

(No Model.)

J. J. WATSON.

COMBINED CARD AND DICE EXHIBITING MACHINE.

No. 517,316.

Patented Mar. 27, 1894.

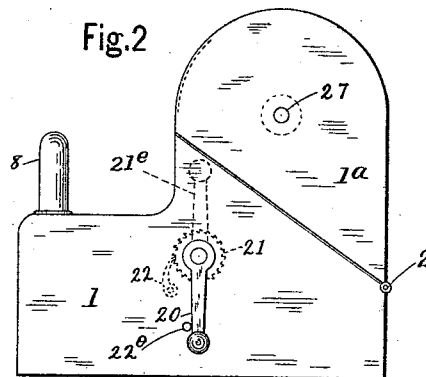
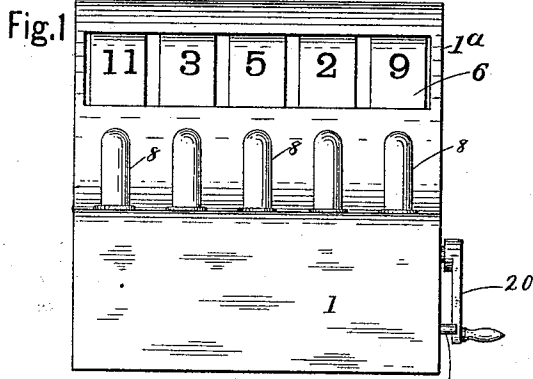


Fig. 3

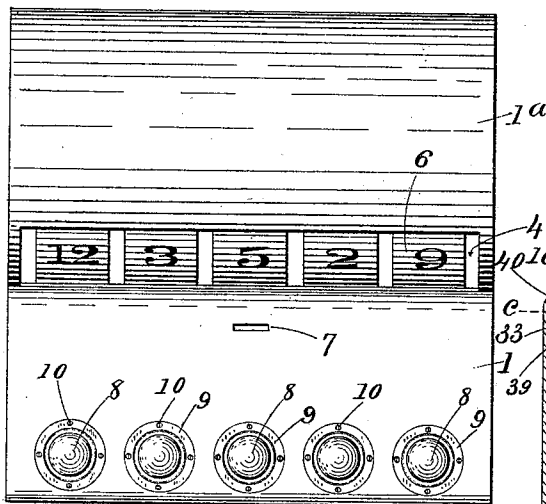


Fig. 4.

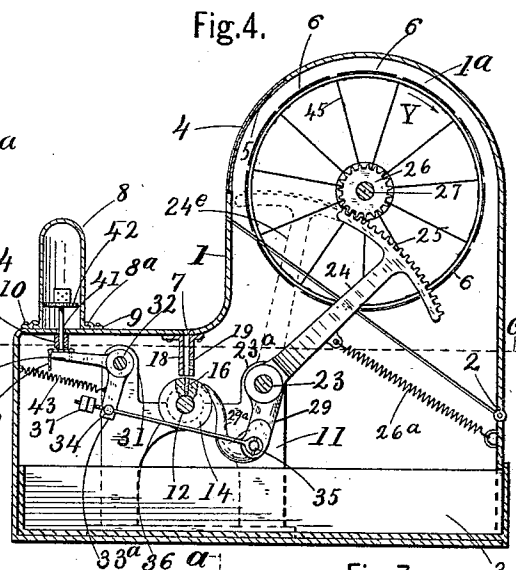


Fig. 6

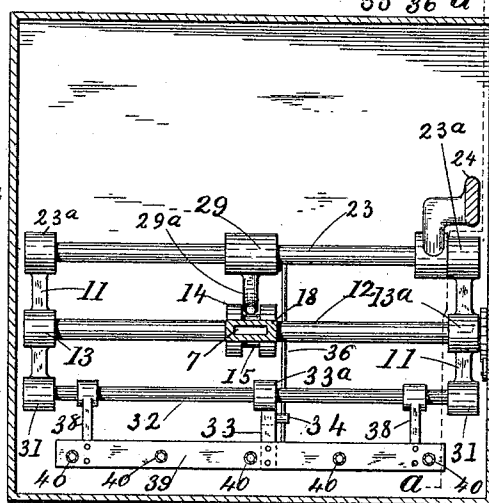


Fig. 7.

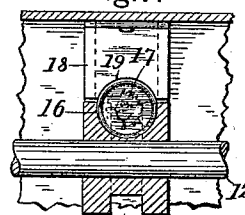


Fig. 5.

Witnesses.

J. M. Caldwell.
Harriet Johnson

John J. Watson,
Inventor.
By James Baugher
Attorney.

UNITED STATES PATENT OFFICE.

JOHN J. WATSON, OF BUFFALO, NEW YORK.

COMBINED CARD AND DICE EXHIBITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 517,316, dated March 27, 1894.

Application filed January 15, 1894. Serial No. 496,875. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. WATSON, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Combination Card and Dice Exhibiting Machines, of which the following is a specification.

My invention relates to a combined coin controlled, card and dice exhibiting machine and will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1, is a front elevation, showing a series of cards and the glass dice holding cases. Fig. 2, is a side elevation of the same, showing the handle for operating the device and one of the glass dice holders. Fig. 3, is an enlarged top or plan view of the device showing the top of the dice holders and a portion of the cards. Fig. 4, is a side sectional elevation in or about line *a a*, Fig. 6, showing the interior operating mechanism. Fig. 5, is an enlarged side sectional elevation of a portion of the coin operating mechanism. Fig. 6, is a horizontal section on or about line *c c*, Fig. 4, showing by a similar view a larger portion of the interior mechanism. Fig. 7, represents an enlarged front elevation of the coin operating mechanism, a portion being in section.

The object of my invention is to render the coin operating mechanism more certain in its action, and to prevent the use of iron washers or other similar devices from being used to operate the machine, also to combine with the card operating mechanism, means for throwing dice, all of which will appear farther on.

Referring to said drawings, 1 and 1^a, represent the outside case of the machine, it is preferably constructed of light sheet metal and is made in the usual way with the two parts 1 and 1^a, hinged together at the back by hinges 2, see Figs. 2 and 4. It is also provided with a drawer 3, which pulls out from the back.

Near the top front portion of the case is an opening 4, to receive the glass 5, covering the opening, see Fig. 4 where this is shown, so that the cards 6, back of this glass can be seen. These cards are secured on wheels constructed in the well known way so as to be operated by the turning of the wheels on

which they are secured as will be more clearly shown farther on.

In Figs. 3, 4 and 5, 7 represents the slot opening through which the coin is passed into the machine.

At or near the front of the machine is a series of glass cases 8 which cover the dice holding pistons or tables. These cases are each provided with a flange 8^a, at the bottom edge, see Fig. 4, where this flange is shown, the cases 8, being set in place, a ring 9, is then slipped down over them, and secured by one or more screws 10, see Figs. 3 and 4.

The interior mechanism is supported on a frame 11, made preferably of cast iron, see Figs. 4 and 6, in which a side elevation, and a plan view is shown. The shaft 12, is mounted in boxes 13 and 13^a, in said frame and carries a drum or barrel 14, (which is rigidly secured to said shaft 12,) having a surrounding groove 15, the object of which will appear farther on. This drum is made of iron or brass and is provided with a slot 16, into which the coin, 17, shown in Fig. 7 drops when the machine is being used.

Directly above the drum 14, is a flat tubular portion 18, which connects with the slot, 7, in the top of the machine through which the coin is passed into the machine. One side of this tubular portion, 18, at the lower end is cut out half round, or substantially so, at 19, see Fig. 7, where a flat view is shown, see also Figs. 4 and 5, where a section is shown through this semicircular opening. The object of this semicircular opening (which is adapted to the size of the coin to be used) is to allow only coin of the exact size adapted for the machine, to pass through, it will also prevent a piece of metal from passing through and operating the machine. The shaft, 12, also projects through the side of the machine and is provided with a handle 20, see Figs. 1 and 2, by which the device is operated.

Inside of the case next to the handle, 20, is a ratchet wheel, 21, a pivoted pawl 22, operating in the ratchet 21, the object of which is to allow the handle 20, to be turned in the direction of the arrow V, and to prevent it from being turned backward or in an opposite direction.

Back of the shaft, 12, see Figs. 4, 5 and 6, is another shaft 23, set in boxes 23^a, in the

frame of the machine on which is rigidly mounted an arm 24, having at its outer end a curved toothed bar, 25, forming a part of it. The teeth in this bar 25, engage with the teeth in the pinion 26, see Fig. 4. This arm 24, is kept back in its normal position by a spiral spring 26^a, substantially as shown in Fig. 4. The object of the arm 24, and its toothed bar 25, is through the pinion 26, to turn the shaft 27, to which the pinion is rigidly connected and upon which the cylinder carrying the cards 6, to be exhibited are secured in any well known way, and thereby operate the card holding cylinder, but as this card holding cylinder is a well known device for this purpose and is not a part of this invention, a further description of its construction and operation is not required here.

At or near the center of the shaft 23, is rigidly secured a hook shaped arm 29. The hook 29^a, on this arm when in its normal position as shown in Fig. 4, projects forward into the groove 15, in the proper position to receive a washer 30, shown in section in Fig. 5, if one should be put into the machine, the result of which would be, that the washer goes easily on to the hook as shown without causing it to operate.

At the front of the frame 11, is mounted in bearings, 31, a shaft 32. On this shaft 32, (near the center of the shaft) is rigidly secured an angular arm 33 and 33^a, the lower portion of the arm, 33^a, is provided with a stud 34, and pivoted by a pin 35, to the arm 29, is a small connecting rod, 36, see Fig. 4, also Fig. 6. The opposite end of the connecting rod 36, passes loosely through a hole in stud 34, and is provided with the jam nuts, 37, shown in Fig. 4. The other portion, 33, of the angular arm projects horizontally forward and on each side of the angular arm is rigidly secured to the shaft 32, one or more arms 38. The arms 38 and the arms 33 support and carry a long thin plate 39, rigidly secured to the ends of said arms by screws or rivets, or in any well known way.

Centrally under each glass dice case 8, is secured to the underside of the case 1, a small tube 40, through which passes a small vertical rod 41, carrying a piston or disk 42, that fits loosely in the glass case 8. The angular arm is held in its normal position by means of a spiral spring 43, also shown in Fig. 4.

The operation of the device is as follows: The handle 20, being in its downward position against the pin 22^e, as shown in Fig. 2, and a piece of coin of the proper size adapted to the machine being dropped into the slot, 7, it immediately drops down into the slot, 16, in the barrel, 14. The pin 22^e, which is kept out by a spring in the well known way, is pressed in and the handle 20, is turned around to the position shown in Fig. 2, which operation causes the coin to be forced against the end of the hook 29^a, and thereby turn the arm 24, into the position shown in Fig. 2. During this movement of the handle 20, the arm 24,

turns the pinion 26, and the cylinders or drums carrying the cards to be exhibited, in the direction of the arrow Y, Fig. 4, at the same time the top edge of the coin follows the course of the dotted line X, see Fig. 5, while the point of the hook follows the course of the dotted line z, consequently the edge of the coin passes by the end of the hook, 29^a, at the point z, (see Fig. 5.) At the instant the coin leaves the point of the hook the spring 26^a, comes into action and suddenly brings the arm, 24, back to its normal position, at the same time the cylinder, 45, carrying the cards, 6, is given a quick turn forward, and as the handle, 20, is brought to the position shown at 21^e, in Fig. 2, the coin drops out of the slot into the drawer below it. During the above described operation the connecting rod, 36, see Fig. 4, is drawn backward, thereby pulling the outer end of the arm, 33, downward against the force of the spring, 43, thereby allowing the disk, 42, upon which the dice is placed and its vertical supporting rod 41, to drop downward, and the instant the point of the hook, 29^a, is released by the coin the spring 43, comes into action and suddenly forces the disk 42, upward thereby causing the dice to be thrown up in the glass case, 8, which falls again the moment the disk reaches its normal position.

I claim as my invention—

1. The combination with the opening tube through which the coin is passed into the machine, of a barrel having a slot opening to receive the coin from the opening tube and a surrounding groove, means for operating said barrel, an arm mounted on a shaft set in boxes in the frame and provided at its upper end with a curved bar having teeth adapted to engage with a pinion for operating the card wheel, a hook shaped arm secured to said shaft having the point of its hook projecting into the groove in said barrel, and a spring for bringing said arm to its normal position when released from the coin, substantially as described.

2. In a combination card and dice exhibiting machine, the combination with an opening tube having a semicircular opening on one of its wide sides at the lower end, of a barrel having a slot opening adapted to receive the coin from the opening above it, a groove surrounding the periphery of said barrel, an arm mounted on a shaft set in boxes on the supporting frame and provided with curved toothed bar adapted to operate the pinion for driving the card wheels, a hook shaped arm secured to said shaft and having the point of its hook projecting into the groove in said barrel, a spring for bringing said arm to its normal position when released from the coin, a connecting rod pivoted to the hook shaped arm and having its end passed through a rotatable stud mounted on a bell crank arm secured to a shaft mounted in boxes in the supporting frame, jam nuts for preventing the connecting rod from being

drawn out of said stud, a spring for keeping the bell crank in its normal position, a longitudinal plate on the opposite arm of the bell crank, a series of plates or disks each adapted to receive and hold a small dice block, each having a vertical rod which pass through the machine case and rest on the longitudinal plate, and a series of glass cases in which disks operate to throw the dice, whereby the cards and dice are simultaneously exhibited substantially as described.

3. A combined card and dice exhibiting machine having an opening tube through which the coin is passed into the machine, an opening in the lower end of said tube in one of its broad flat sides, a barrel mounted on a shaft set in boxes in the supporting frame and having a slot adapted to receive a coin from the tube above it, an arm mounted on a shaft set in boxes so as to turn therein for operating the card wheel and a spring for holding said arm in its normal position, in

combination with a connecting rod having one end pivoted to an arm mounted on the shaft for operating the card wheel arm, and its opposite end connecting with an arm for operating the disk upon which the dice rests, whereby a coin is made to operate a card wheel and a disk for throwing the dice, simultaneously, substantially as described.

4. In a coin controlled machine, a barrel mounted on a rotatable shaft, and provided with a slot to receive the coin and a surrounding groove, in combination with an arm for operating the machine mounted on a shaft supported in boxes on the supporting frame and having a hook adapted to receive a washer if put into the machine and thereby prevent its operation substantially as described.

JOHN J. WATSON.

Witnesses:

J. M. CALDWELL,
JAMES SANGSTER.