

(No Model.)

N. C. PETERSON & P. E. LARSON.

SELF TALLYING POOL RACK.

No. 332,827.

Patented Dec. 22, 1885.

Fig. 1.

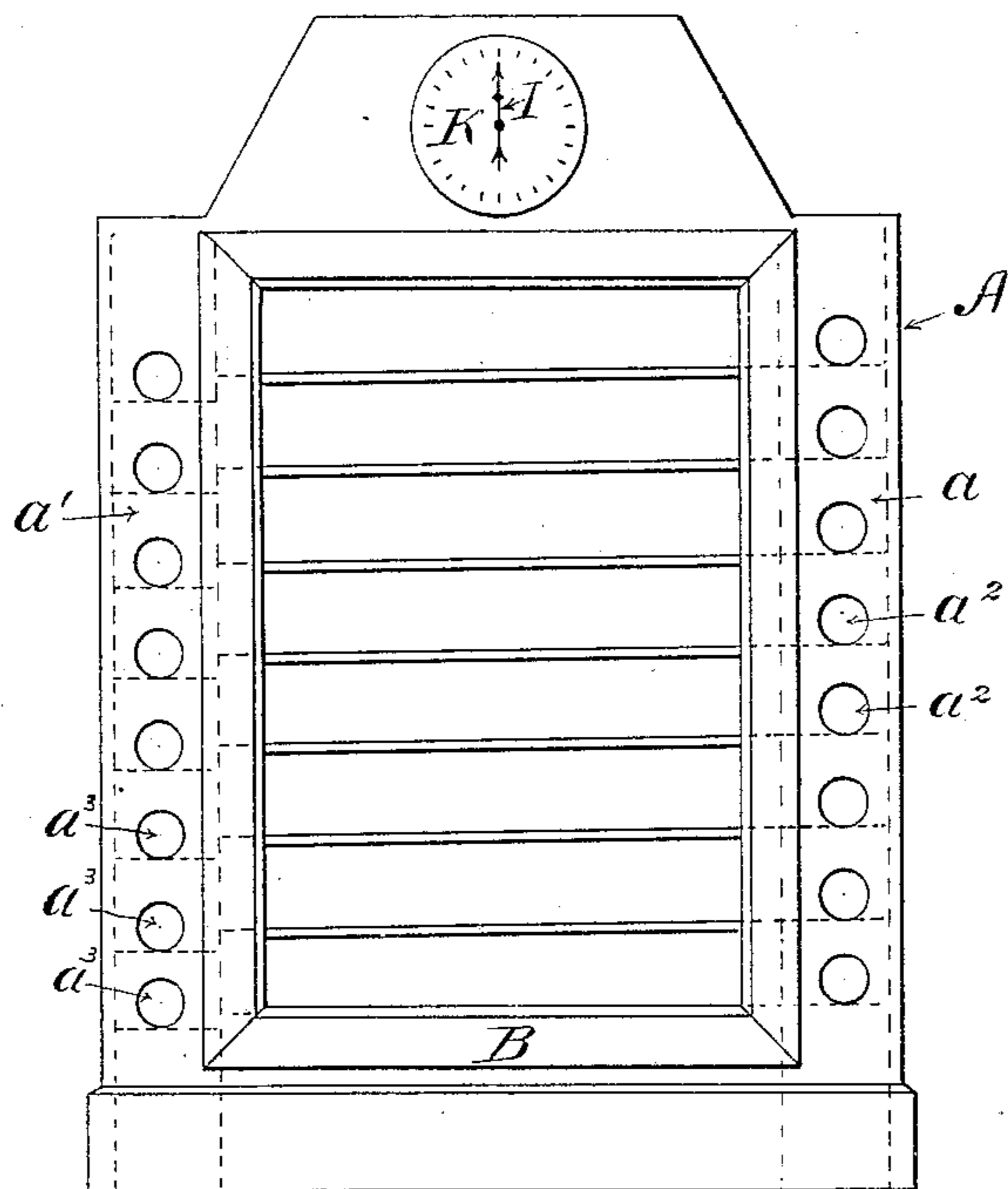


Fig. 2.

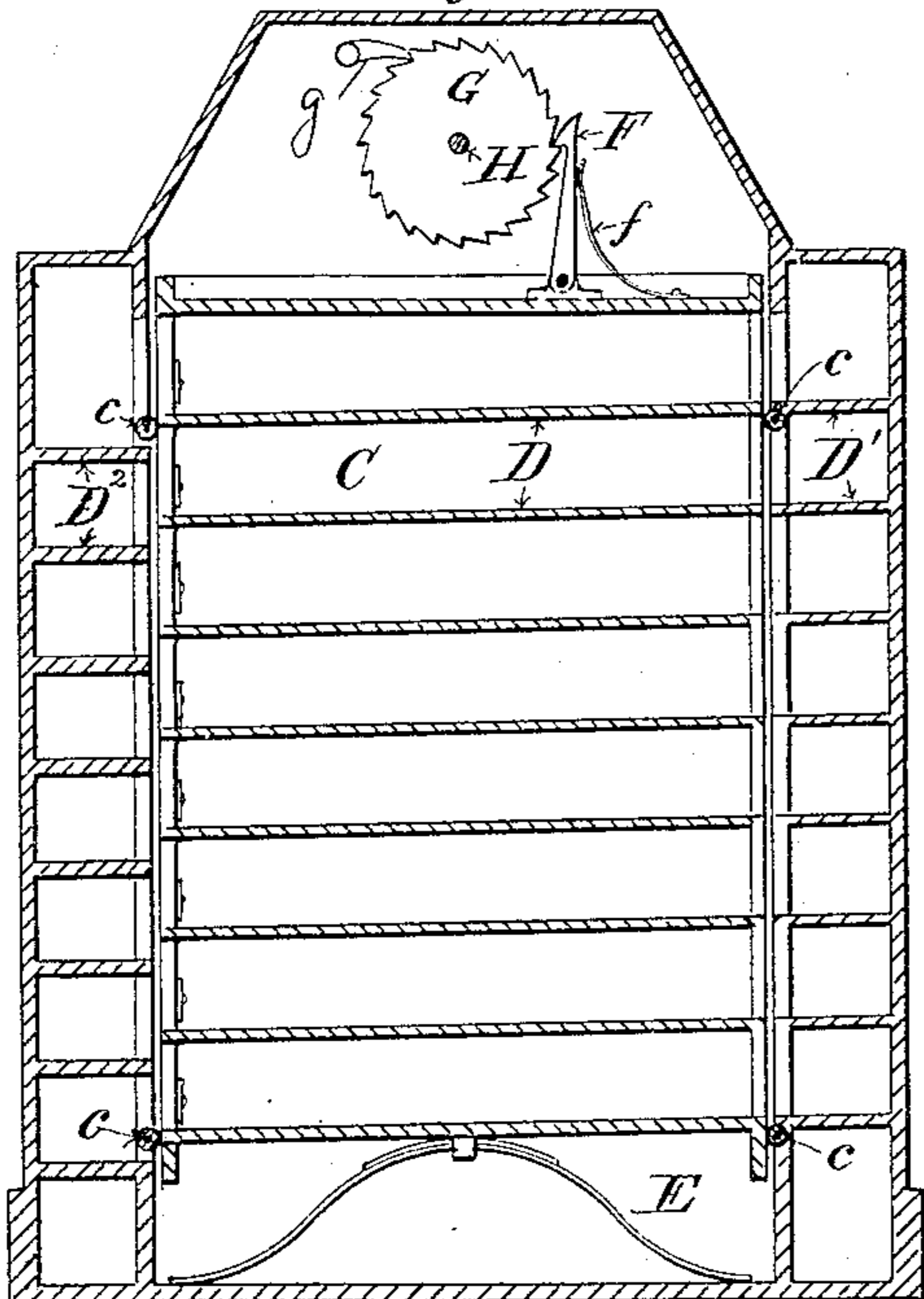


Fig. 3.

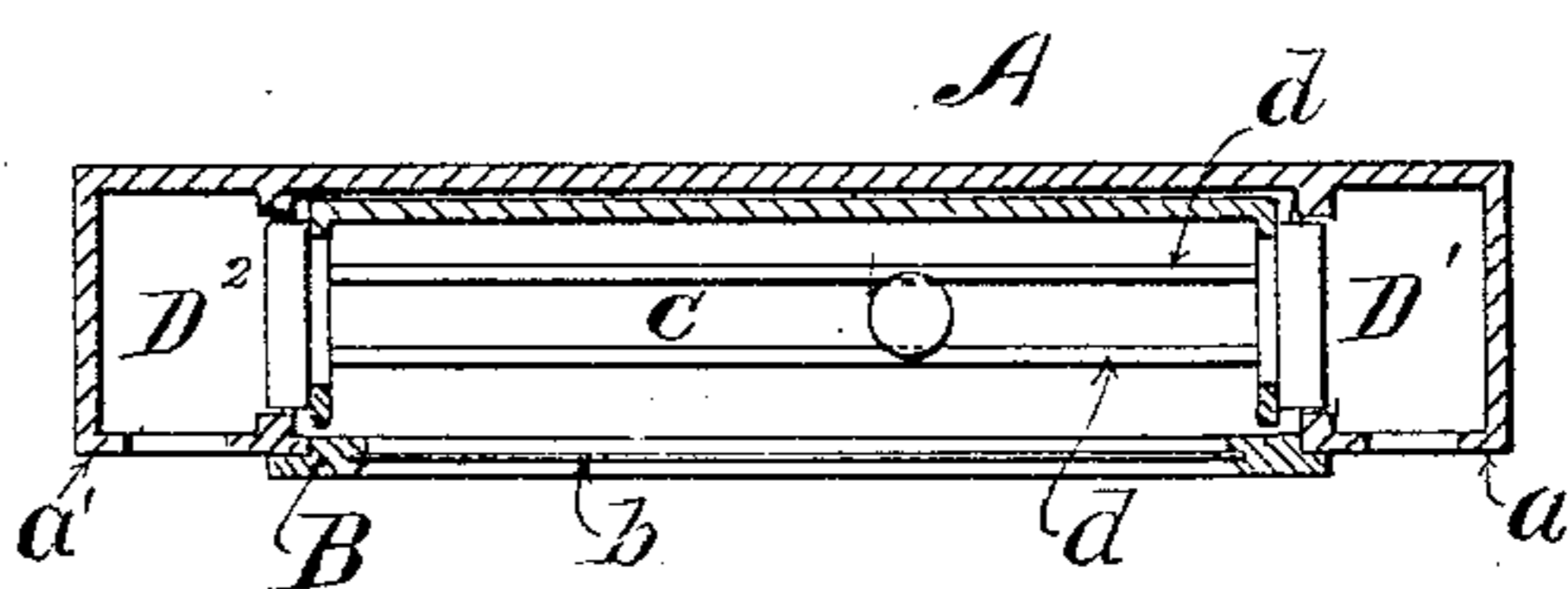
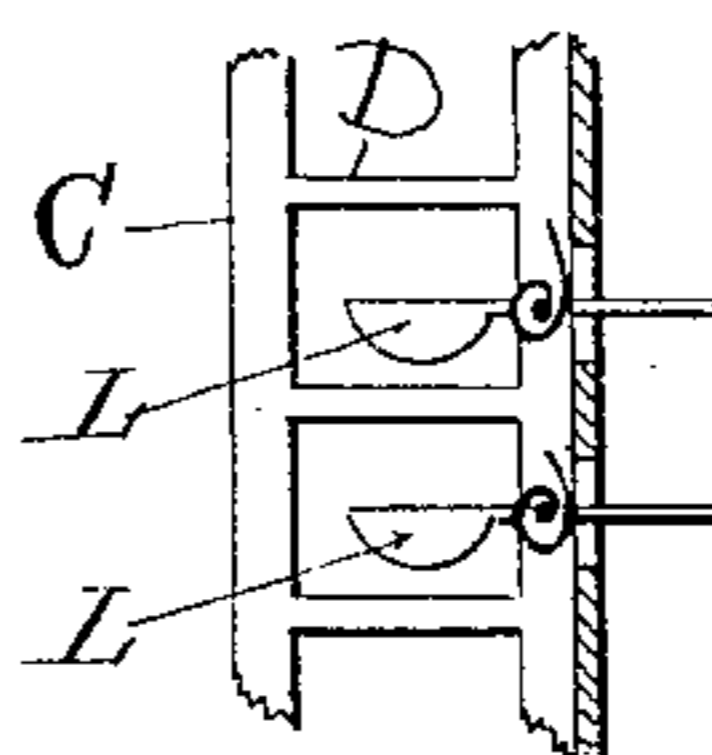


Fig. 4.



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UNITED STATES PATENT OFFICE.

NIELS C. PETERSON AND PER EDWARD LARSON, OF MINNEAPOLIS, MINN.

SELF-TALLYING POOL-RACK.

SPECIFICATION forming part of Letters Patent No. 332,827, dated December 22, 1885.

Application filed March 11, 1885. Serial No. 158,480. (No model.)

To all whom it may concern:

Be it known that we, NIELS C. PETERSON and PER EDWARD LARSON, citizens of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Self-Tallying Pool-Racks, of which the following is a specification.

Our invention relates to improvements in pool-racks; and the invention consists in a rack having a counting device in connection therewith so arranged that the rack will register or tally the number of games played with the balls that are placed in said rack, as hereinafter described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a front elevation, Fig. 2 is a vertical section, Fig. 3 is a cross-section, and Fig. 4 is a detail, of our improved rack.

A represents the main frame of the rack. It is of any suitable construction, and preferably of substantially the shape shown in the drawings. The front of the case is preferably provided with the door B, having a glass panel, *b*. This door is not of the full width of the casing or frame of the rack, and there is upon each side of the door a strip, *a a'*, as seen in Figs. 1 and 2.

C is a movable rack-section or elevator, within the rack A, which operates the counting device. This movable section and the rack A are provided with ball-supporting shelves D D', as shown. The portions D' are stationary in the rack A, and are opposite the shelves D in the movable section. In the front of the rack are a series of holes, *a² a²*—one for each shelf—through which the balls are placed in the rack. As these holes are in the front of the rack, it is not possible to operate the movable section of the rack by inserting a cue through one of the holes. The movable section of the rack rests upon a suitable spring, E, which keeps the rack, when empty, in an elevated position. Instead of the spring shown one or more spiral springs, or a suitable weight with cord and pulley, or rubber cords, may be used to hold the rack-section and to allow it to descend when the balls are placed therein. The stationary part of the rack is shown provided with a number of anti-friction rolls, *c c*, which bear against the movable section and

lessen the friction between the two parts of the rack and permit the section C to move freely, even when the weight of the balls is mainly on one side thereof. These wheels may be on the movable section instead. To the upper part of section C is pivoted a hook-dog, F, having a suitable spring, *f*, by which it is made to engage with a ratchet-wheel, G, mounted upon a shaft, H, which carries the needle I upon the dial K in the front of the rack. *g* is a spring pawl, engaging wheel G. The stationary part of the rack at the side opposite that at which the balls enter is provided with a series of spring-gates, L L, Fig. 4, which are just above the shelves D in the movable section, and prevent the balls from passing out of that section. These gates are so located that they stop the balls, whether the movable section is in its highest or lowest position.

The rack is provided opposite the exit side of the movable section with a series of shelves, D², upon which the balls pass when they leave the movable section. These shelves are lower than the shelves D' at the opposite side of the rack, so that the balls will pass on to them when the movable section is in its lowest position. A series of holes, *a² a²*, communicate with the spaces over the shelves D², and through these holes the balls may be removed. The shelves D² may be omitted, and the balls will then be allowed to drop to the bottom of the rack, and there removed. The shelves D', D, and D² are slightly inclined from the entrance to the exit side of the rack, so that the balls pass by gravity from one side to the other. Each shelf may be composed of two parallel rods, *d d*, as shown in Fig. 3.

The rack may be so adjusted that it will descend and operate the counting device as soon as four balls have been placed therein, which will be the usual arrangement, or it may be adjusted to count under a greater or a less number.

The gates L L may be in the movable section, as shown in Fig. 2.

The operation is as follows: The parts of the rack being in the position shown in Fig. 2, the rack is ready for use. As soon as four balls, or whichever number the rack is adjusted to count under, are placed in the rack the movable section will descend against the

tension of the supporting-spring, and will operate the counting device, turning the needle one point. The placing of the other balls in the rack will not change its position; but after
 5 a game is played the spring-gates L are raised by pressing on their rods, which extend through the front of the casing, and the balls roll out from the movable section, which is then thrown up by the spring E, so that the dog F takes
 10 into the next tooth of the ratchet, and the rack is ready for the next count.

We are aware that heretofore pool-racks have been constructed having a movable rack or a gate, and a counting mechanism in connection therewith, so that said mechanism is
 15 operated when the rack or the gate is moved to permit the balls to move or to be moved from the rack.

The distinguishing feature of our invention is in a vertically-movable rack-section supported by springs or the equivalent therefor, and connected with the counting mechanism, so that said rack-section is moved and the counting mechanism operated by the weight
 20 of a predetermined number of balls, and when the balls are removed the said rack-section returns to its former position.

There are several advantages resulting from this construction. The last game is counted
 30 without removing the balls from the rack and without any attention from the players beyond the placing of the balls in the rack and without any attention from the party in charge of the racks. The racks are self-tallying, and
 35 count the game as soon the prescribed number of balls are placed therein.

We claim as our invention—

1. In a pool-rack, the combination, with a vertically-movable spring-supported rack-section, of a counting mechanism and means carried by said movable rack-section for operating the counting mechanism, whereby said section is moved against the tension of the spring sup-

porting it, and the counting mechanism is operated by the weight of the balls placed in the
 45 rack.

2. The combination, in a pool-rack, of a vertically-movable rack-section, and springs supporting said section, with a counting mechanism, and a spring-dog on said movable section, adapted to engage with and to operate
 50 said counting mechanism, substantially as described, and for the purpose set forth.

3. The combination, with the rack A, having shelves D' and openings *a*, of the vertically-movable rack-section C, having shelves D, supporting springs for said section, a counting device, and means secured to the movable section for operating said device, substantially
 55 as described. 60

4. The combination, with the rack A, having shelves D' and openings *a*, of the vertically-movable rack-section C, having shelves D, supporting-spring E, spring-gates L L, a counting device, and means secured to the
 65 movable section for operating the counting device, substantially as described.

5. The combination, with the rack A, having shelves D' D² and openings *a*² *a*³, of the vertically-movable rack-section C, having
 70 shelves D, supporting-spring E, gates L L, friction-rolls *c*, a counting device, and means on the movable section for operating the counting device, substantially as described.

6. The combination, in a pool-rack, with the vertically-movable rack-section D and spring E, of the ratchet G, pawl *g*, shaft H, needle I, dial K, and spring-dog F, substantially
 75 as described.

In testimony whereof we have hereunto set
 our hands this 5th day of March, 1885.

NIELS C. PETERSON.

PER EDWARD LARSON.

Witnesses:

A. C. PAUL,

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