No. 842,853.

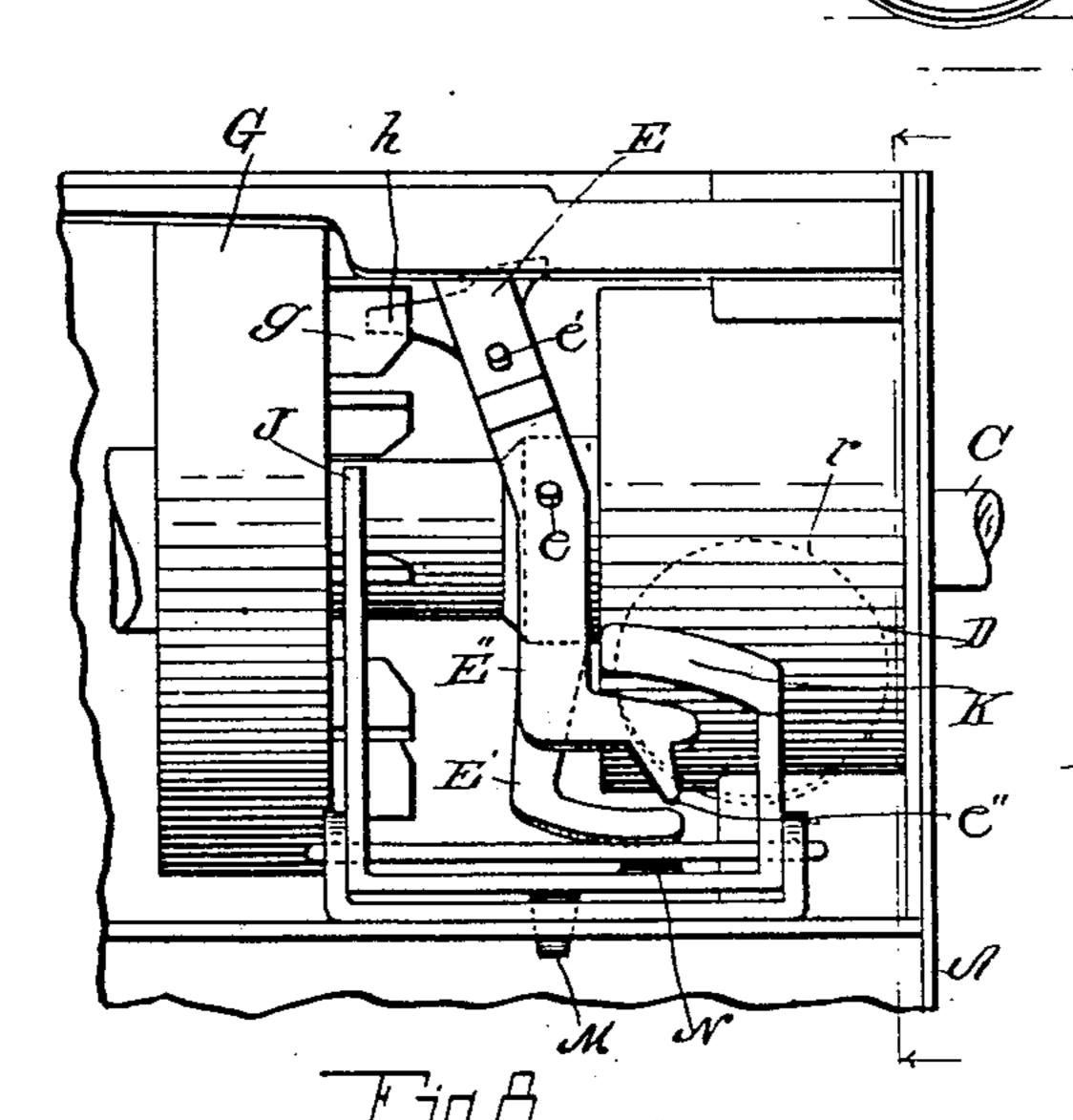
PATENTED FEB. 5, 1907.

L. J. BURDICK.

COIN REGISTER.

APPLICATION FILED SEPT. 19, 1903.

3 SHEETS—SHEET 1.



Witnesses: Lulu G. Grunfield Amelia J. Albar

Dendick By Fra L. Repare

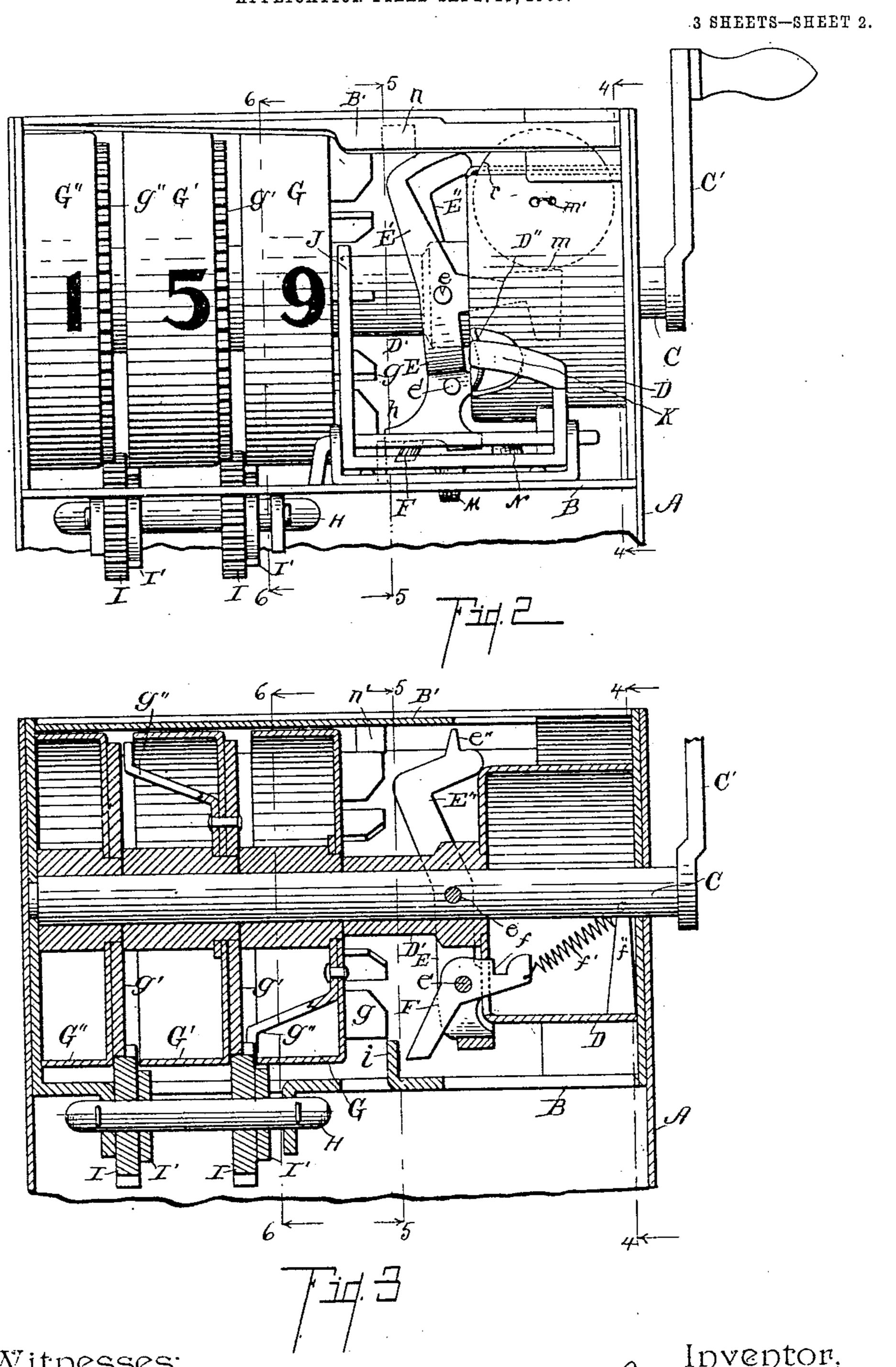
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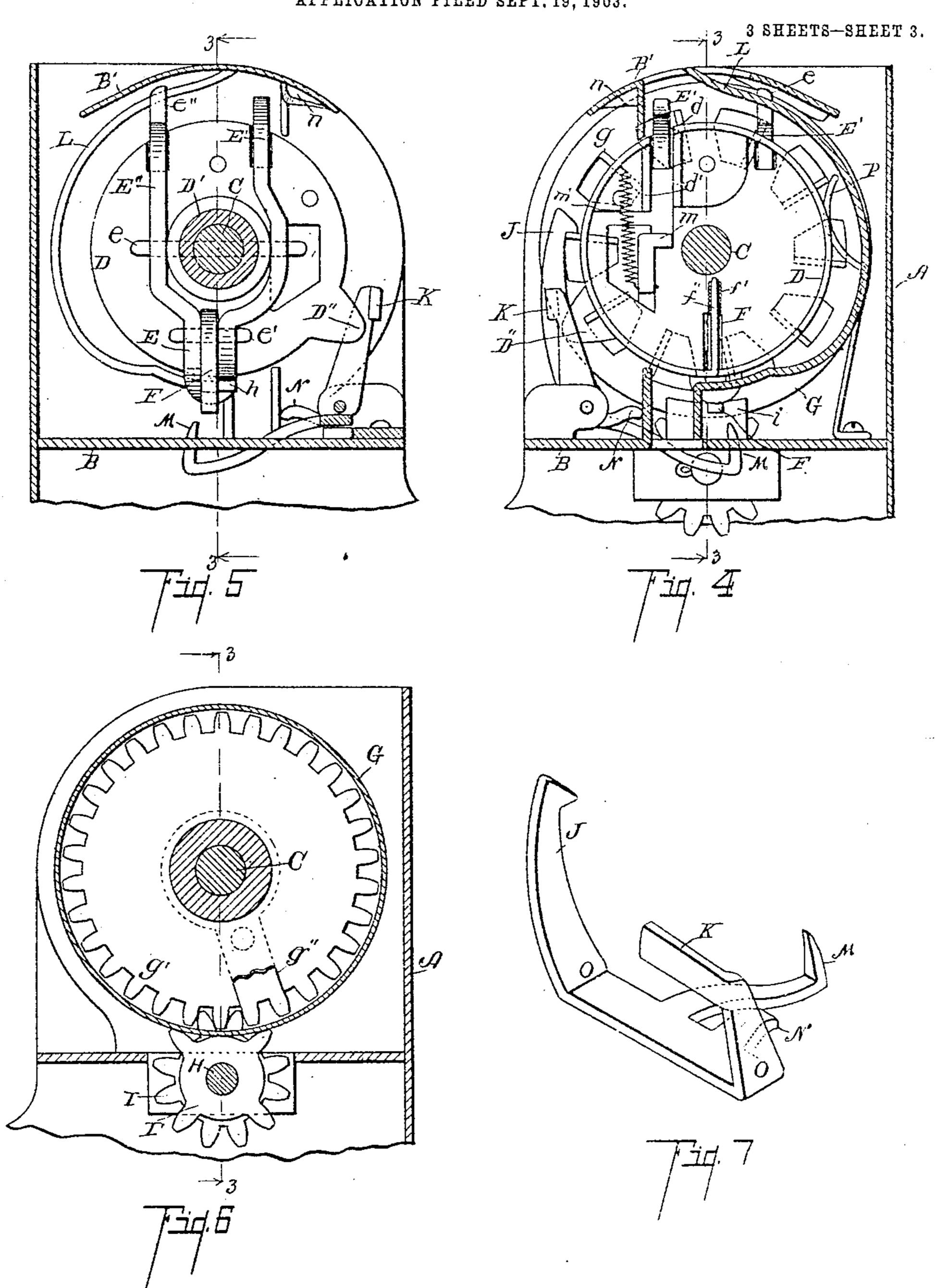
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By Gredo Chappell

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

## ED STATES PATENT OFFICE.

LEO J. BURDICK, OF LOS ANGELES, CALIFORNIA.

## COIN-REGISTER.

No. 842,853.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed September 19, 1903. Serial No. 173,849.

To all whom it may concern:

Be it known that I, Leo J. Burdick, a citizen of the United States, residing at the city of Los Angeles, in the county of Los Angeles 5 and State of California, have invented certain new and useful Improvements in Coin-Registers, of which the following is a specification.

This invention relates to improvements in

coin-registers.

The objects of this invention are, first, to provide an improved coin-register by which the values of coins of different denominations introduced therein are registered; second, to provide an improved coin-register by which 15 the values of coins of different denominations are registered, which is simple and compact in structure and economical to produce; third, to provide an improved coin-register which is simple and easy to operate and not 20 likely to get out of repair.

Further objects and objects relating to structural details will definitely appear from

the detailed description to follow.

I accomplish the objects of my invention 25 by the devices and means described in the following specification.

The invention is clearly defined, and point-

ed out in the claims.

A structure embodying the features of my 3c invention is clearly illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of a structure embodying the features of my invention 35 adapted to a toy savings-bank. Fig. 2 is an enlarged detail front elevation view of the operative mechanism, the front of the casing being removed. Fig. 3 is a detail longitudinal sectional view taken on a line correspond-40 ing to lines 3 3 of Figs. 4, 5, and 6, portions being shown in full lines. Fig. 4 is a detail cross-

sectional view taken on lines 4 4 of Figs. 2 and 3. Fig. 5 is a detail cross-sectional view taken on lines 5 5 of Figs. 2 and 3. Fig. 6 is

45 a detail cross-sectional view taken on lines 6 6 of Figs. 2 and 3. Fig. 7 is an enlarged perspective view of the locking-dog for the registering-wheels. Fig. 8 is a detail side elevation showing the lever E in engagement with

apparatus and about to be discharged. Fig. | drum D. A coiled spring m', secured to the 105 9 is a vertical section taken on a line corresponding to line 9 9 of Fig. 8.

taken looking in the direction of the little ar- 55 rows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, the casing A is here represented as a toy oo savings-bank. The coins are introduced through the coin-chute A'. The casing is provided with suitable windows a, through which the amount registered may be read.

Supported within the upper portion of the 65 casing A is a frame B, on which the operative parts of the machine are supported. The operative mechanism is provided with a shield or cover B'. Supported by the frame B and projecting through the side of the cas- 70 ing A is a shaft C, which is provided with a suitable crank C', by which it is actuated. Mounted on the shaft C is a cup-shaped wheel or drum D. This wheel or drum D is preferably formed of sheet metal. The drum D 75 is provided with a projecting hub D', which is secured to the shaft C by the pin e.

A lever E is pivotally mounted on the pin e, so that it is revolved with the shaft. This lever E is formed of a piece of sheet metal 8c bent into a loop to form arms E' E", which embrace the hub D'. The lever E is shaped somewhat like a letter S, the advantage of

which will appear later.

A locking-dog F is supported on the looped 85 end of the lever E by a pivot e'. One end of the dog F projects through a suitable slot in the drum D and is notched at f to engage the wall of the drum to lock the lever in its engaging position. The dog F is held under 90 tension by a coiled spring f', which is secured to the inner end of the dog and to the arm f'', which is preferably formed by striking a portion of the drum inward. The spring f' also tends to return the lever E to its initial posi- 95 tion when the dog F is disengaged.

Revolubly mounted on the shaft C is a series of number-wheels G G' G". The units or lower number-wheel G is provided with laterally-projecting teeth g, ten in number, 100 with which the tooth h on the end of the lever E is adapted to engage when the lever is in its operative position. The lever E is pro-50 the number-wheels and with the coin in the vided with an arm m, projecting inside of the periphery of the drum and to the arm m, tends to hold the same in its normal posi-In the drawings, the sectional views are I tion. The periphery of the drum D is slot-

ted at d to receive a coin, as is indicated by dotted lines in Fig. 2 at r, the inner end of the arm m serving as a rest for the coin. The guiding-plates d' project inwardly from the 5 slot d in the drum to form a holder for the coin and to retain the same upon the arm.

Arranged to the rear of the drum D and encircling about one-half thereof is a camshaped plate L, which the projecting edge of 10 the coin engages as it is carried downwardly by the drum. When the coin passes from the cam-plate, it is discharged from the drum into a suitable receptacle, in this case the bottom of the casing A. When the coin en-15 gages the cam-plate L, it is forced inwardly, thereby actuating the lever E, so that the tooth h thereon is engaged with one of the teeth g on the units number-wheel G.

When the lever E is thrown forward, the 20 notch f in the locking-dog F engages the wall of the drum and locks the lever in its engaging position, so that as the shaft is rotated the units number-wheel is rotated.

The cam-shaped plate L is shaped so that 25 coins of different sizes actuate the lever E at different periods in the movement of the drum-e. g., a one-cent piece actuates the lever to engage a tooth one step in advance of the point of discharge of the coin, so that 30 the units-wheel is actuated one step and the lever released. The five-cent piece is of such size as to actuate the lever at the beginning of the movement of the drum, so that the units-wheel is carried forward until the coin 35 is discharged, which occurs when the drum has completed one-half its revolution, the lever returning to its normal position on the discharging of the coin. To prevent the locking-dog F engaging when the lever is re-40 leased by the discharge of a coin, I provide a cam n', which is arranged on the shield B', which is adapted to engage the dog.

As it is necessary to cause the units registry-wheel to make a complete revolution to 45 secure the proper registry of a ten-cent coin, the lever E is not released upon the discharge of the coin, but is released by the trippingcam n, arranged on the cover or shield B'. When a ten-cent coin is introduced, the lever 50 E is not thrown into engagement with the registry-wheel until just before its discharge and after the locking-dog F has passed the cam n. This allows a complete revolution of the drum before the lever locking-dog is 55 tripped by the cain, and therefore a complete revolution of the units-wheel, thereby securing proper registry for the ten-cent coin. The arm E' on the lever E is adapted to project into the coin-slot d.

60 To prevent over-registration, I provide a pivoted locking-dog J, adapted to engage the teeth on the units-wheel G. The lockingdog J is provided with projecting arms M and N. The arm M is provided with an up-65 turned portion, which lies in the path of the

tooth e'' on the arm E'' of the lever E when the lever is in its engaging position. This trip is arranged so that the locking-dog is actuated just previous to the disengagement of the lever locking-dog F by the releasing- 70 cam n, so that when the lever is released and disengaged from the number-wheel the register locking-dog J is engaged therewith.

When coins of the size of one-cent or fivecent pieces are introduced, the lever E is ac- 75 tuated or thrown farther inward, so that the tripping-tooth  $e^{\prime\prime}$  does not engage with the arm M, but engages with the arm N.

The locking-deg J is released by the lug D" struck up from the drum D, which is adapted 80 to engage the arm K on the dog. The lug D" is so placed relative to the coin-slot d in the drum that when the slot is in position to receive a coin the lug is in engaging position with the arm K, so that as soon as the drum is 85 actuated the register-wheel lock is released.

The number-wheels G G' G" are connected by a suitable gear-train. The numberwheels are preferably formed of sheet metal, cup-shaped in form and mounted on suitable 90 hubs. The number-wheels G' G' are provided with gear g' g', which are adapted to mesh with the pinions I revolubly mounted on the shaft H. The number-wheels G G' are provided with engaging members g''. 95 These engaging members are adapted to engage the pinions I' as the number-wheels are revolved, thereby advancing the succeeding number-wheel one step at each revolution of the preceding number-wheel. Each num- 100 ber-wheel is provided with numerals from "0" to "9."

To prevent the manipulation of the lever E through the coin-chute to throw the same into engagement with the registry-wheel, I 105 provide a stop i opposite the coin-chute, so that it is impossible to manipulate the lever when in this position to engage the same without the introduction of a coin.

I apply tension to the units-wheel G by a rio spring F, which is secured to the frame B and the free end of which is curved to engage the teeth on the number-wheel G.

With the parts thus arranged they are substantially all formed of sheet metal and are 115 therefore very economical to produce and comparatively light.

I have illustrated and described my improved coin-register as applied to a toy registering-bank. It is, however, evident that it 120 is applicable for various uses. The structure I have illustrated is adapted for the use of three coins only-that is, the one-cent, fivecent, and ten-cent pieces. It is evident, however, that the principle of operation is 125 applicable to coins of other denominations. The same may be easily adapted for a check register or the like without departing from my invention.

I have illustrated and described my im- 130

proved coin-register in the form preferred by me on account of economy of manufacture and durability in use. I am aware, however, that it is capable of very great structural va-5 riation without departing from my invention.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. In a register mechanism, the combina-10 tion of a suitable casing containing a coinslot for the introduction of coins; a frame B supported within said casing; a shaft C supported on said frame and projecting through said casing; a suitable operating-crank for 15 said shaft; a drum-like wheel D secured to said shaft; a cain-slot D-in-said drum adapted to register with the coin-slot in said casing; a lever E having arms E' E" pivotally supported on said shaft, said arm E' being adapt-20 ed to enter said coin-slot d; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch F therein; a tension-spring f' for said lockingdog F secured within said drum; an arm m 25 on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; plates d' d' coacting with said arm m to form a coin-holder; a spring m' secured to said arm m and to said 3c drum; a series of register-wheels, the units register-wheel G having laterally-projecting teeth q thereon; suitable gear connections for said register-wheels; a cam-plate L arranged to the rear of and partially embracing 35 said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with the teeth q on said registerwheel G; tripping-cams n n' for said lever 40 locking-dog F; a locking-dog J for said units register-wheel G, having arms M, N, K, thereon; and engaging tooth e'' on the arm E" of said lever E, adapted to engage said arms M, N, to actuate the said locking-dog J; 45 a lug D" on said drum adapted to engage said arm K to release said locking-dog J; and a stop i to prevent the actuation of said lever E through said coin-slot in said casing, all coacting for the purpose specified.

2. In a register mechanism, the combination of a suitable casing containing a coinslot for the introduction of coins; a frame B supported within said casing; a shaft C supported on said frame and projecting through 55 said casing; a suitable operating-crank for said shaft; a drum-like wheel D secured to said shaft; a coin-slot d in said drum adapted to register with the coin-slot in said casing; a lever E having arms E' E" pivotally support-60 ed on said shaft, said arm E' being adapted to enter said coin-slot d; a locking-dog F car-

ried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f' for said locking-dog F65 secured within said drum; an arm m on said

lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; plates d' d' coacting with said arm m to form a coin-holder; a spring m' secured to said arm m and to said drum; a se- 70 ries of register-wheels, the units registerwheel G having laterally-projecting teeth gthereon; suitable gear connections for said register-wheels; a cam-plate L arranged to the rear of and partially embracing said 75 drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with the teeth g on said register-wheel G; tripping-cams n n' for said lever locking- 80 dog F; a locking-dog J for said units registerwheel G, having arms M, N, K thereon; an engaging tooth e'' on the arm E'' of said lever E, adapted to engage said arms N M to actuate the said locking-dog J; and a lug D" 85 on said drum adapted to engage said arm K to release said locking-dog J, all coacting for the purpose specified.

3. In a register mechanism, the combination of a suitable casing containing a coin-slot 90 for the introduction of coins; a frame-B-supported within said casing; a shaft C supported on said frame and projecting through said casing; a suitable operating-crank for said shaft; a drum-like wheel D secured to said 95 shaft; a coin-slot d in said drum adapted to register with the coin-slot in said casing; a lever E having an arm E" pivotally supported on said shaft; a locking-dog F carried by said lever E, arranged through a suitable slot in 100 said drum, having a notch f therein; a tension-spring f' for said locking-dog F secured within said drum; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin- 105 slot d; plates d' d' coacting with said arm mto form a coin-holder; a spring m' secured to said arm m and to said drum; a series of regter-wheels, the units register-wheel G having laterally-projecting teeth g thereon; suitable 110 gear connections for said register-wheels; a. cam-plate L arranged to the rear of and partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to 115 throw the same into engagement with the teeth g on said register-wheel G; trippingcams n n' for said lever locking-dog F; a locking-dog J for said units register-wheel G, having arms M N K thereon; an engaging tooth 120 e" on the arm E" of said lever E, adapted to engage said arms M N to actuate the said locking-dog J; a lug D" on said drum adapted to engage said arm K to release said locking-dog J; and a stop i to prevent the actua-125 tion of said lever E through said coin-slot in said casing, all coacting for the purpose specified.

4. In a register mechanism, the combination of a suitable casing containing a coin- 130

slot for the introduction of coins; a frame B supported within said casing; a shaft C supported on said frame and projecting through said casing; a suitable operating-crank for 5 said shaft; a drum-like wheel D secured to said shaft; a coin-slot d in said drum adapted to register with the coin-slot in said casing; a lever E having an arm E" pivotally supported on said shaft; a locking-dog F carried by 10 said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f' for said locking-dog F secured within said drum; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coinslot d; plates d' d' coacting with said arm mto form a coin-holder; a spring m' secured to said arm m and to said drum; a series of register-wheels, the units register-wheel G hav-20 ing laterally-projecting teeth g thereon; suitable gear connections for said register-wheels; a cam-plate L arranged to the rear of and partially embracing said drum, adapted to engage the coins as they are carried by said 25 drum, whereby said lever E is actuated to throw the same into engagement with the teeth g on said register-wheel G; trippingcams n n' for said lever locking-dog F; a locking-dog J for said units register-wheel G, hav-30 ing arms M N K thereon; an engaging tooth e" on the arm E" of said lever E, adapted to engage said arms M N to actuate the said locking-dog J; and a lug D" on said drum adapted to engage said arm K to release said 35 locking-dog J, all coacting for the purpose specified.

5. In a register mechanism, the combination of a suitable casing containing a coinslot for the introduction of coins; a frame B 40 supported within said casing; a shaft C supported on said frame and projecting through said casing; a suitable operating-crank for said shaft; a drum-like wheel D secured to said shaft; a coin-slot d in said drum adapted 45 to register with the coin-slot in said casing; a lever E; a locking-dog F carried by said lever E, arranged through a suitable slot in said

drum, having a notch f therein; a tensionspring f' for said locking-dog F secured with-50 in said drum; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot  $\bar{d}$ ; plates d' d' coacting with said arm m to form a coin-holder; a spring m' secured to

55 said arm m and to said drum; a series of register-wheels, the units register-wheel G having laterally-projecting teeth g thereon; suitable gear connections for said register-wheels; a cam-plate L arranged to the rear of and

60 partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with the teeth g on said register-wheel G; tripping-65 cams n n' for said lever locking-dog F; and a

stop i to prevent the actuation of said lever E through said coin-slot in said casing, all co-

acting for the purpose specified.

6. In a register mechanism, the combination of a suitable casing containing a coin- 70 slot for the introduction of coins; a frame B supported within said casing; a shaft C supported on said frame and projecting through said casing; a suitable operating-crank for said shaft; a drum-like wheel D secured to 75 said shaft; a coin-slot d in said drum adapted to register with the coin-slot in said casing; a lever E having arms E' E" pivotally supported on said shaft, said arm E' being adapted to enter said coin-slot d; a locking-dog F 80 carried by said lever E, arranged through a suitable slot in said drum, having a notch ftherein; a tension-spring f' for said lockingdog F secured within said drum; an arm m on said lever E projecting into said drum in po- 85 sition to be engaged by a coin introduced into said coin-slot d; plates d' d' coacting with said arm m to form a coin-holder; a spring m' secured to said arm m and to said drum; a series of register-wheels, the units register-9° wheel G having laterally-projecting teeth g thereon; suitable gear connections for said register-wheels; a cam-plate L arranged to the rear of and partially embracing said drum, adapted to engage the coins as they 95 are carried by said drum, whereby said lever E is actuated to throw the same into engagement with the teeth g on said register-wheel G; and tripping-cams n n' for said lever locking-dog F, all coacting for the purpose 100 specified.

7. In a register mechanism, the combination of a register mechanism; a shaft; a drumlike wheel secured to said shaft; a coin-slot d in said drum; a lever E having arms E' E" 105 pivotally supported on said shaft, said arm E' being adapted to enter said coin-slot d; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f' 110 for said locking-dog F secured within said drum; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said slot d; plates d' d'coacting with said arm to form a coin-holder; 115 a spring m' secured to said arm m and to said drum; a cam-plate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into en- 120 gagement with said register mechanism; tripping-cams n n' for said lever locking-dog. F; a locking-dog J for said register mechanism, having arms M N K thereon; an engaging tooth  $\tilde{e}''$  on the arm E'' of said lever  $\tilde{E}$ , 125 adapted to engage said arms M N to actuate said locking-dog J; and a lug D" on said drum adapted to engage said arm K to release said locking-dog J, all coacting for the purpose specified.

8. In a register mechanism, the combination of a register mechanism; a shaft; a drumlike wheel secured to said shaft; a coin-slot din said drum; a lever E having an arm E" 5 pivotally supported on said shaft; a lockingdog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f' for said locking-dog F secured within said drum; ro an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; plates d' d'coacting with said arm to form a coin-holder; a spring m' secured to said arm m and to said 15 drum; a cam-plate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; 20 tripping-cams n n' for said lever locking-dog F; a locking-dog J for said register mechanism, having arms MNK thereon; an engaging tooth e'' on the arm E'' of said lever E, adapted to engage said arms M N to actuate 25 said locking-dog J; and a lug D" on said drum adapted to engage said arm K to release said locking-dog J, all coacting for the pur-- pose specified.

9. In a register mechanism, the combina-30 tion of a register mechanism; a shaft; a drumlike wheel secured to said shaft; a coin-slot d in said drum; a lever E having arms E' E" pivotally supported on said shaft, said arm E' being adapted to enter said coin-slot d; a 35 locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f'for said locking-dog F secured within said drum; an arm m on said lever E projecting 40 into said drum in position to be engaged by a coin introduced into said coin-slot d; plates. d' d' coacting with said arm to form a coinholder; a spring m' secured to said arm m and to said drum; a cam-plate L partially embrac-

15 ing said drum, adapted to engage the coins as

they are carried by said drum, whereby said

lever E is actuated to throw the same into

engagement with said register mechanism;

and tripping-cams n n' for said lever locking-50 dog F, all coacting for the purpose specified. 10. In a register mechanism, the combination of a register mechanism; a shaft; a drumlike wheel secured to said shaft; a coin-slot d in said drum; a lever E having an arm E" 55 pivotally supported on said shaft; a lockingdog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f' for said locking-dog F secured within said drum; an 6c arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; plates d' d' coacting with said arm to form a coin-holder; a spring m' secured to said arm m and to said 65 drum; a cam-plate L partially embracing | coin-slot d; plates d' d' coacting with said 130

said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; and tripping-cams n n' for said lever locking- 70 dog F; all coacting for the purpose specified.

11. In a register mechanism, the combination of a register mechanism; a shaft; a drumlike wheel secured to said shaft; a coin-slot din said drum; a lever E having arms E' E" 75 pivotally supported on said shaft, said arm E' being adapted to enter said coin-slot d; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; an arm m on said 80 lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; plates d' d' coacting with said arm to form a coin-holder; a spring m' secured to said arm m and to said drum; a cam- 85. plate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; tripping-cams n n' for 90 said lever locking-dog F; a locking-dog J for said register mechanism, having arms M N K thereon; an engaging tooth e'' on the arm E'' of said lever E, adapted to engage said arms MN to actuate said locking-dog J; and a lug 95. D" on said drum adapted to engage said arm K to release said locking-dog J, all coacting for the purpose specified.

12. In a register mechanism, the combination of a register mechanism; a shaft; a 100 drum-like wheel secured to said shaft; a coin-slot d in said drum; a lever E having arms E' E" pivotally supported on said shaft, said arm E" being adapted to enter said coin-slot d; a locking-dog F carried by 105 said lever E, arranged through a suitable slot in said drum, having a notch f therein; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; plates d' d' 110 coacting with said arm to form a coin-holder; a spring m' secured to said arm m and to said drum; a cam-plate L partially embracing said drum adapted to engage the coins as they are carried by said drum, whereby said 115 lever E is actuated to throw the same into engagement with said register mechanism; and tripping-cams n n' for said lever lockingdeg F, all coacting for the purpose specified.

13. In a register mechanism, the combina- 120 tion of a register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot d in said drum; a lever E having an arm E" pivotally supported on said shaft; a locking-dog F carried by said lever E, ar- 125 ranged through a suitable slot in said drum, having a notch f therein; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said

19-2-3

arm to form a coin-noider; a spring m' secured to said arm m and to said drum; a cam-plate L partially embracing said drum, adapted to engage the coins as they are car-5 ried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; and trippingcams n n' for said lever locking-dog F, all coacting for the purpose specified.

14. In a register mechanism, the combination of a register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot d in said drum; a lever E having arms E' E" pivotally supported on said shaft, 15 said arms E'being adapted to enter said coinslot d; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch. f. therein; a tensionspring f' for said locking-dog F secured within 20 said drum; an arm m en said lever E prejecting into said drum in position to be engaged by a coin introduced into said coinslot d; a spring m' secured to said arm m and to said drum; a cam-plate L partially em-25 bracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; tripping-cams n n' for said 30 lever locking-deg F; a locking-deg J for said register mechanism, having arms M N K thereon; an engaging tooth e'' on the arm E" of said lever E, adapted to engage said arms M N to actuate said locking-dog J; and 35 a lug D" on said drum adapted to engage said arm K to release said locking-dog J, all

coacting for the purpose specified. 15. In a register mechanism, the combination of a register mechanism; a shaft; a 40 drum-like wheel secured to said shaft; a coin-slot d in said drum; a lever E having arms E' E" pivotally supported on said shaft said arm E' being adapted to enter said coin-slot d; a locking-dog F carried by 45 sáid lever E, arranged through a suitable slot in said drum, having a notch f therein; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; a spring m'50 secured to said arm m and to said drum; a cam-plate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; tripping-cams n n' for said lever locking-dog F; a lockingdeg J for said register mechanism, having arms M N K thereon; an engaging tooth e''on the arm E" of said lever E, adapted to en-60 gage said arms M N to actuate said lockingdog J; and a lug D" on said drum adapted to engage said arm K to release said lockingdog J, all coacting for the purpose specified. 16. In a register mechanism, the combina-

65 tion of a register mechanism; a shaft; a

drum-like wheel secured to said shaft; a coinslot d in said drum; a lever E having an arm E" pivotally supported on said shaft; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having 70 a notch f therein; a tension-spring f' for said locking-dog F secured within said drum; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot d; a spring m' 75 secured to said arm m and to said drum; a cam-plate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement 80 with said register mechanism; trippingcams n n' for said lever locking dog-F; a locking-dog J for said register mechanism, having arms M N K thereon; an engaging tooth e'' on the arm E'' of said lever E, 85 adapted to engage said arms M N to actuate said locking-dog J; and a lug D" on said drum adapted to engage said arm K to release said locking-dog J, all coacting for the purpose specified.

17. In a register mechanism, the combination of a register mechanism; a shaft; a drum-like wheel secured to said shaft; a coinslot d in said drum; a lever E having an arm E" pivotally supported on said shaft; a 95 locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f' for said locking-dog F secured within said drum; an arm m on said lever E projecting 100 into said drum in position to be engaged by a coin introduced into said coin-slot d; a spring m' secured to said arm m and to said drum; a cam-plate L partially embracing said drum, adapted to engage the coins as 105 they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; and tripping-cams n n' for said lever lockingdog F, all coacting for the purpose specified. 110

18. In a register mechanism, the combination of a register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot d in said drum; a lever E having arms E' E" pivotally supported on said shaft, 115 said arm E' being adapted to enter into said coin-slot d; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f' for said locking-dog F secured 120 within said drum; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coinslot d; plates d' d' coacting with said arm to form a coin-holder; a spring m' secured to 125 said arm m and to said drum; a cam-plate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said 130

register mechanism; a tripping-cam for said lever locking-dog F; a locking-dog J for said register mechanism, having arms M, N, K thereon; an engaging tooth e'' on the arm 5 E" of said lever E, adapted to engage said arms M, N to actuate said locking-dog J; and a lug D" on said drum adapted to engage said arm K to release said locking-dog J, all

coacting for the purpose specified.

19. In a register mechanism, the combination of a register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot d in said drum; a lever E having an arm E" pivotally supported on said shaft; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, having a notch f therein; a tension-spring f'for said locking-dog F secured within said drum; an arm m on said lever E projecting 20 into said drum in position to be engaged by a coin introduced into said coin-slot d; plates d' d' coacting with said arm to form a coinholder; a spring m' secured to said arm mand to said drum; a cam-plate L partially 25 embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; and a tripping-cam for said lever 30 locking-dog F; all coacting for the purpose

specified. 20. In a register mechanism, the combination of a register mechanism; a shaft; a drumlike wheel secured to said shaft; a coin-slot d35 in said drum; a lever E having arms E' E" pivotally supported on said shaft, said arm E' being adapted to enter said coin-slot d; a locking-dog F carried by said lever E, arranged through a suitable slot in said drum, 40 having a notch f therein; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot  $\bar{d}$ ; plates d' d' coacting with said arm to form a coin-holder; a spring m' se-45 cured to said arm m and to said drum; a camplate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement

cam for said lever locking-dog F, all coacting for the purpose specified.

21. In a register mechanism, the combination of a register mechanism; a shaft; a drum-55 like wheel secured to said shaft; a coin-slot din said drum; a lever E having an arm E" pivotally supported on said shaft; a lockingdog F carried by said lever E, arranged through a suitable slot in said drum, having 60 a notch f therein; a tension-spring f' for said locking-dog F secured within said drum; an arm m on said lever E projecting into said drum in position to be engaged by a coin introduced into said coin-slot  $\bar{d}$ ; a spring m' se-65 cured to said arm m and to said drum; a

50 with said register mechanism; and a tripping-

cam-plate L partially embracing said drum, adapted to engage the coins as they are carried by said drum, whereby said lever E is actuated to throw the same into engagement with said register mechanism; and a tripping- 70 cam for said lever locking-dog F, all coacting

for the purpose specified.

22. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a drum-like wheel secured to said 75 shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; a locking-dog for said lever carried thereby; a tensionspring for said lever; an arm on said lever projecting into said drum in position to be 80 engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said 85 registry mechanism at a predetermined point in the movement of said shaft; trippingcams for said lever locking-dog; a lockingdog for said registry mechanism adapted to be actuated by said lever; and an arm on said 90 drum adapted to release said registry-mechanism locking-dog, for the purpose specified.

23. In a registering mechanism, the combination of a suitable register mechanism; a shaft; drum-like wheel secured to said shaft; a 95 coin-slot in said drum; a lever pivotally supported on said shaft; a locking-dog for said lever carried thereby; a tension-spring for said lever; an arm on said lever projecting into said drum in position to be engaged by a coin in- 100 troduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry 105 mechanism at a predetermined point in the movement of said shaft; and tripping-cams for said lever locking-dog, for the purpose

specified.

24. In a registering mechanism, the com- 110 bination of a suitable registry mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; a locking-dog for said lever carried thereby; a tension-115 spring for said lever; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it is carried by 120 said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; a trip adapted to release said lever locking-dog as the shaft 125 is revolved; a locking-dog for said registry mechanism adapted to be actuated by said lever; and an arm on said drum adapted to release said registry-mechanism locking-dog, for the purpose specified.

25. In a registering mechanism, the combination of a suitable registry mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever piv-5 otally supported on said shaft; a tensionspring for said lever; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, 10 adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; a locking-15 dog for said registry mechanism adapted to be actuated by said lever; and an arm on said drum adapted to release said registrymechanism locking-dog, for the purpose specified.

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26. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; a locking-25 dog for said lever carried thereby; a tensionspring for said lever; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, 30 adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; and a trip 35 adapted to release said lever locking-dog as the shaft is revolved, for the purpose speci-

fied. 27. In a registering mechanism, the combination of a suitable register mechanism; a 40 shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; a tensionspring for said lever; an arm on said lever projecting into said drum in position to be 45 engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said 50 registry mechanism at a predetermined point in the movement of said shaft, for the purpose specified.

28. In a registering mechanism, the combination of a suitable register mechanism; a 55 shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; a lockingdog for said lever carried thereby; an arm on said lever projecting into said drum in posi-60 tion to be engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into

at a predetermined point in the movement of said shaft; tripping-cams for said lever locking-dog; a locking-dog for said registry mechanism adapted to be actuated by said lever; and an arm on said drum adapted 70 to release said registry-mechanism lockingdog, for the purpose specified.

29. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a drum-like wheel secured to said 75 shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing 80 said drum, adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; 85 a locking-dog for said registry mechanism adapted to be actuated by said lever; and an arm on said drum adapted to release said register-mechanism locking-dog, for the purpose specified.

30. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; a locking- 95 dog for said lever carried thereby; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it 100 is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; and tripping-cams for said lever lock- 105 ing-dog, for the purpose specified.

31. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever piv- 110 otally supported on said shaft; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it 115 is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft, for the purpose specified.

32. In a registering mechanism, the combination of a suitable registry mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slet in said drum; a lever pivotally supported on said shaft; a locking-dog 125 for said lever carried thereby; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embrac-65 engagement with said registry mechanism | ing said drum, adapted to engage the coin as 130

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it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said 5 shaft; a trip adapted to release said lever locking-dog as the shaft is revolved; a locking-dog for said registry mechanism adapted to be actuated by said lever; and an arm on said drum adapted to release said registryro mechanism locking-dog, for the purpose

specified.

33. In a registering mechanism, the combination of a suitable registry mechanism; a shaft; a drum-like wheel secured to said 15 shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing 20 said drum, adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said 25 shaft; a locking-dog for said registry mechanism adapted to be actuated by said lever; and an arm on said drum adapted to release said registry-mechanism locking-dog, for the purpose specified.

30 34. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a drum-like wheel secured to said shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; a locking-dog 35 for said lever carried thereby; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing said drum, adapted to engage the coin as it 40 is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said

shaft; and a trip adapted to release said le-45 ver locking-dog as the shaft is revolved, for

the purpose specified.

35. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a drum-like wheel secured to said 50 shaft; a coin-slot in said drum; a lever pivotally supported on said shaft; an arm on said lever projecting into said drum in position to be engaged by a coin introduced into said slot; a cam-plate partially embracing 55 said drum, adapted to engage the coin as it is carried by said drum, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said 60 shaft; for the purpose specified.

36. In a registering mechanism, the combination of a suitable register mechanism; a shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft adapt-65 ed to be engaged by a coin carried by said

holder; a locking-dog for said lever carried thereby; a tension-spring for said lever; a cam-plate adapted to engage the coin as it is carried by said holder, whereby said lever is actuated to throw the same into engagement 70 with said registry mechanism at a predetermined point in the movement of said shaft; tripping-cams nn' for said lever locking-dog; a locking-dog for said registry mechanism adapted to be actuated by said lever; 75 a trip on said coin-holder adapted to release said register-mechanism locking-dog, for the

purpose specified.

37. In a registering mechanism, the combination of a suitable registry mechanism; a 80 shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft adapted to be engaged by a coin carried by said holder; a locking-dog for said lever carried thereby; a tension-spring for said lever; a 85 cam-plate adapted to engage the coin as it is carried by said holder, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; a 90 trip adapted to release said lever locking-dog as the shaft is revolved; a locking-dog for said registry mechanism adapted to be actuated by said lever; a trip on said coin-holder adapted to release said registry-mechanism 95 locking-dog, for the purpose specified.

38. In a registering mechanism, the combination of a suitable registry mechanism; a shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft adapt- 100 ed to be engaged by a coin carried by said holder; a tension-spring for said lever; a cam-plate adapted to engage the coin as it is carried by said holder, whereby said lever is actuated to throw the same into engagement 105 with said registry mechanism at a predetermined point in the movement of said shaft; a locking-dog for said registry mechanism adapted to be actuated by said lever; and a trip on said coin-holder adapted to release 110 said registry-mechanism locking-dog, for the

purpose specified. 39. In a registering mechanism, the combination of a suitable registry mechanism; a shaft; a coin-holder carried by said shaft; a 115 lever pivotally supported on said shaft adapted to be engaged by a coin carried by said holder; a locking-dog for said lever carried thereby; a tension-spring for said lever; a cam-plate adapted to engage the coin as it is 120 carried by said holder, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; tripping-cams n n' for said lever locking-dog; 125 for the purpose specified.

40. In a registering mechanism, the combination of a suitable registry mechanism; a shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft adapt- 130

ed to be engaged by a coin carried by said holder; a locking-dog for said lever carried thereby; a tension-spring for said lever; a cam-plate adapted to engage the coin as it is 5 carried by said holder, whereby said lever is actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft; a trip adapted to release said lever locking-dog so as the shaft is revolved, for the purpose

specified.

41. In a registering mechanism, the combination of a suitable registering mechanism; a shaft; a coin-holder carried by said shaft; a 15 lever pivotally supported on said shaft; adapted to be engaged by a coin carried by said holder; a tension-spring for said lever; a camplate adapted to engage the coin as it is carried by said holder, whereby said lever is 20 actuated to throw the same into engagement with said registry mechanism at a predetermined point in the movement of said shaft, for

the purpose specified.

42. In a registering mechanism, the com-25 bination of a suitable registry mechanism; a shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft adapted to be engaged by a coin carried by said holder; a cam-plate adapted to engage a coin 30 as it is carried by said holder, whereby said lever is actuated to throw the same into engagement with said register mechanism at a predetermined point in the movement of said shaft; a trip adapted to disengage said lever 35 from said register mechanism as the shaft is revolved; a locking-dog for said register mechanism, adapted to be actuated by the said lever; and a trip on said coin-holder adapted to release said register locking-dog, 40 for the purpose specified.

43. In a registering mechanism, the combination of a suitable registering mechanism; a shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft adapted to be engaged by a coin carried by said holder; a cam-plate adapted to engage the coin as it is carried by said holder, whereby said lever is actuated to throw it into engagement with said register mechanism at a . 50 predetermined point in the movement of said shaft; a trip adapted to disengage said lever from said register mechanism as the shaft is revolved, for the purpose specified.

44. In a registering mechanism, the com-55 bination of a suitable registering mechanism; a shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft adapted to be engaged by a coin carried by said holder; a cam-plate adapted to engage 60 the coin as it is carried by said holder, whereby said lever is actuated to throw it into engagement with said register mechanism at a predetermined point in the movement of said shaft; a locking-dog for said register 65 mechanism adapted to be actuated by the

said lever; and a trip on said coin-holder adapted to release said register locking-dog,

for the purpose specified.

45. In a registering mechanism, the combination of a suitable registering mechanism; 70 a shaft; a coin-holder carried by said shaft; a lever pivotally supported on said shaft, adapted to be engaged by a coin carried by said holder; a cam-plate adapted to engage the coin as it is carried by said holder, where- 75 by said lever is actuated to throw it into engagement with said register mechanism at a predetermined point in the movement of said

shaft, for the purpose specified.

46. In a registering mechanism, the com- 80 bination of a suitable registering mechanism; a shaft; a lever adapted to engage said registering mechanism; a coin-holder pivotally supported on said shaft; a cam-plate adapted to engage the coin as it is carried by said 85 holder, whereby said lever is actuated to throw it into engagement with said register mechanism at a predetermined point in the movement of said shaft; a trip adapted to disengage said coin-holder from said lever as 9° said shaft is revolved; a locking-dog for said register mechanism adapted to be actuated by said lever; and a trip on said coin-holder adapted to release said register locking-dog, for the purpose specified.

47. In a registering mechanism, the combination of a suitable registering mechanism; a shaft; a lever adapted to engage said registering mechanism; a coin-holder pivotally supported on said shaft; a cam-plate adapted 100 to engage the coin as it is carried by said holder, whereby said lever is actuated to throw it into engagement with said register mechanism at a predetermined point in the movement of said shaft; a trip adapted to 105 disengage said coin-holder from said lever as the shaft is revolved; for the purpose speci-

fied. 48. In a registering mechanism, the combination of a suitable registering mechanism; 110 a shaft; a lever adapted to engage said registering mechanism; a coin-holder pivotally supported on said shaft; a cam-plate adapted to engage the coin as it is carried by said holder, whereby said lever is actuated to 115 throw it into engagement with said register mechanism at a predetermined point in the movement of said shaft; a locking-dog for said register mechanism adapted to be released by said coin-holder, for the purpose 120 specified.

49. In a registering mechanism, the combination of a suitable registering mechanism; a shaft; a lever adapted to engage said registering mechanism; a coin-holder pivotally 125 supported on said shaft; and a cam-plate arranged to engage the coin as it is carried forward by said holder, whereby said lever is actuated to throw it into engagement with said register mechanism at a predetermined 130

point in the movement of said shaft, for the

purpose specified.

50. In a registering mechanism, the combination of a suitable registering mechanism; a shaft; a lever adapted to engage said registering mechanism; a coin holder on said shaft; and a cam-plate arranged to engage the coin as it is carried forward by said holder, whereby said lever is actuated to throw it into engagement with said register mechanism at a predetermined point in the movement of said shaft, for the purpose specified.

51. In a registering mechanism, the combination of a suitable registering mechanism;

means for actuating the same; a coin-holder; a cam-plate arranged to engage a coin as it is carried forward by said holder whereby said registering actuating means is engaged with the registering mechanism at a predeter- 20 mined point in the movement thereof, for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two wit-

nesses.

LEO J. BURDICK. [L. s.]

Witnesses:

E. A. DE Blois, G. M. Davey.