No. 647,879. Patented Apr. 17, 1900.

C. H. ROW.

CHANGE MACHINE.

(No Model.) (Application filed Nov. 17, 1899.)

3 Sheets—Sheet 1

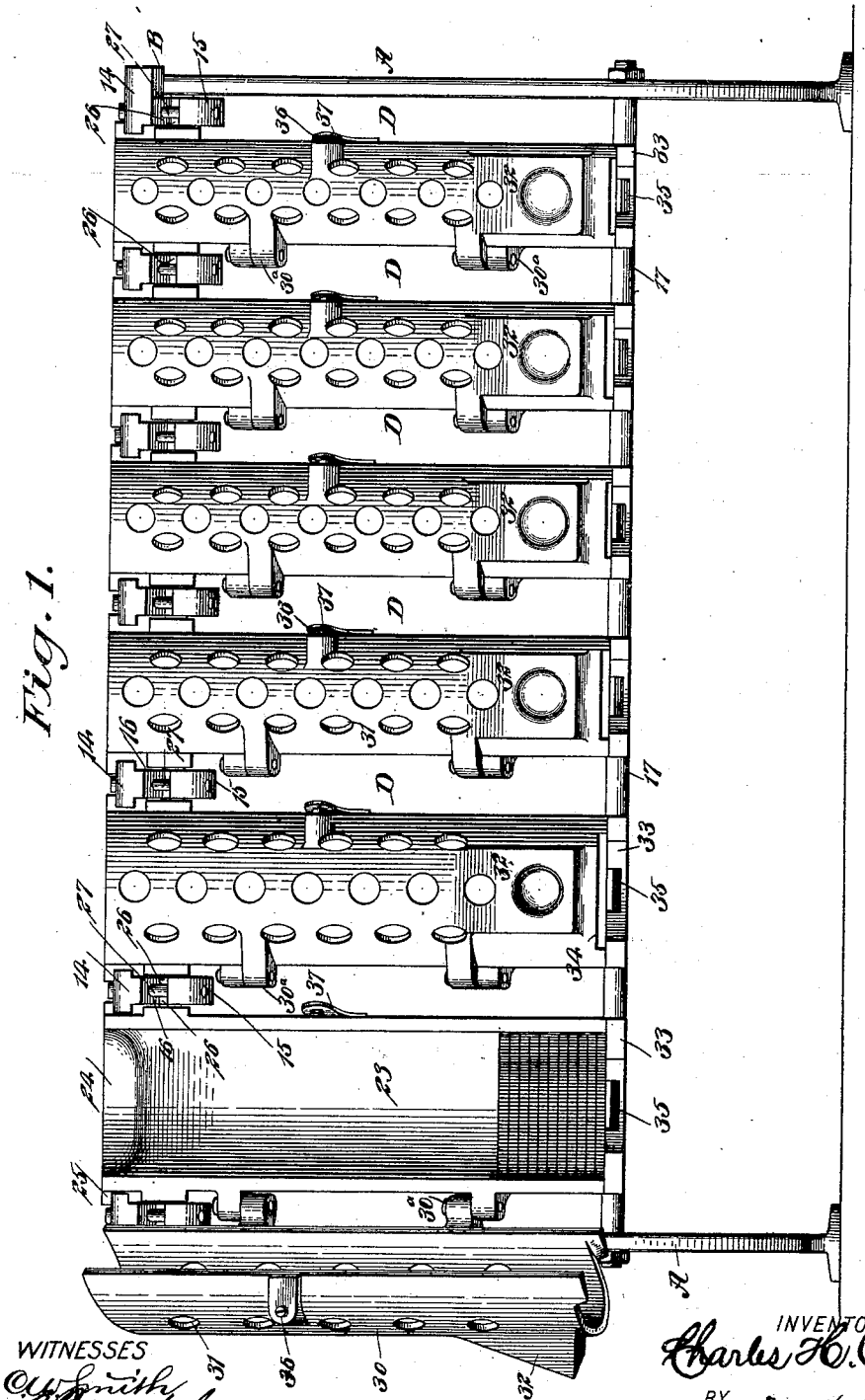


Fig. 1.

WITNESSES

C. H. Smith

Fred. Baker

INVENTOR

Charles H. Row

BY Munn & Co

No. 647,879. Patented Apr. 17, 1900.

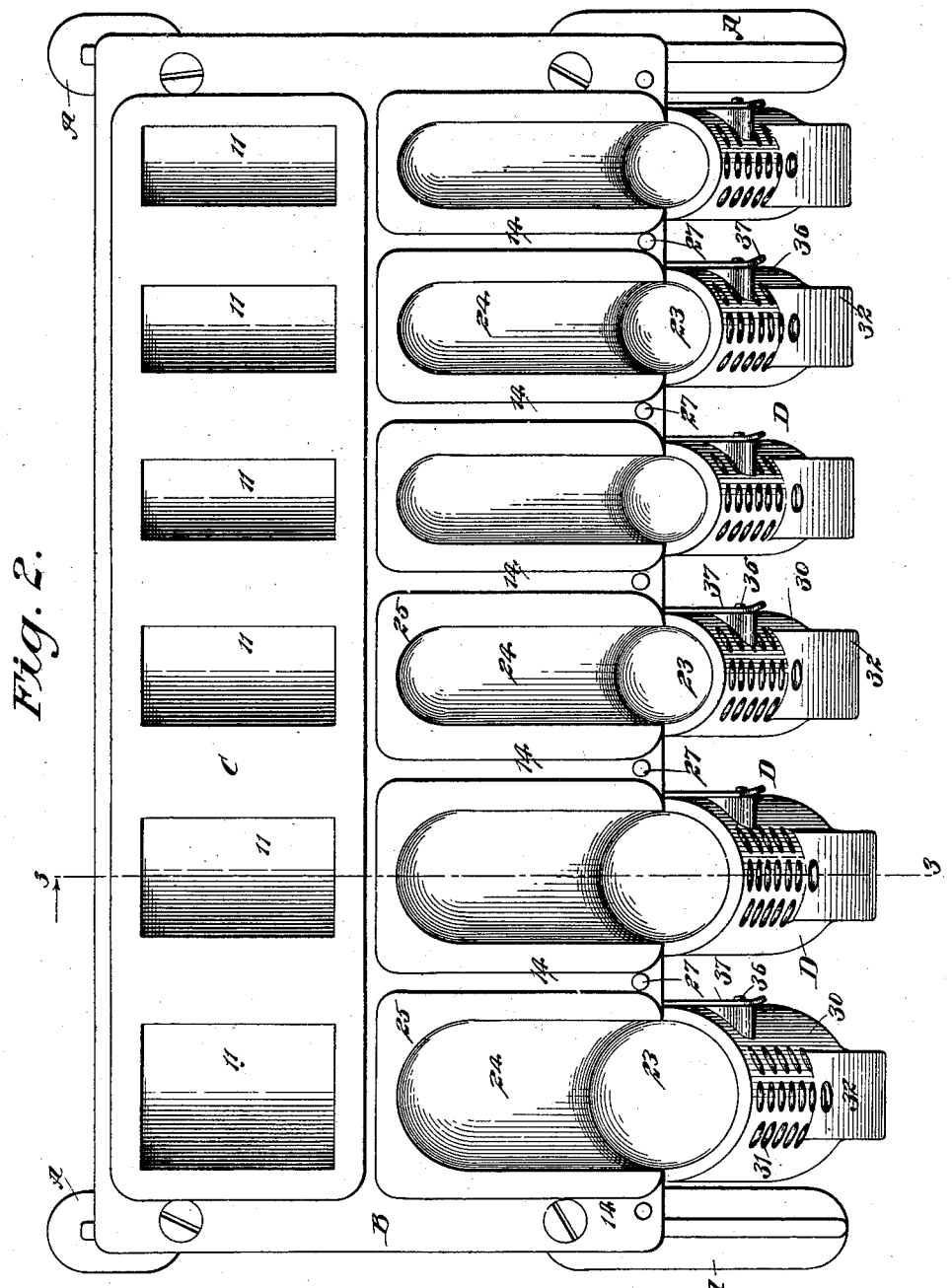
C. H. ROW.

CHANGE MACHINE.

(Application filed Nov. 17, 1899.)

(No Model.) 3 Sheets—Sheet 2

Fig. 2.



WITNESSES:

C. W. Smith

J. Ed. Acker

INVENTOR

Charles H. Row

BY

Munn & Co.

ATTORNEYS.

No. 647,879. Patented Apr. 17, 1900.

C. H. ROW.

CHANGE MACHINE.

(Application filed Nov. 17, 1899.)

(No Model.) 3 Sheets—Sheet 3.

Fig. 3.

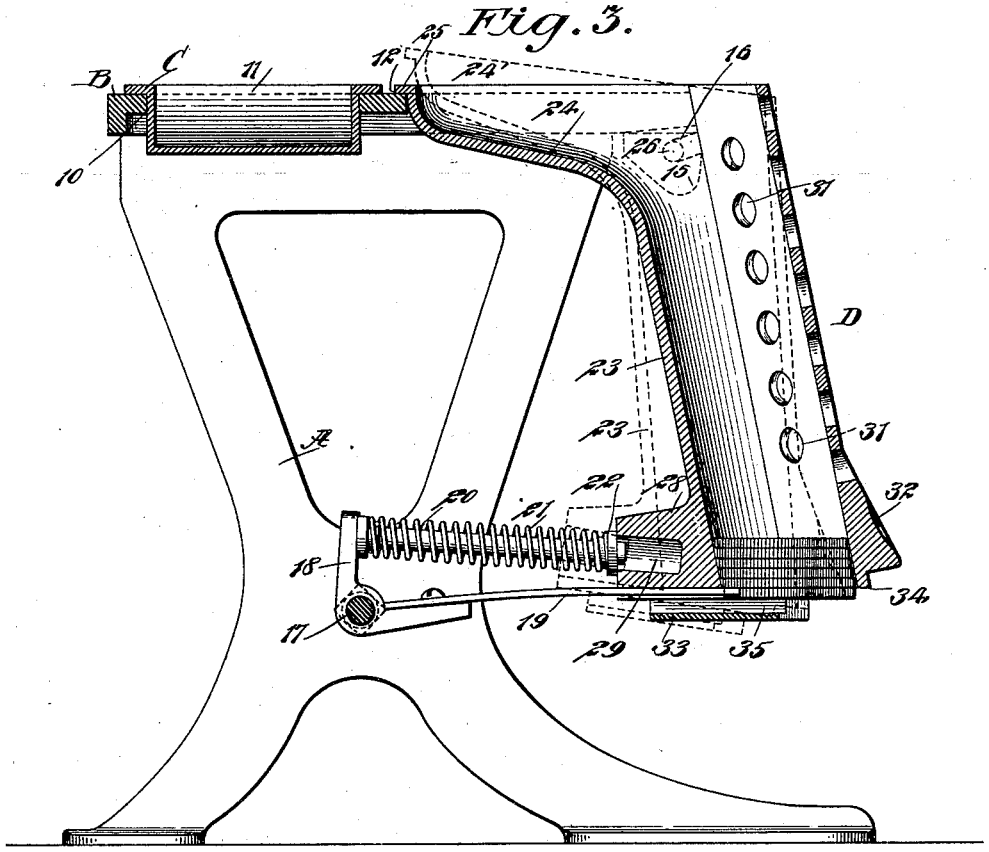


Fig. 4.

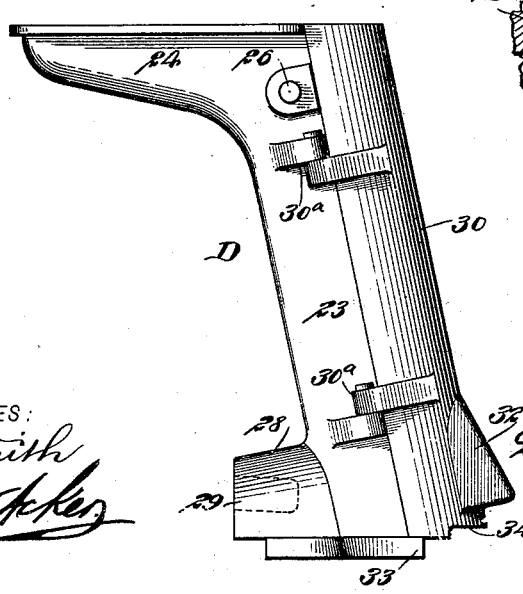
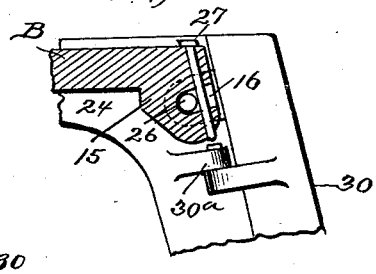


Fig. 5.



WITNESSES:

C. W. Smith

J. Fred Acker

INVENTOR

Charles H. Row

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES H. ROW, OF NEW YORK, N. Y.

CHANGE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 647,879, dated April 17, 1900.

Application filed November 17, 1899. Serial No. 737,337. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. ROW, a citizen of the United States, residing at the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Change-Machine, of which the following is a full, clear, and exact description.

One object of the invention is to provide a machine for making change wherein individual compartments will be provided for coins of different denominations, each compartment being independent of the others, and wherein each compartment has a hinged section capable of exposing the interior and an independent extractor for the discharge of the coins.

Another object of the invention is to so construct the coin-receptacle that the coins placed therein will automatically form into a column and to so mount the receptacles that when touched they will swing upon their axes in direction of the coin-discharging mechanism, which mechanism at such time will force a single coin out from the operated receptacle.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the improved machine, one of the coin-receiving receptacles being open. Fig. 2 is a plan view of the machine. Fig. 3 is a vertical section taken substantially on the line 3 3 of Fig. 2. Fig. 4 is a side elevation of one of the coin-receptacles detached from the machine, and Fig. 5 is a detail section illustrating the manner of attaching the coin-receptacles.

The frame of the machine consists of side pieces A, which may be secured in any suitable or approved manner to a support or may simply rest thereon, and a table B, which connects the side pieces A. This table is provided at its rear portion with a longitudinal opening 10, in which opening a tray C is placed, and this tray may be provided with a series of depressions 11, as shown in the drawings, or may be in one compartment, as desired. When the depressions 11 are formed in the tray, each depression is adapted to receive a number of coins of a certain denomination. The table is provided at its forward portion with a series of transverse openings 12, separated by partitions 14, and each partition 14 at its forward end is provided with a downwardly-extending lug 15, (shown in positive lines in Fig. 1 and in dotted lines in Fig. 3,) and each of these lugs has an inclined slot 16 formed therein, the inclination of the slots 16 being from the upper portion of the lugs downward and rearward. A rod 17 extends from one side piece A to the other near the bottom, and on the said rod 17 a series of angle or L-shaped levers 18 are mounted to turn. These levers correspond in number to the number of openings 10 and 12 in the table and are beneath the central portions of said openings. The horizontal member of each lever 18 is secured to a plunger-bar 19, the forward ends of which bars are preferably more or less concaved. A rod 20 is attached to the vertical member of each of the levers 18, and each rod 20 is surrounded by a spiral or coil spring 21, and the said springs are attached at their forward ends to a head 22, having an opening therein, so that the said heads may slide on the rods 20, as shown in Fig. 3.

A coin-receptacle D is mounted in the table C in each of the openings 12, as is shown in Figs. 1 and 2. These coin-receptacles have a downward and a forward inclination, and each receptacle consists of a tubular body 23, adapted to receive a coin of a chosen denomination, and a mouth 24, which inclines in direction of the body, said mouth being surrounded by a flange 25. The flanges of the mouth portions of the receptacles D when the receptacles are in their normal position rest upon the table B, as shown in Fig. 2 and in positive lines in Fig. 3. The inclination of the mouth-sections 24 of the coin-receptacles D is such that when a coin is thrown into the mouth of the receptacle said coin is directed to the body and will enter the same and fall flat to the bottom. Each coin-receptacle D is provided with a lug 26 at each of its sides. These lugs enter the slots 16 in the hangers

or lugs 15, extending downward from the table B, as shown in dotted lines in Fig. 3 and in positive lines in Fig. 4.

The coin-receptacles are held in their pivoted positions by passing suitable pins 27 through the table B and through the hangers 15, as shown in Fig. 1. Each coin-receptacle D is further provided at the rear portion of its bottom with an extension 28, in which a horizontal channel 29 is formed, as shown in Fig. 3. These channels 29 are adapted to receive the rods 20, attached to the levers 18, and the heads 22 of the springs 21 have bearing against the rear faces of the said extensions 28, as is also shown in Fig. 2. Thus when the lower portion of a coin-receptacle is pushed rearward the spring 21 belonging to such receptable is placed under tension, and the plunger 19 belonging to said receptacle will force the lowermost coin contained in the receptacle out therefrom in a manner to be hereinafter described. Each coin-receptacle is preferably provided with a front section 30, which is in the nature of a door and is connected with the main portion of the body by suitable hinges 30^a, as shown in Figs. 1 and 4, and when the hinged section 30 of a receptacle is opened the contents of said coin-receiving receptacle may be readily removed. The said door-section of each coin-receptacle D is provided with a series of apertures 31, or said door-sections may be provided with slots or with a single slot in which a pane of transparent material may be entered, so that the operator may readily ascertain the amount of coin in any of the receptacles at any time. Each coin-receptacle D is also preferably provided with a front projection 32, adapted to be pressed by a finger of the operator when the receptacle is to be brought into operation to make change. Each coin-receptacle is also provided with a bottom 33, in which a slot 35 is produced, extending from the front to the rear at the longitudinal center of the bottom, as the bottom 33 of each receptacle extends beyond the body of the receptacle and below the extension 28 thereof. This extension 28 is also provided in its bottom with a slot. The slot in the extension connects with the slot in the bottom of the receptacle. The hinge or door section of each receptacle is provided with a recess 34 in its lower edge at the front, the recesses being of such dimensions that a coin adapted to be placed in the receptacle may find a ready exit in a forward direction from the receptacle when forced out by the plunger 19, used in connection with the receptacle, as shown in Fig. 3. The forward ends of the plungers 19 normally rest in the slots made in the extensions 28, as shown in positive lines in Fig. 3; but when a coin-receiving receptacle is forced rearward the plunger in engaging with the lowermost coin in the receptacle will force said lowermost coin out through the recessed portion 34 of the receptacle, as is likewise illustrated in Fig. 3.

The door-section 30 of each coin-receptacle is normally held closed through the medium of a latch 37, attached to the body portion of the receptacle and arranged for engagement with a keeper 36, carried by the door-section of the receptacle.

In operation any one of the coin-receiving receptacles may be pressed rearward by the thumb or fingers of the operator, while the palm of the hand is held below the receptacles to receive the coin expelled therefrom by means of the plunger 19.

It is evident that when a machine is constructed as above set forth coins may be quickly extracted from any of the receptacles and that the receptacles will automatically return to their normal positions. It is also evident that the operation of the device is rendered exceedingly simple, since it is only necessary to force a receptacle rearward, the plunger which removes the coin being practically stationary.

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

1. A change-machine, comprising a frame, a coin-receptacle pivotally suspended in said frame, and provided with a recessed bottom and a horizontally-channeled rear extension, a plunger secured in the frame and working through said recessed bottom, and a spring-pressed rod held in the frame and having its forward end fitted in the channeled extension, as and for the purpose set forth.

2. A change-machine, comprising a frame, a series of coin-receptacles pivotally suspended in the frame, and provided with recessed bottoms and rear extensions formed with channels and slots below their channels, a transverse rod secured in said frame, angle-levers mounted on said rod, plungers attached to the horizontal arms of said levers and having their forward free ends inserted through the slots of the extensions, and spring-pressed rods attached to the vertical arms of said levers, said rods having their forward ends fitted in the channels of the extensions and provided with heads engaging their springs and bearing against the extensions, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES H. ROW.

Witnesses:
J. FRED. ACKER,
JNO. M. RITTER.