No. 621,187.

Patented Mar. 14, 1899.

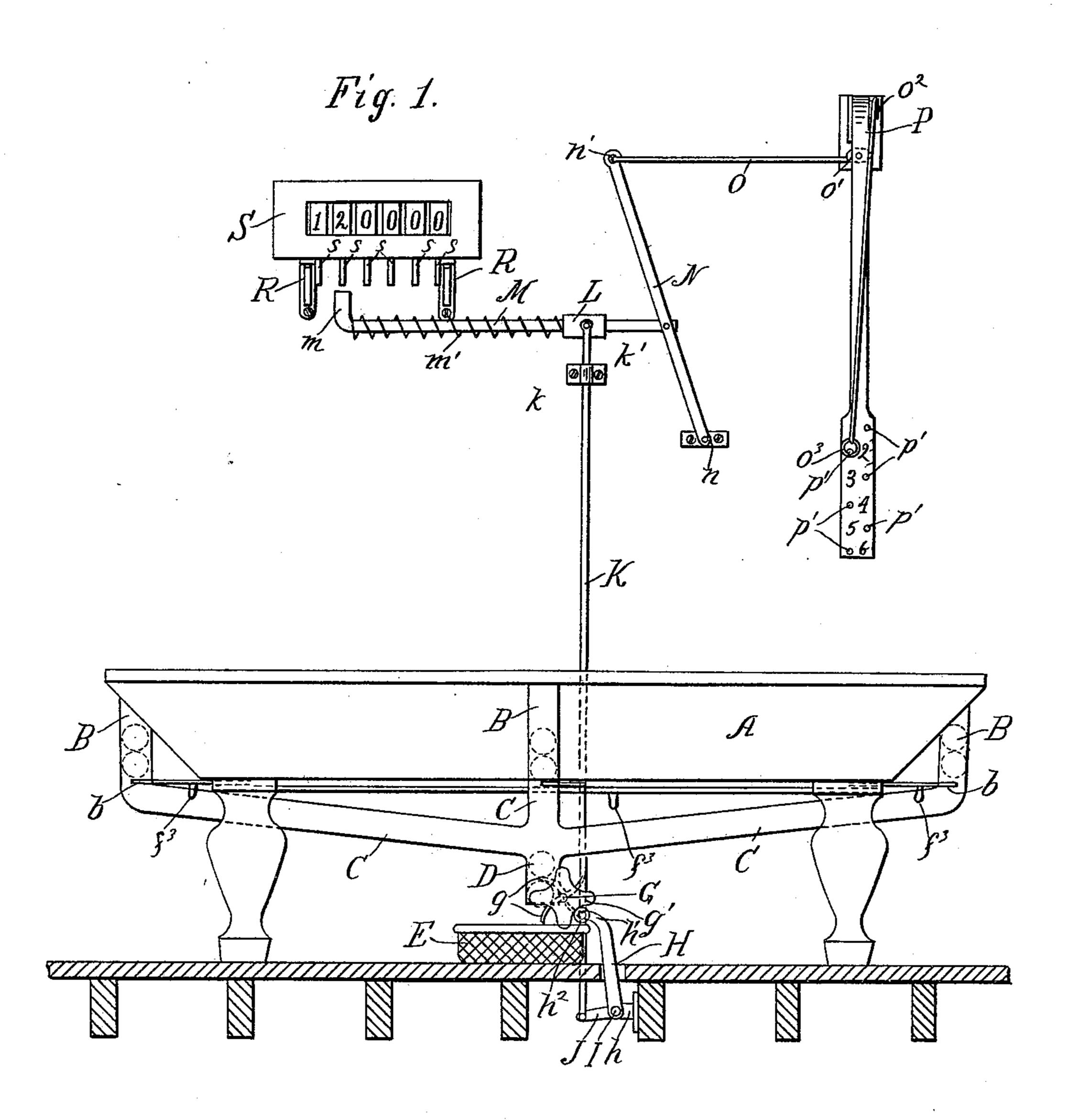
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POOL TABLE.

(Application filed Mar. 16, 1898.)

(No Model.)

2 Sheets-Sheet 1.



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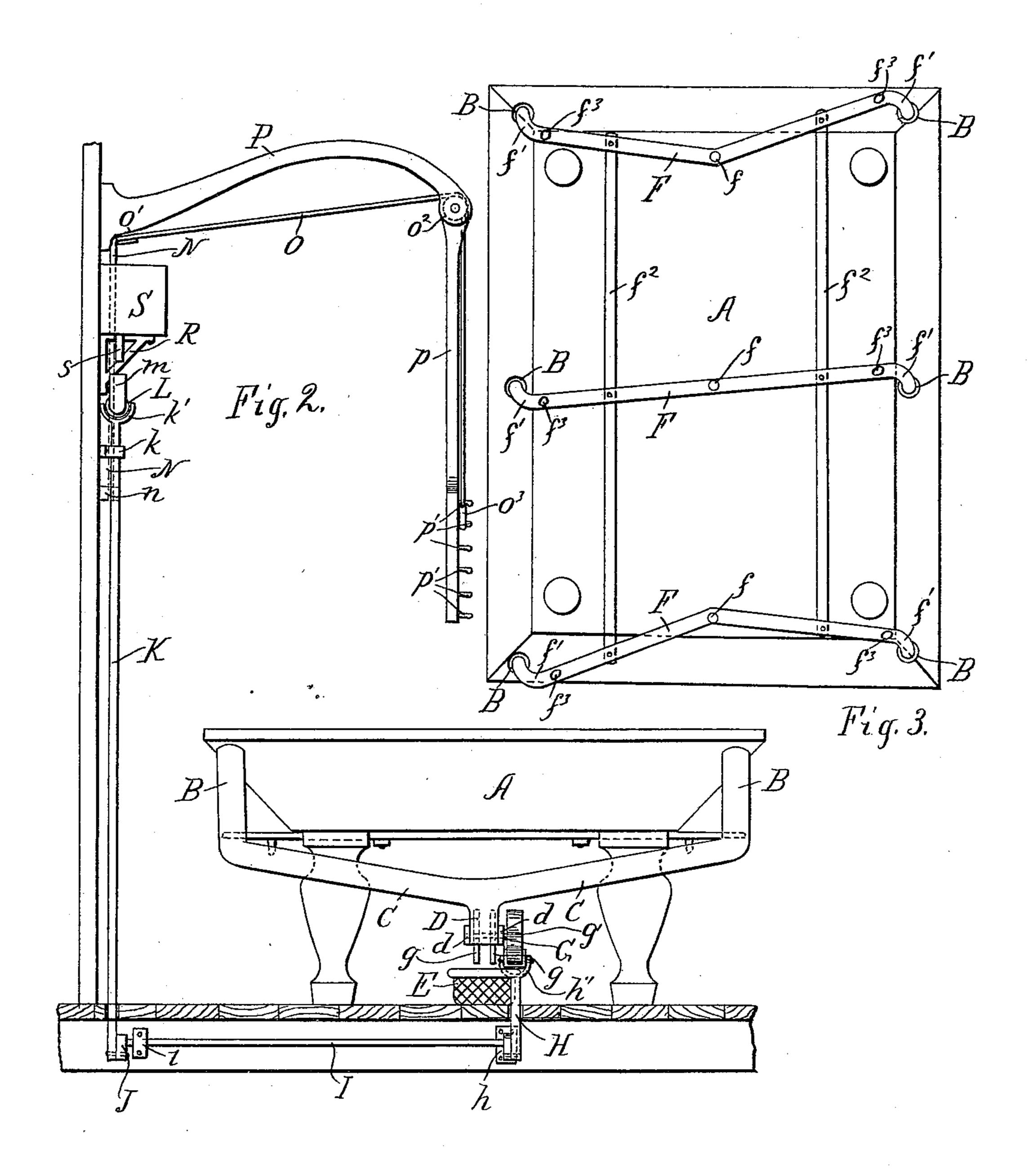
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United States Patent Office.

JAMES WALSH AND DAVID SHEPHERD, OF DENVER, COLORADO.

POOL-TABLE.

SPECIFICATION forming part of Letters Patent No. 621,187, dated March 14, 1899.

Application filed March 16, 1898. Serial No. 674,036. (No model.)

To all whom it may concern:

Beit known that we, James Walsh and David Shepherd, citizens of the United States, and residents of Denver, county of Arapahoe, and State of Colorado, have invented certain new and useful Improvements in Pool-Tables, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

This invention relates to an improvement

in pool-tables.

The object of the invention is to provide an automatic device for recording the results of the play of the several participants in the game.

Heretofore it has been necessary to remove the balls from the pockets and deposit them in racks provided for that purpose, which is a source of endless annoyance.

The invention will be hereinafter fully described, and specifically set forth in the an-

nexed claims.

In the accompanying drawings, Figure 1 shows the pool-table in side elevation and also shows the recording apparatus sustained at the adjacent side wall of a room. Fig. 2 is an end elevation of the same. Fig. 3 is an inverted plan view of the bottom of the table

on a reduced scale. In applying our invention we employ a pooltable A, the upper face of which is constructed in the usual manner. The fixed pockets in 35 the ordinary table are dispensed with and replaced by the pockets B B, which may be of tubing or of open wirework, as preferred. Tubes or wire guides C are connected with the bottom of said pockets and run in an in-40 clined plane to the position approximately under the center of the table, where all converge into a downwardly-projecting tube or guide D. The object of these guides is to cause the balls deposited in the pockets to 45 roll therein to a common center and be deposited in the basket E, placed under the mouth of the tube or guide D. It will thus be seen that there is no necessity for picking the balls out from the pockets after each play 50 and depositing them in a separate rack for

each player.

Pivoted to the under side of the table by

means of the pivots f are the arms F, extending transversely across the bottom of the table and provided with curved ends f', said 55 curved ends being adapted to slide in suitable slots b in the lower part of the tubes or guides B. Said arms are connected by means of parallel bars $f^2 f^2$, which are pivoted thereto and adapted to cause said arms to work to- 60 gether. Knobs f^3 , fixed to the said arms F near their outer ends, form convenient handles, by means of which the said arms may be moved out from engagement with the tubes B. The object of these arms is to retain the 65 balls deposited in the pockets B when necessary or desirable on account of a "scratch," so that they may be removed without operating the recording apparatus.

Two projections d d on one side of the up- 70 right tube or guide D form a journal for the axle G, upon which are mounted the curved arms g g, which work in a suitable slot in the tube D. Upon the end of said axle is fixed the cam g', preferably of a four-armed type. 75

A lever H, fixed to the end of a shaft mounted in the pillow-block h, located under the floor, extends upwardly through a suitable slot in the flooring and is provided at its upper end with a yoke h', in which the roller h^2 80 is mounted. This roller is adapted to roll upon the surface of the cam.

The shaft I, upon which the lever H is fixed, extends horizontally to a position close to the wall of the room, a suitable journal i support-85 ing its other end. A crank-arm J is fixed upon the end of said shaft, and to said crank-arm is pivoted a vertical rod K, which extends upwardly through a suitable hole in the flooring and parallel to the wall and being adapted to 90 slide vertically through a suitable journal k. Its upper end terminates in a yoke k', to which is pivoted a collar or sleeve L. Mounted within said sleeve L and adapted to slide laterally through said sleeve is the lever M, provided 95 at one end with an upwardly-projecting spur m. A coiled spring m', surrounding said rod and contacting with said spur m and said collar or sleeve L, is adapted to normally extend said spur m from the collar L. The other end roo of said rod M is pivoted to a lever N, one end of which is fulcrumed to a suitable pivot n, fixed to the side of the wall. The upper end. of said lever N is preferably formed with an

eye n', through which a cord O is adapted to pass and be secured. Said cord O passes around a sheave o', which is journaled to the base portion of the arm P, fixed to the wall 5 in any approved manner. Upon the outer end of said arm P is fixed another sheave o², over which the cord is adapted to pass. A vertical extension p of the arm P may be rigidly fixed thereto, or it may be pivoted there-10 to, as preferred. The lower portion of said extension p is provided with a series of pins p', fixed in the face thereof. Upon the lower end of the cord O is fixed a ring o3, adapted

to hook over one of the said pins p'. Mounted upon suitable brackets R R, fixed to the wall in any approved manner, is the counter S, constructed in any approved form and which has depending therefrom a series of rods ss, equal in number to the number of 20 counting-cylinders in the box, said rods being adapted to move its corresponding wheel one number when raised by the action of the lever M.

In the operation of the device the balls are 25 placed upon the table and the player tries to deposit them in one of the several pockets in the usual manner. The balls fall in the pockets and are brought up and stopped by the curved ends of the arms F, as shown by 30 the dotted lines in Fig. 1. If the hit is a scratch, the balls may then be removed; but if not, the player moves the arms F, allowing the balls to drop into the tubes or guides C, through which they roll to the guide D.

35 As is shown by the dotted lines in Fig. 1, the ball in falling will operate to revolve the , axle G and thereby turn the cam g, which in turn will operate the lever H and through the medium of the shaft I and the crank-arm 40 J elevate the rod K. As shown in Fig. 1, the

first player has finished his play and the recorder has been set for the second player by means of the cord, which is hooked over the second pin in the arm extension p. As the 45 rod K is elevated it raises the collar L. The

end of the rod M on the right being pivoted to the lever N, the upwardly-projecting spur on the other end of the rod will be raised, thereby striking the second rod s and record-

50 ing one more ball in the indicator. If another ball should follow that already recorded, the cam will be turned another quarter-turn and the indicator will show another ball. The second player having finished his play, the

55 ring o^3 is hooked over the third pin, thereby bringing the spur m of the rod M in line with the third rod of the indicator. This operation may be repeated until all the balls are deposited in the pockets and have been re-60 corded. The play having been finished, the balls are returned from the basket to the ta-

It is obvious that we may use mechanical equivalents for any one of the many parts of 65 this device without departing from the spirit of our invention.

ble and the operation repeated indefinitely.

Having thus described our invention, what |

we claim as new, and desire to secure by Letters Patent, is—

1. A pool-table having ball-pockets pro- 70 vided with means for arbitrarily opening and closing their outlets, guides leading therefrom to a common outlet for the balls, mechanism at said outlet permitting passage of one ball at a time, a registering apparatus, 75 and mechanism connecting the ball-passing mechanism at the outlet with the registering apparatus and indicating passage of each ball from said outlet, substantially as shown and described.

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2. A pool-table having ball-pockets supplied with outlets having cut-off mechanism. and means for opening and closing the same, guides leading therefrom to a common outlet for the balls, mechanism at said outlet per- 85 mitting passage of one ball at a time, a registering apparatus comprising a series of indicators one for each player, and mechanism connecting the ball-passing mechanism at the outlet with the registering mechanism and 90 including portions adapted for adjustment to actuate any one of the series of indicators to register the score of any individual player, substantially as shown and described.

3. A pool-table having ball-pockets, guides 95 leading therefrom to a common outlet for the balls, mechanism at said outlet permitting passage of one ball at a time, a registering apparatus, mechanism connecting the ballpassing mechanism at the outlet with the reg- 100 istering apparatus and indicating passage of each ball from said outlet, and cut-off mechanism adapted to prevent passage of the balls from the pockets to the guides and thereby prevent operation of the registering appa- 105ratus by certain balls at the will of the players, substantially as described.

4. A pool-table having ball-pockets, guides leading therefrom to a common outlet for the balls, mechanism at said outlet permitting 110 passage of one ball at a time, a registering apparatus, mechanism connecting the ballpassing mechanism at the outlet with the registering apparatus and indicating passage of each ball from said outlet, and cut-off mech- 115 anism adapted to prevent passage of the balls from the pockets to the guides and thereby prevent operation of the registering apparatus by certain balls at the will of the players; said cut-off mechanism comprising a se- 120 ries of cut-off devices one working at each pocket and mechanism coupling said devices and causing their simultaneous operation for closing or opening all the ball-pockets at once, substantially as described.

5. An improved pool-table embodying a table proper having a series of pockets fixed thereto, guides adapted to convey the balls through a central vertical guide, lever-operating mechanism fixed thereto, said levers 130 being adapted to record the number of balls passing through said vertical guide, and means for independently recording the number of balls deposited in the pockets by each player

consisting of a fixed arm provided with a series of pegs, an oscillating lever pivotally connected to the recorder-operating rod, and a cord fixed to the free end of the oscillating lever and passing over suitable sheaves in the fixed arm, substantially as shown and described.

6. The combination with a pool-table provided with ball-pockets having outlets, a series of cut-off devices respectively working at each pocket-outlet, and mechanism coupling said series of cut-off devices and causing their simultaneous operation for closing or opening all of the ball-pockets at once, of guides re-

spectively leading from the cut-off outlet device of each pocket to a common receptacle, 15 substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of two witnesses, this 8th day of March, 1898.

JAMES WALSH. DAVID SHEPHERD.

Witnesses:
H. B. PAGE,
ELIZABETH MASON.