

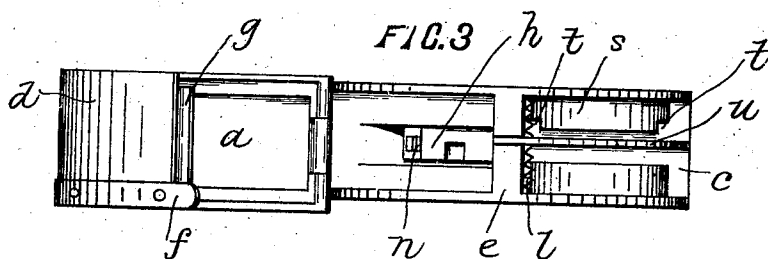
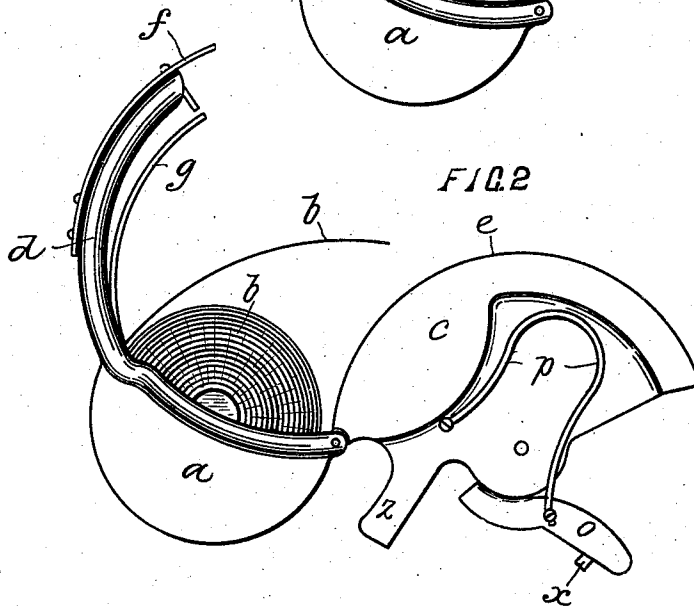
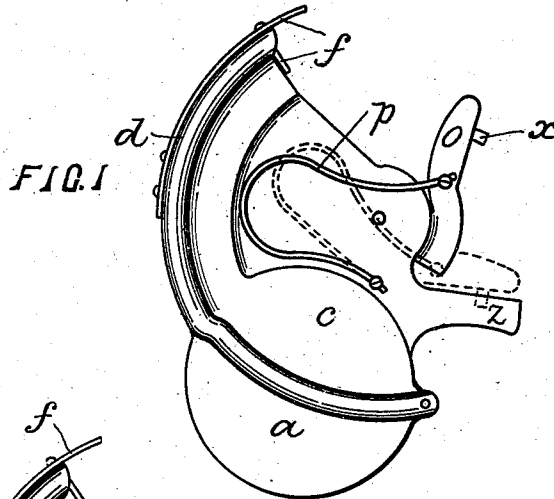
No. 857,266.

PATENTED JUNE 18, 1907.

A. E. YOUNG & E. G. KERR.
MACHINE FOR ISSUING CHECKS OR TICKETS.

APPLICATION FILED APR. 26, 1907.

2 SHEETS—SHEET 1.



WITNESSES:

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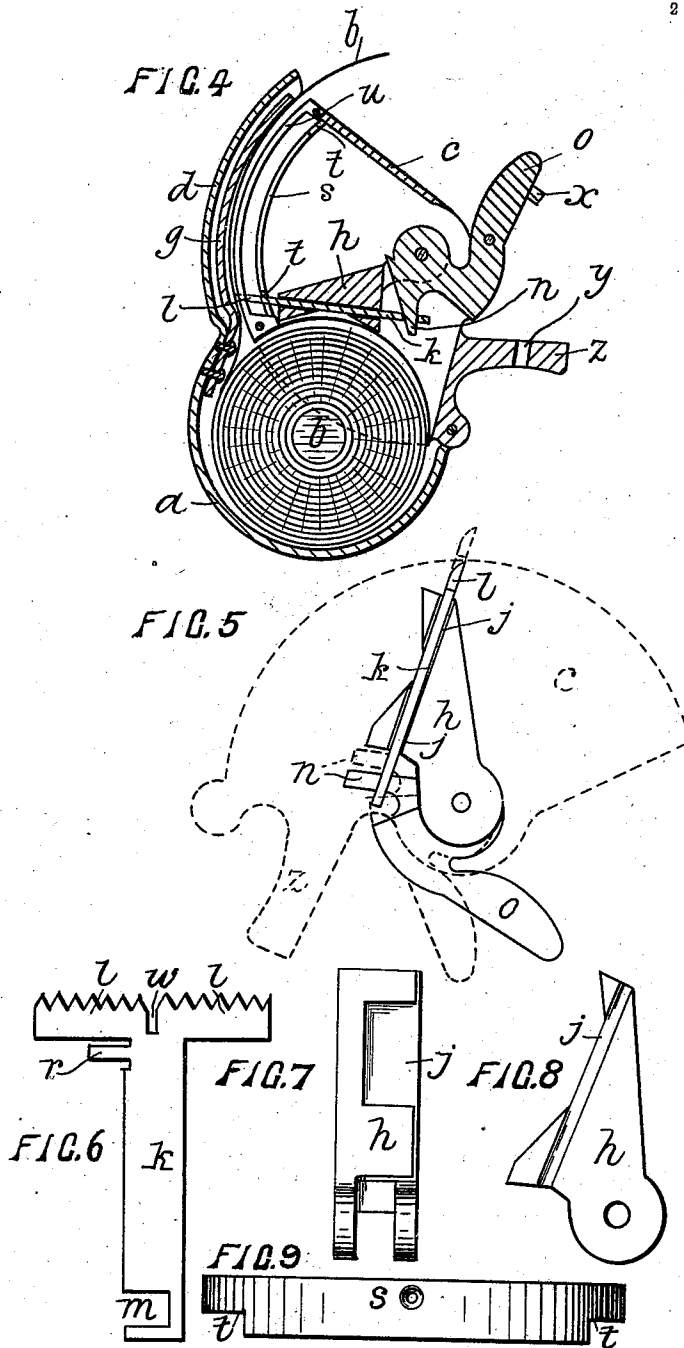
No. 857,266.

PATENTED JUNE 18, 1907.

A. E. YOUNG & E. G. KERR.
MACHINE FOR ISSUING CHECKS OR TICKETS.

APPLICATION FILED APR. 25, 1907.

2 SHEETS—SHEET 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT EDWARD YOUNG, OF CHRISTCHURCH, AND EDWARD GEORGE
KERR, OF TIMARU, NEW ZEALAND.

MACHINE FOR ISSUING CHECKS OR TICKETS.

No. 857,266.

Specification of Letters Patent.

Patented June 18, 1907.

Application filed April 25, 1907. Serial No. 370,136.

To all whom it may concern:

Be it known that we, ALBERT EDWARD YOUNG, engineer, and EDWARD GEORGE KERR, newspaper proprietor, subjects of the King of Great Britain, respectively residing at Christchurch and Timaru, New Zealand, have invented a new and useful Improved Machine for Issuing Checks or Tickets; and we do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to a machine that has been specially designed for use by tramway conductors in issuing checks or tickets to passengers in return for fares paid them. The machine may however be used for other analogous purposes, the construction thereof being modified to adapt it for different sizes or shapes of tickets. The machine designed is adapted by the depression of a thumb lever to eject from a casing a certain length of the outer end of a continuous roll of tickets, while at the same time dividing such length from the main portion by a row of perforations so that it may be torn off with ease.

In describing the invention, reference will be made to the accompanying sheets of drawings, in which:—

Figure 1 is a side elevation of the machine. Fig. 2 is a similar view but showing the machine in the open condition. Fig. 3 is a plan view of Fig. 2. Fig. 4 is a sectional elevation of the machine in the closed condition. Fig. 5 is an enlarged detail view of the perforating and ejecting mechanism. Figs. 6 to 9 are detail views of parts that will be hereinafter more fully referred to.

The machine comprises a metal casing consisting of a lower portion *a* adapted to receive and retain a continuous roll *b* of the checks or tickets, and of an upper portion *c* hinged to the portion *a* in such a manner as to open and close upon it in the manner shown in the drawings. The roll containing portion *a* is formed with an extension piece *d* that curves upward from its outer edge and against which a similarly curved face *e* upon the hinged portion *c* fits when in the closed condition. A spring tooth *f* (Figs. 1 & 2.) is provided for retaining the machine in a closed condition and to allow of it being opened when so desired.

Extending upwardly against the inside face

of the extension *d* is a flat spring plate *g*, the lower end of which is made fast while its upper end is loose and is given an inward normal springiness as shown in Fig. 2.

The perforating and ejecting mechanism is contained between the side cheeks of the hinged portion *c*. This mechanism consists of a pivoted arm *h* formed with a guide slot *j* on its underside. This arm is shown in the detail views Figs. 7 & 8 which are underneath plan and side elevation respectively. Within the slot *j* of this arm, a plate *k* fits so as to be free to slide longitudinally therein. The outer end of this plate is provided with a cross piece *l* the outer edge of which is formed with a number of sharp pointed teeth. This device is shown in detail in Fig. 6. The inner end projects beyond the inner end of the arm *h* and is formed with a recess *m* in one of its edges into which recess fits a finger *n* of a thumb lever *o* that is also pivoted between the cheeks of the casing. The thumb piece of this lever projects outside the casing and is kept normally in a raised position by means of the bowed springs *p* (Figs. 1 & 2) one of which is secured on each side of the casing, and which are adapted when the thumb lever is turned by depressing it, to raise it again. The finger piece *n* of this lever is so disposed with regard to the normal position of the lever that it shall be free from contact with the arm *h*, so that when the lever is depressed, the first portion of its movement will be independent of the arm, and as the movement continues, the finger piece will engage with the arm and carry it round with it to the limit of its movement. Then, when the lever is released the finger piece will first turn away from engagement with the arm, and will then carry the arm down with it as the lever is returned to its normal position by its springs. This limited independent movement of the lever will by reason of the engagement of its finger piece with the ends of the recessed portion in the plate *k*, cause an outward sliding movement to be imparted to such plate when the lever is first depressed, and an inward movement thereto when the lever is released. These movements of the lever and plate are indicated by the dotted lines in Fig. 5 and are for a purpose to be hereinafter referred to.

The plate *k* is provided on one of its edges,

and at a point within the cross piece *l*, with a projecting lug *r* and within the hinged portion *c* of the casing a curved guide plate *s* is fixed. This plate is shown in Figs. 3 & 4, and in detail plan view in Fig. 9 and its curve corresponds to an arc of a circle, the center of which is the pivot point of the lever *o*. When the plate *k* is in its normal position, it is adapted to pass along the inside face of this guide plate. The guide plate is, however, formed with notches *t* at each end of the edge adjacent to the plate *k*, such notches being of such a depth as to be capable of clearing the lug *r*. On the depression of the lever, and the outward movement being given the plate *k*, the lug *r* will be caused to pass out through the lower of the notches in the curved guide plate and on the movement being continued, the lug *r* will as the plate is carried up, travel along the outside face of the guide plate until it reaches the upward limit of its movement. Then, when the lever is released to allow of it returning, the lug will first be caused to pass in through the upper notch in the guide plate, so that it will, on the return movement of the plate, travel along the inner surface of the guide plate. It will thus be apparent that on the upward movement of the toothed cross piece *l*, the teeth will move in an arc of greater diameter than on the return movement.

The curved joint face *e* of the portion *c* is divided in its upper half by means of a correspondingly curved plate *u* which, when the casing is closed, engages against the face of the spring plate *g* as shown in Fig. 4. The cross piece *l* of the plate *k* is formed with a slot *w* therein, which loosely fits over the plate *u*.

In operation, the roll of tickets *b* is placed within the casing in the manner shown and its free end passed up between the spring plate *g* and the curved plate *u* of the hinged portion. When the operating lever is depressed and the toothed piece *l* is caused to move outward in the manner before described, the teeth thereof shall first puncture the ticket strip with a row of punctures and then, as the plate *k* is carried upward by the further movement of the lever, will carry the strip up with it and cause it to project out of a slot opening that is left in the casing. The projecting end may then be torn off along the line of perforations.

On the return movement of the ejecting mechanism the strip will first be freed and the toothed piece will then travel down away from contact therewith. The use of the spring plate *g* in conjunction with the lug *r* and curved guide plate *s* will insure that as the toothed piece travels up it shall retain its grip on the paper strip, while as it travels back it will be free from the strip, which strip will then be held from any back movement by the pressure between the spring plate *g* and the plate *u*.

If desired, the machine may be provided with means for punching and canceling the tickets after they are ejected, such means consisting of a punch *x* secured to the underside of the thumb lever *o* and adapted to pass into a hole *y* (Fig. 4) formed in the anvil *z* that limits the movement of the lever as shown by dotted lines in Fig. 1.

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

1. In ticket issuing machines, a casing comprising two portions hinged together, one of such portions being provided with a curved extension on one side and with a spring plate underlying such extension and being adapted to contain a roll of tickets, the other portion of the casing being formed with a curved face adapted, when the casing is closed to engage against the spring plate and curved extension of the first portion and to grip upon the free end of the ticket roll placed between them, in combination with a toothed plate carried in a pivoted arm and a lever for turning such arm, substantially as herein specified.

2. In ticket issuing machine, a casing comprising two portions hinged together one of such portions being provided with a curved extension on one side and with a spring plate underlying such extension and being adapted to contain a roll of tickets, the other portion of the casing being formed with a curved face, adapted when the casing is closed to engage against the spring plate and curved extension of the first portion and its grip upon the free end of the ticket roll placed between them in combination with an arm pivoted in the casing, a thumb lever for turning such arm, a plate slidably mounted in the arm and formed with teeth on its outer edge, and an extension of the thumb lever engaging with the inner end of the toothed plate substantially as specified.

3. In ticket issuing machines, a casing comprising two portions hinged together, one of such portions being provided with a curved extension on one side and with a spring plate underlying such extension and being adapted to contain a roll of tickets, the other portion of the casing being formed with a curved face adapted when the casing is closed, to engage against the spring plate and curved extension of the first portion and its grip upon the free end of the ticket roll placed between them, in combination with an arm pivoted in the casing, a spring controlled lever for turning such arm, a toothed plate slidably mounted in the arm, a lug projecting laterally from the plate, a curved guide plate normally overlying such lug and formed with a notch at each end in the edge adjacent to the lug, and an extension upon the thumb lever engaging with the inner end of the toothed plate, substantially as specified.

4. In ticket issuing machines, a casing adapted to contain a roll of tickets and formed with a slot or orifice therein, an arm pivoted in the casing, a plate slidably mounted in the arm provided with teeth on its outer edge, a spring controlled thumb lever pivoted in the casing, an extension on such lever engaging with the inner end of the toothed plate, such extension being so disposed and arranged that when the lever is turned, it will impart a limited longitudinal sliding movement to the plate and will then turn the arm on its pivot substantially as specified.

In testimony whereof, we have signed this specification in the presence of two subscribing witnesses.

ALBERT EDWARD YOUNG.
EDWARD GEORGE KERR.

Witnesses to the signature of Albert Edward Young:

A. D. COOK,
PERCY R. CLINNE.

Witnesses to the signature of Edward George Kerr:

M. J. O'BRIEN,
I. D. McLEOD.