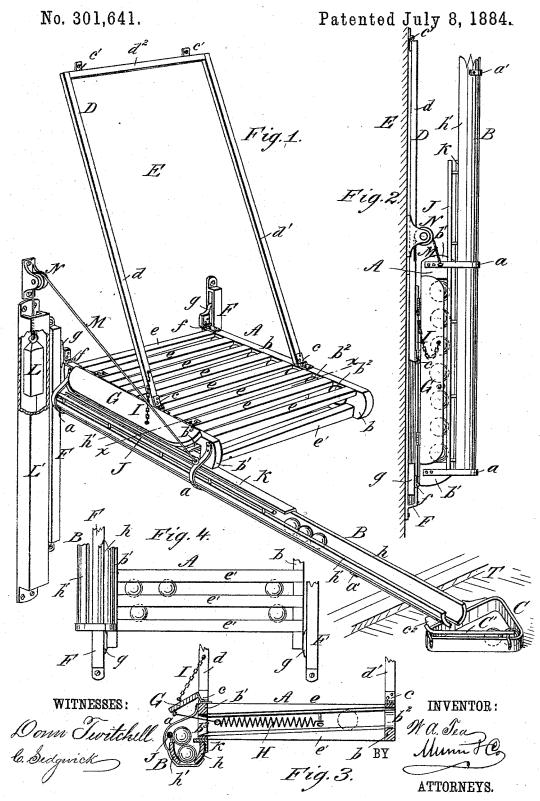
W. A. TEA.

## COMBINED FIFTEEN BALL POOL RACK AND SPOTTER.



## UNITED STATES PATENT OFFICE.

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## COMBINED FIFTEEN-BALL POOL RACK AND SPOTTER.

SPECIFICATION forming part of Letters Patent No. 301,641, dated July 8, 1884.

Application filed March 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. TEA, of Clyde, in the county of Sandusky and State of Ohio, have invented a new and Improved 5 Combined Fifteen-Ball Pool Rack and Spotter, of which the following is a full, clear, and exact description.

This invention relates to improvements upon a fifteen-ball pool-rack for which Letters Pat10 ent were granted to me April 15, 1884, the same being numbered 297,031, said rack being provided with a trough or conduit for leading the balls from the rack to the pool-table, the rack and conduit or trough being arranged to be swung out from the wall or support to horizontal position for spotting, and held in vertical position for receiving and holding the balls as the game proceeds, the rack being arranged also to automatically empty the balls into the trough or conduit when the rack is brought to horizontal position.

The invention consists in the construction and arrangement of the parts of the rack; in the construction of the trough or conduit at25 tached to the rack to prevent clogging of the balls; in the attachment to the outer end of the trough or conduit of the triangle for spotting the balls, whereby the balls may be automatically and accurately spotted; and, finally, in the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, 35 in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken perspective view of my new and improved pool-rack as it appears when swung out from the wall or upright sup40 port to horizontal position for spotting the balls. Fig. 2 is a side elevation of the same raised to vertical position. Fig. 3 is a transverse sectional elevation taken on the line xx of Fig. 1; and Fig. 4 is a front elevation of the lower end of the rack and of the trough or conduit, showing the sliding blocks to which the rack is hinged.

A represents the ball-rack; B, the trough or conduit, attached to one edge of the rack A by the metallic stays or bands a a. Crepresents the triangle, attached to the outer end of the trough or conduit B, and D represents a frame edge of the strip h is provided with the flange

composed of the bars d d'  $d^2$ , hinged to the rack A and to the wall or upright support E by the hinges c c', as shown clearly in Fig. 1.

The rack A is composed of the side pieces, b b', which are correspondingly apertured, as shown at  $b^2b^3$ , for the entrance and exit of the balls, and of the series of cross-bars  $e\ e'$ , between and upon which the balls are placed and 60 held in the rack. The rear or lower ends of the side pieces, bb', of the rack A are attached by the hinges ff to the blocks gg, held in the ways F F, secured to the wall or upright support E, and these blocks g g are adapted to 65 slide up and down in the said ways F F to permit the rack A and trough B to be swung forward to horizontal position, as shown in Fig. 1, and raised to vertical position, as shown in Fig. 2. The upper edges of all of the cross- 70 bars e e', the edges which are uppermost when the rack A stands in vertical position, are the edges which support the balls in the rack, and these edges are straight and stand practically horizontal when the rack is in ver- 75 tical position, as shown in Fig. 4, so that the balls will remain in position when placed in the rack through the above-mentioned apertures  $b^2$ . When the rack A is tipped down to the horizontal position, the balls rest upon 80 the then upper edges of the bars e', as shown in Fig. 3, and these edges are beyeled from the apertures  $b^2$  to the apertures  $b^3$ , to form inclines for causing the balls to roll of their own weight from the rack A into the trough B, as will be 85 understood from said Fig. 3. For preventing the balls from rolling out at the apertures b when they are placed in the rack A, I hinge to the side piece  $b^{\prime}$  the stop plate or door G, which is held closed over the apertures  $b^3$  by the action 90 of the spring H when the rack is in vertical position, but which is opened by the chain I in the act of bringing the rack A to horizontal position, as hereinafter described.

The trough B is composed of the two concaved strips h h', held together with their concaved surfaces facing each other, and their lower edges a little distance apart by the above-mentioned stays a a and the stay-iron a'. The outer strip, h', of the trough is provided at its upper edge with the stop-rail J, for keeping the balls from passing the trough in rolling out of the rack A, and the upper

K, the outer edge of which reaches past the outer surface of the side piece b', and slightly overhangs the trough B, so that the balls, in passing from the rack A into the trough B, will be carried against the outside of the trough or against rail J over any balls that may be in the trough, so that their outward motion is entirely stopped before they descend into the trough B, which prevents the balls from coming forcibly together in the trough, and prevents all danger of the balls clogging in the trough.

The triangle C is attached to the outer end of the trough B by screws passing through the cleat  $c^2$  and entering the strips  $h \ h'$ , and the triangle is provided at its outer edge with the rail C, for preventing the balls from passing the triangle after they leave the trough B.

L is a counter-weight placed in the casing L', and attached to the trough B by the cord M, which passes over the pulley N, so that in swinging or tipping the rack and trough to horizontal position the weight L will be raised in casing L', and serve to retard sudden movement of the rack, and the weight being thus raised in the casing L', it will assist the swinging of the rack back to vertical position.

It is designed to have the trough B of such length relative to the distance of the pool-ta30 ble T from the upright support E, and to have the table so placed that when the trough and rack are brought to horizontal position the triangle C will be placed upon the table, so as to accurately spot the balls, thus avoiding all danger of one player gaining advantage over another by reason of irregular or inaccurate spotting of the balls, which is liable to occur when the balls are spotted by hand.

In use while the players are pocketing the balls the rack and triangle will be raised to vertical position shown in Fig. 2, where they will be held by the action of the weight L. As the balls are shot into the pockets, the attendant on the game will place them in the rack A, between the bars e e', through the apertures b' in the side piece b. All of the balls having been pocketed, the rack A and at-

tached trough B will be swung by the attendant to horizontal position shown in Fig. 1.

This will cause side piece b' to move away from the bar d of hinged frame D, so that chain I will open the hinged door G against the tension of the spring H, and permit the balls to roll from the rack A into the trough a B clong which they will roll to the triangle.

55 B, along which they will roll to the triangle C, which, as above mentioned, will accurately spot them upon the table T. The balls having been thus spotted, the attendant will raise the rack A and trough B to vertical position,

60 which will slacken the chain I and permit the spring H to close the hinged door G, and thus put the rack in position to receive the balls

again. In this manner it will be seen that the rack is very convenient, is automatic in its action, and will always spot the balls accu- 65 rately upon the table.

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

1. The swinging rack A, provided with the inclined cross pieces or bars e', for causing the 70 balls to roll out of the rack when the rack is brought to horizontal position, as set forth.

2. The rack A, having the straight horizontal cross pieces or bars e, in combination with the cross bars or pieces e', that are straight 75 upon one edge and inclined upon the other edge, substantially as and for the purposes set forth.

3. The rack A, composed of the parallel cross-pieces e and e', the latter being inclined 80 upon one edge, the apertured side piece b, and the apertured side piece, b', substantially as and for the purposes set forth.

4. The rack A, hinged to the sliding blocks g, and also to the frame D, hinged at its up- 85 per end to the wall or upright support E, substantially as and for the purposes set forth.

5. The rack A, hinged to the blocks g, placed in the ways F, and hinged to the hinged frame D, in combination with the counter-weight L, 90 attached to the rack A by the cord M, passing over pulley N, substantially as and for the purposes set forth.

6. The trough B, attached to rack A, and provided with the rail J, said rail being disposed opposite one side of said rack and above the top edge of said trough, substantially as and for the purposes set forth.

7. The trough B, attached to rack A, and provided with the ledge K, said ledge slightly 100 overhanging said trough, substantially as and for the purposes set forth.

8. The trough B, attached to the rack A, and provided with the rail J and ledge K, said rail being disposed above the top edge of one 105 side of the trough, and said ledge slightly overhanging said trough, substantially as and for the purposes set forth.

9. The swinging rack A, having the automatically operated door G, in combination 110 with the trough B, having the triangle C attached to its outer end, substantially as and for the purposes set forth.

10. The rack A, hinged to sliding blocks g, and to hinged frame D, and provided with the 115 automatically-operated door G, in combination with the counter-weight L, trough B, and triangle C, attached to the outer end of the trough, substantially as and for the purposes set forth.

WILLIAM A. TEA.

Witnesses:

Homer C. Noble, Jno. D. Finch.