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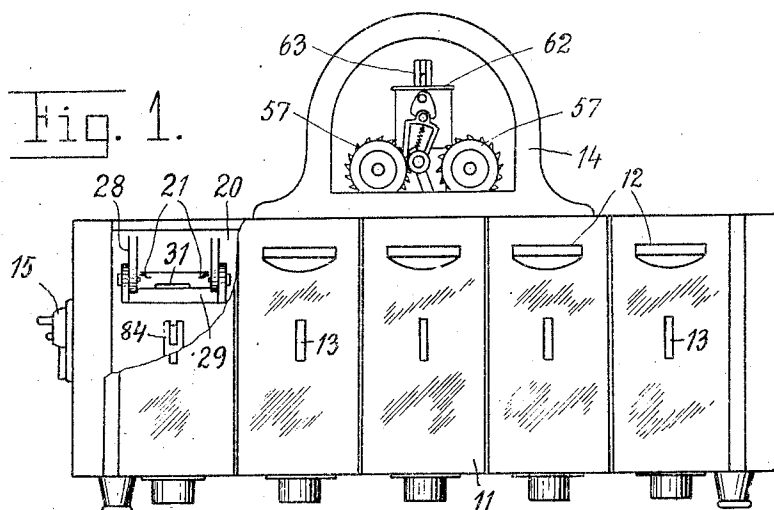
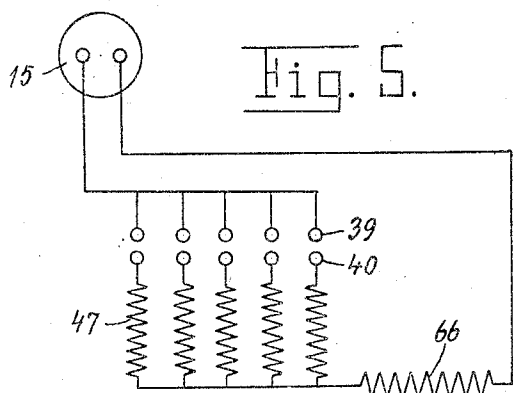
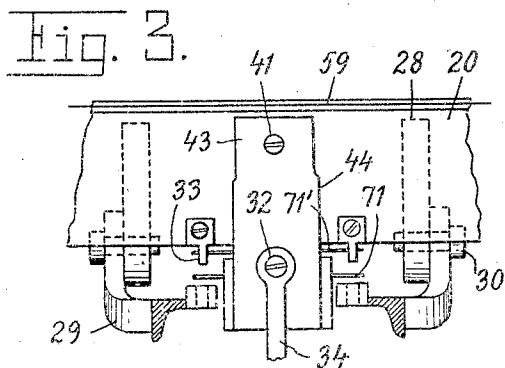
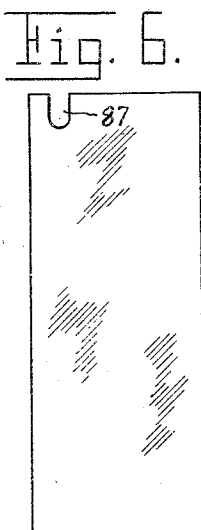
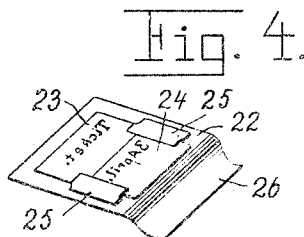
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APPARATUS FOR STAMPING OF TICKETS AND THE LIKE

Filed June 8, 1935

2 Sheets-Sheet 1



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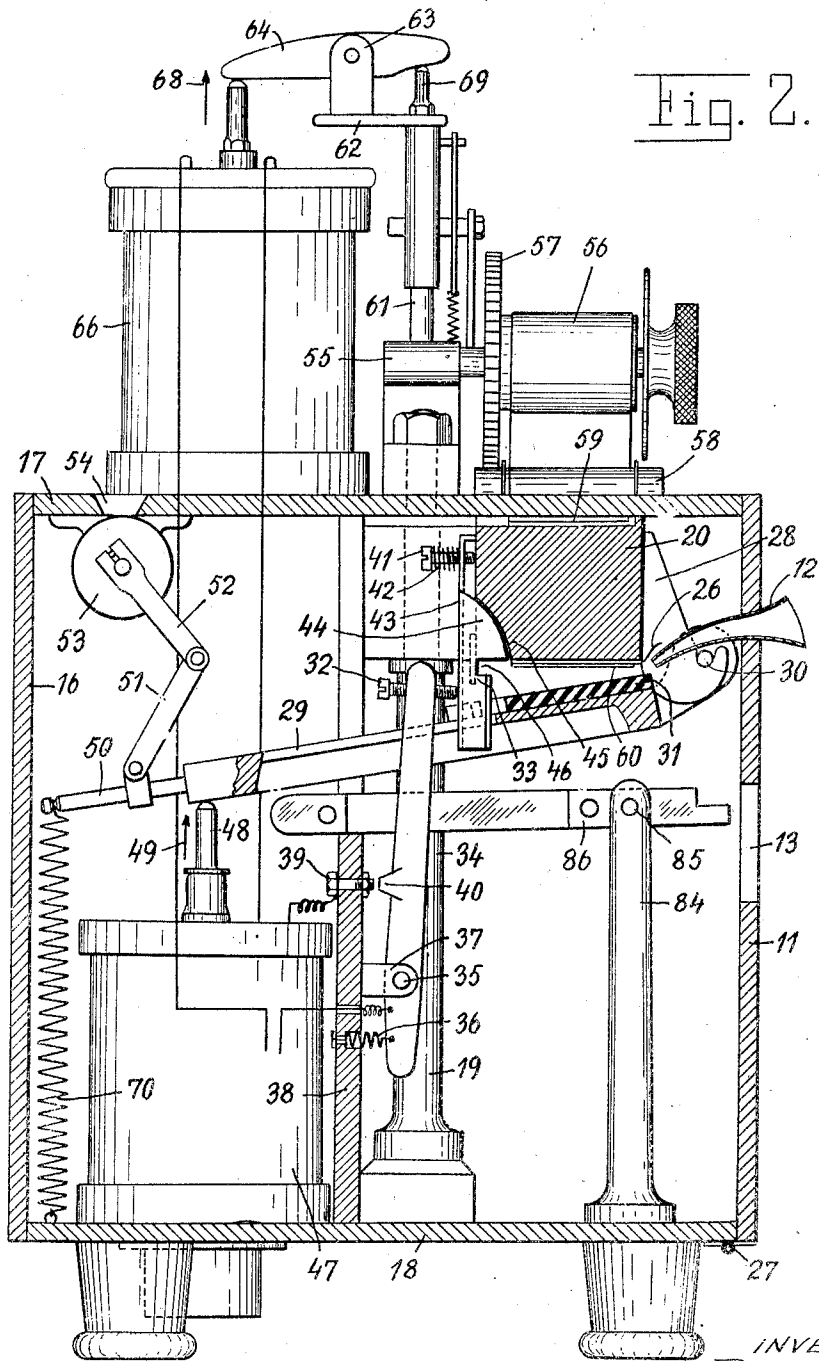
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APPARATUS FOR STAMPING OF TICKETS
AND THE LIKE

Hans Reinholdtsen, Copenhagen, Denmark

Application June 8, 1935, Serial No. 25,661
In Denmark June 8, 1934

1 Claim. (Cl. 101—69)

Generally, where tickets are sold, for instance for biograph theatres, theatres, sporting events and the like, it is difficult to control the same efficiently, in respect to their number as well as in respect to their distribution into the individual price classes. This is very unfortunate, especially because the government frequently, in the form of amusement taxes, is to have its part of the amount cashed by the sale of tickets.

The present invention relates to an electric apparatus for stamping of such tickets, and the stamping is effected under an automatically operating control, so that the apparatus will indicate directly how many tickets have been stamped, and at what prices the said tickets have been sold. The apparatus is fitted with as many stamping mechanisms as there are selling prices for the tickets, in such a manner that each ticket is stamped by the particular mechanism corresponding to the price of the ticket. Each stamping mechanism is connected to a corresponding counting device, so that the latter can indicate how many tickets of the value concerned have been stamped by the machine.

The apparatus is arranged in such a manner that the ticket, when inserted into a slot provided for the purpose, will close an electric contact, and thereby a pad of rubber or the like will press the ticket against a printing block provided in the machine and serving to imprint the lettering desired on the ticket. This printing block is exchangeable, so that the same can be replaced by another one. The printing block may be fitted with loose types so that the date can be changed from day to day. Also for free tickets a special stamping mechanism is provided, in such a manner that the apparatus will also give information about the free tickets delivered at any time.

The stamping may be effected by means of one single ink ribbon, which is inserted between the printing blocks and the pads serving to press the tickets against the printing blocks, and this ink ribbon is fed forward some distance, whenever a ticket is stamped. The forward motion of the ink ribbon is effected by means of the same electric current that performs the stamping, and when one end of the ink ribbon has been reached, its direction of motion will change automatically like in a type-writing machine.

The apparatus is arranged in such a manner that the same can also be operated by hand, if the electric current might fail, and also in this case the apparatus will control the stamped tickets perfectly.

One construction of the invention is illustrated on the drawings, in which

Fig. 1 shows the apparatus in front elevation, partly in section,

Fig. 2 a cross-section of the apparatus, to a larger scale and with the hood removed that covers the feeder mechanism for the ink ribbon,

Fig. 3 the printing device viewed from the rear,

Fig. 4 a printing block in perspective view,

Fig. 5 a wiring diagram, and

Fig. 6 a ticket.

To the front side 11 of the apparatus a number of funnels 12 are attached, one for each group of prices, and by way of the said funnels the tickets are inserted into the apparatus. Below each funnel 12 a slot 13 is provided, by way of which a handle can be inserted into the apparatus, and thereby can cause the latter to operate, if the electric current might fail. On the top of the apparatus a hood 14 is provided which encircles the ribbon-feeding and ribbon-reversing mechanism, and one side wall of the apparatus is fitted with an electric contact 15 by way of which the current from the outside can be supplied to the apparatus.

The apparatus is enclosed in a case, which besides the front wall 11 is fitted with a rear wall 16, see Fig. 2, a cover 17 and a bottom 18. The bottom supports a number of posts 19 carrying a horizontal bar 20 which extends throughout the entire length of the box. Opposite each funnel 12 a printing block 22, Fig. 4, is inserted into guides 21, see Fig. 1, the said blocks being fitted partly with fixed types 23 and partly with exchangeable types 24 adapted to be slid into two guides 25 on the printing block. The latter is fitted, at the front, with a bent flap 26 serving as a handle, and after the front wall 11 together with the funnels 12 has been swung away from the position shown in Fig. 2, by a rotation about a hinge 27, the printing blocks may be withdrawn and be replaced with other ones, or the block may be brought into position again below the bar 20 after a change of lettering on the same printing block.

To the front side of the bar 20, bearings 28 are fixed for arms 29 resting with pins 30 in these bearings. Each arm 29 is fitted with a rubber pad 31 disposed below the printing block 22 belonging to the arm.

On the rear side of the bar 20, opposite each printing block 22, an arm 43 actuated by a spring 42, is suspended by means of a screw 41, the said arm being fitted with two flaps 44 bent sideways and extending into slot-like incisions

45 in the bar 20. The flaps 44 have each an incision 46 situated directly below the exchangeable printing block.

A contact arm 34 is pivoted about a pin 35, and is actuated by a spring 36, in such a manner that the upper end thereof, which is fitted with an insulated screw 32, is constantly maintained in contact with the arm 43. The pin 35 rests in a bearing 37 on a partition 38 disposed longitudinally in the casing of the apparatus. To the said partition a contact 39 is attached, and on the arm 34 a contact 40, which by the rotation of the arm about the pin 35 can be caused to touch the contact 39.

When a ticket consisting of a piece of cardboard of the shape shown in Fig. 6 is introduced through the funnel 12, the same will slide in between the printing block 22 and the rubber pad 31. When the ticket has been inserted so far that its front edge touches the pivoted arm 43, the latter will be pressed backward by the ticket when the same is pressed slightly more inward by hand, and the arm 43 will thereby actuate the arm 34, so that the spring 36 will be tightened, and the contacts 39 and 40 will come into contact. Hereby an electric current is closed which causes the arm 29 to swing about the pins 30, as will be described, and thereby the rubber pad 31 will press the ticket upward against the printing block. At the same time the front edge of the ticket, marked with the numeral 71 in Fig. 3 and being in this position in contact with the arm 43, will be raised to the position 71', in which it is situated in the incisions 46, the result being that the contact 39, 40 will be interrupted, while the spring 36 returns the arm 34 to the position shown in Fig. 2. The arm 29 returns thereby similarly to the position shown in Fig. 2, whereas the front edge of the ticket remains hanging in the incisions 46, in which position the front edge of the ticket is in contact with two stopping pins 33 attached to the rod 20 and serving to prevent the ticket from being now pushed farther into the apparatus so as to close the contact 39, 40 once more. After the stamping is finished the ticket is withdrawn by way of the funnel 12.

Behind the partition wall 38 a row of electromagnets 47 are disposed, one for each funnel 12. From the armature of each electromagnet, a pin 48 is extending, which with its top end rests against the arm 29, and when the electromagnet 47 is supplied with current, the armature thereof is flung upward in the direction of the arrow 49 shown, and thereby the arm 29 will be swung about the pins 30 causing thus the tickets to be stamped.

The arm 29 is extended with a rod 50, which by means of guide rods 51 and 52 is connected to a counting device 53 adapted to be read through an opening 54 in the cover 17 of the apparatus. Whenever the arm 29 is swung upward, and stamps a ticket, the counting device 53 is advanced one unit, in such a manner that this counting device will show directly how many tickets have been stamped. The apparatus contains therefore as many counting devices 53 as there are stamping places or funnels 12.

A spring 70 connects the arm 50 to the bottom of the apparatus, and serves to dampen the motion of the arm 29 during the stamping.

On top of the cover 17, a post 55 is disposed, which supports two spools 56 for an ink ribbon. Each of these spools is fitted with a ratchet-wheel 57 serving to feed the ribbon forward.

Below the spools 56, guide rollers 58 are provided for the ink ribbon, and the latter is directed from the one ink-ribbon spool down below the cover 17, and thence around the bar 20 and back to the other ink-ribbon spool. In Fig. 2, 59 and 60 indicate the two sections of the ink ribbon cut by the plane of the drawings. When a ticket is pushed through a funnel 12, the same will be situated between the rubber pad 31 and the ink ribbon 60, and by the rotation of the arm 29 the rubber pad 31 will press the ticket up against the ink ribbon 60, in such a manner that the lettering of the printing block will be printed through the ink ribbon on to the ticket.

From the post 55 two vertical columns 61 are extending which at the top support a plate 62 with a bearing 63 for a two-armed lever 64. Alongside the post 55 an electromagnet 66 is provided, the armature of which is extended by means of a pin situated below one arm of the lever 64. When current is supplied to the electromagnet 66, the armature thereof is flung upward in the direction of the arrow marked 68, and thereby the lever 64 is turned. The other end of the lever depresses thereby a rod 69, which causes the ink ribbon to be fed some distance forward.

The apparatus acts in the following manner.

When a ticket to be stamped is inserted into one of the funnels 12, the ticket will strike the arm 43 provided in front of the funnel concerned, and will turn the said arm backward, and thereby the said arm will actuate the arm 34, in such a manner that the contact 39, 40 will be closed. A current, see Fig. 5, will now pass from an external source of current, by way of the contact 15, the arm 34, the contact 39, 40, the electromagnet 47, the electromagnet 66 and the contact 15 back to the source of current. The armature of the electromagnet 47 is flung upward, and thereby the arm 29 is swung about its pins 30, so that the ticket will be stamped, and at the same time the front edge of the ticket is lifted into the incisions 46, so that the arm 43 will be freed from the pressure of the ticket, and the spring 36 will break the contact 39, 40. Simultaneously with the electromagnet 47 receiving current, the electromagnet 66 was also supplied with current, so that the armature thereof was flung upward, and the ink-ribbon mechanism was turned somewhat forward.

Below each arm 29, a post 84 is disposed on the bottom of the apparatus and supports an arm 86 pivoted about a pin 85. The arm 86 is situated opposite the slots 13 in the front wall 11 of the apparatus, in such a manner that a handle can be introduced through the said slots, and thereby the arm 85 concerned can be turned about the pin 85. By this rotation the pin 86 actuates the arm 29 in such a manner that the same can be swung about its pins 30, the stamping of the ticket being thereby effected in similar manner as if the armature of the electromagnet 47 were effecting the stamping. The counting device 53 registers the stamping in the usual manner.

In order to ensure that only certain tickets adapted for the apparatus should be stamped in the same, the tickets may be given a special shape, as shown in Fig. 6, for instance with an incision disposed at the front edge of the ticket, the width or depth of the said incision being adjusted according to the machine in which the stamping is to be effected. In that case the machine should be fitted with a fixed stop in such a manner that the said stop will fit into the in-

cision 87, when the ticket has been introduced into the apparatus, and is in the position, in which the arm 43 is pressed back, and the contact 39, 40 is closed, so that the stamping can be performed. Tickets that do not have the said incision 87, or have an incision of another shape, are then unable to cause the machine to operate, as such a ticket cannot press the pivoted arm 43 to the rear.

The rubber pad 31 may be disposed in such a manner that it can be withdrawn like the printing block 22, and be replaced by another pad. This feature may be of importance, when it is desired to stamp the tickets with omission of a part of the lettering provided on the printing block, as in that case the new rubber pad may have recesses corresponding to the lettering to be omitted, so that the same cannot be stamped on the ticket.

The rubber pad 31 may also be replaced by a cubic body about a horizontal shaft, so that the pad can be swung about the latter. In that case one of the four sides of the pad, as desired, may be turned towards the printing block, and

the said sides may be fitted with recesses of various shapes, so that only certain parts of the lettering of the printing block will be imprinted on the ticket.

I claim:—

A device for the stamping of tickets and the like, comprising means forming a plurality of slot-like apertures, each of said apertures corresponding to a certain price class, a printing block in each of said apertures, a printing pad situated opposite said block, an arm adapted to be moved by the insertion of a ticket, means for closing an electrical circuit upon the movement of said arm, means actuated by the last-mentioned means for moving said printing pad toward said printing block to stamp a ticket introduced between said pad and said printing block, a horizontal bar carrying said arm, flaps carried by said arm and having incisions formed therein to catch the front edge of the ticket during the stamping, and fixed stops preventing the ticket from moving said arm upon return of said pad to the normal position.

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