

C. H. Froelich

Game Board.

N^o 32,811.

Patented July 9/1861.

Fig. 2.

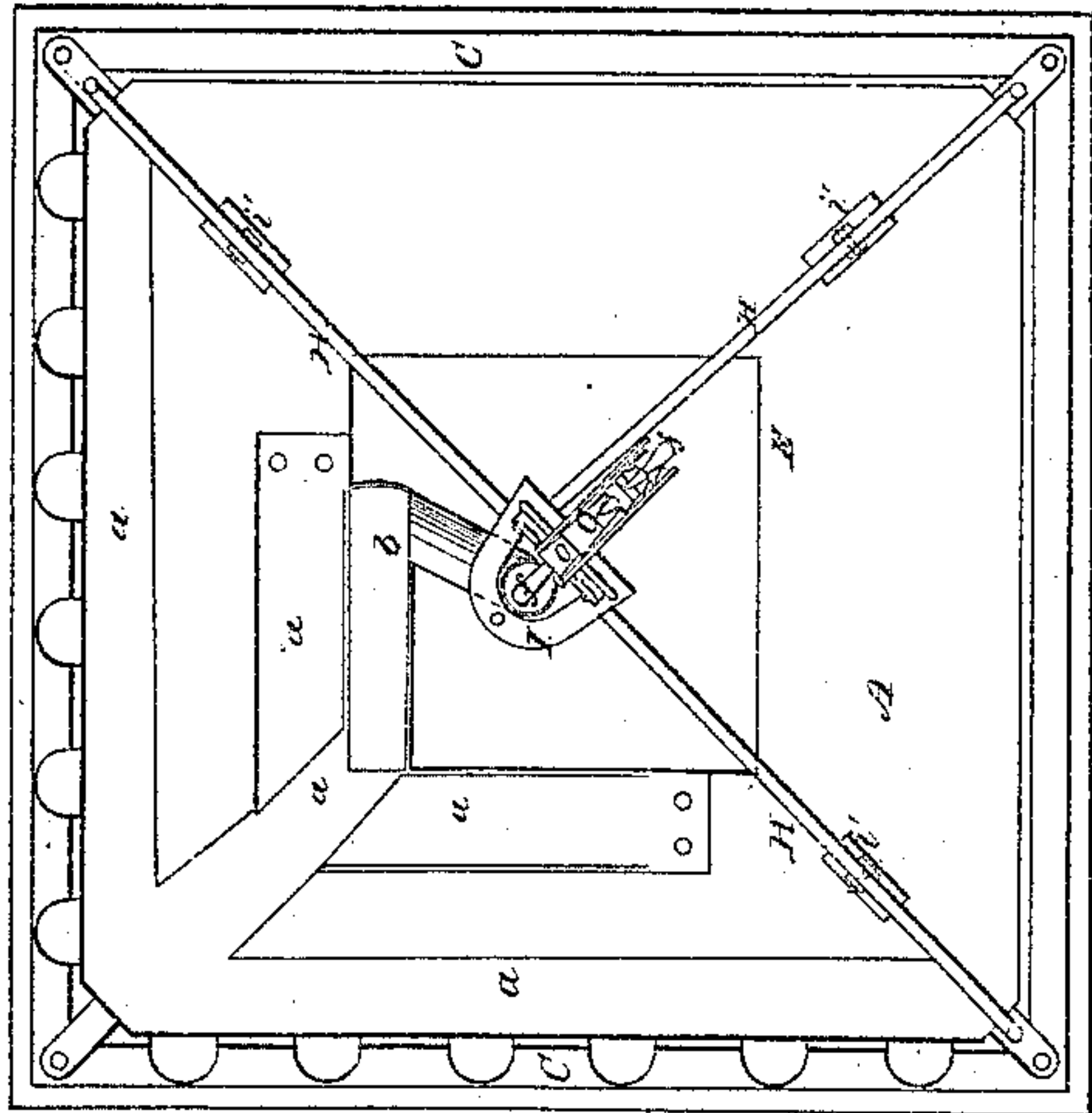
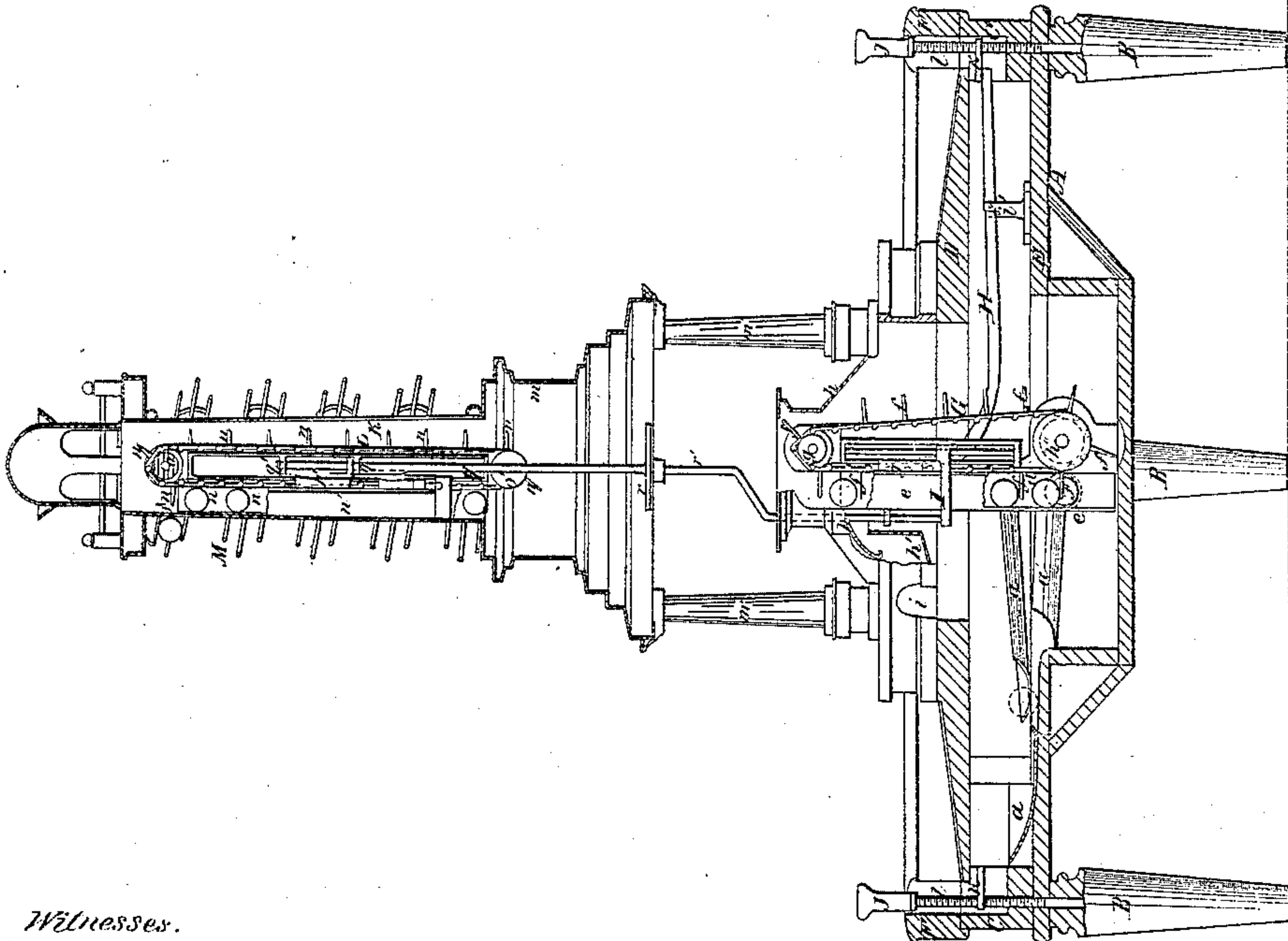


Fig. 1.



Witnesses.

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CH. FRÖLICH, OF NEW YORK, N. Y., ASSIGNOR TO PHELAN & COLLENDER, OF NEW YORK, N. Y.

TIVOLI-TABLE.

Specification of Letters Patent No. 32,811, dated July 9, 1861.

To all whom it may concern:

Be it known that I, CH. FRÖLICH, of the city, county, and State of New York, have invented a new and Improved Automatic Tivoli-Table; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1, is a vertical section of my invention in a plane passing diagonally across the table. Fig. 2, is a plan or top view of the same, the top of the table having been removed to expose the working parts.

Similar letters of reference in both views indicate corresponding parts.

This invention consists in the arrangement of an endless chain of fingers acting upon a number of balls in combination with a series of channels above and below the perforated table and with levers operated upon by buttons on the edge of the table in such a manner, that by successively depressing said buttons one ball after the other is caused to roll on the table and to descend through one of the apertures in the top of said table and through the channels or gutters under the table top back to the starting point, while at the same time one of the balls remaining in the gutter below is taken up by one of the fingers thereby enabling the player or players to proceed with the play without interruption.

It consists further in combining with the endless chain of fingers which throw the balls out upon the table and with the apparatus for operating the same, a column having in its interior an additional endless chain of fingers operating upon a secondary number of balls and being provided with a spiral channel extending from the top to the base of the column in such a manner, that on depressing one of the buttons, and simultaneously with the ball thrown out by the lower or main chain of fingers, one of the secondary balls is thrown out at the top of the column and made to descend through the entire height of the spiral channel, giving to the entire arrangement the appearance as if the balls thrown out at the top of the column were the same as those thrown out by the main chain of fingers and as if the same balls, which descend through the spiral channel on the outside of the column, also make a circuit on the table and disap-

pear through one of the apertures in the top.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation with reference to the drawing.

The table A, is supported by four legs B, and its frame C, is provided with a top D, and with a bottom E. The central part of this bottom is depressed as clearly shown in Fig. 1, of the drawing and it forms the bed for all the working parts of my table. The top D, of this table has the shape of a truncated pyramid, each of its sides being inclined from the center toward the edge, and it is provided with a number of apertures either cut into the edges or in the centers of its sides, through which the balls used in the play descend to the bottom of the table. These apertures are numbered and each player counts as many points as he finds marked opposite the aperture through which his ball disappears. A rim F, encircles the edge of the table top and prevents the balls running off. As the balls pass down through the apertures in the top of the table, they collect in channels *a*, which are inclined toward the central channel *b*, so that all the balls, which descend through one of the apertures in the top of the table, are collected in said channel or tube *b*. This tube communicates through an opening *d*, with the ascension tube *e*, and the balls, which pass through the opening *d*, are caught by one of the fingers *f*, attached to the endless chain G, so that by imparting a rotary motion to one of the pulleys *g*, *h''*, over which the chain is stretched, one of the balls after the other is taken up by one of the fingers and carried up to the platform *h*. From this platform, the sides of which are inclined, the balls run down into channels *h'*, leading to doors *i*, which open toward the inclined sides of the table top. The platform *h*, is so arranged, that the balls on being raised to the same by the action of the endless chain of fingers are perfectly free to roll down toward either side of the table and on reaching one of the sides of the table top the balls disappear through one of the apertures just as it may happen, the entire motion of the balls being left to chance.

The endless chain G, is operated upon by levers H, that are fulcrated on standards *i'*, secured to the bottom E, and radiating to-

ward the four corners of the table. The inner end of each of these levers acts upon a sleeve I, which slides on the outside of the ascension tube *e*, and which supports two
 5 spring dogs *j*, that act upon the links of the chain, said links being so shaped, that the spring dogs catch hold in going up, but in descending the dogs slide over the links without taking effect. The outer ends of the
 10 levers H, connect by short links *h*, and screw rods *l*, with knobs or buttons J, in such a manner that by depressing one of said buttons the sleeve I, with the catches is raised and an upward motion is imparted
 15 to that side of the chain, which carries the balls. Whenever one of the buttons is depressed therefore, one of the balls will be thrown out on the platform *h*, and another ball is taken in below (provided there is a
 20 sufficient number of balls,) and the play progresses without interruption, since all the balls, which are thrown out on the top, run back to the bottom of the chain, neither is it of the least consequence, which of the but-
 25 tons is depressed so that four persons can station themselves on the four corners of the table and play together with equal chances.

Over the platform *h*, rises the column K, supported by a base *m*, resting on small columns *m'*, so as to give to the whole a neat and
 30 ornamental appearance. The column K, is hollow, and arranged in its interior is a series of fingers *n*, attached to an endless chain L, that passes around two pulleys or
 35 chain wheels *o*, *o'*, as clearly shown in Fig. 1, of the drawing. This chain carries an additional series of balls up in the interior of the column, the balls being prevented rolling off sidewise by an ascension tube *n'*,
 40 and on arriving at or near the upper end of said column, the balls are discharged through an aperture *o**, into a channel M, running spirally around the outside of the column and extending from its top to the
 45 base. The lower end of the spiral channel M, communicates with an aperture *p*, through which the balls roll back unto one of the fingers *n*, provided the place is not previously occupied by another ball. The
 50 chain L, is operated by two spring dogs *p'*, which are secured to a rod *q*, that is guided

in loops *q'*, attached to the inside of the column. This rod extends down through the base of the column K, and it connects with a plate *r*, which rests on the end of a rod *r'*,
 55 that is firmly screwed into the sleeve I, which carries the dogs through the action of which, motion is imparted to the lower or main chain G. If now by depressing one of the
 60 buttons J, the sleeve I, is raised, the dogs *p'*, act on the chain L, while at the same time the dogs *j*, act on the chain G, and two balls are thrown out simultaneously, one upon the platform *h*, to make its circuit on the table
 65 and the other into the spiral channel M, to roll down to the bottom of the column K. And since it takes some time before the ball thrown up by the lower chain G, rolls down over the platform *h*, and through the channels *h'*, to one of the doors *i*, during which
 70 time said ball is not visible, while at the same time the ball thrown out by the upper chain has time to pass through the entire channel M, it appears as if the ball thrown out by the upper chain after having made
 75 the circuit through the spiral channel M, was coming out on the table to make its circuit there and to disappear in one of the apertures in the top D, of the table.

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

1. The arrangement of the hinged levers H, operated upon by buttons J, in combination with the endless chain G, with fingers *f*,
 85 and with the channels *h'*, *a*, *b*, substantially as and for the purpose set forth.

2. The arrangement of the secondary chain L, with fingers *n*, in combination with the spiral channel M, and with the chain G,
 90 all constructed and operating substantially as and for the purpose specified.

3. The arrangement of the sleeve I, rod *r'*, plate *r*, and rod *q*, in combination with the spring dogs *j*, and *p'*, chains G, and L,
 95 and with the hinged levers H, constructed and operating substantially as, and for the purpose described.

CH. FRÖLICH.

Witnesses:

L. L. DEAN,
 M. M. LIVINGSTON.