May 21, 1929. C. G. DIMITRAKIS 1,713,748

TICKET DISPENSING MACHINE

Filed July 18, 1927 2 Sheets-Sheet 1

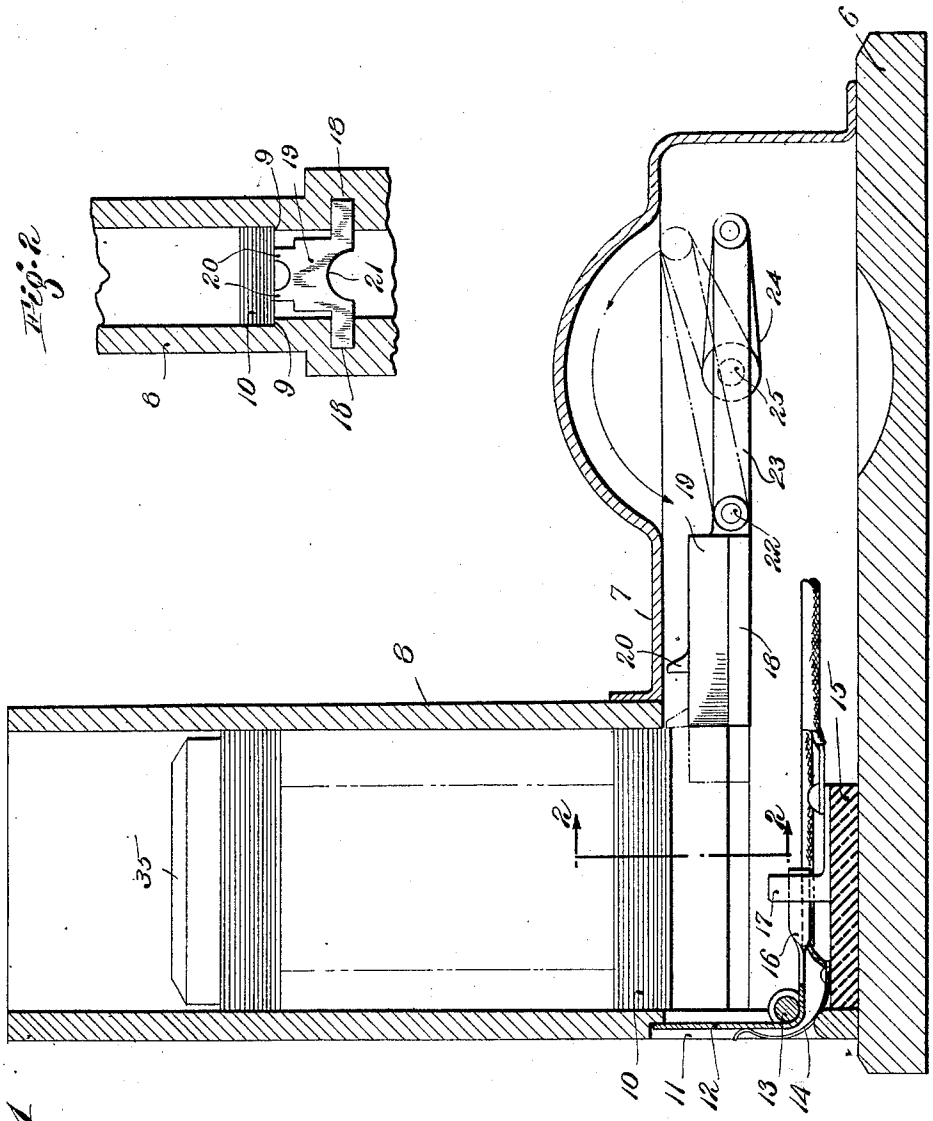


Fig. 1

Fig. 2

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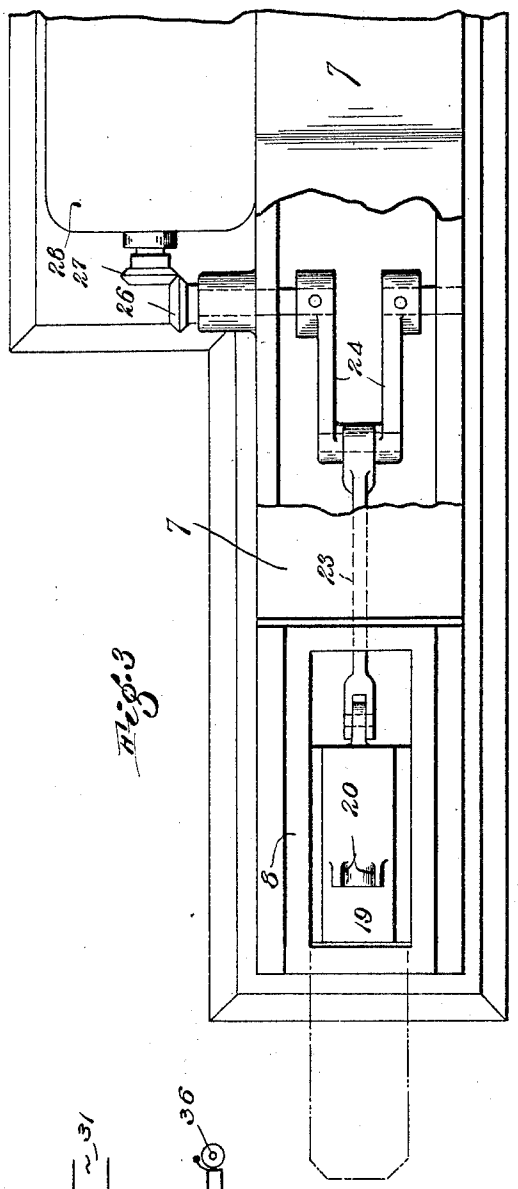


Fig. 3

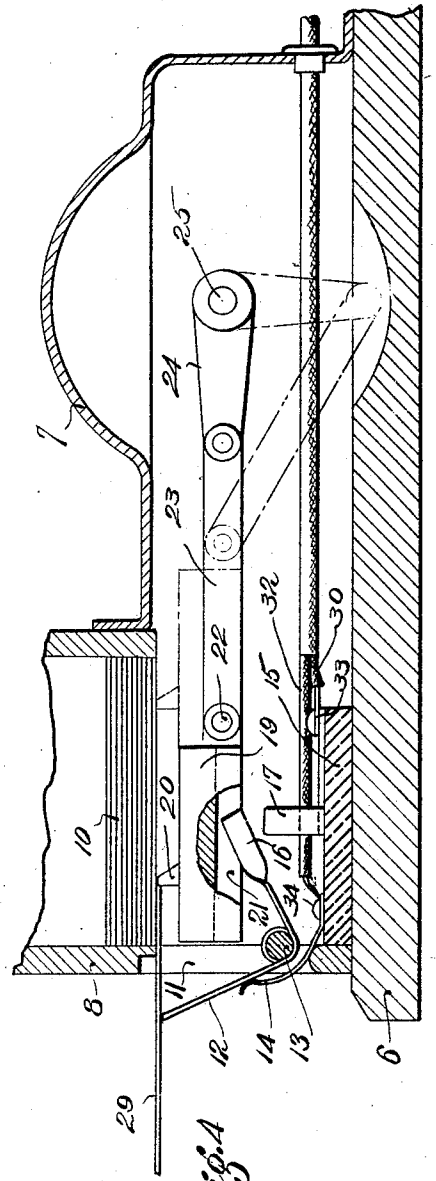


Fig. 4

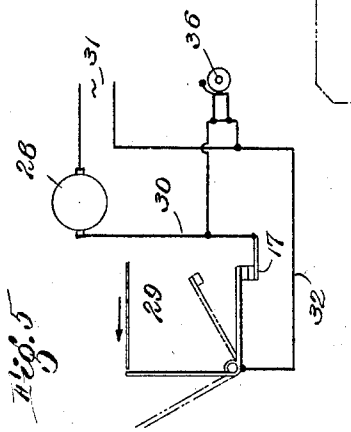


Fig. 5

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Patented May 21, 1929. 1,713,748

UNITED STATES PATENT OFFICE.

CONSTANTINE G. DIMITRAKIS, OF BOSTON, MASSACHUSETTS.

TICKET-DISPENSING MACHINE.

Application filed July 13, 1927. Serial No. 206,547.

This invention relates to machines for automatically delivering a succession of flat strips of sheet material such as cardboard and more particularly to machines for dispensing tickets or checks to the customers of restaurants or lunch rooms, upon their entry into the establishment.

The practice of handing or mechanically delivering a lunch check to each customer prior to his ordering and obtaining the food for which the charge is subsequently punched upon the printed check, is well known, and many sorts of devices have been provided for holding and distributing the checks in order to save the time and effort expended by the earlier custom of manual delivery. The present invention is an improvement upon that type of automatic machine which initially delivers a single check so that it may be grasped by the customer and removed from the machine, the removal of the first check causing the machine automatically to deliver a second check for the succeeding customer, the operation being continued intermittently until the supply of checks in the machine is exhausted. The objects of the invention include the provision of an improved, automatic electrically operated machine which is compact and readily transportable, simple of construction and operation and economical to manufacture and in use. Further objects reside in the particular details of construction hereinafter described and pointed out in the appended claims.

A preferred embodiment of the invention is shown by way of illustration in the accompanying drawings, in which:

Fig. 1 is a central longitudinal section through the container of the machine, with portions of the mechanism in side elevation;

Fig. 2 is a vertical section to enlarged scale of a detail of the machine, taken on the line 2—2 of Fig. 1;

Fig. 3 is a plan view of the device with the checks removed;

Fig. 4 is a fragmentary view similar to Fig. 1, but showing a different position of the movable elements of the apparatus; and

Fig. 5 is a diagrammatic view of the electric circuit.

The apparatus is preferably mounted upon a base 6 within a casing 7 provided with an upright ticket chamber 8 open at both ends and provided at its bottom with side ledges 9 to support the superposed block 10 of individual lunch checks. An opening 11 which is closed by a door 12 pivoted on a rod 13, when the machine is in the inoperative position of Fig. 1, is provided in the front of the casing or box through which an individual check may be delivered. A leaf spring 14, fastened at one end to a block 15 of insulating material, contacts with the outer surface of the door and tends to hold the latter in closed position. An arm 16, also mounted on the rod 13 and preferably integral with the door 12 as shown, is arranged at right angles to the door and so connected with it that the arm turns on the pivot when the door is opened. In the position of Fig. 1 the arm is engaged in a knife switch 17 also mounted on block 15.

Mounted for longitudinal sliding movement in slots 18 of the side walls of the casing is a reciprocating bar 19 provided with upstanding fingers 20 and having a central groove 21 in its bottom surface. The bar is disposed to slide beneath the block of checks and the fingers project just enough to engage behind the rear edge of a single check when the bar is moved forwardly from the inoperative position. Pivoted to the rear end of the bar 19 at 22 is a connecting rod 23 mounted at its other end in a bifurcated crank arm 24 of a shift 25. The shaft is connected through bevel gears 26 and 27 to the rotor shaft of an electric motor 28 of any suitable type.

Operation of the crank shaft revolves the crank arm 24 in the direction of the arrow of Fig. 1, moving the connecting rod and bar 19 forwardly so that the fingers 20 catch behind the individual check 29 and push the same through the aperture 11 opening the door 12 to the position shown in Fig. 4. The swing of the door releases the pivoted arm 16 from its sliding contact with the switch 17, so that the motor is disconnected and the mechanism stops with the check 29 in position to be withdrawn by the customer, the door being maintained in open position by the check, as shown. The bottom groove 21 of the bar permits the arm 16 to move upward a sufficient distance without contacting with the bar. When the check is retracted from the machine, the door is closed by the spring 14, closing the switch 16—17 and causing the motor to turn the crank arm through a complete revolution; thus automatically projecting another check into receiving position.

The electric circuit illustrated in Fig. 5 and the wiring indicated in Fig. 4 show the simple arrangement by which the above operation is automatically controlled. The knife

switch 17 is connected by a wire 30 and through the motor 28 to a source of power 31 and the door and arm 16 are connected through the spring 14 and a wire 32 to the same source. Wire 30 is attached at 33 (Fig. 4) to the base of the switch 17; and wire 32 may be secured at 34 to the spring fastening on block 15. Movement of the door by the check 29 breaks the circuit at 17, as indicated by the dotted lines of Fig. 5.

The machine will thus distribute individually the entire block of checks contained in the chamber 8, the checks preferably being pressed downwardly to proper position on the shelves 9 by a weight 35 placed on top of the pile. The device will commence to operate as soon as the motor is connected to the power source and will continue to function without attention until the checks have all been delivered or the source of power shut off. The chamber 8 may be of such dimensions as to accommodate a check of any desired size and tickets or sheets other than lunch checks may be dispensed if desired, it being understood that this invention is not limited to the exact details of construction herein described except as it may be defined in the following claims.

If desired, a signal, such as the bell 36 connected in the electric circuit (Fig. 5), may be provided to indicate the operation of removing a check and to furnish a warning when the supply of checks in the machine has been exhausted. The bell may be connected in any desired manner, and it will be obvious from the illustration in Fig. 5 that the bell will ring whenever the switch 17 is closed to operate the motor.

I claim:

1. A machine for automatically dispensing tickets, comprising in combination a container for holding a plurality of separate tickets in superposed relation, a door beneath the pile of tickets, said door being closed when the machine is in inoperative position, mechanism for projecting the bottom ticket of the pile from the machine to open the door and hold the door open until the ticket is manually withdrawn, an electric motor for operating the projecting mechanism, a switch in the motor circuit mounted near the door, said door being pivoted at its bottom for swinging movement in a vertical plane and having an arm rigidly connected thereto and turning on the door pivot, said arm engaging said switch when the door is closed, and having an electrical connection with the power source for the motor so that, when the arm is disconnected from the switch upon the opening of the door, the circuit is broken and the motor is stopped.

2. A machine for automatically dispensing tickets, comprising in combination a container for holding a plurality of separate tickets in superposed relation, a door beneath the pile of tickets, said door being closed when the machine is in inoperative position, mechanism for projecting the bottom ticket of the pile from the machine to open the door and hold the door open until the ticket is manually withdrawn, an electric motor for operating the projecting mechanism, a knife switch in the motor circuit mounted near the door, said door being pivoted at its bottom for swinging movement in a vertical plane and having an integral arm extending into the machine and movable about the door pivot, said arm engaging the knife switch when the door is closed and having sliding contact with said switch upon the opening of the door so that contact between the arm and switch is not broken until the door has opened a substantial degree, the said arm having an electrical connection with the power sources for the motor whereby the motor is stopped upon the breaking of said contact and is automatically started again upon the closing of said switch.

In testimony whereof I affix my signature.

CONSTANTINE G. DIMITRAKIS.