sections 13 are provided with extensions 14 at their ends to engage with the under surface of the flange of the bed of the table, as is also best shown in Fig. 1, and with a central extension 15, which central extension of each runway engages with the flange of the bed of the table at the center pockets thereof, and end extensions 14, engaging with the said flange where the corner-pockets 10 are located. Quite a space intervenes the upper edge of each side section 13 of a runway between the extensions thereof and the under surface of the flange of the bed of the table, so that

ready access may be gained to the interior of each runway from the sides of the table.

The bottom sections 12 of the runways are carried inward until they engage with the inclined side portions of the table, and preferably a rear longitudinal wall 16 is provided for each runway, extending from the bottom to an engagement with the inclined side surfaces of the table, as is shown in Fig. 4. While the inner walls 16 are usually employed in the construction of the runways, they are not absolutely essential.

It will be observed that the runways in cross-section have a box-like formation, the bottom being flat and the sides straight, so that but little resistance is offered to a ball rolling down the runway.

The runways B are connected at the front end of the table or at that end where the initial play is made by a box-like receptacle C. This box-like receptacle consists of a bottom section 18, which connects with the forward lower ends of the runways in any suitable or approved manner, as is shown in Fig. 4, and a preferably narrow outer or front section 17^a, which connects at its ends with higher front pieces 17. (Shown in Fig. 3.) These higher front pieces 17 extend up nearly to the bottom of the corner-pockets 10 at the front end of the table. Thus it will be observed that the receptacle C is quite open at the front, enabling a person to readily introduce a hand into the said receptacle for the purpose of removing the balls therefrom which have rolled down the runways into said receptacle after the balls have passed through the pockets 10 and 11, the bottoms of which pockets are open.

Brackets 19 are usually employed to support the bottom section 18 of the front or receiving receptacle C, and like brackets may likewise be employed to support the bottom sections of the runway B. The bottom of the receptacle is preferably flat and, as will be seen particularly in Figs. 4 and 5, is dropped until it is a short distance below the horizontal plane of the runway, the ends of the base-board or bottom of the receptacle being connected to the bottom board of the adjoining runways by a short strip or block, as at 18^a. This is clearly shown in Fig. 5. If desired, a slight incline may be formed at the juncture of the runways with the base-board of the receptacle—that is to say, the board 18^a might be sloped from the runways to the base-board of said receptacle, so that the balls rolling down the runway will gradually enter the receptacle instead of dropping over an abrupt corner at 18^a.

Each runway B is closed at its rear end by a suitable upright 20, and from this upright an inner side piece 21 is carried to an engagement with the inclined portion of the rear end of the pool-table, as is shown in Fig. 3.

At the rear end of each runway B, and immediately below the corner-pockets 10 at the rear end of the table, an inclined plane 22 is formed, which is preferably in the nature of a corner-block, having its inclined surface more or less concaved, so that as the balls drop from the rear corner-pockets 10 they will strike on the inclined surface of the corner-block 22, thus giving the ball considerable headway as it enters the runway and causing the ball to travel rapidly down the runway to the receptacle C, so that a second ball quickly following, even from the same pocket or from the center pocket, will not interfere with the first ball pocketed.

A second inclined plane in the form of a block 23 is located at the lower front end of each runway B beneath the front corner-pockets 10, and the inclined surfaces of the corner-blocks 23 face the receptacle C, as is shown in Figs. 4 and 5, the upright back portions of the said blocks being against the side sections 13 of the runways, so that when a ball enters a front corner-pocket 10 it will drop down on the inclined surface of the corner-block 23 below said pocket, which inclined surface is more or less concaved, and the ball thus dropping will be quickly speeded on its way to the receptacle C. It will further be observed that a ball rolling down the runway B will be directed by the face 23^a of the block into the receptacle, as is indicated by the arrows in Fig. 5.

In order to give momentum to a ball passing through a center pocket 11, a spring 24 of greater or less width is provided at one end with a projection 25, (shown best in Fig. 2,) and this projection is attached to the inner surface of the side section of a runway B in such manner that the springs 24 will extend below the open ends of the center pockets 11 with more or less of a tip and a slight incline, the ends of the springs which face the front of the table being perfectly free, so that when a ball is placed in a center pocket it will drop through the pocket onto the spring 24 below said pocket and force the said spring down to an engagement at its free end with the bottom of the runway B, thus forming an inclined plane down which the ball rapidly travels, and the ball is thereby caused to quickly pass to the front of the runway and into the receptacle C. The action of a spring 24 is clearly shown in dotted lines in Fig. 3.

The pockets at their bottom ends are preferably attached in any suitable or approved manner to the adjacent outside portions of the runways B, particularly to the extensions 14 and 15 of the side sections of the runways, as is shown in Fig. 1, and the pockets when so attached are prevented from swaying at the bottom, and the balls placed in the pockets are compelled to drop into the runways.

It is obvious from the construction above described that the balls will travel from a pocket to the receptacle C in a most rapid manner and that the balls may be quickly conducted thereto, one after the other, without one interfering with the travel of others. It will be further understood that the runways and the receptacles C are open to such

an extent that any obstructing material which might accidentally fall into the runways or the receptacle may be quickly and conveniently removed.

It may here be remarked that the attachment is in no manner in the way of the players, as the outer surfaces of the attachment are in the same plane with the outer edges of the flange of the bed and within the plane of said edges.

The device is very simple and is readily attached to any pool-table.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A pool-table and runways located at the sides of the said table, inclining downwardly from one end of the table in direction of the other and passing beneath the corner and center pockets, concaved blocks located in the ends of said runways, and a receptacle connecting the runways at their lower ends, the outer longitudinal portions of the runways and receptacle being for a greater portion of their length some distance below the flange of the table-bed beneath which the device is located, as set forth.

2. A pool-table provided with pockets open at their bottoms, runways extending at each side of the said table below the corner and center pockets, with a downward inclination in direction of one end of the table, a space intervening the upper edges of the longitudinal outer portions of the runways and the flange of the table-bed beneath which the runways are connected, a receptacle connecting the said runways at their lower ends, both the runways and the receptacles being within the vertical plane of the flange of the table-bed, means substantially as described for connecting the pockets and the said runways, whereby to cause the balls entering the pockets to drop into the said runways, inclined concaved blocks located at the higher ends of said runways, facing the lower ends thereof, and inclined concaved blocks located at the lower ends of the runways, facing the said receptacle, as set forth.

3. A pool-table provided with pockets open at their bottoms, runways extending at each side of the said table below the corner and center pockets, with a downward inclination in direction of one end of the table, a space intervening the upper edges of the longitudinal outer portions of the runways and the flange of the table-bed beneath which the runways are connected, a receptacle connecting the said runways at their lower ends, both the runways and the receptacle being within the vertical plane of the flange of the table-bed, means, substantially as described, for connecting the pockets and the said runways, whereby to cause the balls entering the pockets to drop into the said runways, inclined planes located at the higher ends of the said runways, facing the lower ends thereof, inclined planes located at the lower ends of the runways, facing the said receptacle, and a spring located in each runway, beneath each center pocket, which springs are secured at their ends which face the higher portions of the runways, being free at their opposite ends, for the purpose described.

4. The combination, with a pool-table, runways at the sides of the said table below the pockets of the table, which pockets are open, the runways having a downward inclination in direction of one end of the table, and a receptacle connecting the runways at their lower ends, of inclined planes located at the higher ends of the said runways, facing the lower ends thereof, inclined planes at the lower ends of runways, facing the said receptacle, and a spring secured at one end in each runway, being free at its opposite end, the opposite ends of the said springs extending in direction of the lower ends of the runways, which springs are located beneath the center pockets of the table, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PETER LAPP.

Witnesses:
JOHN F. WILSON,
OTTO F. PETERSON.