W. J. FISHER.

CHECK CONTROLLED APPARATUS.

APPLICATION FILED MAR. 19, 1913.

1,103,952.

Patented July 21, 1914.

3 SHEETS—SHEET 1.

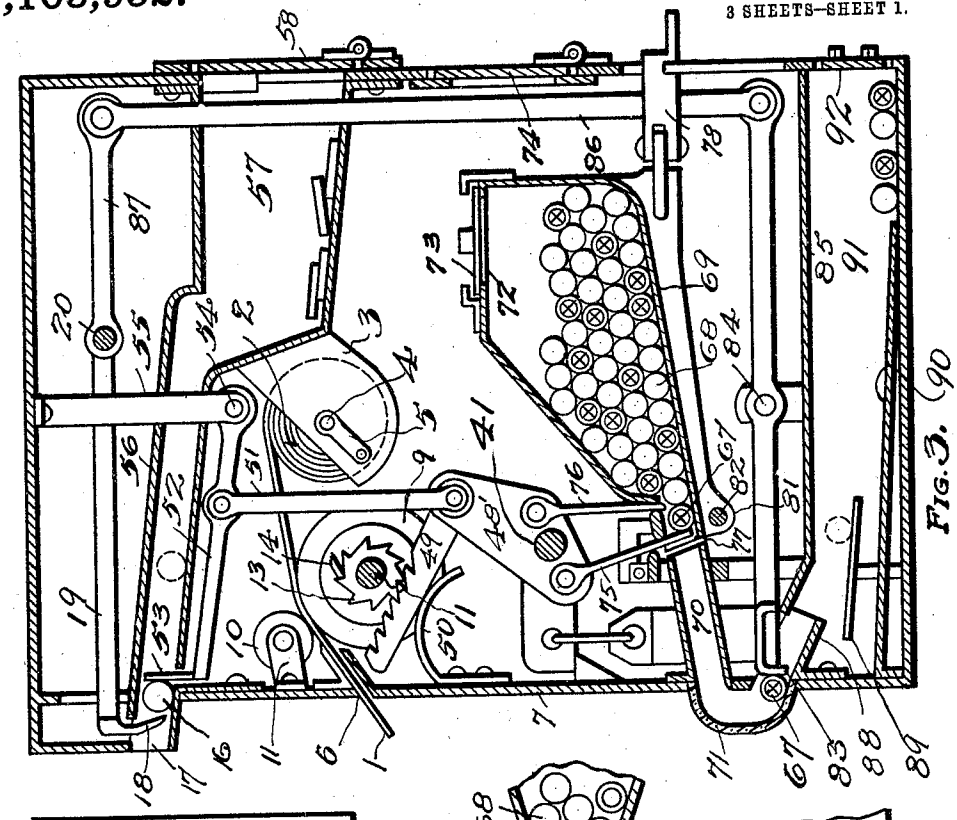

FIG. 3.

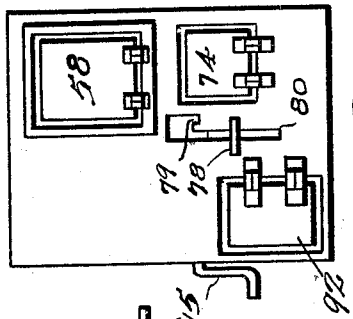

FIG. 2.

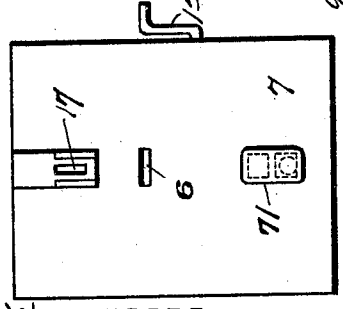

FIG. 1.

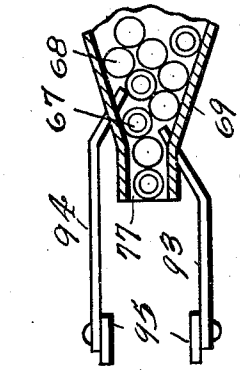

FIG. 13.

FIG. 12.

WITNESSES:

C. E. Shearer

C. H. Davies

INVENTOR

WILLIAM J. FISHER

by Thomas R. Harney Atty.

THE NORRIS PETERS CO., WASHINGTON, D. C.

W. J. FISHER.

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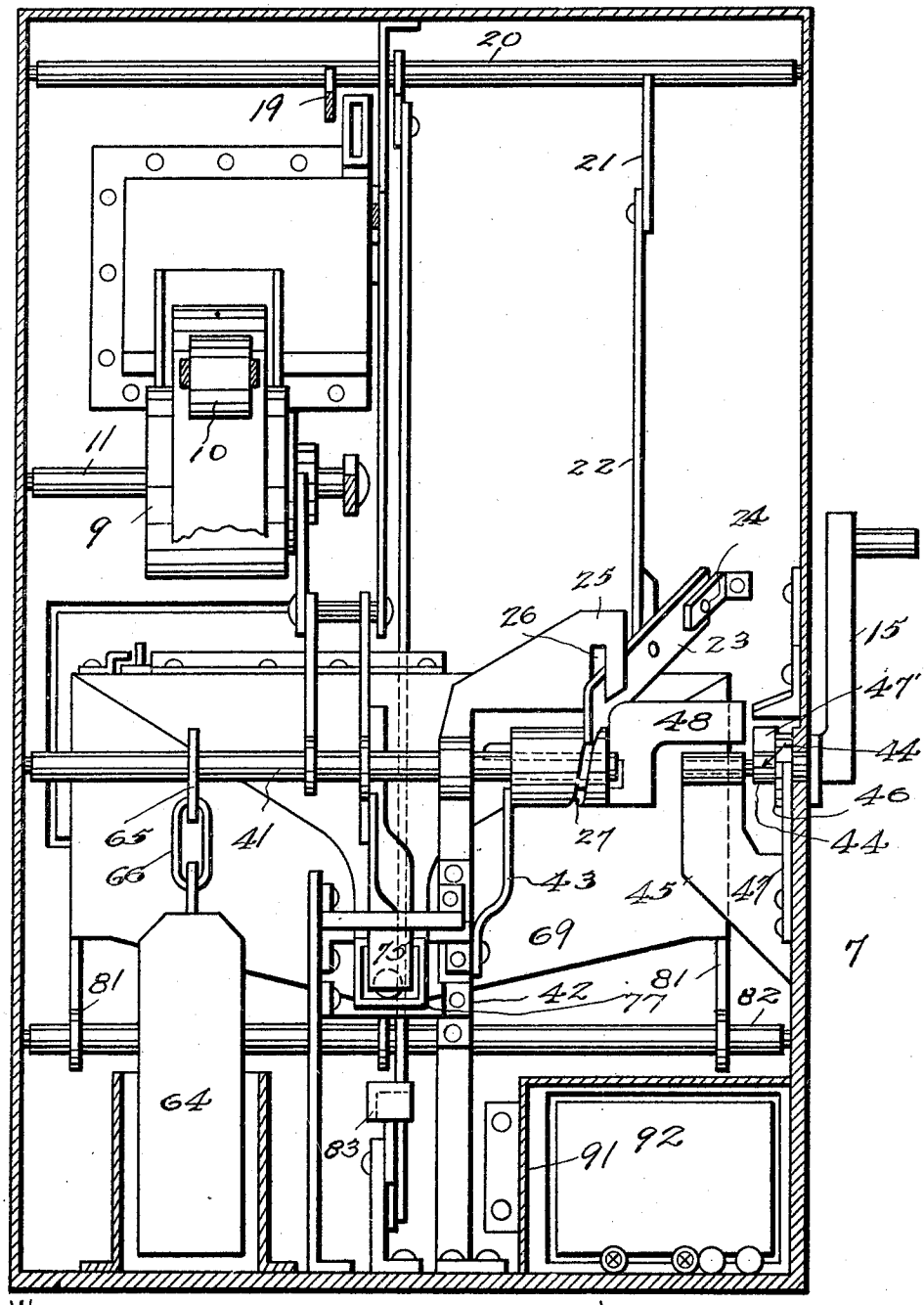

WITNESSES:
C. E. Shearer
C. R. Davies.

FIG. 4

INVENTOR
WILLIAM J. FISHER
by Thomas Hanson atty.

THE NORRIS PETERS CO., WASHINGTON, D. C.

W. J. FISHER.

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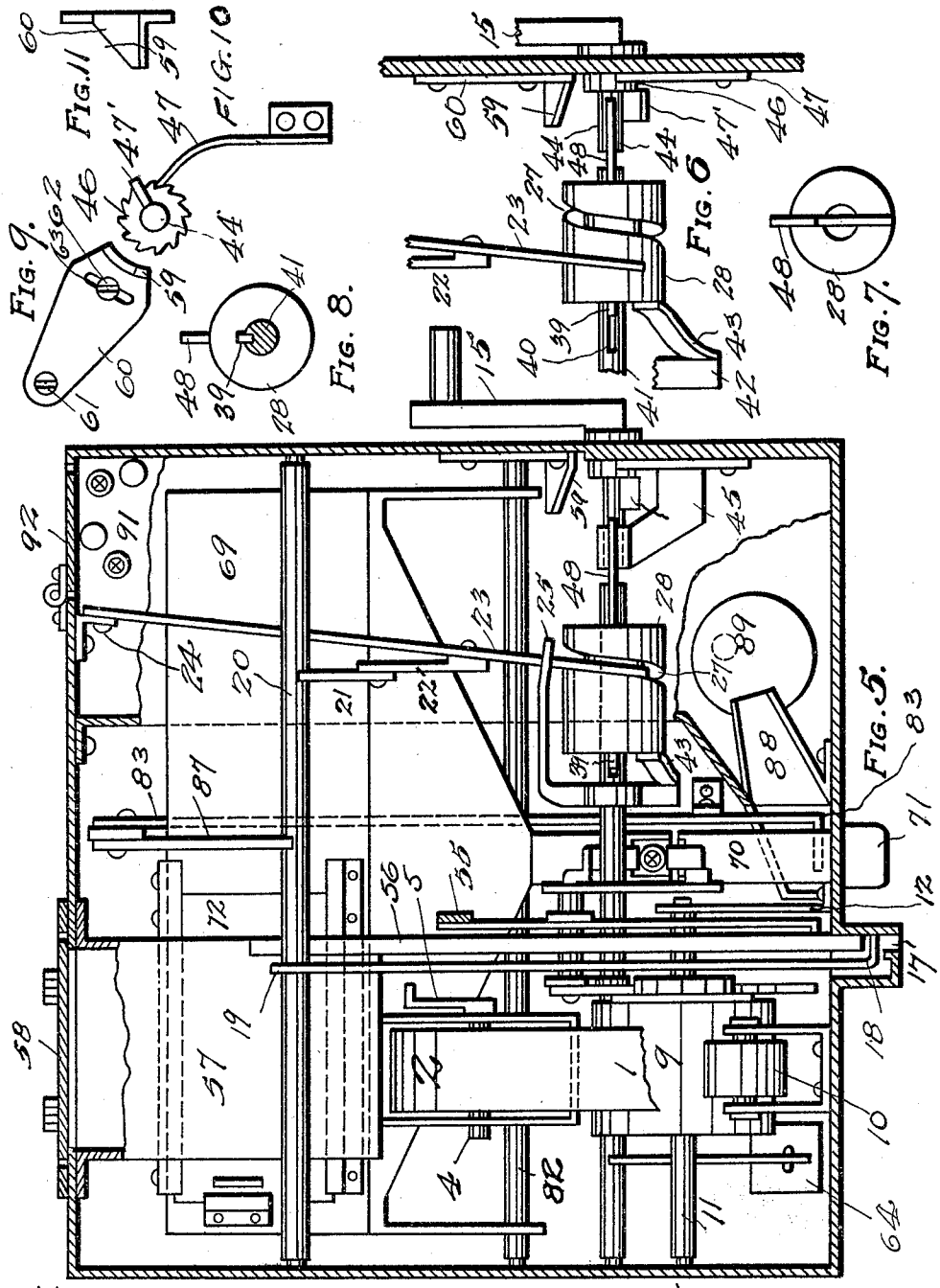
3 SHEETS—SHEET 3.



WITNESSES:
C. E. Shearer
C. R. Davis.

INVENTOR
WILLIAM J. FISHER
by Thomas R. Harney Atty

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM JACKSON FISHER, OF MEMPHIS, TENNESSEE.

CHECK-CONTROLLED APPARATUS.

1,103,952. Specification of Letters Patent. **Patented July 21, 1914.**

Application filed March 19, 1913. Serial No. 755,525.

To all whom it may concern:

Be it known that I, WILLIAM J. FISHER, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Check-Controlled Apparatus, of which the following is a specification.

My present invention relates to improvements in check controlled apparatus, and is designed especially for use in connection with machines for automatically dispensing articles from a continuous strip, such as stamps, tickets, etc.

The object of the invention is the simplification of mechanism for performing the necessary functions of a machine of this character, and in connection therewith to furnish an element of chance for innocent amusement, thus not only making the operation of the device especially interesting, but providing an additional inducement for customers to patronize the machine.

The invention consists in certain novel features of construction, and combinations and arrangements of parts as hereinafter pointed out more fully in the specification and claim.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles of the invention.

Figure 1 is a front elevation of a machine embodying the novel features of my invention, the customary casing or housing being illustrated in connection therewith. Fig. 2 is a rear view of the machine. Fig. 3 is a vertical longitudinal, sectional view through the machine and housing. Fig. 4 is an enlarged vertical, transverse sectional view through the housing near the front of the machine. Fig. 5 is a horizontal sectional view of the housing showing the machine in top plan, part being in section. Fig. 6 is an enlarged detail view of the actuating clutch mechanism. Fig. 7 is an end view of one of the clutch members in Fig. 6. Fig. 8 is a view from the opposite end of the cam sleeve of Fig. 7. Fig. 9 is a detail of the clutch releasing device. Fig. 10 is a detail of the ratchet wheel, its detent, and a contact member of the clutch. Fig. 11 is a side view of Fig. 9. Fig. 12 is a fragmentary view showing a portion of the feed mechanism and showing also a "stirring" mechanism for preventing clogging of the marbles, and Fig. 13 shows a portion of the marble receptacle in section with the stirring fingers in plan view.

In the embodiment of my invention as illustrated in the drawings herewith I have exemplified a continuous strip as 1 which may be stamps, tickets, etc., to be dispensed from the roll or reel 2, supported in the pocket 3 on the journal 4. This journal is threaded into the wall of the pocket 3 and may be turned by handle 5 to unscrew from the pocket. The strip is to be fed through the opening 6 in the front wall 7 of the casing 8, and this is accomplished by means of the feed roll 9, and idler 10 journaled in the bracket 11, between which the strip passes to and through the slot 6 as shown. The feed roll or drum 9 is fixed on the journal 11 which is fitted in bearings in the wall of the housing 8 and bracket 12, (see Fig. 5) and a ratchet wheel 13 on the drum which is engaged by the spring detent 14 attached to the front 7 of the housing, prevents reverse movement of the drum.

The feeding device is operated from a crank or handle 15, located at the exterior and right-hand side of the machine, after the release mechanism has been actuated as will now be described.

The check that is to be used may be a coin of suitable denomination, and is indicated at 16. In Fig. 3 a check or coin is illustrated as having been pushed in through the open front of chute 17 in manner usual in the customary slot machines. When the coin was pushed by hand, into the chute, it encountered the inclined or beveled edge 18 of the hooked end of a rocker arm 19 located in the upper portion of the housing, and fixed to the rock shaft 20, journaled in the side walls of the housing. (See Fig. 5.) The rock shaft has fixed thereto a second arm 21, which is connected by the pivoted link 22 to the detent 23, which latter is pivoted at 24 at the rear of the machine or housing and extends toward the front thereof. A fixed bracket 25, slotted at 26, is provided to guide the detent in its vertical movement and prevent lateral movement thereof.

The normal position of the detent 23, it will be understood, is one of depression, corresponding to the position of the lever arm 19 in Fig. 3, and it will be understood that when the rock shaft 20 is revolved by lifting

the end 18 of the lever arm 19, the detent 23 is also oscillated on its pivot 24, so that its free end is lifted.

The detent 23 is designed to engage, when in depressed position, in a cam slot 27 of a slidable sleeve 28, which is keyed by the feather 39 in the slot 40 of the shaft 41, and it will be observed in Fig. 6 that the slot 40 is sufficiently long to permit movement therein of the feather or key. The shaft 41 is journaled in one side wall of the housing and an upright or standard 42, and a flat spring 43 attached to the standard urges the sleeve or spool 28 to slide to the right on the shaft.

As very clearly seen in Fig. 4 the spool or sleeve 28 is located at the free end of the shaft and may be moved to project beyond the end thereof, when urged by the spring 43 and when free to be moved by the spring.

The crank handle 15 is fixed on the journal 44, which has bearings in the side wall of the housing and also in the bracket 45 fixed to the housing, on the interior. The journal 44 is provided with a ratchet wheel 46, which is engaged by the detent 47 to prevent reverse movement, and a tappet or lug 47′ rotatable with the shaft or journal. This lug is adapted to engage an extension 48 fixed on the sleeve 28, when said extension is moved into the path of rotation of the lug 47′.

From this description it will be plain that when the rocker shaft 20 is rotated as before described, the detent 23 is withdrawn from the cam slot 27 of the spool 28. The freed spool is then pushed to the right (Figs. 4 and 5) to the position in Fig. 6, with the extension 48 in the path of movement of the lug 47′. The crank handle 15 is now turned and the contact of the lug 47′ with extension 48 and continued movement of the crank, causes the shaft 41 to revolve. A rocker arm 48′ on the shaft has pivoted thereto a toothed pawl or rack bar 49 which is pressed against the ratchet wheel 13 by the flat spring 50 secured to the front interior wall of the housing. Thus as the shaft 41 is revolved, the arm 48′ draws down on the toothed pawl, rotating the ratchet wheel 13, and with it the drum or feed roll 9 to feed the strip 1 through the slot 6. This movement of the rocker arm 48′ also draws down on a link 51, which is pivoted to the lever 52 having a shutter 53 and pivoted at 54 in the bracket 55, and when the shutter is moved, the coin 16 is free to roll down the chute 56, and into the coin box 57, from which the coins may be extracted through the door 58 when unlocked and opened.

It will be understood that the shaft 41 does not make a complete rotation, but the crank handle, and journal 44 does make such a revolution. As the rotary movement of the journal 44 is continued with the lug 47′ and extension 48 in contact, the extension 48 encounters the cam edge 59 of a plate 60, which may be adjusted by means of the pivot 61 and screw 62 in the slot 63, with relation to the moving extension. When the extension strikes the cam of the plate, the continued movement of the crank handle causes the extension to "ride down" on the cam, and the spool is thus gradually shifted to the left in Fig. 6 until the detent 23 drops into the cam slot 27 of the spool, and the spool is again held between the detent and the spring 43. A weight 64, suspended from the arm 65 of the rock shaft 41, by link 66, serves to return the rock shaft to normal position, and the spiral cam groove 27 in which the detent 23 is now located, permits the spool to move or rotate with the rock shaft, as will be understood.

In connection with the above described mechanism, I employ mechanism actuated from the rock shaft 20 for releasing and permitting, a single marble or sphere as 67 or 68, to roll from the receptacle 69 down through the chute 70, through a transparent (as glass) receptacle 71 located at the front exterior of the housing and in full sight of the patron. The spheres or marbles may be placed within the receptacle 69 through the opening 72 when the slide 73 is displaced, and access to the receptacle may be had from the exterior of the housing through the door 74.

One sphere or marble is permitted to pass from the receptacle to the chute 70 by means of the gates 75 and 76, one of which is open when the other is closed, and vice versa. These gates are suspended from the rock plate 48′ and they project through slots or openings provided for them in the contracted mouth 77 of the receptacle 69. In Fig. 3 it will be seen that when the shaft 41 is rocked the gate 75 will be lifted, permitting a sphere 67 to pass therethrough, but the gate 76 will descend in time to cut off the exit of a second sphere. Should the spheres become clogged, or if it is desired to mix them up, the handle 78 which is attached to the receptacle 69 may be moved from the short slot 79 to the longer slot 80. The receptacle is pivoted in ears 81 on the bar 82, and by raising and lowering the handle 78, the oscillating movement imparted to the receptacle will mix the spheres. After moving the handle as described it is placed back again in the short slot 79 and permitted to rest there, supporting the receptacle. These spheres may be of differing color, and when one of them is permitted to roll down the chute 70 it is stopped and held in the transparent pocket 71 by a gate 83 as shown. The gate is pivoted at 84 above a horizontal partition 85 in the bottom of the housing, and at its rear end is connected with the link 86 which is pivoted to the rock arm 87 pro-

jecting to the rear from the rock shaft 20. Thus when the shaft 20 is rocked by pressure from a coin on the lever arm 19, the gate 83 is lifted to permit a sphere 67 to pass thereunder. The sphere rolls out through the open end of the chute 88 and drops on the disk 89 to give an audible signal, and then rolls down the inclined floor 90 to the box 91. Access to the box may be had through the door 92, and the spheres may be returned, by hand, to the receptacle 69.

A pair of stirring fingers 93 and 94 pivoted on the arm 95 may be used to stir up the spheres or balls, and prevent them clogging the opening of the receptacle to the chute 70. The arm 95 is pivoted at 96 on the bracket 97, and at its upper end is connected by link 98 to the fixed arm 99 on the shaft 41. Thus, with every movement of the shaft, the fingers or stirrers 93 and 94, which protrude into the front portion of the receptacle through openings, as shown in Fig. 12, are moved back and forth to agitate the balls and prevent them clogging.

It will be understood of course that the proportion of colored balls to the white ones may be varied at will, and thus the store keeper can determine the percentage of prizes there will be in a certain number of chances, by putting into the machine a corresponding number of certain colored balls.

What I claim as new and desire to secure by Letters Patent is:—

In a vending apparatus including a casing, the combination with an open-mouth receptacle for spheres, a chute communicating with the mouth and having a transparent pocket outside the casing, a box within the casing below the pocket, a rocker shaft and actuating means therefor, a rocker arm and a release gate and retention gate pivoted to said arm to control the exit of a sphere from the mouth of the receptacle, a pivoted retention gate below the receptacle, and means for actuating said gate to permit a sphere to fall into said box.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM JACKSON FISHER.

Witnesses:

H. SCHULZE,

A. J. SIGNAIGO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."