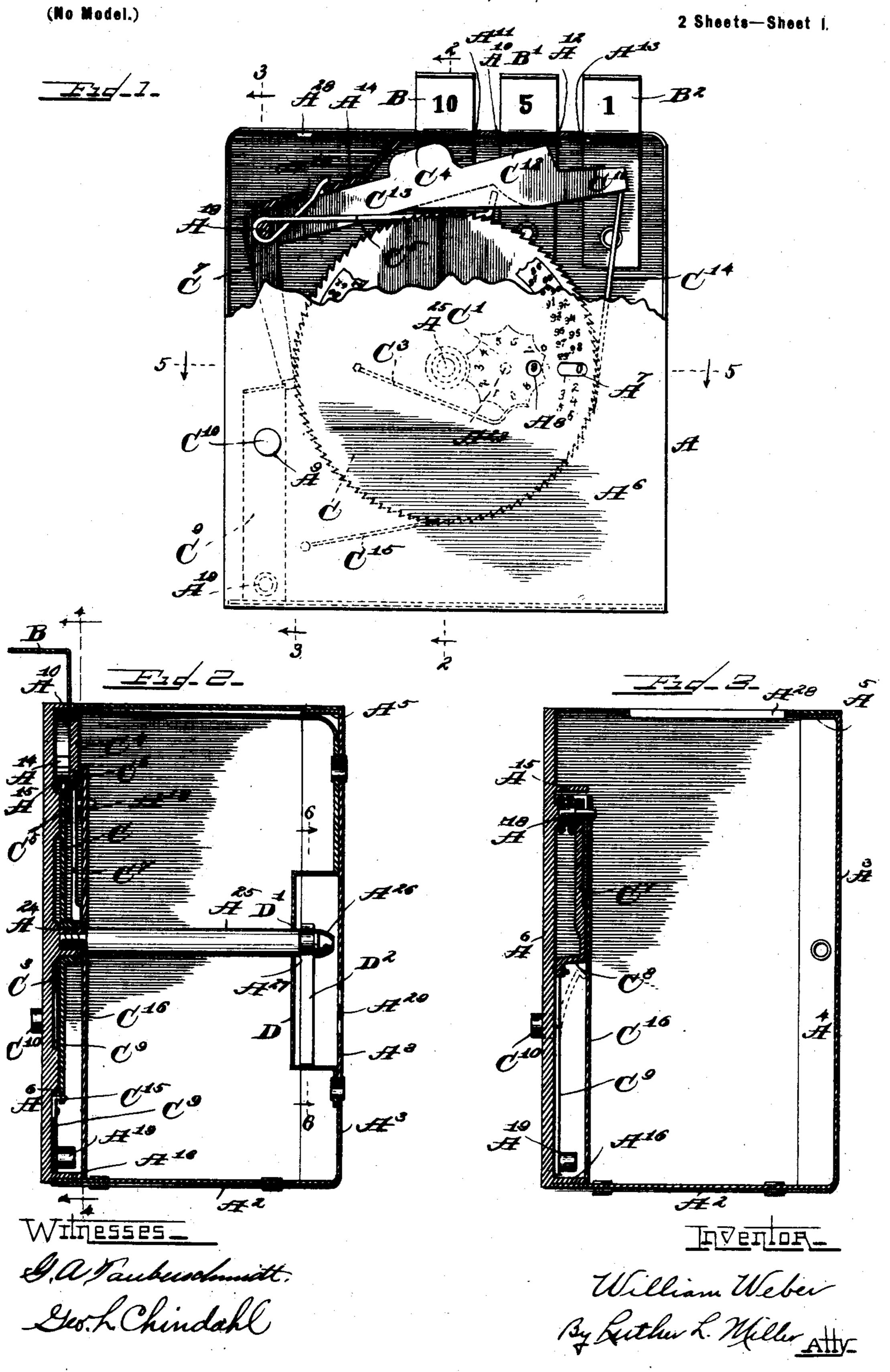
# W. WEBER. REGISTERING BANK.

(Application filed Dec. 9, 1901.)



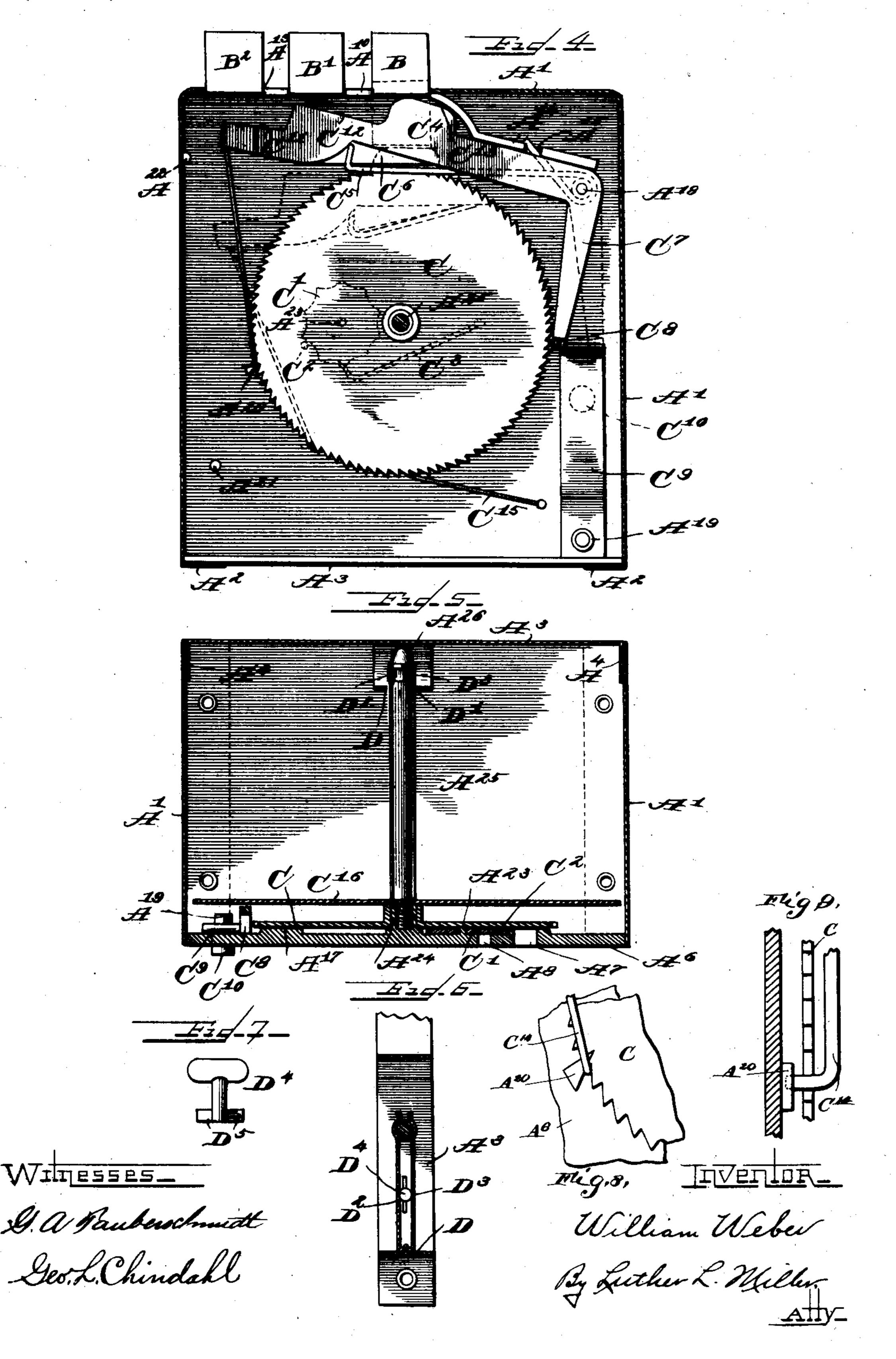
### W. WEBER.

#### REGISTERING BANK.

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(No Model.)

2 Sheets—Sheet 2.



## United States Patent Office.

WILLIAM WEBER, OF CHICAGO, ILLINOIS.

#### REGISTERING-BANK.

SPECIFICATION ferming part of Letters Patent No. 712,873, dated November 4, 1902.

Application filed December 9, 1901. Serial No. 85,152. (No model.)

To all whom it may concern:

Beitknown that I, WILLIAM WEBER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Registering-Banks, of which the following is a specification.

The object of this invention is the production of a locked box or receptacle into which no money, either in coin or paper, may be put and the amount of each deposit and the total amount of all deposits registered. Such a bank it is clear may be used as a private locked receptacle for the savings of an indistidual or of a household or by a banking institution as a means for increasing its savings deposits.

In the accompanying drawings, Figure 1 is a face view of this improved bank, showing the front piece partly broken away to illustrate portions of the registering mechanism. Fig. 2 is a transverse vertical section through the bank on dotted line 2 2 of Fig. 1. Fig. 3 is a similar view on dotted line 3 3 of Fig. 1.

rig. 4 is a rear side view of the registering mechanism, taken on dotted line 4 4, Fig. 2. Fig. 5 is a transverse section through the bank on dotted line 5 5 of Fig. 1. Fig. 6 is a fragmental vertical section on dotted line 6 6 of Fig. 2, showing in elevation the locking mechanism. Fig. 7 is a key for disengaging the locking mechanism. Fig. 8 is an enlarged detail showing the form of the stop A<sup>20</sup>. Fig. 9 is a fragmental side elevation

35 showing the relative positions of the stop  $A^{20}$ , the wheel C, and the rod  $C^{14}$ .

In the production of this bank I provide a receptacle A, preferably formed from sheet metal and having the integral sides and top 40 piece A', provided with the bottom flanges  $A^2$ , the integral bottom, and back piece  $A^3$ , said bottom piece being secured to the bottom flanges A2 in any suitable manner, as by means of the tubular rivets shown, the back 45 piece being provided with the side flanges A4 and the top flange A<sup>5</sup>, secured to the sides and top piece, respectively, and the front piece A<sup>6</sup>, of cast metal, made removable from the other parts of the receptacle. This front 50 piece is provided in its face with two openings A<sup>7</sup> and A<sup>8</sup>, one of which openings shows the "cents" figures and the other the "dol-

lars" figures of the dials of the registering mechanism. It also has another opening A9, through which a push-button, to be herein- 55 after described, projects, which button it is necessary to depress before the registering apparatus can be operated. The front piece bears upon its face any suitable design, and the dollars and cents openings are suitably 60 designated thereon. The inside face of the front piece is provided at its top with a flange  $A^{10}$ , having notches  $A^{11}$ ,  $A^{12}$ , and  $A^{13}$  for the reception of the registering-keys, also a flange  $A^{14}$ , having a notch  $A^{15}$  for holding one end 65 of a spring to be hereinafter described. At the bottom of the front piece is a flange  $A^{16}$ , adapted to lie within the receptacle. front piece is also provided with the raised ring A<sup>17</sup>, against which the cents-wheel bears, 70 also with the studs A<sup>18</sup>, A<sup>19</sup>, A<sup>20</sup>, A<sup>21</sup>, A<sup>22</sup>, A<sup>23</sup>, and A<sup>24</sup>, the latter stud being internally screwthreaded to receive a correspondingly-screwthreaded pin A<sup>25</sup>, adapted to extend through the receptacle to the locking device on the in- 75 side rear wall thereof. This pin is provided near the end opposite to that upon which the screw-thread is formed with a conical head  $A^{26}$  and with a groove  $A^{27}$  just rearward of said conical head. The top of the receptacle has an 80 opening A<sup>28</sup>, adapted to receive deposits, and the rear side has an opening A<sup>29</sup> for a key to disengage the locking device.

Keys B, B', and B<sup>2</sup>, of spring material, bent upward and outward at their forward ends to 85 extend through the notches A<sup>11</sup>, A<sup>12</sup>, and A<sup>13</sup> in the flange A<sup>10</sup> of the front piece A<sup>6</sup> and to present a surface for the fingers of the operator, are secured at their rear ends to the inner side of the rear wall of the receptacle.

The registering mechanism of this bank comprises a ratchet-wheel C, having one hundred teeth formed in its periphery. This wheel is rotatably mounted centrally on the front piece and on the inner side thereof upon the projection  $A^{23}$  and is provided upon its face with numbers from "0" to "99," inclusive, placed in a circular series near the periphery of said wheel. This wheel C may be called the "cents-wheel." Just within 100 the ring  $A^{17}$  on the inner face of the front piece  $A^{6}$  is the "dollars-wheel" C', rotatably mounted upon the stud  $A^{23}$ , formed integral with the front piece  $A^{6}$ . The face of the

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dollars-wheel bears a series of numbers from "0" to "9," inclusive, and its periphery is provided with curved depressions forming between them ten points or teeth. A projec-5 tion C<sup>2</sup>, formed upon the face of the centswheel, is adapted to engage one of the teeth upon the dollars-wheel at each revolution of the cents-wheel and to rotate said dollarswheel the distance of one tooth, or a portion of 10 said distance, the proper movement of said dollars-wheel being completed by the action of a curved wire spring C3, secured at one end to the rear side of the front piece A6, its free end being curved to correspond with the curved depres-15 sions in the periphery of said dollars-wheel. This spring acts not only to hold said dollarswheel from accidental rotation, but when it is turned partially by the projection C<sup>2</sup> upon the cents-wheel the movement of said dollars-20 wheel is completed by the action of the spring in dropping into the next adjacent notch in said wheel.

A lever C<sup>4</sup> is pivotally mounted upon the stud A<sup>18</sup>, formed integral with the front piece, 25 and is held upward against the flange A<sup>14</sup> by means of the spring C<sup>5</sup>, one end of which lies in a notch C<sup>6</sup>, formed in said lever, the opposite end lying in the notch A<sup>15</sup>, formed in the flange projection from said front piece, said 30 spring intermediate its ends being coiled about the stud A<sup>18</sup>, upon which said lever is mounted. The rear end of the lever C4 has an arm C<sup>7</sup> extending substantially at right angles to the main portion of said lever, and 35 this arm at its extremity is turned forward in a finger C<sup>8</sup>, bearing against the rear side of said front piece. A flat spring C9, mounted upon the stud A<sup>19</sup>, formed integral with said front piece, constitutes the detent de-40 vice for preventing accidental movement of said registering mechanism, for when said spring C<sup>9</sup> is in its normal position it lies in the path of the finger C<sup>8</sup> of the lever C<sup>4</sup> and prevents the downward movement of said le-45 ver. A stud C<sup>10</sup>, fixed with relation to said spring, constitutes the push-button hereinbefore mentioned and projects through the opening A<sup>9</sup> in the front piece. In order to withdraw the spring from the path of the fin-50 ger C<sup>8</sup>, it is only necessary to move the pushbutton inward, which movement withdraws the detent and releases the registering mechanism to action. The forward end of the lever C4 has three stages or portions C11, C12, 55 and C<sup>13</sup>, adapted to receive the "cents," "nickels," and "dimes" keys, respectively. The portion C<sup>11</sup>, which receives the cents-key is comparatively low, inasmuch as said lever need be depressed only a little distance in 60 order to cause a sufficient movement of the cents-wheel. The plane C<sup>12</sup>, which receives the nickels-key, is slightly higher than that which receives the cents-key and also is nearer the pivotal center of the lever. The plane 65 C<sup>13</sup>, which receives the dimes-key, is not only

higher than that which receives the nickels-

key, but also is nearer the pivotal center of

the lever. The forward end of the lever C<sup>4</sup> carries a spring-pawl C<sup>14</sup>, the lower end of which is bent at right angles to its length and 70 lies in engagement with the ratchet-teeth of the cents-wheel. When the lever C4 is in its highest position, the free end of the pawl C<sup>14</sup> lies between the teeth of the cents-wheel C and is held in such position by the fixed stop 75 A<sup>20</sup>, formed integral with the front piece, thus preventing the forward movement of said wheel. A backward movement of the centswheel is prevented by the spring C<sup>15</sup>, secured upon the rear side of the front piece A<sup>6</sup>, the 80 forward end of which spring engages the

ratchet-teeth of the cents-wheel C. C<sup>16</sup> is a plate for protecting the registering mechanism and for holding certain of the parts of said mechanism in position. This 85 plate is provided with three openings, by means of which it is held in place. One of these openings receives the stud  $A^{18}$ , another the stud A<sup>21</sup>, and the third opening coincides with the screw-threaded opening in the stud 90 A<sup>24</sup>, the shoulder at the upper end of the screw-thread upon the pin  $A^{25}$  holding the plate upon said studs. The stud A<sup>22</sup>, formed integral with and projecting from the rear face of the front piece A<sup>6</sup>, supports one of 95 the upper corners of the plate  $C^{16}$ .

The locking mechanism for retaining the front piece in position comprises a box-loop D, secured to and rising from the inner side of the rear wall of the receptacle and having 100 the perforation D' near its center. Two flat springs D<sup>2</sup> and D<sup>3</sup>, their planes being at right angles to the rear wall of the receptacle A, are secured to the lower side of said box-loop, their free ends being adapted to lie within the 105 groove  $A^{27}$ , formed upon the locking-pin  $A^{25}$ . The pin being conical at its forward end may easily be inserted into the opening D' and will pass the springs D<sup>2</sup> and D<sup>3</sup>; but as soon as the groove in the pin is coincident with the springs 110 the latter will press into said groove and prevent the withdrawal of the pin, and as said pin is secured within its threaded opening in the rear side of the front piece A<sup>6</sup> the front piece is thereby locked in position.

To permit access to the receptacle, a key D4 is provided, having oppositely-extending wards D<sup>5</sup>, which when inserted through the opening  $A^{29}$ , provided in the rear wall for its reception, and said key is turned, force apart 120 the free ends of the springs D<sup>2</sup> and D<sup>3</sup>, withdrawing said springs from the groove A<sup>27</sup> in the locking-pin A<sup>25</sup>, and thus releasing said pin and the front piece.

In operation a deposit is made by drop- 125 ping the desired amount into the receptacle through the opening  $A^{28}$  in the top thereof. The push-button C<sup>10</sup> is then depressed and the registering mechanism operated by means of the keys B, B', or B<sup>2</sup> until the amount of 130 the deposit has been registered. If the deposit was one cent, the push-button is depressed and the cents-lever pushed downward as far as possible and released. The spring-

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pawl C<sup>11</sup> at the forward end of the pivoted lever C4 travels downward with the depression of said lever, its free end passing over one ratchet-tooth of the cents-wheel C. When 5 the cents-key is released, the spring C<sup>5</sup> raises the lever C<sup>4</sup>, rotates the cents-wheel C the distance of one tooth, and registers the deposit by moving the dial with relation to the centsopening A<sup>7</sup> in the front piece. If the deposit 10 is five cents, the cents-key may be depressed five times or the nickels-key once. In either event the spring-pawl C<sup>14</sup> at the outer end of the lever C4 is caused to pass over five teeth in the periphery of the cents-wheel and to 15 move said wheel five steps, which will be indicated by the higher numbers which will coincide with the opening A<sup>7</sup> in the face of the front piece. If a dime is to be registered, the cents-key may be depressed ten times, the 20 nickels-key twice, or the dimes-key once, the action of the mechanism being the same in either case. When the cents-wheel passes from "99" to "0," the projection on said wheel engages one of the peripheral teeth of the dol-25 lars-wheel and causes said wheel to be moved the distance of one of its teeth. This causes the dollars-wheel to present the next higher figure at the opening  $A^8$  in the front piece  $A^6$ .

The push-button C<sup>10</sup> is placed at a little dis-30 tance from the registering-keys, so that said button shall not be depressed and the keys operated inadvertently or by accident.

It is obvious that two wheels representing cents and dimes having ten teeth each and 35 adapted to engage at suitable intervals might be substituted for the cents-wheel herein shown.

I am aware that many slight changes may be resorted to in the general form and ar-40 rangement of the several parts described without departing from the spirit and scope of my invention, wherefore I desire to have it understood that I do not limit myself to the exact details herein shown and described, but 45 claim all such changes and modifications as properly fall within the scope and spirit of my invention.

I claim as my invention—

1. In a registering-bank, in combination, a 50 money-receptacle having a removable side; registering-keys mounted on said receptacle; a rotatable cents-wheel having a series of teeth and a projection; a pivoted lever adapted to be engaged at different distances from 55 its pivotal center by the registering-keys; a pawl on said lever adapted to engage the teeth on said cents-wheel; a dollars-wheel adapted to be engaged by the projection on said centswheel; and a movable detent adapted to pre-60 vent the movement of said lever.

2. In a registering-bank, in combination, a money-receptacle; registering-keys mounted on said receptacle; a rotatable cents-wheel having a series of teeth and a projection; a 65 pivoted lever adapted to be engaged at different distances from its pivotal center by the registering-keys; a spring for moving said |

lever in one direction; a pawl on said lever adapted to engage the teeth on said centswheel; a dollars-wheel adapted to be engaged 70 by the projection on said cents-wheel; and a fixed stop adapted to hold said pawl between the teeth of said cents-wheelin order to prevent the forward movement of said wheel.

3. In a registering-bank, in combination, a 75 money-receptacle; registering - keys formed from spring material and secured at one end to said receptacle; a rotatable cents-wheel having a series of teeth and a projection; a pivoted lever adapted to be engaged at differ- 80 ent distances from its pivotal center by the registering-keys; a spring for moving said lever in one direction; a pawl on said lever adapted to engage the teeth of said centswheel; a fixed stop adapted to hold said pawl 85 between the teeth of said cents-wheel to prevent the forward movement of said wheel; a dollars-wheel adapted to be engaged by the projection on said cents-wheel; and a spring adapted normally to engage a portion of said 90 pivoted lever to prevent the accidental movement of the registering mechanism.

4. A money-receptacle for registering-banks comprising integral sides and top, the sides being provided with bottom flanges; an in- 95 tegral bottom and back piece, the back having side flanges and a top flange; means for securing the bottom to the bottom flanges, the sides to the side flanges, and the top to the top flange; a standing loop on the inner 100 side of said back piece, said loop being provided with an opening therein; a front piece; a pin secured to said front piece adapted to enter the opening in said standing loop; and a spring-finger secured to said loop adapted 105

to engage said pin.

5. A money-receptacle for registering-banks comprising integral sides and top, the sides being provided with bottom flanges; an integral bottom and back piece, the back hav- 110 ing side flanges and a top flange; means for securing the bottom to the bottom flanges, the sides to the side flanges, and the top to the top flange; a standing loop secured to the inner side of said back piece, said loop 115 being provided with an opening; a front piece; a pin having a conical head and a groove, which pin is adapted to enter the opening in said standing loop; and two springfingers adapted to engage the groove in said 120 pin to hold the front piece in position.

6. In a registering-bank, in combination, a money-receptacle; registering-keys in flat spring form, said keys being secured at one end upon the inner side of a wall of said re- 125 ceptacle; and registering mechanism in said receptacle, adapted to be operated by the movement of said keys.

7. In a registering-bank, in combination, a money-receptacle; registering-keys mounted 130 on said receptacle; a rotatable cents-wheel having a series of teeth and a projection; a pivoted L-shape lever having different planes adapted to be engaged by the registering-

keys; a spring for moving said lever in one direction; a movable detent-spring adapted to engage the other arm of said L-shape lever to prevent the movement of said lever; a pawl on said lever adapted to engage the teeth of said cents-wheel; and a dollars-wheel adapted to be engaged by the projection on said cents-wheel.

8. In a registering-bank, in combination, a money-receptacle; registering-keys; a registering mechanism adapted to be operated by said registering-keys, said mechanism comprising a pivoted L-shape lever; a detent-spring adapted to prevent the movement of said lever; and a push-button for moving said

detent-spring.

9. In a registering-bank, in combination, a money-receptacle having a removable side, said side being provided with a dollars-opening, a cents-opening, and a push-button opening; registering-keys mounted on said receptacle; a cents-wheel having a series of teeth and a projection, said wheel being ro-

tatably mounted upon said removable side; a pivoted L-shape lever adapted to be en- 25 gaged at different distances from its pivotal center by the registering-keys, which lever is mounted upon said removable side; a spring for holding said lever in one direction; a pawl on said lever adapted to engage the 30 teeth on said cents-wheel; a stop projection on the removable side adapted to hold said pawl in engagement with the teeth of said wheel to prevent the forward movement of the wheel; a dollars-wheel adapted to be en- 35 gaged by the projection on said cents-wheel; a detent-spring normally lying within the path of movement of a portion of said lever; and a push-button extending through the push-button opening in the removable side, 40 by means of which the detent is withdrawn.

WILLIAM WEBER.

Witnesses:

L. L. MILLER, GEO. L. CHINDAHL.