(No Model.) 2 Sheets—Sheet 1.

A. V. SANFORD.

GAME APPARATUS.

No. 506,407. Patented Oct. 10, 1893.

Fig. 2.

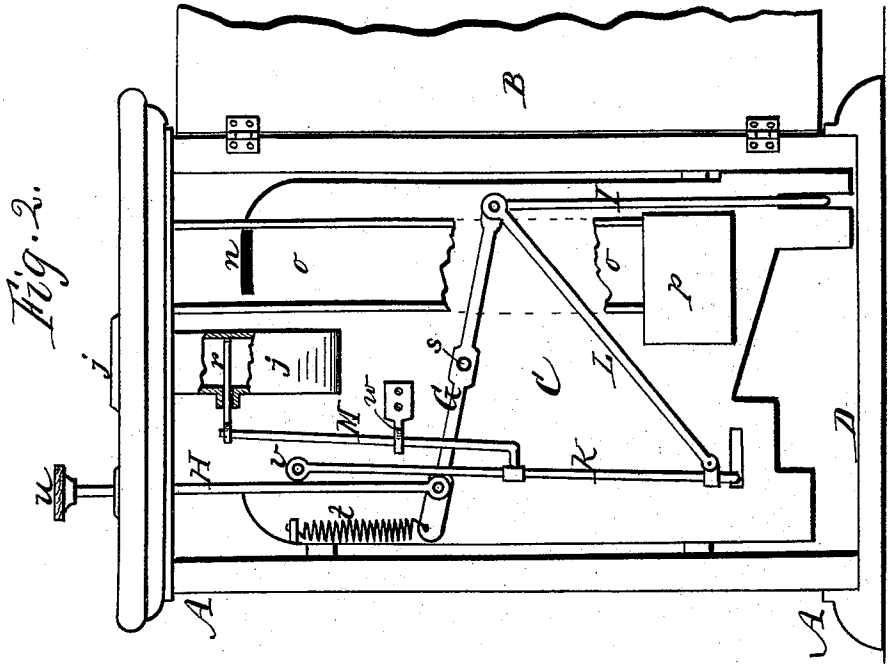
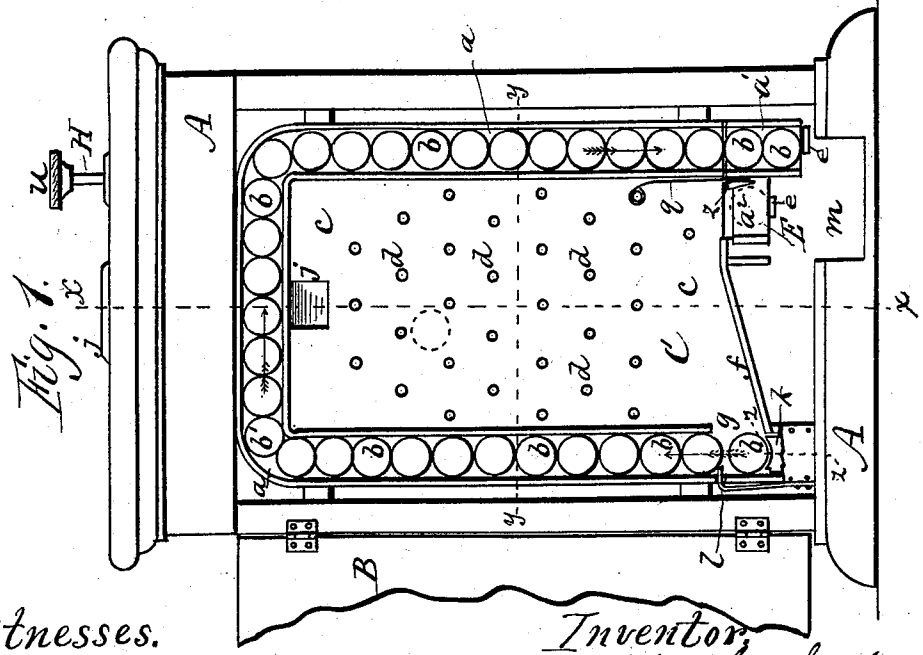


Fig. 1.



Witnesses.
Geo. B. Selden.
C. G. Crandell.

Inventor.
Addison V. Sanford,
per R. F. Osgood,
Atty.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

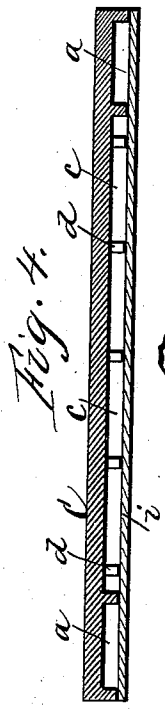


Fig. 6.

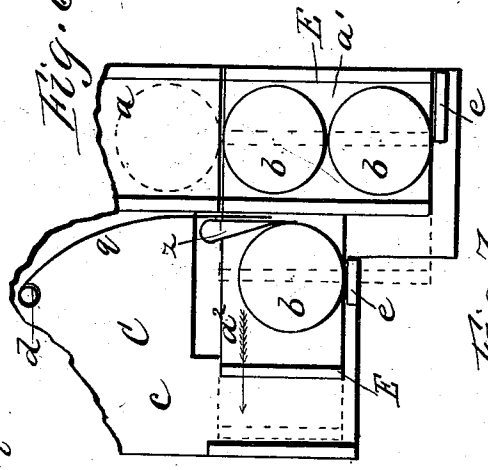


Fig. 7.

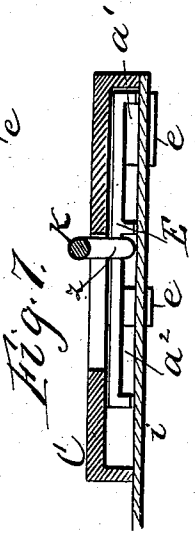


Fig. 5.

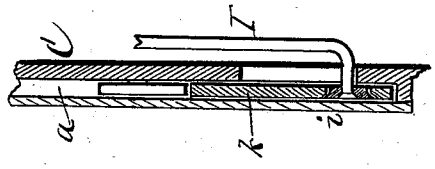
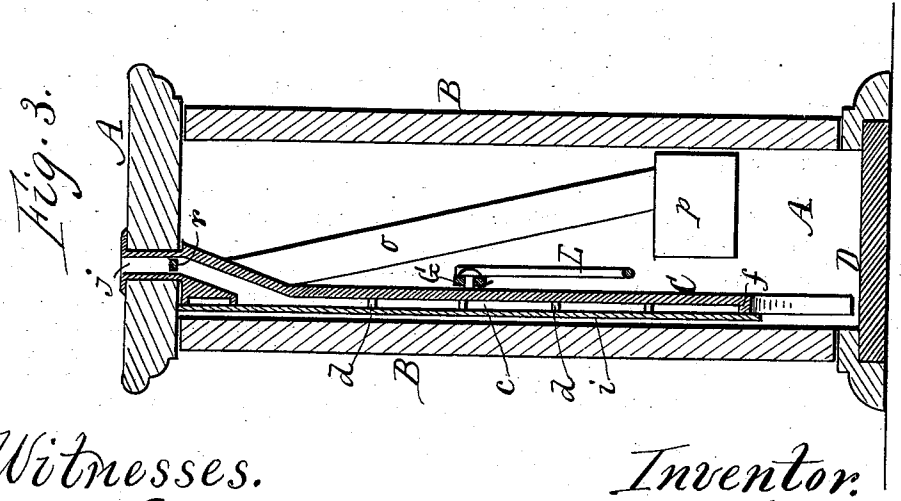


Fig. 3.



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Geo. B. Selden.
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Inventor.
Addison V. Sanford,
by R. F. Osgood,
Atty.

UNITED STATES PATENT OFFICE.

ADDISON V. SANFORD, OF ELMIRA, NEW YORK.

GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 506,407, dated October 10, 1893.

Application filed March 31, 1893. Serial No. 468,561. (No model.)

To all whom it may concern:

Be it known that I, ADDISON V. SANFORD, of Elmira, in the county of Chemung and State of New York, have invented a certain new and useful Improvement 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 drawings accompanying this application.

My improvement relates to game apparatus in which a series of disks is used dropped through a slot, and the invention consists in the mechanism for manipulating the disks as hereinafter more fully described and embraced in the claims.

In the drawings—Figure 1 is a front elevation of the apparatus. Fig. 2 is a rear elevation. Fig. 3 is a vertical cross section in line *x x* of Fig. 1. Fig. 4 is an enlarged horizontal section in line *y y* of Fig. 1. Fig. 5 is an enlarged vertical cross section in line *z z* of Fig. 1. Fig. 6 is an enlarged front elevation of the slide at the discharge end of the apparatus. Fig. 7 is a horizontal section of Fig. 6.

A indicates the case for holding the mechanism, which case may be made of any ornamental form. It is preferably provided in front and rear with hinged doors B B, by which access is obtained to the interior. At the bottom it is provided with a metallic base plate D for the purpose of weighting it, and holding it in position on a table without fastening it in place.

C is a metallic plate set upright in the case and forming the support for the operating mechanism. It has a thin channel or way *a*, extending all around at the edges, except at the bottom, said channel or way being of such width and depth as to receive the disks *b b* with which the game is played, said disks entering edgewise, at the bottom at the left hand, Fig. 1, thence passing upward through the channel, one disk raising another, till the channel is filled around the whole circuit as shown in the face view, Fig. 1. The plate C is also provided with a sunken center forming a depression *c*, from which project a series of short pins *d d d*, diversified and set at such positions that the disks as they pass down edgewise between the pins have a devious course and are liable to be thrown either to the right or the left at the bottom of the plate. In order to throw most of them to the left the bottom of the plate C has an inclined rib *f*, down which the disks run and finally pass through a throat *g* into the entrance of the channel *a* before described. Such of the disks as incidentally go to the right fall into a channel of a slide E, as indicated by the dotted lines in Figs. 1 and 6. This slide will presently be described.

The front of the plate C is covered by a glass pane *i*, which closes up close to the plate, leaving only a space sufficient for the disks to pass freely edgewise between the pins and through the channel.

The disks are dropped into the machine through a slotted chute *j*, which directs them down between the pins. Such of the disks as pass through the throat *g* at the entrance to the channel, are raised into said channel by a follower *k* (Figs. 1 and 5), which is of the same thickness as the disks. In the act of rising, this follower strikes the last disk which entered and forces it up, thereby raising all the disks that are superincumbent. When fully raised the last disk rests upon and is supported by the end of a light spring *l* (Fig. 1), and the follower can then be retracted to allow another disk to enter. In this manner the whole channel is filled all the way around.

The slide E, before referred to, consists of a plate which slides horizontally forward and back. It is made with two channels *a'* and a^2, the first being simply a continuation of the main channel *a*, and standing in line therewith, and capable of holding two disks, and the other one, a^2, standing inside the depressed central portion *c* of the main plate and capable of holding but a single disk, as indicated in Figs. 1 and 6. Such of the disks as pass to the right, in escaping from the pins, pass into this channel a^2, a single one at a time. When so loaded the slide E holds three disks; two in the channel *a'*, and one in the channel a^2. These disks are prevented from dropping through by resting on stops *e e*, which form part of the main plate C. When the slide is thrown to the left all three disks leave the supporting stops *e e* and drop through into a trough *m* outside. It is a matter of chance how many of the disks pass to the right or the left between the pins, hence

with two players who take alternate turns in operating the machine the greatest number of disks delivered to one in making an aggregate number constitutes the game. In case of an excess of disks being forced up into the channel on the induction side, the pressure will force the disk b' at the upper left-hand corner up through a slot n, (Fig. 2), in the plate C, and it drops on the back side into a trough o, and is conveyed down into a receptacle p inside the case.

r is a slide which passes through the slot j and forms a cut-off between the insertion of the disks, so that a disk already entered into the slot cannot pass through till the mechanism is operated.

The operating mechanism is located on the back of the plate C and is as follows:—

G (Fig. 2) is a rock lever pivoted centrally at s, and drawn upward at one end by a spring t.

H is a handle pivoted to this lever and extending up through the top of the case, and provided with a knob u. The mechanism is operated by pressing down on this handle.

I is a rod connecting the opposite end of the rock lever G with the follower k, by passing through a slot in the supporting plate.

K is a rock arm pivoted at v, the lower end passing through a slot of the supporting plate and connected with the slide E.

L is a rod connecting the lower end of arm K with the outer end of the rock lever G, by which means the arm is operated.

M is a rod attached to arm K, passing loosely through the eye of a fulcrum w, and connected at the top with the slide r. By this means the various slides are all operated by the handle H.

The lower end of the rod K after passing through the slot of the supporting plate, is turned down forming a tongue z, which rests loosely in the back of the channel a^2, as shown in Fig. 6. The single disk which enters this channel a^2 rests between the tongue and the outer flange of the channel, and forms the means by which the tongue pushes the slide outward. The rod K is not attached to the slide. A light spring q follows behind the tongue in its outward movement and prevents a second disk from passing behind and entering the channel accidentally during the outward movement of the slide, as it might otherwise do.

The disks are preferably made of celluloid or hard rubber, but may be made of any other material. They are also preferably made in different colors, and some one color may indicate a blank. They may also be indicated by names. By this means a great variety of games may be played.

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

1. In a game apparatus, the combination of a plate provided with projecting pins, a slotted chute for the entrance of the disks above the pins, a divider at the bottom of the plate for throwing the disks part in one direction and part in the other, a channel extending around three sides of the plate provided with a throat at one end for the entrance of the disks to the channel, a follower for lifting the disks, a spring for supporting them, a slide at the exit end of the channel for discharging the disks, and suitable means for operating the follower and slide, as specified.

2. The combination, with the supporting plate provided with a central depression and a channel for holding the disks, of a slide located at the exit end of the channel, said slide provided with two channels, one resting in coincidence with the main channel, the other resting in the depressed center of the plate, stationary supports for sustaining the disks within the channels of the slide, and suitable means for operating the slide, as herein shown and described.

3. The combination, with the follower, the slide, and the cut off in the slotted chute, of the rock lever G, the spring t, the handle H, the rod I, the rock arm K, the rod L, and the rod M, arranged to operate in the manner and for the purpose specified.

4. The combination, with the slide provided with two channels, one resting in coincidence with the main channel the other in the depressed center of the plate, and with means for supporting the disks in the channels, of an operating rod provided with a tongue which enters the outer channel and rests loosely therein near its back side, leaving space between it and the opposite side for the entrance of a disk, and a spring resting against the back of the tongue, as shown and described and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ADDISON V. SANFORD.

Witnesses:
R. F. OSGOOD,
A. W. WILBUR.