(No Model.) 3 Sheets—Sheet 1.

E. H. DAVIS.

COIN CONTROLLED GAME APPARATUS.

No. 508,922. Patented Nov. 21, 1893.

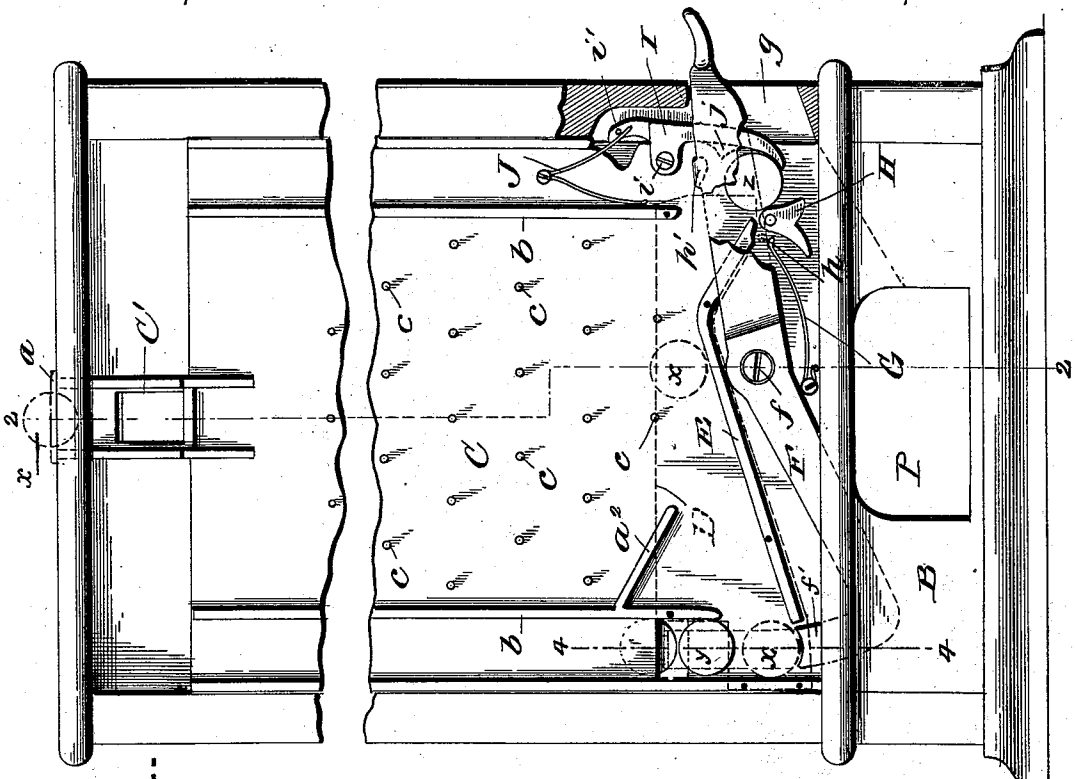


Fig. 1.

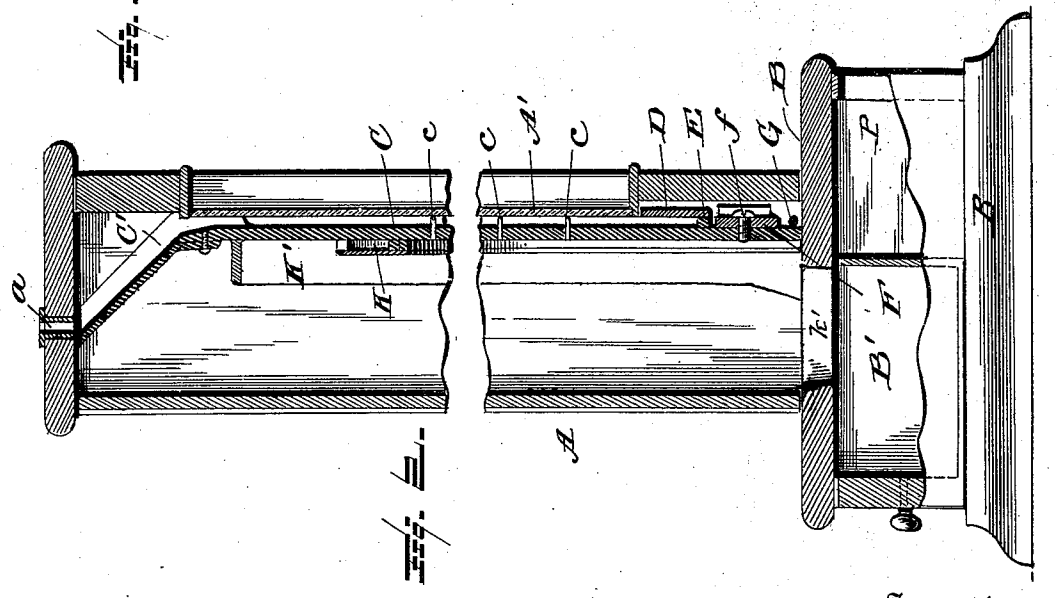


Fig. 2.

Witnesses
L. C. Hills
E. A. Bond

Inventor
Ethan H. Davis.
per Chas. N. Fowler
Attorney.

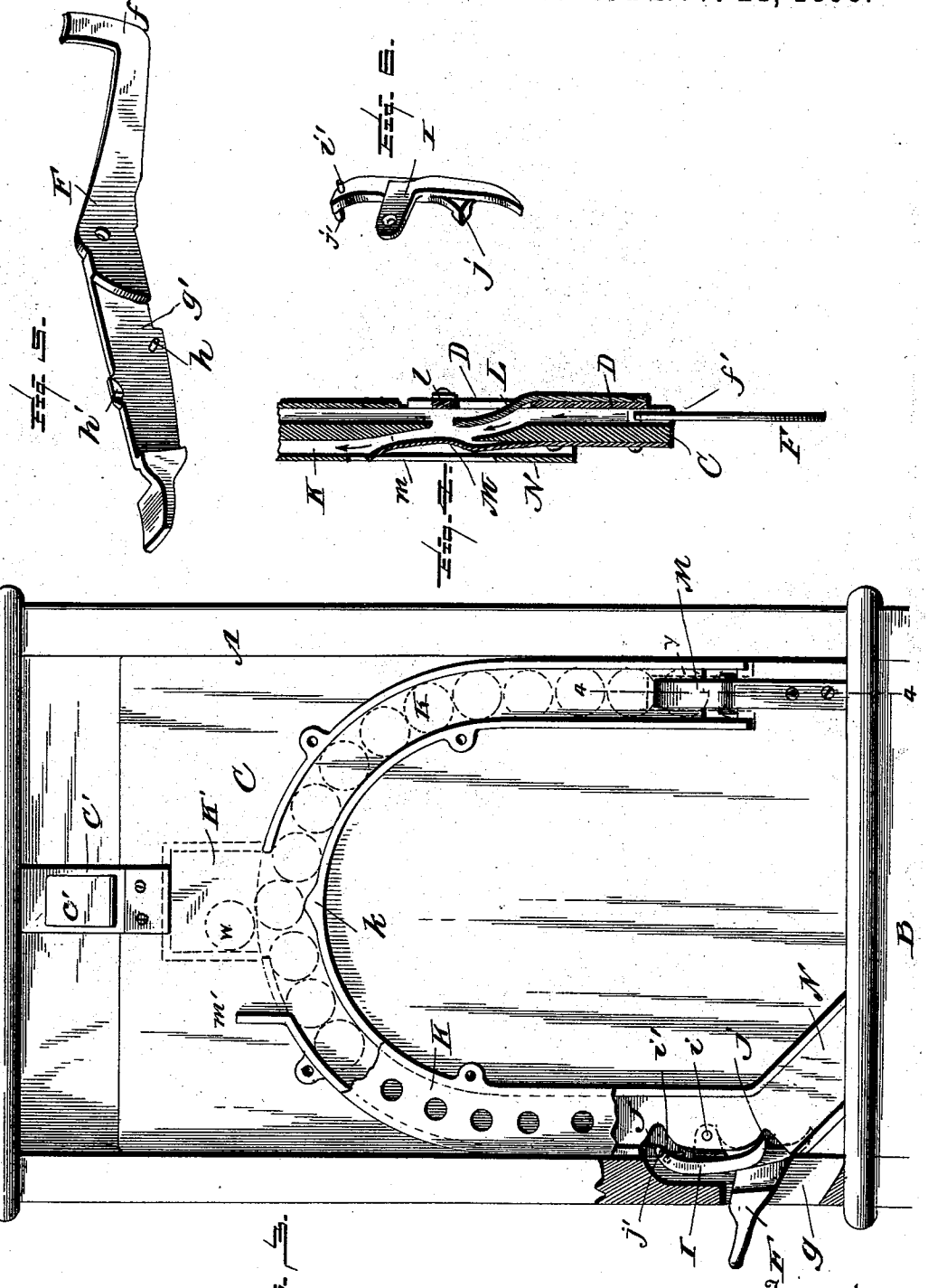
THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

(No Model.) 3 Sheets—Sheet 2.

E. H. DAVIS.

COIN CONTROLLED GAME APPARATUS.

No. 508,922. Patented Nov. 21, 1893.



Witnesses
L. C. Hills.
E. A. Bond

Inventor
Ethna H. Davis.
per Chas. N. Fowler
Attorney

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

(No Model.) 3 Sheets—Sheet 3.

E. H. DAVIS.

COIN CONTROLLED GAME APPARATUS.

No. 508,922. Patented Nov. 21, 1893.

Fig. 7.

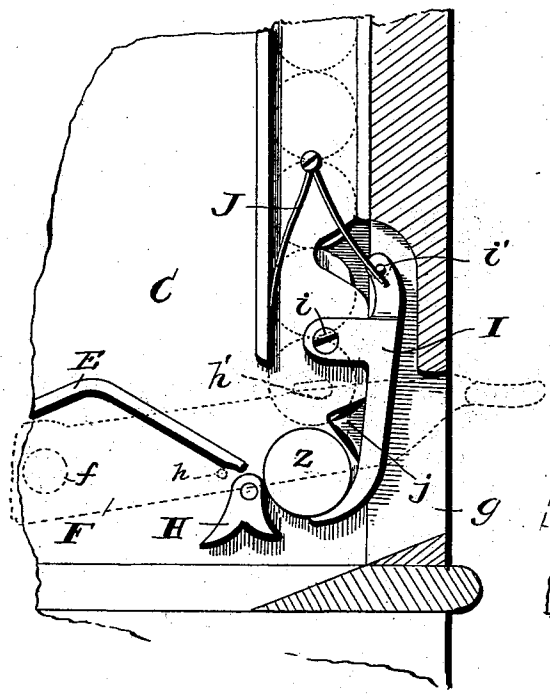


Fig. 8.

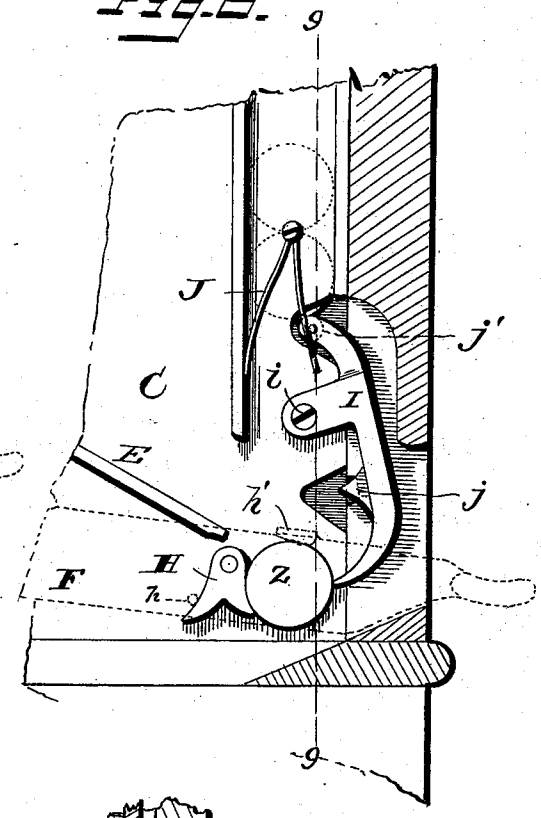
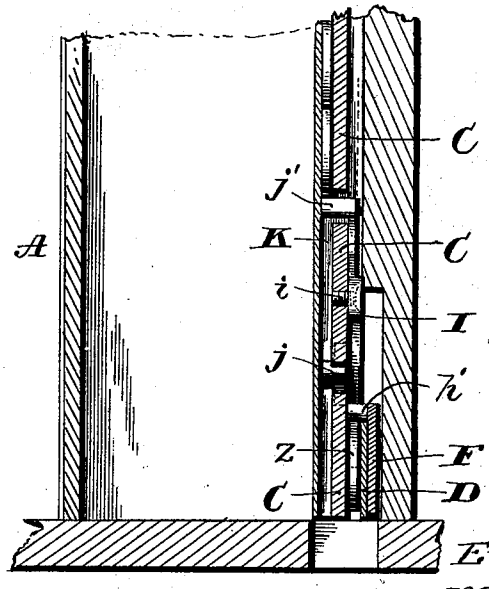


Fig. 9.



Witnesses
C. J. Williamson.
C. H. Bond.

Inventor
Etna H. Davis.
per Chas. N. Fowler
Attorney.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ETNA H. DAVIS, OF ELMIRA, NEW YORK.

COIN-CONTROLLED GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 508,922, dated November 21, 1893.

Application filed October 6, 1892. Serial No. 448,023. (No model.)

To all whom it may concern:

Be it known that I, ETNA H. DAVIS, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Game Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to game apparatus in which are employed a series of counters sufficient in number to accommodate two or more persons playing the game, the counters being introduced in the apparatus through a slot and deposited in certain places designed to receive them, depending on the course the counter takes after leaving the slot.

The invention consists in an apparatus of the above character constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 represents a front elevation of my improved game apparatus with the front plate removed. Fig. 2 represents a vertical section thereof from front to rear and on line 2 2 of Fig. 1. Fig. 3 represents a rear elevation with the back plate removed. Fig. 4 represents a detail sectional view taken on line 4 4 of Figs. 1 and 3 and on an enlarged scale. Fig. 5 represents a perspective view of the operating lever detached from the apparatus, also on an enlarged scale. Fig. 6 represents a perspective view of the escapement pawl detached from the apparatus. Fig. 7 represents a detail view on an enlarged scale showing the normal position of the gravity pawl and retaining pawl and the position of the counter with relation thereto after passing over the short incline of the track upon the winning side of the apparatus and previous to the lever being depressed, the lever being shown in its normal position and in dotted lines. Fig. 8 represents a similar view showing the relative position of the pawls after the lever has been depressed and the position of the counter with relation thereto immediately previous to its being forced down and out of the machine by the lever; Fig. 9 a sectional elevation taken on line 9 9 of Fig. 8.

In the accompanying drawings A designates a suitable case of any preferred size and design, either ornamental or plain as found most preferable, and within the case the several parts which constitute the game apparatus are suitably arranged, said case having a glass or transparent front-plate A′ through which the course of the counter may be seen after the same is deposited in the apparatus. A suitable base B supports the case A, which base is provided with a drawer B′ to receive the counters, and a plate C at the front of the case just behind the transparent plate A′ is provided with a plurality of horizontally projecting pins *c* which are of a sufficient length to extend nearly or quite to the surface of the transparent plate as shown in Fig. 2.

At the upper end of the case A is provided a slot *a* of the required length and breadth to receive the counters which are in the form of a metal disk as shown. The counter as it is introduced through the slot falls on a chute C′ and descends therefrom to the space between the plates A′ and C, and as it passes downward it is given a zig-zag course by coming in contact with the pins *c*.

A plate D is secured to flanges *b* upon the plate C near its lower end, and between these plates is located a track E which track is inclined in opposite directions, the incline on one side of its highest point being of greater distance than that upon the opposite side as shown in Fig. 1. The plate D is also secured to the track E as indicated in dotted lines, (Fig. 1,) but is shown therein as removed to better illustrate the relative position of the operative parts, the plate serving to guide and retain the counter in an upright position when moving along the track.

Below the track E and to the plate C is suitably pivoted a lever F, the outer portion thereof having an upturned end *f′* to form a support for the counter as it passes from the longer incline of the track to the aforesaid end of the lever. The supporting end of the lever is slightly concave to more readily retain the counter thereon and the opposite or outer end of the lever terminates in a handle, thumb, or finger-piece and extends through an opening *g* in the side of the case, as shown in Figs. 1 and 3.

One side of the lever F has a recess as shown at g' to provide a passage for the counter, and upon the inner face of this recess is a laterally projecting pin h and upon the upper edge is an inwardly projecting lug h', such construction of the lever being more clearly shown in detail (Fig. 5).

A spring G is connected at one end to the plate C, the opposite or free end thereof being adapted to bear upon the under side of the lever F between its pivot and its outer end, as shown in Fig. 1. The shorter arm of the track E projects back of the space formed by the recess g' on the side of the lever F, and just below the extremity of this short arm of the track, is a pivoted gravity-pawl or stop H as shown in Fig. 1.

Within the case A near the outer extremity of the lever F is a pawl I shown in detail in Fig. 6, which is pivoted at i to the plate C, and the upper end of this pawl is provided with a pin i' while its lower end is curved inward, and between its pivot and its lower end is an inwardly extending lug j for the purpose of sustaining the column of counters in the channel. The pawl I at its upper end has an inwardly projecting lug j', which lug extends into the channel when the upper end of the pawl is brought forward to support the column of counters above it and while the two counters in the channel below said lug are allowed to pass out into the receptacle to be taken out by the winning side. A spring J is provided to act upon the pin i' at the upper end of the pawl I to keep its lower end pressed inwardly, said spring being secured in position in any suitable and well known manner to serve its purpose.

An inclined projection a^2 may be provided upon one of the upright flanges b of the plate C in order to deflect the counter should it strike said plate in its descent and cause it to pass to the center of the plate.

The back of the plate C is provided with a curved or arch-shaped channel K which communicates at its top with an overflow-chamber K′ as shown in Fig. 3, the counters therein being shown in dotted lines. The lower flange which forms the bottom of one of the side-walls of the channel is formed with a foot k and is located on a line with the chute C′ and centrally therewith and bears the same relation with the overflow-chamber K′. The overflow chamber K′ is open at its rear and any counters passing therein will fall down and through the opening k' into the drawer B′. The entrance to the channel K is at a point above the upturned end f' of the lever F, said end being on a line directly under the entrance as clearly shown in Fig. 1. The lower portion or end of the channel which forms the entrance thereto is peculiarly constructed so that as each counter is forced up by the upturned end of the lever it will be held suspended to make room for the next counter between it and the end of the lever, after which the operation of forcing the counter far enough up and in position to be suspended within the channel is repeated. The entrance to the channel and its particular construction is shown most clearly in Fig. 4 which view is on an enlarged scale and shows the relative position of the upturned end of the lever therewith.

At the sides of that portion of the channel K which forms the entrance thereto are suitable spring-plates L M, which plates are curved inwardly in a direction toward each other as shown in Fig. 4, and when the counter which is supported upon the end of the lever is forced up the channel between the two spring-plates, it is held there by frictional contact with the plates until another counter takes its place. In order to allow the spring-plate M to have the necessary play in a lateral direction, an opening of suitable size as shown at m is formed in the back-plate N, and to prevent the spring-plate L from being pressed out too far when the counter is forced upward, a suitable stop l is provided.

I do not wish to be understood as confining myself to the precise construction shown, as many modifications and changes may be made in the details of construction without departing from the principle of the invention, and therefore reserve the right to make such changes as would come within ordinary mechanical skill.

The game may be played by two or more persons, each having an equal number of counters in their possession and in turn dropping one in the slot at the top of the apparatus. In order to make the action of the several operating parts and the course of the counter perfectly clear, the supposed moving counter I have shown in dotted lines and designated by the letter x. After the counter x has been deposited in the slot a at the top of the apparatus as shown in Fig. 1, it will descend onto the chute C′ and be guided into the space between the plates A′ and C. In its descent it will strike the projecting pins c and be caused to take a zig-zag course until it reaches the track E. If the counter x as is shown in dotted lines passes onto the longer incline of the track, it will gravitate to the space between the upturned end f' of the lever F and the counter represented at y, which latter mentioned counter is held suspended in the channel K by the spring-plates heretofore described. Now the player whose counter has taken this course as above described loses it, and by pressing on the lever F the counter is forced up the channel K to take the place of the counter y, and to leave a space above the upturned end of the lever to receive the next counter that falls on the longer incline of the track E. After the lever F has been pressed down at its outer end, it is again brought to its normal position as indicated in Fig. 1, by means of the spring G.

Previous to the operation as above described, it should be understood that the apparatus is supplied with counters in number

to fill the channel, and as the counters in possession of the players are dropped into the slot at the top of the apparatus, and take the course already indicated, they will successively dislodge or force them into the overflow chamber, as shown at *w* (Fig. 3), which counter *w* will fall down through the opening *k'* into the drawer B'. I have described now the course of the counter when on the losing side, and the manner of its disposal previous to its being deposited in the drawer, and will now give a description of the course the counter would take should it in its descent strike the short incline of the track, which is designated as the winning side. After the counter passes over the short incline of the track, it will gravitate to the position shown at *z* in Fig. 7, the counter in such position being upon the outside of the plate C, or in other words upon the outside wall of the channel and between the gravity-pawl and the retaining pawl. Now when the counter in the hands of the player is placed in the slot and passes into the apparatus and takes the position above indicated upon the outside wall of the channel, the column of counters in the channel is supported by the lug *j* upon the retaining pawl I.

Fig. 7 shows the relative position of the pawls H I, the counter *z*, the column of counters in the channel and the lever F, previous to the operation of the lever by the winning side. The counters and several operating parts being in the position shown in Fig. 7, the lever F is now operated by pressing down upon the handle or thumb piece thereof. This depression of the lever will bring the lug *h'* thereon down upon the upper edge of the counter *z* and force it downward to the position shown in Fig. 8. Now if some means were not provided to retain the counter in this position it would fall down into the receptacle P, but when this action takes place the pin *h* on the lever will be brought against gravitating pawl H and hold it rigid so as to form a support for the counter when in the position indicated. When the counter is forced down by the lug on the lever coming in contact therewith as above described, the edge of the counter will act as a wedge against the lower end of the pawl I and force it outward in the position indicated in Fig. 8. When in this position the lug *j*, which extends into the channel to support the column of counters, will be withdrawn, and the lug *j'* upon the upper end of the pawl will be carried into the channel by the outer and inner movement of the lower and upper ends of the pawl respectively. When both pawls are in the position indicated in Fig. 9, the two counters previously occupying the space in the channel above the lug *j* are released and allowed to drop down and into the receptacle P, and as the lever is forced back to its normal position by the spring G, as shown in Fig. 1, the pin *h* will be withdrawn from contact with the gravity pawl, and by gravity the counter will press aside the pawl H and drop down into the receptacle, thus the player receiving his own counter and two additional counters. As the counter *z* passes from between the two pawls and into the receptacle, the spring J will force the pawl I back to its normal position, as indicated in Fig. 7 and allow the column of counters to descend and be again supported by the lug *j* on the lever, the two lower counters of the column being in position to be delivered to the receptacle P in a like manner should another counter introduced into the apparatus fall on the winning side, which is the short incline of the track.

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

1. A game apparatus, consisting of the following elements, viz: a suitable casing having a slot through which a counter may be introduced, two upright plates, one of which may be transparent, said plates being arranged a suitable distance apart to provide a space with which the slot may communicate, horizontally extending pins located in the space between the plates to deflect the counter in a zig-zag direction in its descent, a channel communicating with the space between the plates, a track located therein and having a long and a short incline and with its extremities below the channel to direct the counter to the losing or winning side, a suitable supporting and releasing mechanism disposed on line with the lower ends of the channel to force the counter when passing over the long incline of the track up into the channel, and when passing over the short incline thereof, to direct it to a receptacle communicating with the winning side of the channel and releasing one or more counters therein which are also directed to the receptacle, substantially as and for the purpose set forth.

2. In a game apparatus, the combination with a suitable casing having a slot at its top, the channel having an overflow chamber with which it communicates, means located at each end of the channel to hold the counters suspended therein, of a track having double inclines and a pivoted lever adapted to force the counters into one end of the channel and to release the counters from the opposite end, and a plate having pins to deflect the counter in its descent in a zig-zag course, substantially as and for the purpose specified.

3. In a game apparatus, a suitable casing having at its top a slot for the reception of the counters, and a channel for the counters communicating with an overflow chamber, a drawer to receive the counters therefrom, and spring-plates at the entrance of the channel, in combination with a track having a double incline, a pivoted lever adapted to force the counters into said entrance and suitable devices acting in connection with the lever to

hold and release the counters at the exit end of said channel, substantially as and for the purpose described.

4. In a game apparatus, a track having a double incline upon which the descending counter falls, a pivoted lever located below the long incline of the track, a channel communicating with the ends of the track, a gravity pawl and a retaining pawl at one end of the track, means for operating them and releasing the counters by a downward pressure of the lever, and springs for bringing the retaining pawl and lever back to their normal positions after the lever has been depressed, substantially as and for the purpose set forth.

5. In a game apparatus, a suitable casing having a slot at its upper end to receive the counters, and at its bottom a drawer and a space or receptacle independent of each other, in combination with a channel and an overflow chamber for the counters which communicate with the drawer, plates arranged apart to form a space for the descending counters, and pins located in the space to deflect the counters in their downward course in a zig-zag direction, in combination with a track having a double incline and a pivoted lever having an upturned end to form a support for the counter, means for holding the counter suspended at the entrance of the channel and devices acting in conjunction with the lever to hold and release the counter after passing over the short incline of the track, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ETNA H. DAVIS.

Witnesses:
CHARLES LEAVITT,
DANIEL DAVIS.