Dec. 29, 1942. W. F. BERNART, JR 2,306,518

MEANS FOR IDENTIFYING DEPOSITORS OF SPURIOUS COINS

Filed Feb. 1, 1940 3 Sheets-Sheet 1

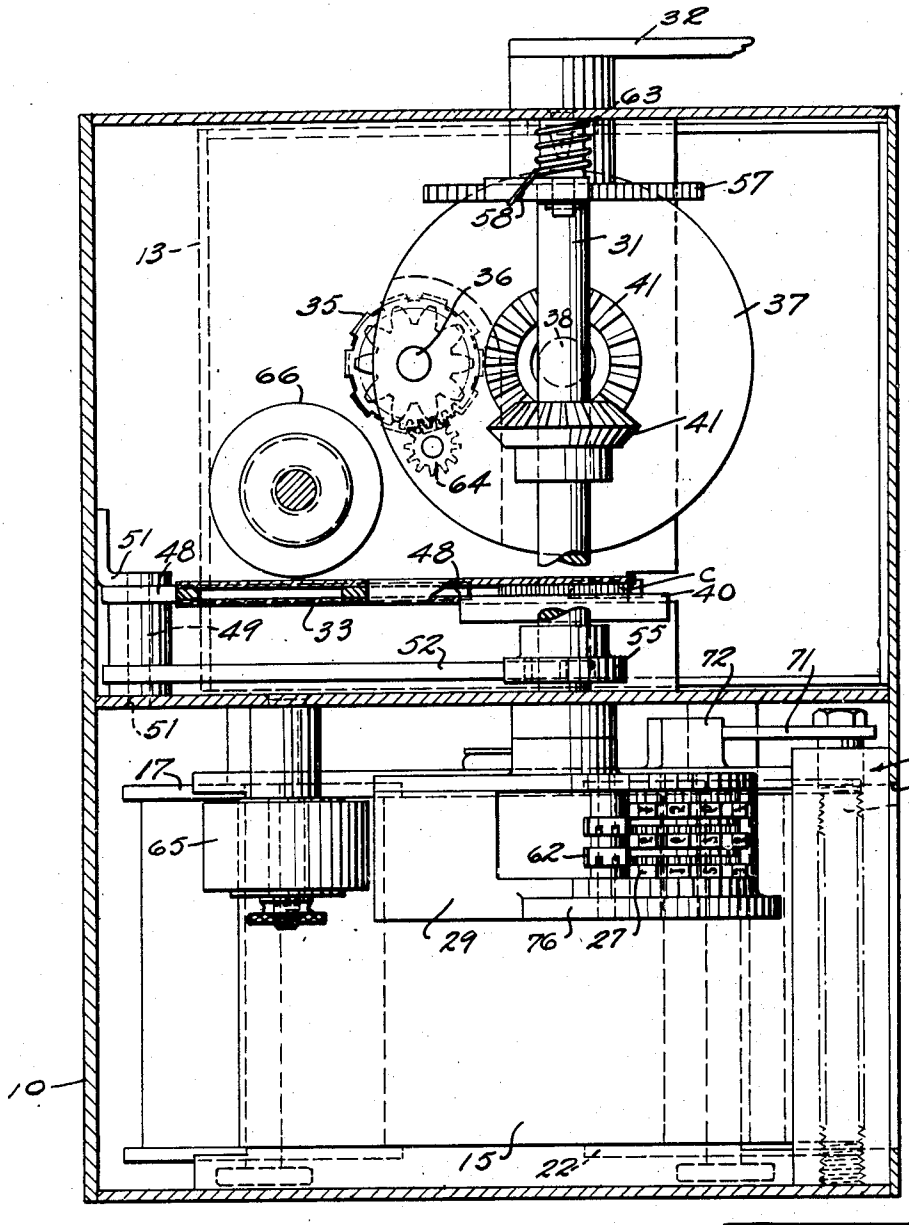


FIG-4-

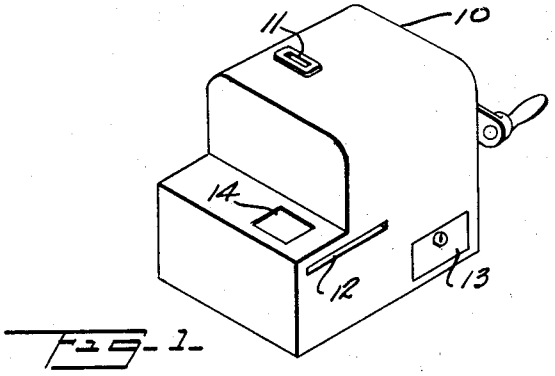


FIG-1-

INVENTOR
William F. Bernart, Jr.
BY
Edwin A. Owen
ATTORNEY

Dec. 29, 1942.

W. F. BERNART, JR 2,306,518

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Filed Feb. 1, 1940 3 Sheets-Sheet 2

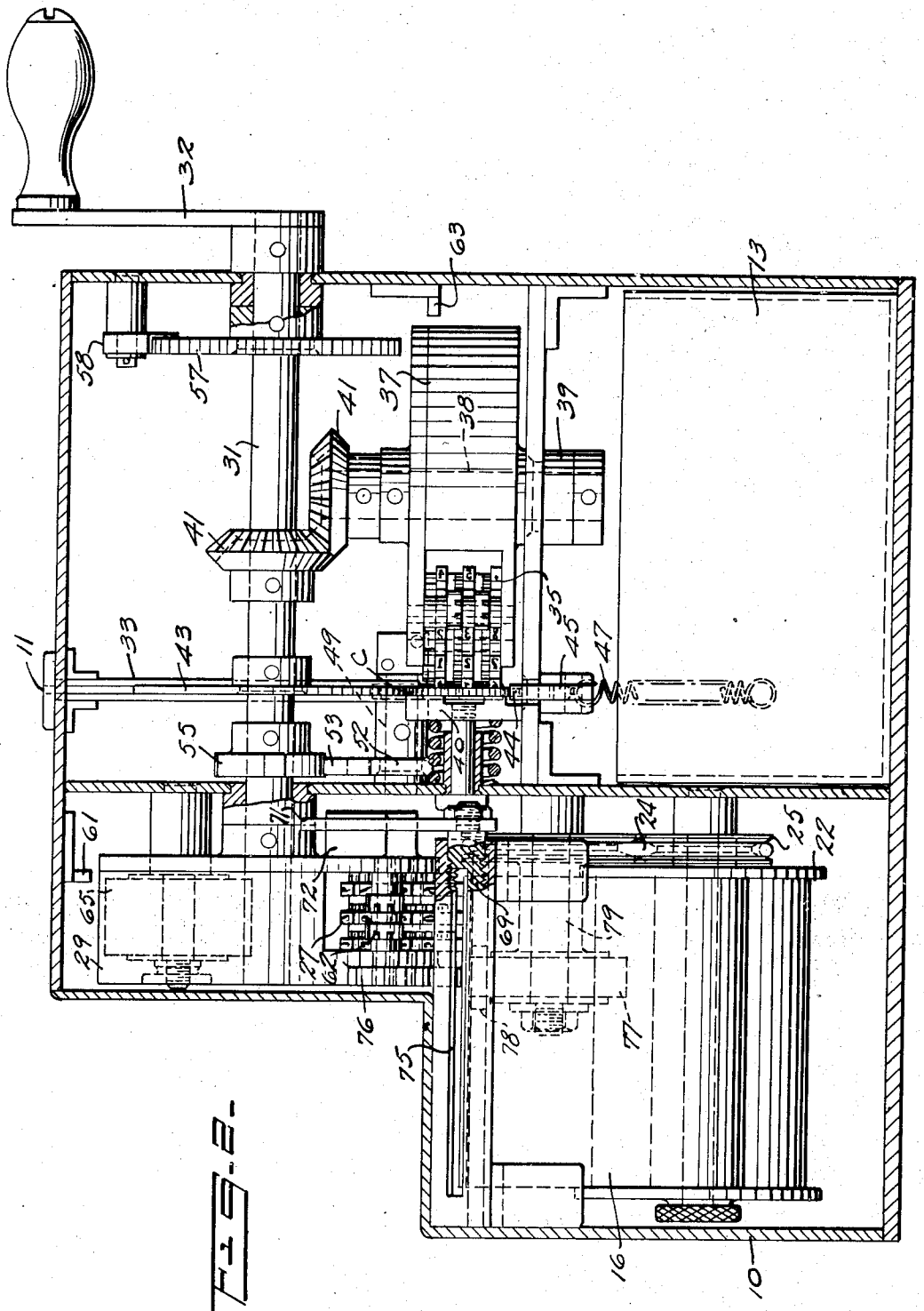


FIG. 2.

INVENTOR
William F. Bernart, Jr.
BY
Edwin H. Oen
ATTORNEY

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MEANS FOR IDENTIFYING DEPOSITORS OF SPURIOUS COINS

Filed Feb. 1, 1940 3 Sheets-Sheet 3

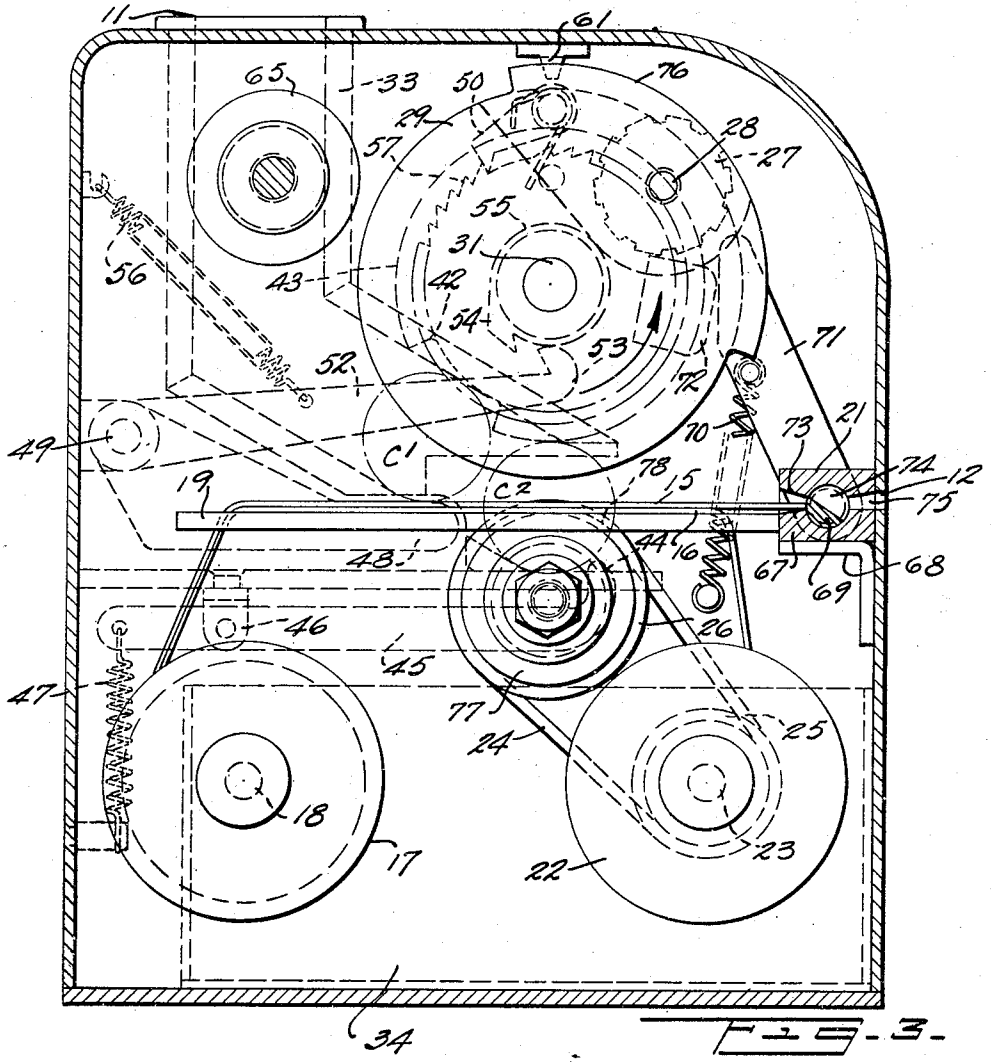


FIG. 3.

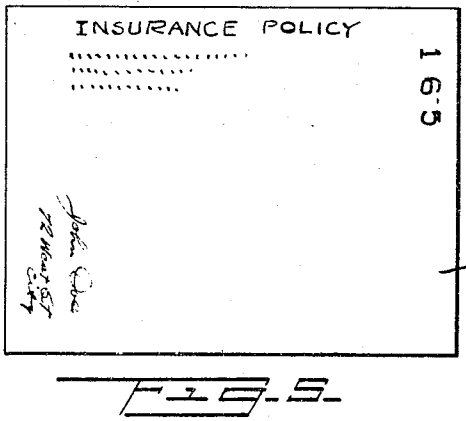


FIG. 5.

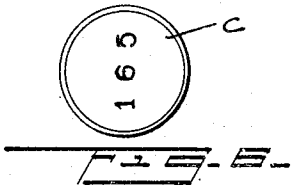


FIG. 6.

INVENTOR
William F Bernart, Jr.
BY
Edwin N Owen
ATTORNEY

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UNITED STATES PATENT OFFICE

2,306,518

MEANS FOR IDENTIFYING DEPOSITORS OF SPURIOUS COINS

William F. Bernart, Jr., New Canaan, Conn., assignor to Pitney-Bowes Postage Meter Company, Stamford, Conn., a corporation of Delaware

Application February 1, 1940, Serial No. 316,733

7 Claims. (Cl. 194—61)

This invention relates to coin operated machines and more particularly to a means for identifying the depositors of spurious coins.

To prevent the acceptance of spurious coins in coin operated machines, it is the present practice to provide coin detectors which reject or return such spurious coins to the operator. Coin detectors however, are always vulnerable to slugs which may be developed by the so called professional slugger.

It is the principal object of this invention to provide means for identifying the depositor of a slug by printing or otherwise applying identical identifying characters on the slug and on any article of service rendered.

For example, there are coin operated machines now in use which sell insurance policies, others which print postage on mail, and many other types of service rendering or vending machines. In such machines as the insurance policy and postage printing machines, a service is rendered which ties the service in with the person receiving same, that is, there is a record of the person receiving the service. It is to this class of service rendering machines therefore, that the invention is particularly adapted because the depositor is directly identified with the service in some way.

The type of machine which has been selected for illustration is a coin operated insurance policy machine, and upon depositing a coin of predetermined value in such machine a policy will be issued. Through the name and address of the insured, which is written in space provided therefor on the policy, a carbon duplicate of which remains in the machine, the identity of the insured is established.

If a coin detector were the only means provided in the machine for preventing the acceptance of slugs, and a slug was found which would pass through the detector, there would be no way of identifying the coin with the person who deposited same.

By means of this invention, identical identifying characters are applied to the coin and to the policy, also to the duplicate record policy remaining in the machine which contains the name and address of the policy holder. Tracing of the policy holder who has deposited a slug now becomes a simple matter.

In a similar manner, identical identifying characters may be printed upon a coin and a letter in a coin operated mailing machine, and a letter, having a character corresponding with that on a spurious coin, is withheld from delivery. The passer of the spurious coin is then traced through the return address or the mailing address.

Having presented some practical examples for the utility of the invention, the particular device used to illustrate the invention will now be described and claimed, it being understood that various changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings:

Fig. 1 is a perspective view showing a coin operated insurance policy machine, and is drawn to a reduced scale;

Fig. 2 is a front vertical elevational view with the front wall of the casing removed, and showing parts in section;

Fig. 3 is a side vertical elevational view with the left side wall removed, and showing parts in section;

Fig. 4 is a plan view with the upper wall or cover removed, and showing parts in section;

Fig. 5 is a detail view of an insurance policy issued by the machine, also showing an identifying character in the form of a serial number thereon; and

Fig. 6 is a diagrammatic view of a coin having a serial number stamped thereon which corresponds with the serial number on the insurance policy.

Referring to Fig. 1, a casing 10 envelopes the entire machine structure and has provided therein a coin slot 11, a policy issuing slot 12, a coin drawer 13 and a window 14. Said window is accessible to the customer to write his name and address upon the portion of the insurance policy exposed thereunder for purposes of record.

A series of insurance policies may be provided in the form of duplicate webs 15 and 16, one superimposed upon the other, and having suitable carbon surfacing beneath the upper web to provide a duplicate record of any matter written or printed thereon. Said webs 15 and 16 are carried by a supply spool 17, which is suitably mounted upon a shaft 18, and the free ends thereof are passed over the surface of a table 19, with a portion of the upper surface of web 15 exposed beneath the window 14. The leading edge of the upper web 15 terminates at a cutting member 21, while the lower web is adapted to be wound upon a receiving spool 22. Said spool 22 is also suitably mounted upon a shaft 23 and is adapted to be driven by means

of a belt 24 carried by pulleys 25 and 26, in a manner to be later described.

A serial number printing device is provided to print a serial number upon each policy issued and comprises a series of numeral type wheels 27, which are carried by a shaft 28 in a drum structure 29. Said drum 29 is fixed to a main drive shaft 31, which shaft is suitably supported within a frame structure of the casing and is adapted to be rotated by a crank 32.

By means of a coin chute 33, a coin C, upon being inserted in the slot 11 passes through the chute 33 to the position indicated at C1, Fig. 3, then in a manner which will be later described, the coin will be moved to the position of C2, where it will remain temporarily before being ejected into the coin drawer 13.

When the coin is in said latter position, C2, it is adapted to have a serial number printed thereon, which serial number will be identical to that printed on the policy purchased. The means for printing said serial number comprises a series of numeral type wheels 35, which are carried by a shaft 36 mounted within a drum 37. Said drum is carried by a shaft 38, suitably supported in a bearing 39, and is geared to the drive shaft 31 by means of a pair of bevel gears 41—41.

It will be noted that when the coin is in the position of C1, Fig. 3, it is contained within a pocket 42, formed in a disc 43. Said disc 43 is fixed to the drive shaft 31, and, when rotated with the shaft, the rearward edge of the pocket will engage the coin and force same to the position of Fig. 2. When the coin is in said latter position, the outer edge of the disc 43 will pass freely over the edge of the coin, while the coin normally bears against a projecting end 44 of a lever 45. Said lever 45 is pivotally mounted upon a stud 46 and has its end 44 normally urged in the direction of the coin by means of a spring 47. When in said latter position the coin is directly in the path of the serial number printing wheels 35, and when engaged by said printing wheels, the frictional engagement thereof will cause the coin to move past the end 44 of the lever 45 while printing is effected. Upon passing said end 44, the coin will drop into the coin drawer 13. A yieldable pressure plate 40 may also be provided to urge the coin against the type wheels.

Means is provided to prevent the operation of the machine until a coin is present. The coin upon reaching the position of C1, Fig. 3, will rest upon the end of an arm 48, which arm is fixed to a shaft 49, suitably supported in bearings 51—51. Another arm 52, fixed to said shaft 49, has a hook shaped end 53 which projects into the path of hooked shaped end 54 of a disc 55. Said disc 55 is fixed to the drive shaft 31.

When a coin is in the position of C1, and the crank is rotated, the end of the pocket 42, upon engaging said coin, will cause the arm 48 to be rocked downwardly, thereby rotating the shaft 49 and the arm 52 to move the hooked end 53 of arm 52 out of the path of the hooked end 54 of the disc 55. The said hooked end 53 is normally urged into the path of the hooked end 54 of disc 55 by means of a spring 56.

An anti-reverse ratchet 57 is also fixed to the shaft 31 and has a pawl 58 engaged therewith to provide rotation of the shaft 31 in one direction only.

Means is also provided for advancing the type wheels 27 and 35, one digit during each rotation of the drive shaft 31. To advance the type wheels 27, a tooth-shaped member 61 is provided, as shown in Fig. 3, in the path of the units type wheel in such manner that, as the drum is rotated to move the type wheels past the tooth 61, the engagement of the units type wheel therewith will effect its rotation a distance equal to one digit. The usual Geneva drive is provided as indicated at 62 to effect a transfer from the units to the tens wheel, and from the tens to the hundreds wheel. In a like manner, the type wheels 35 are moved ahead one digit when the units wheel thereof engages a toothed-member 63, shown in Figs. 2 and 4. A Geneva drive 64 is also provided for the transfer operation.

Ink rolls are provided as shown at 65 and 66 for the inking of the type wheels 27 and 35 respectively.

The cutting member 21 comprises a stationary knife 67, Fig. 3, suitably mounted on a bracket 68, and within said knife 67 there is rotatably mounted a rotary cutting knife 69. Fixed to one end of the rotary cutting knife 69 is an arm 71 which is normally urged, by means of a spring 70, into the path of a lug 72 projecting sidewardly from the drum 29. As aforesaid, the leading edge of the upper web 15 terminates at the cutting position. During a cycle of operation said leading edge passes through a slot 73 in the stationary member 67, then passes through a slot 74 in the rotary member 69, and finally passes outwardly through another slot 75 in the stationary member 67.

The feeding of the web 15 through the cutter member and the winding of the web 16 upon the receiving spool 22 is accomplished by means of a segment flange 76 on the printing drum 29, which is adapted to engage the upper web 15 and effect a feeding action in cooperation with a pressure roller 77, which extends through a slot 78, Fig. 3, and engages the lower surface of the web 16. Said pressure roller forms a part of the pulley 26 and is carried on a shaft 79, which is suitably supported by the machine frame. Rotation of the pressure roller 77 will consequently rotate the pulley 26 and drive the receiving spool through the belt 24.

In the operation of the device, the coin is first passed into the coin slot 11 and is guided to the position shown in C1, Fig. 3 by means of the coin chute 33. The operator now operates the crank 32 to rotate the shaft 31 through one complete revolution. During the first part of the revolution, the coin is engaged by the rearward end of the pocket 42 and moves to the position of C2. Also, during the beginning of the revolution of movement, the arm 48 is depressed to remove the hooked end 53 from the path of the hooked end 54 of disc 55. The printing drums 29 and 37 are each rotated by the drive to move type wheels 27 into engagement with the upper web portion 15, and the type wheels 35 into engagement with the coins to effect the printing of a like serial number upon each, the web and the coin. During said printing operation the webs 15 and 16 are advanced when impinged between the flanged portion 76 and pressure roller 77, the receiving spool 22 also being driven by the pressure roller 77 through belt 24 to take up the web 16. While the lower web portion 16 is wound up upon said receiving spool, the upper web 15 is advanced between the blades of the cutting member 21, and at the end of the revolution of the shaft 31, a lug 72 will engage arm 71 to rock the rotary cutter member 74 and cut the web. The cut portion of the web is represented in Fig. 5 as the policy

which is issued to the customer and has a serial number printed thereon which agrees with the serial number printed upon the coin shown in Fig. 6. Owing to the carbon undersurface of the web 15, the said serial number is also printed upon the lower web portion 16, which is a duplicate of the policy receipt shown at 15, Fig. 5.

While the above description is directly related to an insurance policy machine it is obvious that the same system may be employed in applying serial numbers or the like to letters or to tape in a machine such as that illustrated in application Serial Number 314,038, or in any similar service rendering machine.

Having described the invention, what is claimed is:

1. In a coin operated machine, service rendering means, a coin chute to receive a coin having a value agreeing with the service which is adapted to be rendered and having an opening to expose one face of the coin, a printing member, means to position the coin in said coin chute in correct relation to the printing member for the printing of a character on the exposed face thereof, and a second printing member associated with the service rendering means and having a printing element for the printing of a character identical to that of the first named character upon an article of service representing the value of the coin deposited in the coin chute.

2. In a coin operated machine, service rendering means, a coin chute to receive a coin having a value agreeing with the service which is adapted to be rendered and having an opening to expose one face of the coin, a printing member, means to position the coin in said coin chute in correct relation to the printing member for the printing of a character on the exposed face thereof, a second printing member associated with the service rendering means and having a printing element for the printing of a character identical to that of the first named character upon an article of service representing the value of the coin deposited in the coin chute, and means to automatically change the character for each succeeding printing operation.

3. In a coin operated machine, service rendering means, a coin chute to receive a coin having a value agreeing with the service which is adapted to be rendered and having an opening to expose one face of the coin, a printing member including serial numbering type wheels, means to position the coin in said coin chute in correct relation to the printing member for the printing of a serial number on the exposed face thereof, a second printing member associated with the service rendering means and having serial numbering type wheels for the printing of a serial number identical to that of the first named serial number upon an article of service representing the value of the coin deposited in the coin chute, and means to advance the serial number type wheels one digit for each succeeding printing operation.

4. In a coin operated service rendering machine, wherein a part of the service rendered has identifying matter thereon which identifies the person receiving the service, coin receiving means, and marking devices arranged to mark identical identifying data upon the coin deposited in the coin receiving means and upon some portion of the service provided by the machine commensurate with the coin value, whereby the coin deposited is also adapted to be identified with the person receiving the service.

5. In a coin operated service rendering machine, wherein a part of the service rendered has identifying matter thereon which identifies the person receiving the service, coin receiving means, and printing devices arranged to print identical identifying data upon the coin deposited in the coin receiving means and upon some portion of the service provided by the machine commensurate with the coin value, whereby the coin deposited is also adapted to be identified with the person receiving the service.

6. A coin operated machine having saleable negotiable matter in duplicate therein, means for retaining a signed duplicate of each piece of matter within the machine after each sale to identify the purchaser, coin receiving means, and marking devices to mark identical identifying data on the matter and duplicate and on the coin deposited by the purchaser of said matter before the sale is completed, whereby the purchaser is adapted to be identified with the coin deposited.

7. In a coin operated machine, coin receiving means, means for rendering service by said machine to the value of a coin deposited in the coin receiving means, said service rendered having identifying matter thereon which identifies the person receiving the service; a printing device concealed within the machine and associated with the service to be rendered, a second printing device concealed within the machine and associated with the coin inserted for the service which is to be rendered, and drive means including connections with both printing devices and service rendering means to effect a cycle of operation, whereby printing of identifying data is performed on both the coin and service which is to be rendered to provide means for identifying the coins deposited with the persons receiving the service.

WILLIAM F. BERNART, JR.