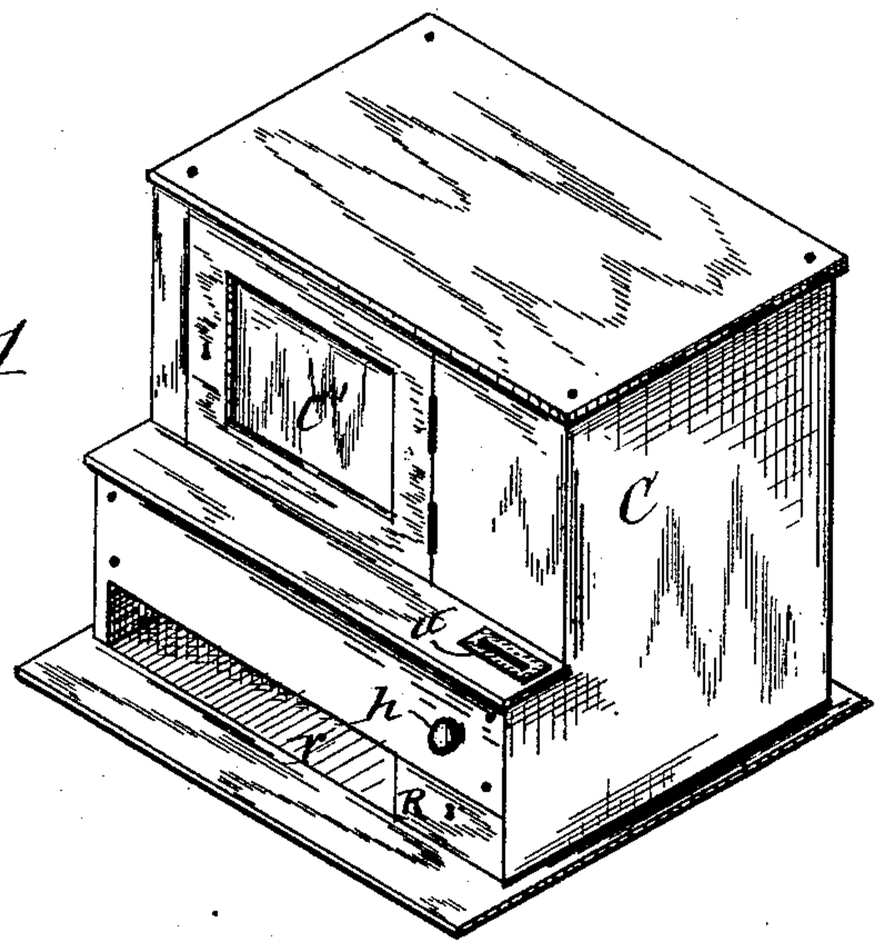
(No Model.) 2 Sheets—Sheet 1.

A. LARSEN.

COIN OPERATED MACHINE.

No. 480,431. Patented Aug. 9, 1892.

Fig. 1



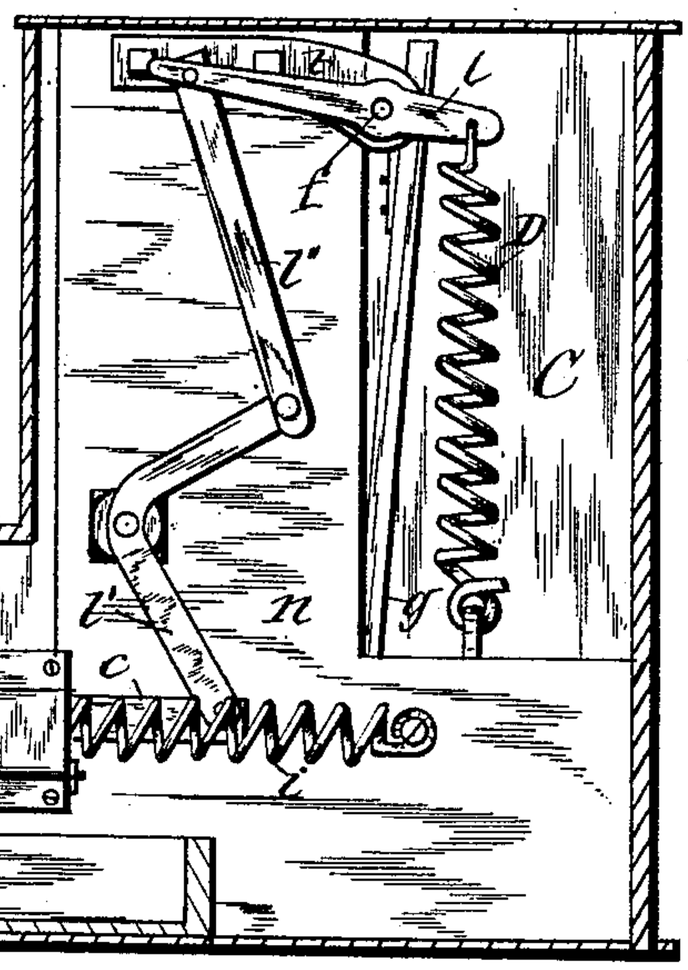


Fig. 2

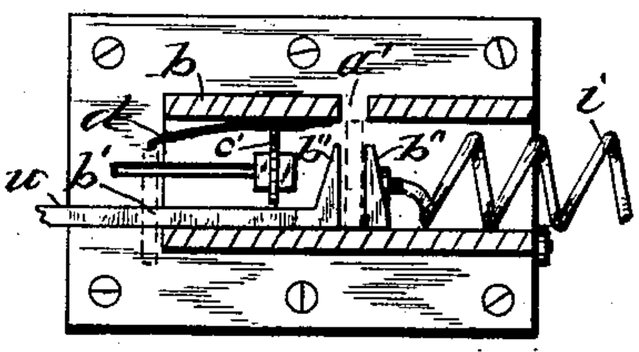


Fig. 4

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his ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3

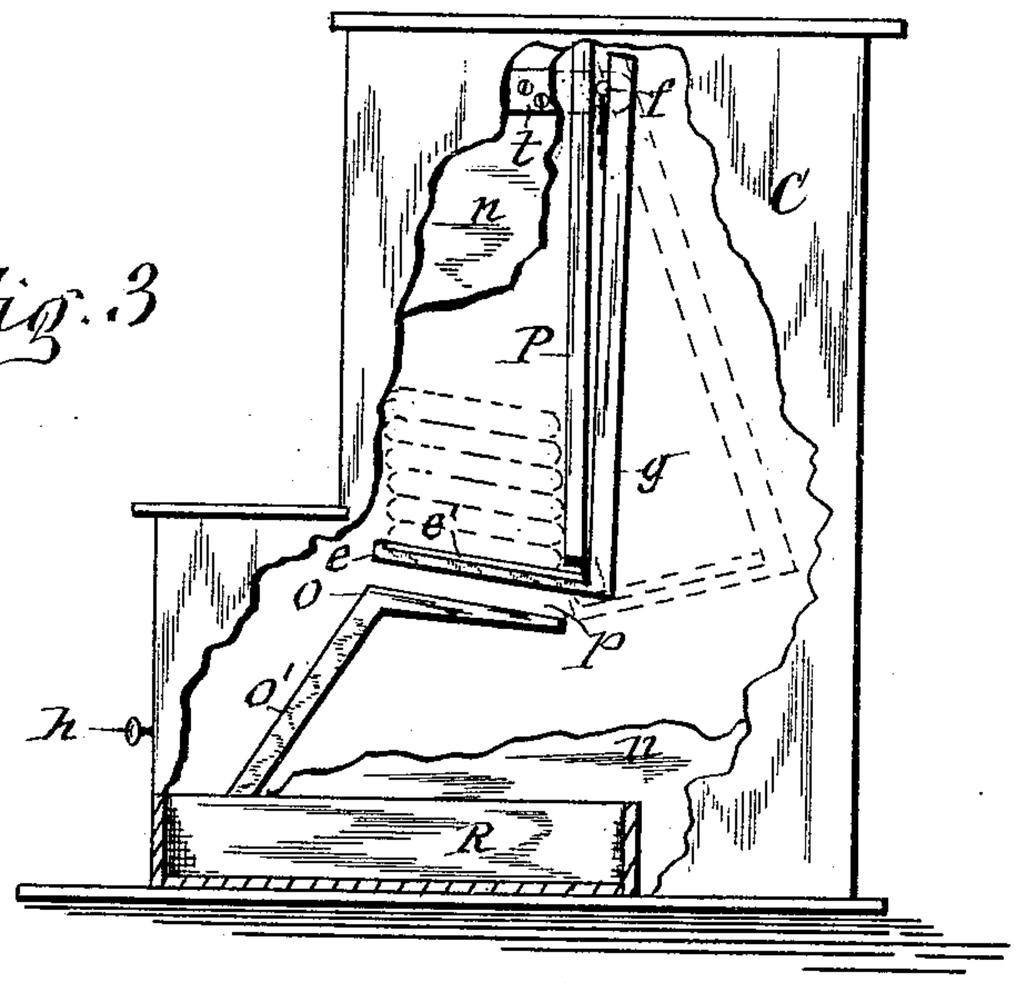
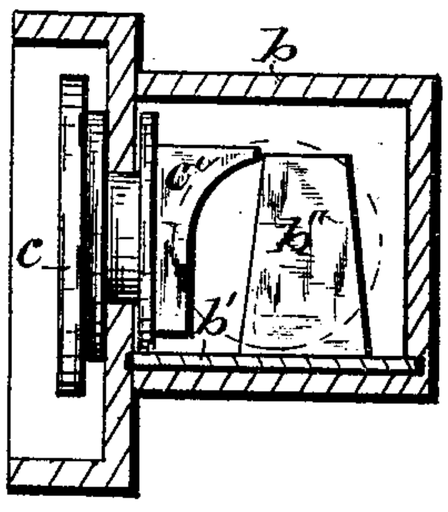


Fig. 5

Fig. 6



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UNITED STATES PATENT OFFICE.

AUGUST LARSEN, OF SYRACUSE, ASSIGNOR OF ONE-HALF TO HENRY C. NYE, OF WHITEHALL, NEW YORK.

COIN-OPERATED MACHINE.

SPECIFICATION forming part of Letters Patent No. 480,431, dated August 9, 1892.

Application filed November 2, 1891. Serial No. 410,593. (No model.)

To all whom it may concern:

Be it known that I, AUGUST LARSEN, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Coin-Operated Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of machines in which the mechanism is inclosed in a case which is provided with a slot for the introduction of coins and the size of the introduced coin controls the movement of the aforesaid mechanism.

My present invention is designed chiefly for selling newspapers put in wrappers or analogous packages inclosed in a case and delivered to the purchasers by their depositing the coins in the case containing said packages.

To that end the invention consists in the novel construction and combination of parts hereinafter described, and specifically set forth in the claims.

In the annexed drawings, Figure 1 is an isometric view of a machine embodying my invention. Fig. 2 is an enlarged vertical transverse section immediately back of the end wall of the case and adjacent to the coin-slot thereof. Fig. 3 is an end view with portions of the end wall and adjacent parallel wall broken away to show the compartment containing the newspapers or analogous packages indicated by dotted lines. Fig. 4 is a vertical longitudinal section of the box in which the coin-carrier is located. Fig. 5 is a further enlarged horizontal longitudinal section of said box, and Fig. 6 is a further enlarged vertical transverse section of the same on line *x x* in Fig. 5.

Similar letters of reference indicate corresponding parts.

C represents the inclosing case of the machine, said case being provided with a suitable door C′ for the introduction of the newspapers or other similar-shaped packages to be sold, and *a* denotes the slot through which to deposit the coin in payment for the newspaper or aforesaid packages to be obtained from the case. Inside of the case is a vertical partition P, which extends from the top part way toward the bottom of the case, and beneath said partition and in front thereof is a stationary shelf *o*, leaving a transverse passage *p* between it and the partition.

e represents a movable shelf adapted to pass through the passage *p*. This shelf is carried on a suitable oscillatory support, preferably of the form of a hanger *g*, fixed to a horizontal shaft *f*, journaled in suitable supports *t*, secured to one of the end walls of the case and to a wall *n* a short distance from the opposite end wall and parallel therewith.

To one end of the shaft *f* is fastened a lever *l*, one end of which is connected with the case by a spring D, which holds the hanger *g* and shelf *e* in their normal position and with the said shelf held in front of the partition P, as shown by full lines in Fig. 3 of the drawings. Across the top of the shelf *e* I prefer to secure wires *e′* to obviate friction and allow the lowermost newspaper or package to slide freely off from the shelf, as hereinafter described.

Under the slot *a* is a stationary box *b*, provided with a transverse slot *a′*, which is in range with the slot *a*. In the said box slides longitudinally the coin-carrier *b′*, which has an arm *u* extending through the front of the case and a handle *h* affixed to its outer end. A spring *i* connects the opposite end of the coin-carrier with the rear of the case and serves to retract the said carrier.

From the top of the coin-carrier project vertically two lugs *b″ b″*, which I designate the "coin-holders," said lugs standing in front and rear of the slot *a′* when the coin-carrier is retracted and in its normal position, as shown in Fig. 4 of the drawings.

On the outside of the box and lengthwise thereof is a drag *c*, provided with a lug which passes through a longitudinal slot in the side of the box and has secured to its inner end a suitable catch *c′* of such shape and dimensions as to engage a coin of a certain size or denomination carried in a vertical and transverse position along in the box by the holders *b″ b″*, hereinbefore described.

To the interior of the front portion of the box *b* is secured a suitable coin-thrower *d*,

represented in the drawings in the form of a wire attached at one end to the side of the box, and having its free end extending through the front end of the box and transversely over the carrier b' sufficiently to push the coin off from the opposite side of said carrier when drawn toward the front by the handle h when drawn to the front end of the box. A drawer R or other suitable receptacle beneath said side of the coin-carrier receives the coin from the latter.

To the wall n is pivoted a lever l', which is connected at one end to the drag c and at the opposite end to the lever l by a rod l'', as shown in Fig. 2 of the drawings.

The front of the case C is provided with an opening r, extending part way along the base thereof, and from the front edge of the stationary shelf o to the said opening extends an inclined chute o'.

In setting the machine for operation the newspapers or packages are introduced through the door C' and piled upon the movable shelf e, and the door and drawer R are locked. Then by depositing the coin through the slot a said coin falls between the holders b'' b'', as indicated by dotted lines in Fig. 4 of the drawings. Then by drawing the handle h outward the coin-carrier b' is drawn toward the front end of the box b, where the coin-thrower d pushes the coin off from the carrier and causes the same to drop into the receptacle R. During the said movement of the carrier the edge of the coin projecting from between the holders b'' b'' engages the catch c', and thereby draws along the drag c, which, by means of the lever l' and its connection with the lever l, swings the hanger g rearward, and thereby withdraws the shelf e from under the pile of newspapers or packages, as indicated by dotted lines in Fig. 3 of the drawings. Said pile of papers are thus allowed to drop onto the stationary shelf o. Upon releasing the hold on the handle h the springs i and D restore the mechanisms to their normal position and cause the shelf e to move forward and over the stationary shelf o and push therefrom the paper lying thereon, the superposed papers being held back by contact with the front of the interior of the case.

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

1. The combination, with the inclosing case provided with a coin-slot, of a partition extending from the top of the case part way toward the bottom, an oscillatory hanger on the back of the said partition, a shelf attached to said hanger and passing under the partition, a spring holding the said shelf in front of the partition, a lever adapted to carry the shelf out of said partition, a coin-carrier communicating normally with the slot of the case, a drag adapted to engage the coin on the carrier and connected with the aforesaid lever, and a handle on the coin-carrier, as set forth.

2. The combination of the case C, provided with the slot a, the box b, having a transverse slot in range with slot a, the coin-holders b'' b'', the drag c, carrying the catch c' in proximity to the path of said coin-holders, the coin-thrower d at the side of the coin-carrier, a coin-receptacle under the opposite side of said carrier, and a movable shelf in the case actuated by the drag, as set forth.

3. The combination of the case C, provided with the slot a, the vertical partition P, extending from the top part way the depth of the case, the stationary-shelf o beneath the partition, the horizontal shaft f at the back of the partition, the hanger g, fixed to said shaft, the shelf e, carried on the hanger beneath the partition, the lever l, fastened to the shaft, the spring D, holding the hanger in its normal position, the box b, provided with a slot in range with slot a, the coin-carrier b', provided with coin-holders b'' b'' and with the handle h, the spring i, retracting the said carrier, the coin-thrower d at one side of the carrier, the coin-receptacle R under the opposite side of the coin-carrier, the drag c, provided with the catch c' in proximity to the path of the coin-holders, and the lever l' and rod l'', connecting the drag to the lever l, all combined to operate substantially as described, for the purpose set forth.

In testimony whereof I have hereunto signed my name this 28th day of October, 1891.

AUGUST LARSEN. [L. S.]

Witnesses:
C. L. BENDIXON,
H. M. SEAMANS.