(No Model.)

2 Sheets—Sheet 1.

A. F. PEACOCK.

COIN CONTROLLED VENDING APPARATUS.

No. 502,754. Patented Aug. 8, 1893.

Fig. 2

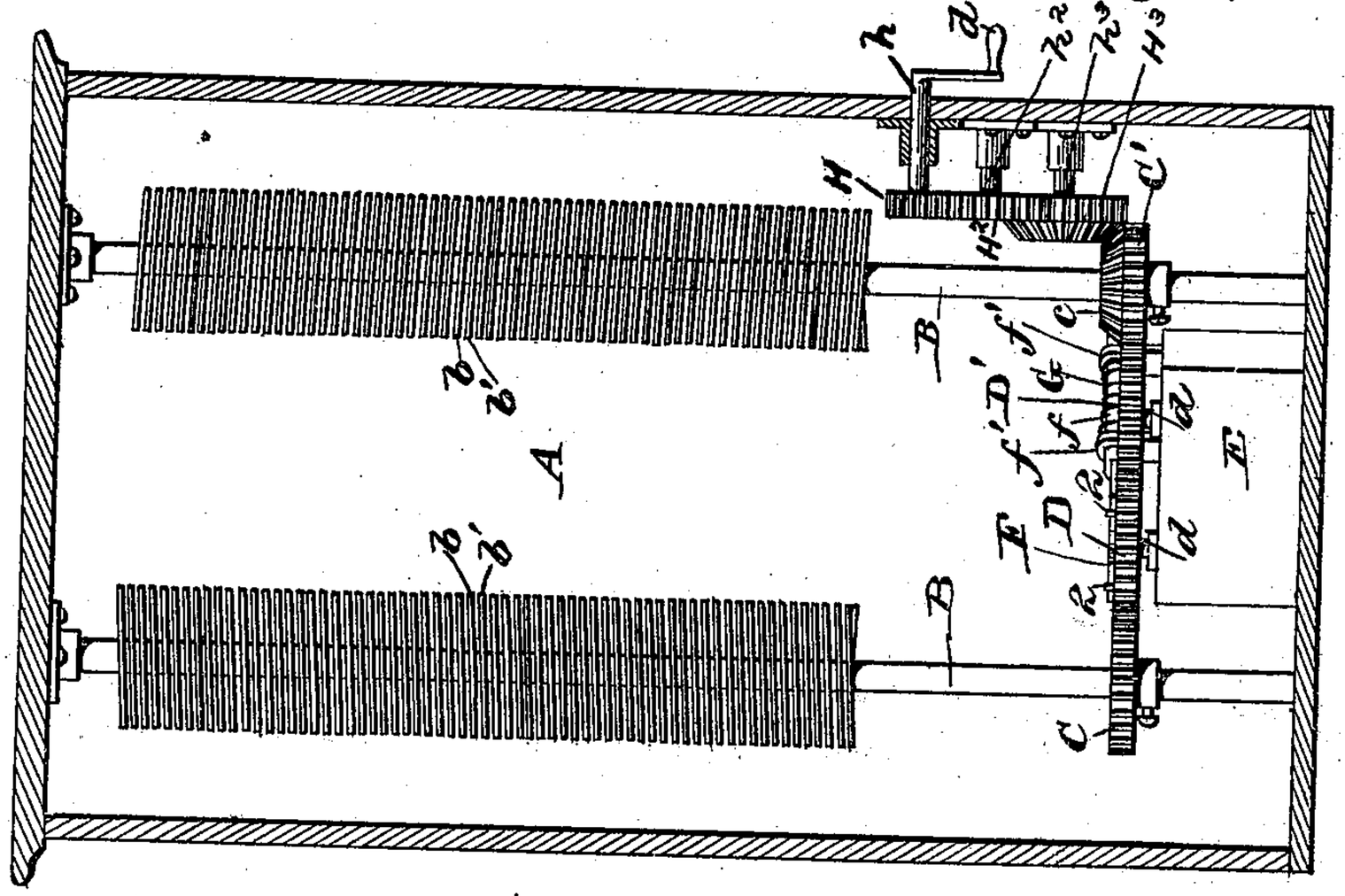
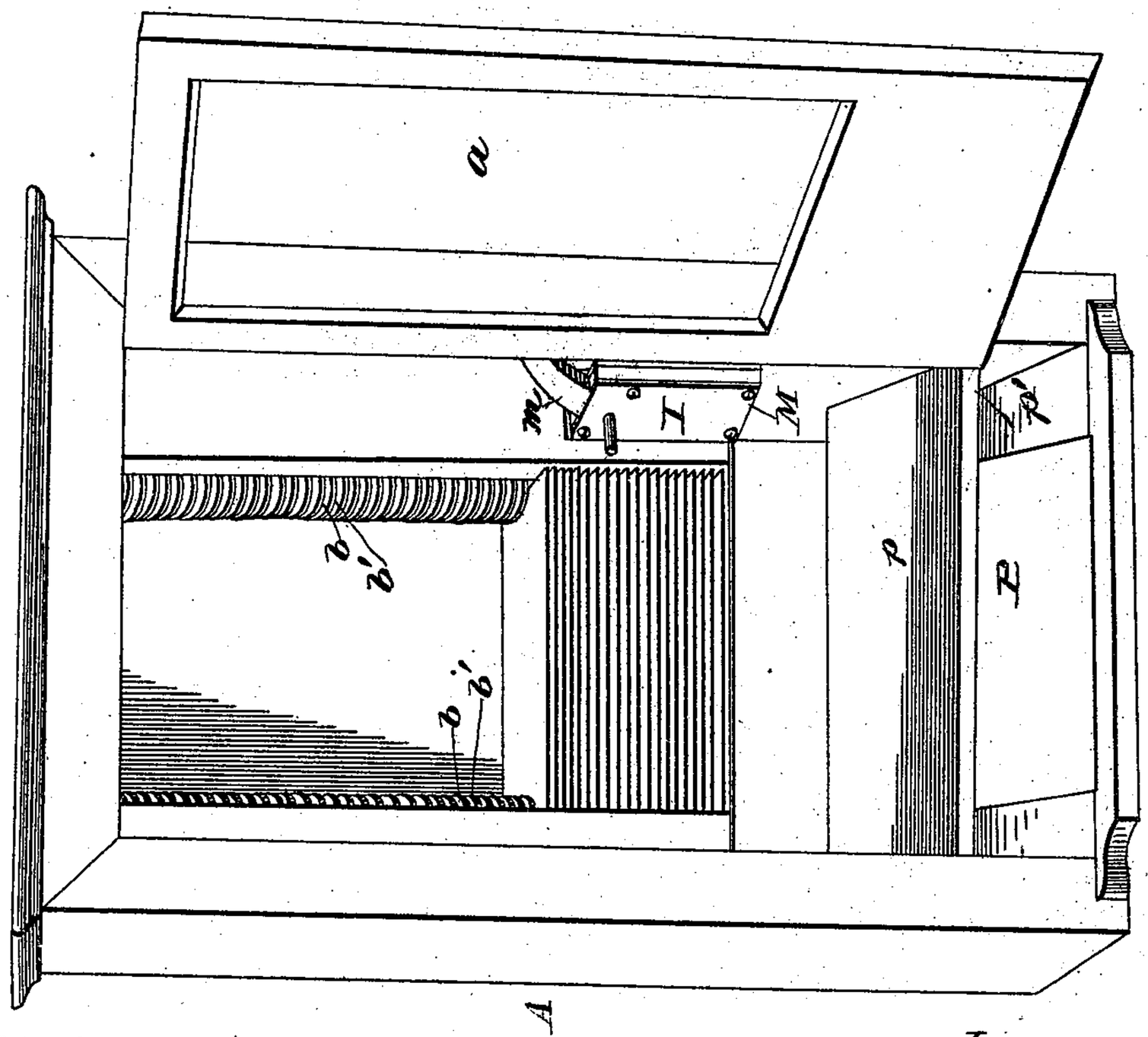


Fig. 1



Witnesses;

J. F. Coleman

John Wood

Inventor:

Alfred F. Peacock

by S. L. Fitzgerald

Att'y.

(No Model.) 2 Sheets—Sheet 2.

A. F. PEACOCK.

COIN CONTROLLED VENDING APPARATUS.

No. 502,754. Patented Aug. 8, 1893.

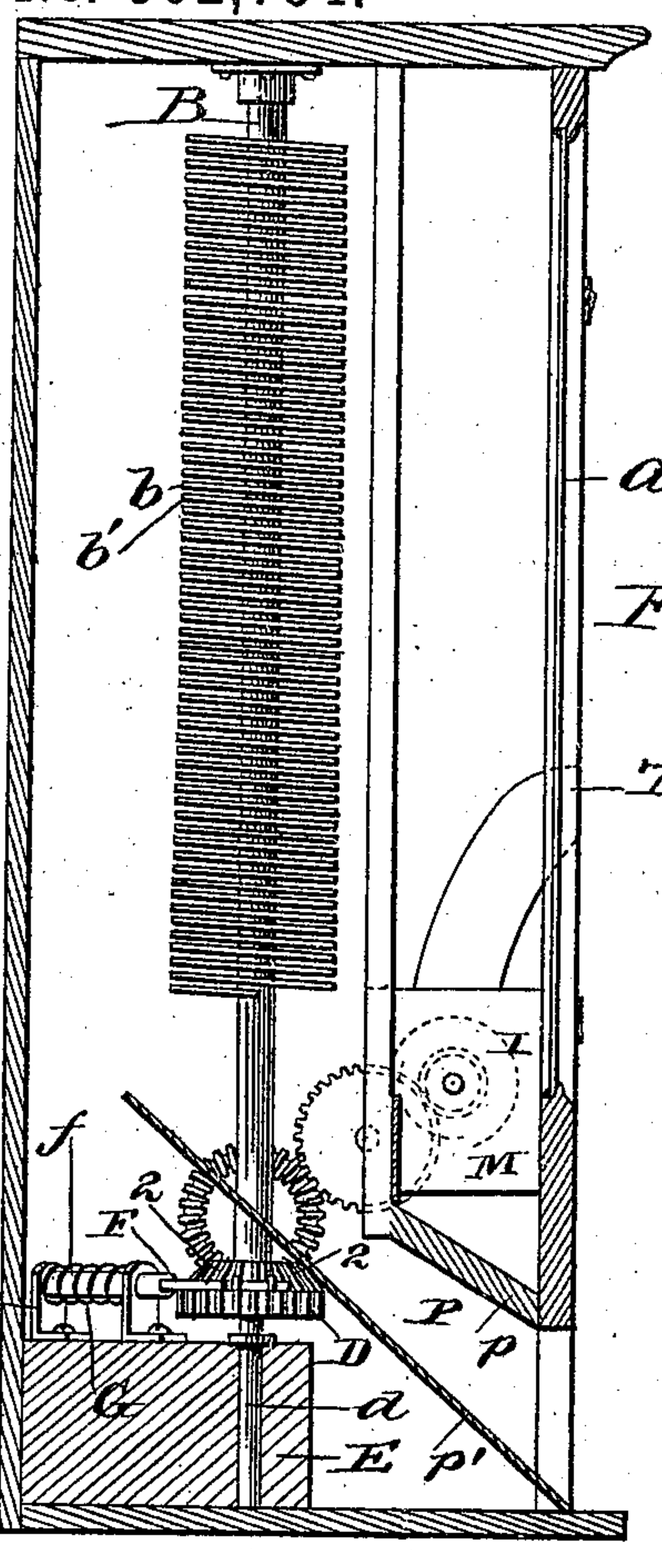


Fig. 3

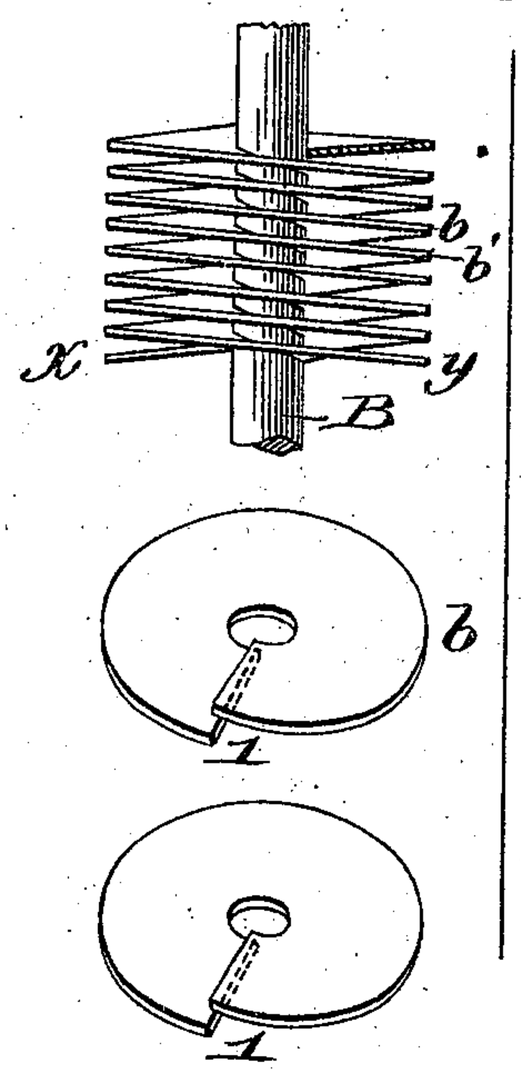


Fig 4.

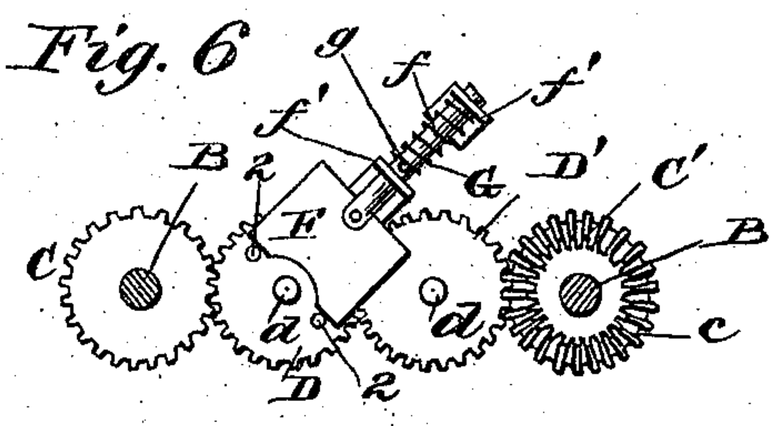


Fig. 6

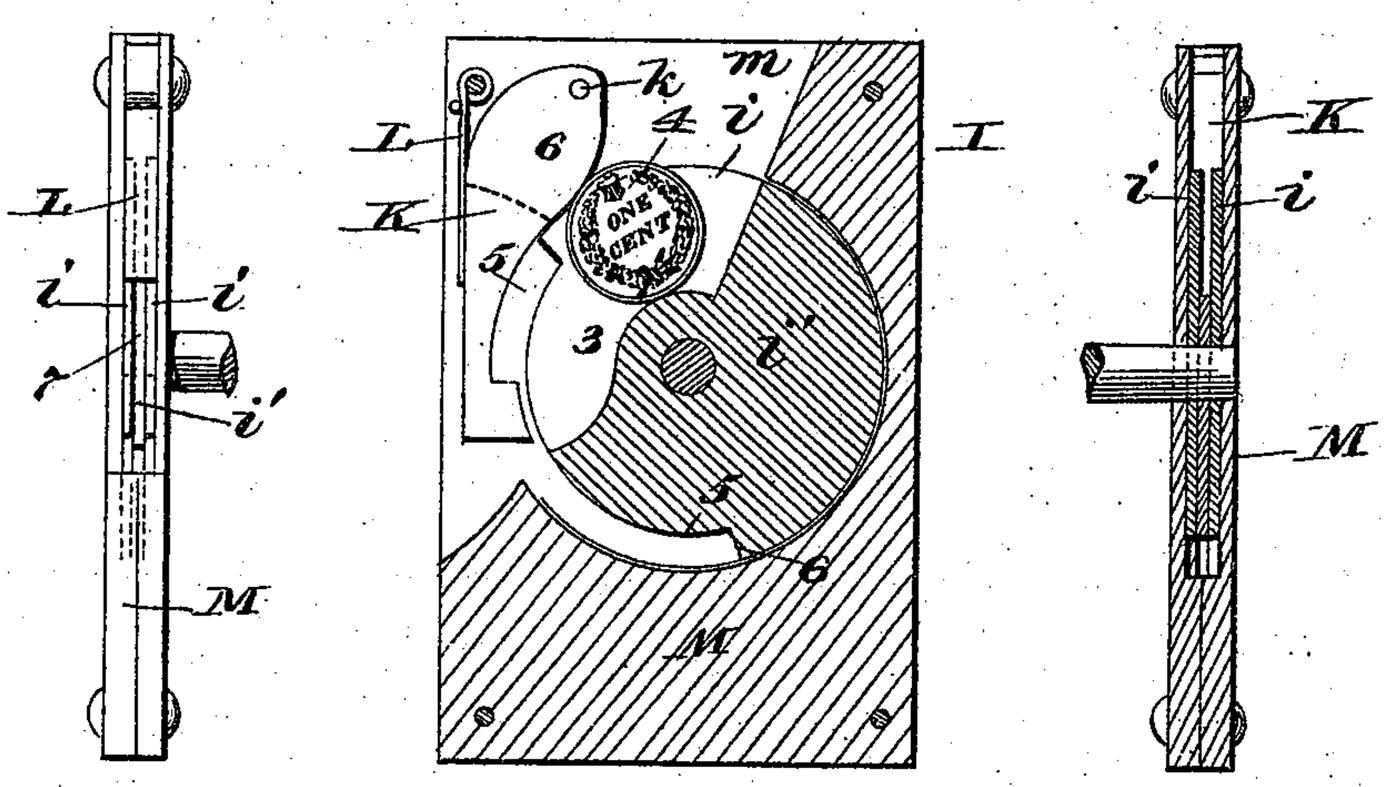


Fig. 5

Witnesses;
J. F. Coleman
John Wood

Inventor
Alfred F. Peacock
by D. C. Fitzgerald
Atty.

UNITED STATES PATENT OFFICE.

ALBERT F. PEACOCK, OF BUCHANAN, MICHIGAN.

COIN-CONTROLLED VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 502,754, dated August 8, 1893.

Application filed April 11, 1893. Serial No. 469,922. (No model.)

To all whom it may concern: .

Be it known that I, ALBERT F. PEACOCK, a citizen of the United States, residing at Buchanan, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Coin-Controlled Vending Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in coin-controlled vending apparatus, and particularly to that class designed for use in vending envelopes and similar articles.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

In the drawings—Figure 1 is a perspective view of an apparatus embodying my invention, the door being opened. Fig. 2 is a vertical section taken through the apparatus in front of the spirals. Fig. 3 is a vertical section taken at right angles to Fig. 2 and showing the coin-controlled locking mechanism. Fig. 4 is a detail view showing the construction of the spirals. Fig. 5 is a collection of detail views showing the construction of the coin-lock. Fig. 6 is a plan view of the gear-wheels.

Referring to the drawings, A is a casing having a glazed door *a*, which does not extend the full length of the casing.

B are vertical shafts, each provided with spirals *b*, *b'*, preferably made of sheet-metal stamped out in rings and slit at 1, then soldered to each other and sprung apart to form a continuous thread, two of these spirals being placed together and fixed on each shaft B, as will be fully understood from Fig. 4. On the lower end of each shaft is fixed a gear-wheel C, C', the latter being of greater thickness than the former and beveled on its upper edge at *c*. These two gear-wheels are geared in unison by a pair of idler wheels D, D', which also mesh with each other. The idler wheels are revolubly mounted on studs *d*, fixed to a base-block E secured to the bottom of the casing. The idler wheel D has two pins 2 projecting upward from its top surface, and against these pins normally bears the edge of a throw-plate F, attached to a bolt-rod *f* passing through suitable openings in bearing-plates *f'* screwed to the top of base-block E. A spring G, located between one of the bearing-plates and a pin *g* passing through the bolt, serves to hold the throw-plate F normally in contact with the pins 2.

H is a gear-pinion mounted on a crank-shaft, *h*, which is journaled in the casing and has a crank-handle, *h'*, outside the said casing. The gear-pinion, H, drives an idler gear-wheel, H^2, mounted on a stud or fixed shaft h^2 secured to the casing, and the gear-wheel, H^2, in turn drives a gear-wheel, H^3, revoluble on a stud, h^3, the gear-wheel H^3 having a beveled surface which engages the beveled upper portion, *c*, of the gear-wheel, C'.

I is a coin-receiver, consisting of two outer plates or disks, *i*, between which is a central plate or disk *i'* cut away as shown at 3 in Fig. 5, so as to receive the coin 4 which projects a short distance beyond the periphery of the outer disks *i*, the latter disks also having a portion of their peripheries removed as shown at 5, thereby leaving projecting faces or stops 6, as will be fully understood from the drawings.

K is a catch, pivoted at *k* and provided with a slot 7, this catch being held against the periphery of the outer disk *i* by means of a spring L. The whole coin-receiver I, the catch K, and the spring L are all located between two side plates M which are recessed to receive them, and have also a recess *m* which forms the coin-channel leading from a slot N in the casing to the coin-receiver. The disk I is mounted on the crank-shaft *h* (which also passes through plate M) and is adapted to be rotated at the same time with the rotation of the bevel-gear-wheels when the catch K is forced away from contact with the stops 6. The gear-wheels H, H^2, H^3, and C' are so constructed with regard to size and relative number of teeth that one revolution of the crank will turn the spirals *b*, *b'* only one half a revolution.

The operation of my apparatus is as follows: The door of the casing being opened, the envelopes or similar articles to be vended are placed horizontally, one by one, in the spirals, *b*, *b'*, as is usual in machines of this class. The door being closed, the machine is ready for use. When it is desired to obtain an envelope from the machine, a coin of the proper

denomination is dropped through the coin-slot in the casing, and falls down into the coin-receiving central disk *i'*. By now rotating the crank-handle, the coin, which as before stated projects beyond the disk, engages the under side of the catch K, forcing the latter outward and permitting the disk I to be rotated, the coin dropping outward into a suitable receptacle after it has passed the catch. The latter will be forced back onto the peripheries of the outer disks and will eventually drop into the segmental notch 5, thereby preventing another rotation of the crank-handle, without the insertion of another coin, by coming into contact with one of the stop-pieces 6. The revolution of the crank-shaft also revolves the spirals, *b*, *b'*, thus feeding the envelopes downward, and as there are two spirals on each shaft, each arranged so that the end of its last thread or tooth is diametrically opposite that of the other (as will be seen at *x* and *y* in Fig. 4) one envelope will be dropped at each half revolution of the vertical shafts B, the envelopes as they are dropped falling into an inclined chute P, formed by upper and lower stationary boards *p*, *p'*, and opening outward at the lower end of the door *a*. The throw-plate F pressing against the pins 2 in the top of the idler-wheel D tends to secure the alignment of the coin-receiving segmental opening in the central disk *i'* with the coin channel or recess *m*, yet, at the same time, permits the rotation of the shafts.

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

1. In a coin-controlled vending machine, the combination, with a pair of vertical shafts, of a pair of spirals arranged on each shaft with the threads of one intermediate those of the other and the end of the last thread of one spiral being diametrically opposite the end of the last thread of the other, substantially as described and for the purpose set forth.

2. In a coin-controlled vending machine, the combination, with a crank-shaft a coin-receiver mounted on the crank shaft, and a casing having a coin-channel, of a wheel rotated by the crank-shaft, a pair of pins fixed in the top of the wheel, and a spring-held throw-plate engaging the pins, whereby the coin-receiver is yieldingly held in its proper relation to the coin-channel, substantially as described and for the purpose set forth.

3. In a coin-controlled vending machine, the combination, with a crank-shaft, a coin-receiving disk mounted on the crank-shaft, a pair of side-plates on each side of the disk and provided with a coin-channel, and a casing having a coin-slot in line with the channel, of a wheel rotated by the crank-shaft, a pair of pins fixed in the top of the wheel, a bolt, a pair of bearings in which the bolt is mounted, a throw-plate fixed to the bolt, and a spring pressing the bolt to hold the throw-plate against the wheel, whereby the coin-receiver is held in its proper relation to the coin-channel and slot, substantially as described and for the purpose set forth.

4. In a coin-controlled vending machine, the combination, with a central disk cut away at its periphery to a depth less than the diameter of the coin, a pair of outer disks provided with long segmental notches, and a crank-shaft on which said disks are fixed, of a catch having a coin contacting-surface located over the central disk, the catch being also provided with a slotted detent, and a spring normally holding the detent into engagement with the notches in the outer disks, substantially as described and for the purpose set forth.

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

ALBERT F. PEACOCK.

Witnesses:
WILLIAM KOONS,
H. C. STORM.