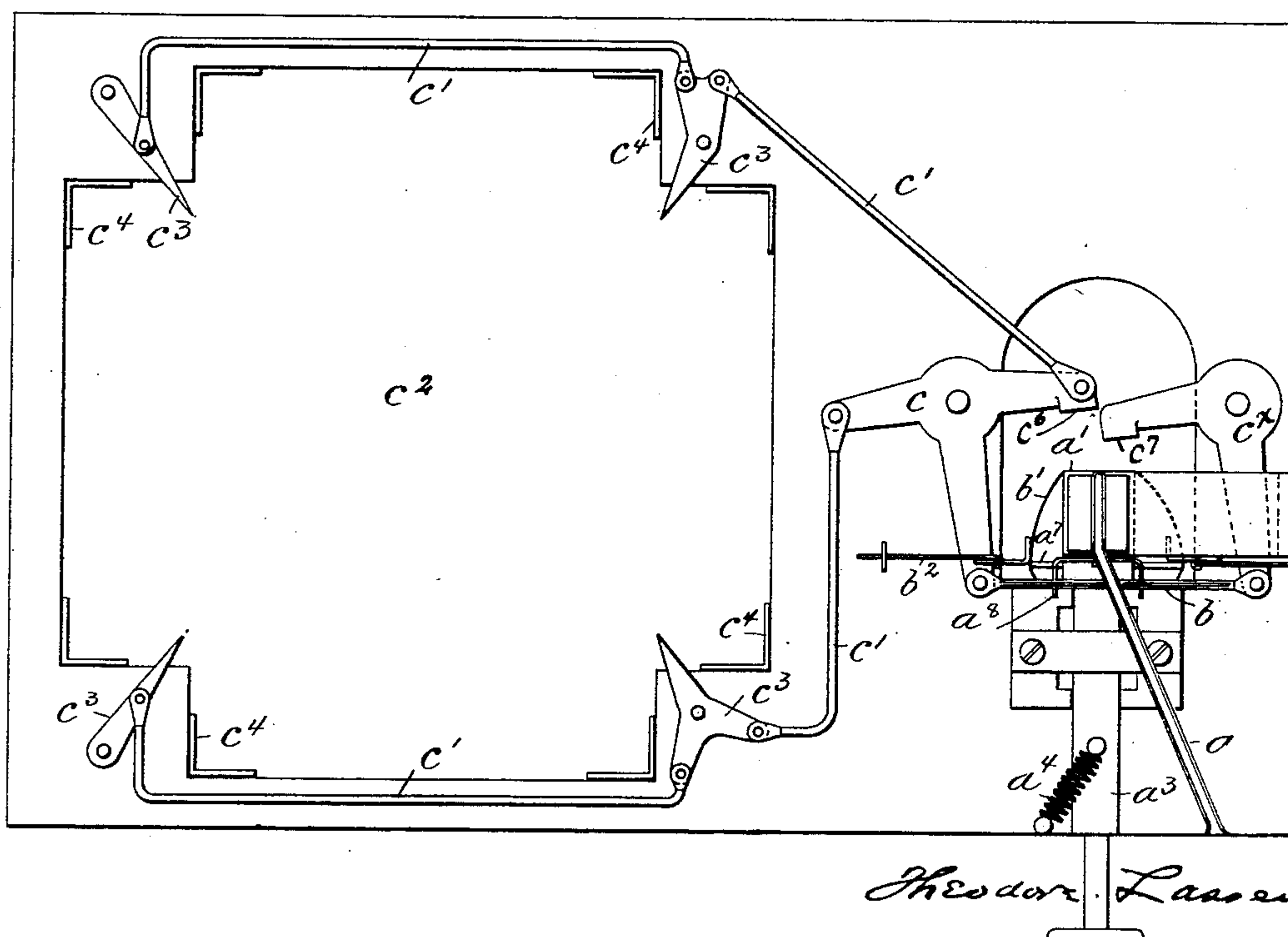


2 Sheets—Sheet 1.

No. 541,241.

Patented June 18, 1895.



Theodore. Lassen
INVENTOR.

WITNESSES:
 Peter W. George
 Robert Horvat

BY Joseph McKeena
ATT'Y.

(No Model.)

2 Sheets—Sheet 2.

T. LASSEN.
VENDING MACHINE.

No. 541,241.

Patented June 18, 1895.

FIG. 3.

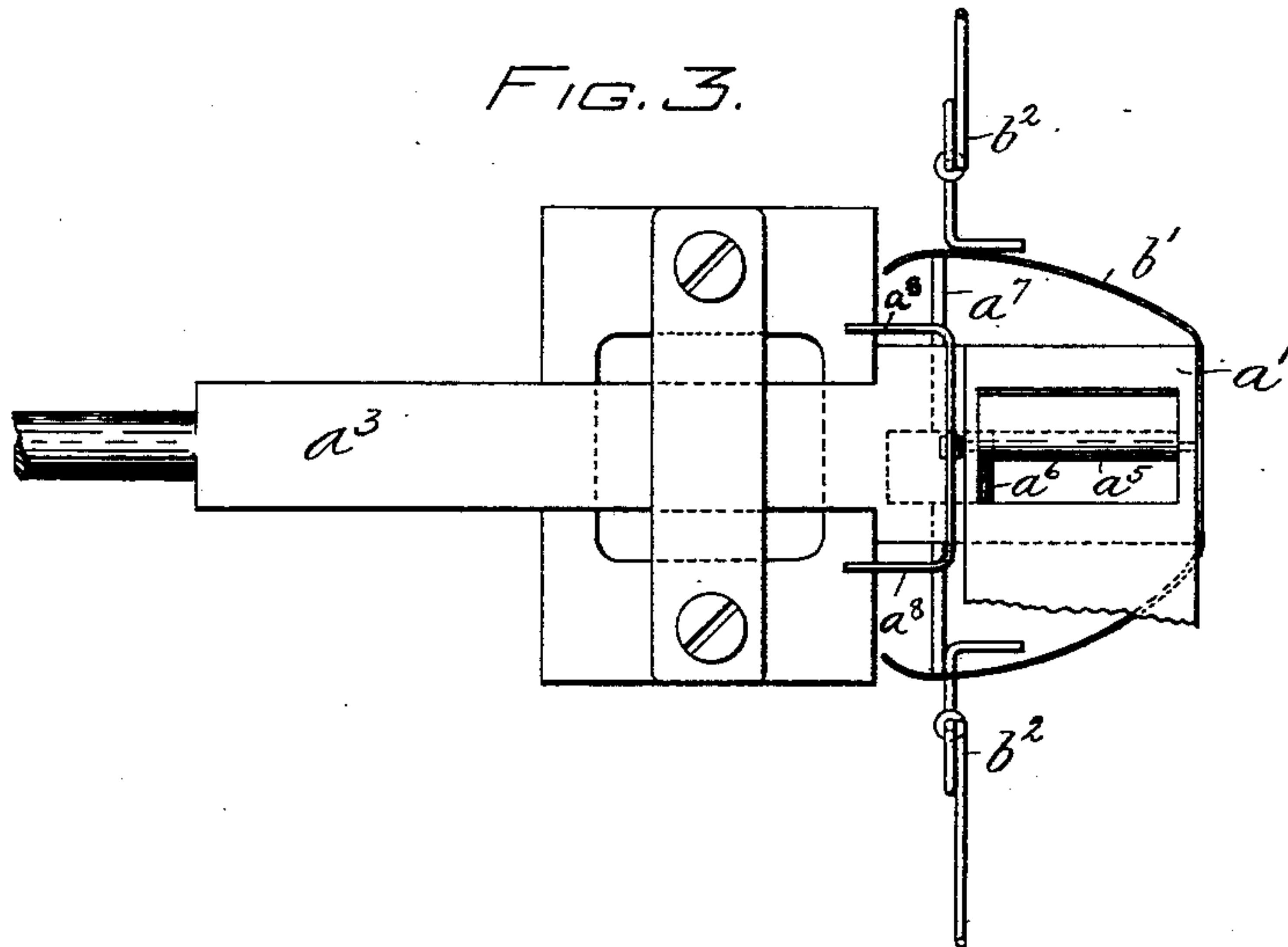


FIG. 4.

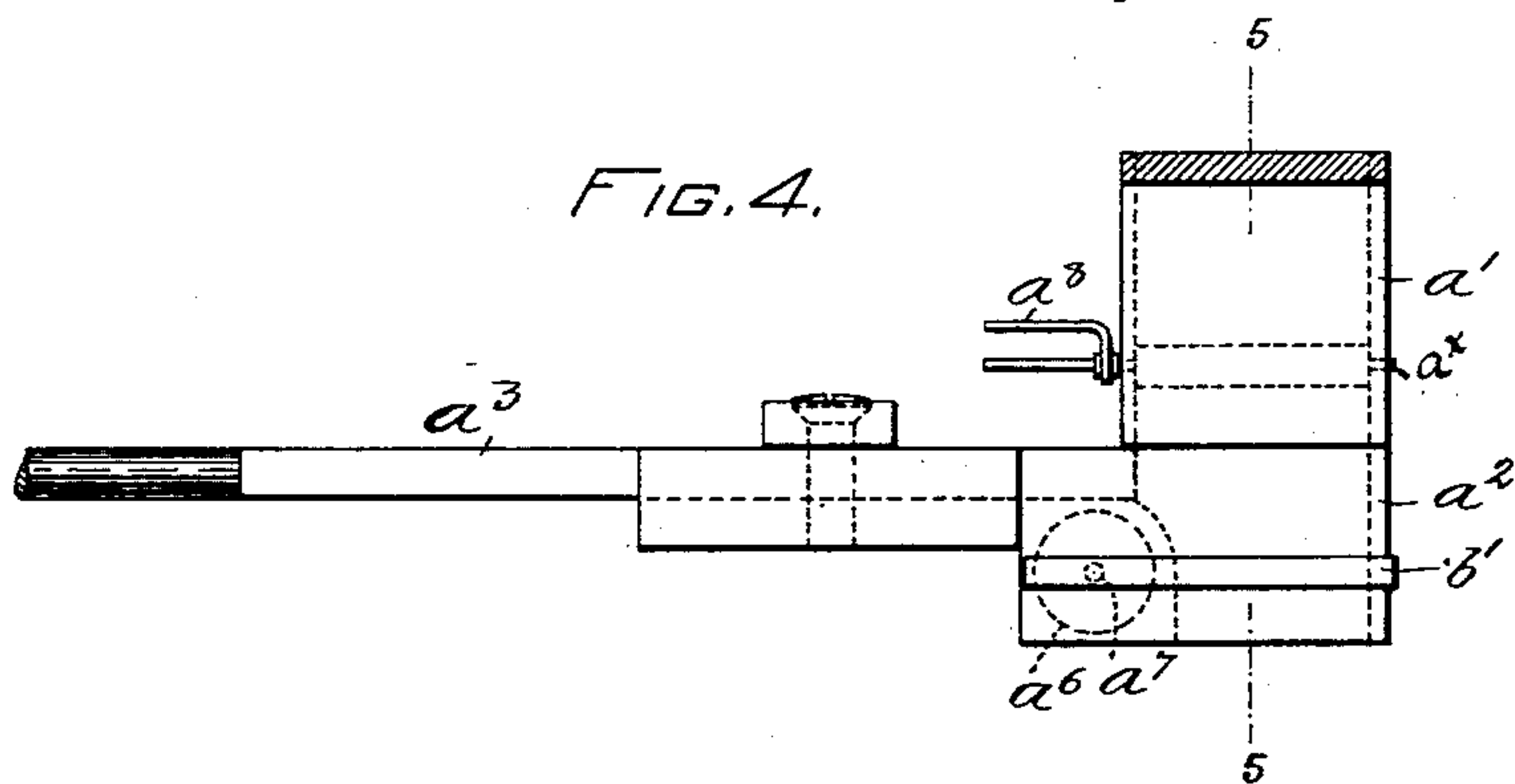
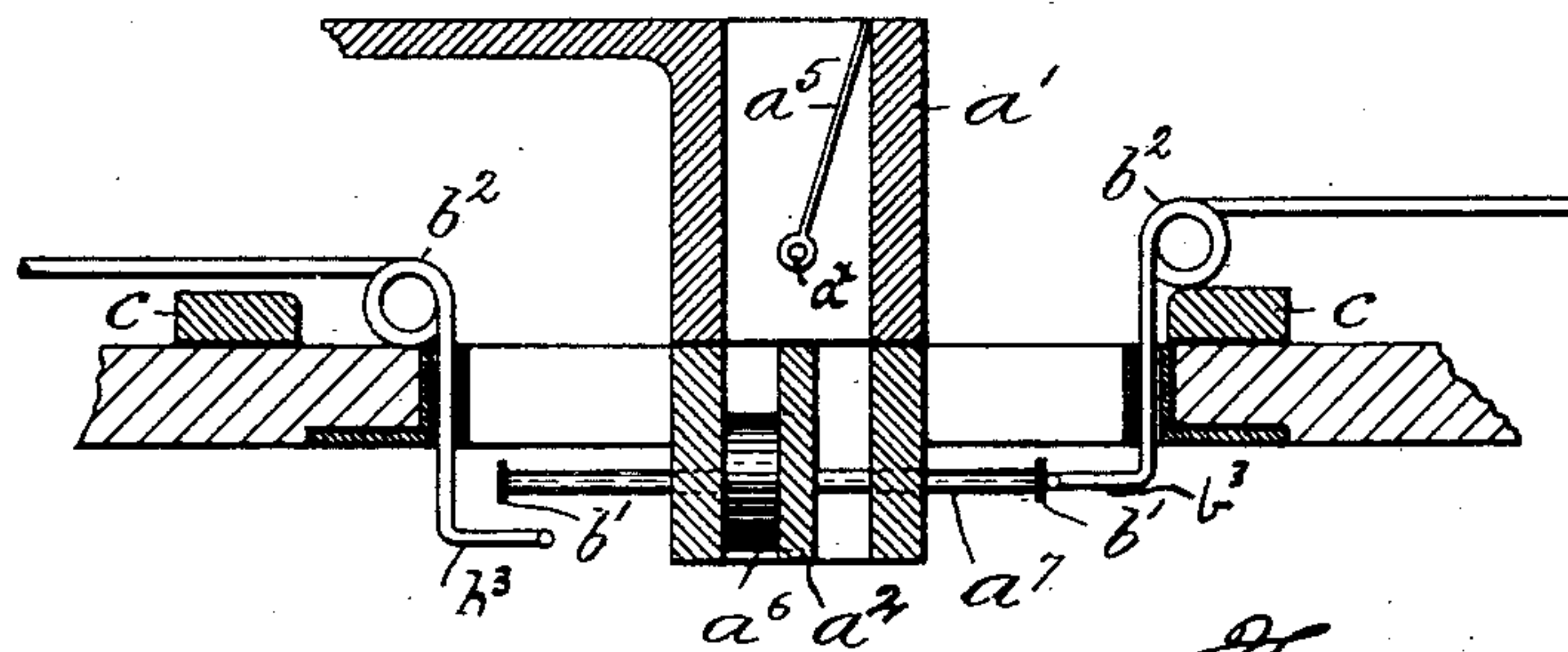


FIG. 5.



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UNITED STATES PATENT OFFICE.

THEODORE LASSEN, OF PHILADELPHIA, PENNSYLVANIA.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 541,241, dated June 18, 1895.

Application filed August 10, 1893. Serial No. 482,869. (No model.)

To all whom it may concern:

Be it known that I, THEODORE LASSEN, a citizen of the United States of America, residing at Philadelphia, (Germantown,) in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Vending-Machines for the Distribution of Photographs of Persons and Photographic Views by Mechanical Action, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention consists of a machine for vending card photographs and like articles, and it consists in the novel features of construction and combination of parts hereinafter fully described, reference being had to the accompanying drawings which illustrate one form in which I have contemplated embodying my invention and the said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 represents a front elevation of the mechanism employed by me in carrying my invention into effect, the front of the machine-casing being removed and parts of the machine being broken away. Fig. 2 is a top plan view of the working parts of the said machine. Figs. 3, 4, and 5 are detailed views showing parts of the mechanism on an enlarged scale.

The supporting plate or bed of the machine upon which the various parts of the operating mechanism are supported is provided at one side with an aperture c^2 formed preferably as shown in Fig. 2.

The card photographs and like articles which this machine is constructed to vend, are formed of greater length than breadth and the aperture c^2 in the bed of the machine takes the configuration which two of said cards would give when laid one upon the other, the greater diameters of the two cards being at right angles to each other. This gives an aperture having eight corners with a re-entrant angle formed between each pair of adjacent corners. At each corner of the aperture c^2 is secured a vertical guide c^4 which is preferably of angular form as shown. In placing the cards in these vertical guides the first card is made to engage four of said guides and the second card is disposed transversely of the first and made to engage the other four

guides, the third is disposed in the same position as the first, the fourth transversely of it and so on until the card guides are filled. Adjacent to each of the re-entrant angles formed by the edges of the aperture c^2 , a card rest or supporting device c^3 is pivoted which can be swung on its pivot so as to project into the vertical plane of one card, or swung over so as to project into the plane of the next or transversely disposed card. These card rests c^3 are all connected in pairs for joint movement and are connected with the arms of a bell crank lever c in such a manner that when the bell crank lever is moved in one direction all four of said card rests will swing into the plane of one of the cards and when said bell crank lever is moved in the opposite direction all of said card rests will swing over into the plane of the next or transversely disposed card far enough to release the bottom card. They will then be beneath the next card, which becomes the bottom card, the card released falling into a chute c^5 from which it is discharged from the machine, through a suitable opening.

The movements of the bell crank lever c are secured by means of a slide or pusher a^3 which is mounted in suitable guides so as to slide in and out, and is held normally in its outermost position by a spring a^4 . The pusher normally does not engage the bell crank c and the connection between the two parts is secured by the introduction into the machine of a coin, which is held in the pusher, and engages a bearing surface c^6 on one arm of the bell crank lever c , thus moving it rearwardly. In order to produce the reverse movement of the bell crank lever c , I provide another bell crank lever c^x connected with the lever c by a link b and having one of its arms provided with a bearing surface c^7 to be engaged by a coin held in the pusher. In order that the coin in the pusher may engage first one bell crank lever and then the other, I provide the rear end of said pusher a^3 with two slots as shown in Fig. 5. Above the pusher a^3 is the coin receiver a' provided with a partition a^5 pivoted at the lower part of the coin receiver upon a rock shaft a^x so that by means of this partition the coin may be directed into one or the other of the recesses or slots in the pusher. A coin chute a having one end com-

communicating with the outside of the casing of the machine, leads the coin deposited therein to the coin receiver a' . The rock shaft a^x is provided at one end, adjacent to the link b , (which connects the two bell crank levers c and c^x), with two laterally extending arms a^8 having portions to engage cams b^x on the link b , which cams, as the link moves to the right or left, shift the pivoted partition a^5 so as to lead the next coin deposited, into the proper slot of the pusher to engage the bell crank lever which has its coin engaging arm in its forward position, as will be understood by reference to Figs. 1, 2 and 5.

The slots in the pusher which receive the coin are sufficiently long to allow the coin to drop entirely through as shown in Figs. 4 and 5, and I therefore provide a coin retaining device a^6 , which is supported and rigidly secured upon a horizontal shaft a^7 , said shaft engaging apertures in the side walls of the pusher and being movable longitudinally therethrough. The coin retaining device which is conveniently made in the form of a cylinder as shown, is of sufficient width to close one end of one of the slots in the pusher and prevent the coin from passing through and the middle wall of the pusher is cut away as indicated in dotted lines, Fig. 4, to allow the said coin retaining device to be moved laterally so as to pass from one slot to the other, thus releasing one coin and placing itself in position to arrest the next one deposited in the machine. This movement is effected by the following means: Adjacent to each end of the horizontal supporting shaft a^7 is a releasing arm b^3 lying normally below the plane of the end of said shaft, and each of these arms has a part extending up through the bed of the machine into the plane of an arm of one of the bell crank levers c and c^x and provided with a portion b^2 to engage a cam portion of one of said arms so as to raise its releasing arm b^3 into the plane of the shaft a^7 . After a coin has been dropped into one of the slots of the pusher, and the pusher is being pushed rearwardly, the coin will engage one of the bell crank levers c or c^x as before stated and move it rearwardly. The forwardly extending arm of the bell crank which is operated upon by the coin, will engage the part b^2 and raise the coin releasing arm b^3 into the plane of the shaft a^7 so that as the pusher is drawn back by its spring a^4 the shaft a^7 will be moved endwise thus removing the coin retaining device from beneath the coin to release the latter and moving the coin retaining device into line with the other slot of the pusher.

I provide a cam construction between the releasing device and the shaft a^7 and in this instance it consists in a pair of curved light spring arms b' secured to the pusher and having their ends engaging the ends of the shaft a^7 . As the pusher is drawn forward by its spring one of these curved arms b' will be engaged by its respective releasing device b^3

and will thus move the shaft a^7 to release the coin.

The operation of the device is as follows: When a person desires to obtain a photograph or like article from the machine, a coin of proper size is deposited in the coin chute a and is led into the coin receiver a' . The pivoted partition a^5 will direct the coin into the proper slot of the pusher to engage the arm of one of the bell crank levers c or c^x which is in its forward position. The coin will be held in the pusher by the coin retaining device and will project slightly above the same so as to engage the arm of one of the bell crank levers which is in line with the slot of the pusher occupied by the coin. The pusher is then moved rearwardly and the coin will then engage the bell crank lever and communicate motion to the card rests to release the bottom card in the manner previously described. At the same time one of the cams b^x on the link b will shift the pivoted partition a^5 of the coin receiver so as to direct the next coin into the other slot of the pusher. As the pusher is drawn forward again by its spring a^4 the coin retaining device will be moved as just described so as to release the coin and place it in position to arrest the next coin. The device is then in position for repetition of the operation when another coin is deposited.

What I claim, and desire to secure by Letters Patent, is—

1. The combination with a receptacle provided with holding devices for holding articles arranged at an angle to each other, each article being placed at an angle to the adjacent articles, said receptacle having a bottom to permit said articles to drop below the same in the positions in which they are held by said holding devices, of movable supporting devices for said articles and means for moving said supporting devices from beneath the bottom article to permit it to fall and to engage and support those above it, substantially as described.

2. The combination with a receptacle provided with holding devices for holding articles arranged at an angle to each other, each article being placed at an angle to the adjacent articles, said receptacle having a bottom to permit said articles to drop below the same in the positions in which they are held by said holding devices, of movable supporting devices for said articles and means for moving said supporting devices from beneath the bottom article to permit it to fall beneath the next adjacent article to support it and those above it, substantially as described.

3. The combination with a receptacle adapted to contain articles arranged in contact with each other, each article being placed at an angle to the adjacent articles, said receptacle having a bottom to permit said articles to drop below the same, of pivoted supporting devices for said articles, and means for moving said supporting devices into engagement

with the article next to the bottom and out of engagement with the bottom article substantially as described.

4. The combination with a receptacle adapted to contain articles arranged in contact with each other, each article being placed at an angle to the adjacent articles, stationary guides for holding said articles in said positions, said receptacle having a bottom provided with an aperture to permit the articles to fall through the same in the positions which they occupy in said guides, and supports for the bottom article adapted to be moved into engagement with the article next to the bottom and out of engagement with the bottom article, substantially as described.

5. The combination with a receptacle for holding articles to be delivered and means for dropping them successively including movable supporting devices for said articles, of two actuating levers connected therewith and connected for joint movement and coin controlled actuating means for moving one of said levers on the introduction of a coin, and for moving the other lever upon the introduction of the next succeeding coin, the movement of one lever by the coin controlled actuating means returning the other lever into position to be operated at the next operation of the machine, substantially as described.

6. The combination with a receptacle for holding articles to be delivered and means for dropping them successively, two operating levers connected with said dropping means, and with each other, a coin controlled actuating means and devices for operatively connecting said actuating means with said levers successively, by the introduction of a coin, substantially as described.

7. The combination with a receptacle for holding articles to be delivered and means for dropping them successively, of two levers for actuating said dropping means connected for joint movement, a pusher having recesses adapted to hold a coin in position to engage either of said levers, and means for directing a coin into one or the other of said recesses, substantially as described.

8. The combination with a receptacle for holding articles to be delivered and means for dropping them successively, of two levers for actuating said dropping means connected for joint movement, a pusher having recesses to hold a coin in position to engage either one or the other of said levers, and means for directing a coin into one or the other of said recesses successively substantially as described.

9. The combination with a receptacle for holding articles to be delivered and means for dropping them successively, of devices for operating said dropping means having coin engaging parts in different planes, a pusher having coin engaging recesses in line with said parts of the operating devices, and means for directing a coin into said recesses successively, substantially as described.

10. The combination with a receptacle for articles to be delivered and means for dropping them successively, devices for operating said dropping means, having coin engaging parts in different planes, a pusher having coin engaging recesses in line with each of said parts, means for directing a coin into said recesses successively, a coin retaining device and devices for moving said retaining device to release one coin and into position to retain the succeeding coin, substantially as described.

11. The combination with the receptacle for holding articles to be delivered and means for dropping said articles successively, of devices for operating said dropping means, having coin engaging parts in different planes, a pusher having coin receiving recesses in line with said parts and a coin receiver having a pivoted partition for directing a coin into one of said recesses and means for operating said partition to direct a coin into said recesses successively, substantially as described.

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

THEO. LASSEN.

Witnesses:

JOSEPH G. McKENNA,
JAMES F. COURTNEY.