

1

2,995,300

TICKET ISSUING MACHINE

Reuben H. Helsel, Long Island City, and Richard I. N. Weingart, New York, N.Y., assignors to General Register Corporation, Long Island City, N.Y., a corporation of New York

Application Sept. 18, 1956, Serial No. 611,089, which is a continuation of application Ser. No. 189,516, Oct. 11, 1950. Divided and this application Feb. 24, 1958, Ser. No. 717,005

4 Claims. (Cl. 235-145)

This invention relates to ticket issuing machines and is a division of our copending application Serial No. 611,089 filed September 18, 1956, which is a continuation of our application Serial No. 189,516 filed October 11, 1950, now abandoned.

The machine involved in the description of the present invention is of the type capable of issuing so-called Daily Double tickets and of keeping proper records of issuance. While the invention will be described with particular reference to this type of machine, it will be evident that the invention is applicable to machines for other purposes such as, for example, the issuing of transportation tickets and other types of tickets.

In the use of the so-called Daily Double machine when a contestant is scratched from a race or when there is no contestant for association with a particular key of the machine it is desirable to remove the key from operation in order to prevent the issuing of a ticket directed to non-existent contestants. Similar needs arise, for example, in the issuance of transportation tickets when, for some reason, a particular station is eliminated or the machine includes keys to which no station has been assigned. Similar needs may arise in other fields of application of ticket issuing machines.

It is, therefore, the object of the present invention to provide a key operated ticket issuing machine in which selected keys may be disabled when it is desired to remove such selected keys from operation.

It is a further object of the invention to provide releasable locking means in association with a bank of keys which, upon the release thereof, will permit any key of the bank to be disabled but which when not released will lock each of the keys into either an operative or an inoperative position.

These and other objects of the invention particularly relating to details of construction will become apparent from the following description when read in conjunction with the accompanying drawings in which:

FIGURE 1 is a fragmentary perspective view showing the upper portion of the outer casing of the machine and key bank thereof;

FIGURE 2 is a vertical section taken just behind the front casing of the machine as viewed in FIGURE 1; and

FIGURE 3 is a vertical section through the machine taken on the trace 3-3 shown in FIGURE 2.

The structure set forth in the following description represents a fragmentary portion of the structure disclosed in our above mentioned applications and, therefore, for convenience of reference, the same numerals will be employed in this application with regard to the various parts of the machine described as are employed in the above mentioned applications.

In FIGURE 1 there is shown the upper portion of a ticket issuing machine employing the present invention and including a side plate 596 locked in position by means of a lock 598 and from which a used carbon strip C issues through a slot 608. The front of the machine is provided with a removable cover plate 600 and the top of the machine is covered by a removable cover plate 604 through which printed tickets T issue from under a hinged cover 606. A first bank of keys 164 and a second bank of keys 188 extend upwardly through the machine cover

2

and are depressible to actuate the machine. The structure involved in the machine operation is fully set forth in the above noted applications and need not, therefore, be fully repeated herein. In FIGURES 2 and 3 there is shown the structure essential to an understanding of the invention claimed herein.

As previously noted, two banks of keys are provided indicated, respectively, at 164 and 188. Consistently with the description of the operation of the machine as a Daily Double machine, the first and upper set of keys 164 will be referred to as those for the first race and the bank of keys at 188 will be referred to as those for the second race.

The keys 164 are provided with stems 166 each of which is provided with a tail extension 168 and a socket 170, the socket being arranged to embrace a pin 172 on a member 174 which at its upper end is provided with a pin 176 riding in a slot 178 of the corresponding key stem. Each member 174 is provided with a pin 180 extending into a slot 182 of a corresponding lever 184, the levers 184 being pivoted on a common rod 186 extending transversely of the machine.

Each of the keys 188 is similarly provided with a stem 190 having an extended tail portion 192 and a socket 194 embracing the pin 196 on the cooperating member 198 which, at its upper end, is provided with a pin 200 arranged to slide in a slot 202 in the key stem. Each member 198 is provided with a laterally extending pin 204 engaging within a slot 206 of a corresponding lever 208, these levers being pivoted on a rod 210 extending transversely of the machine.

The members 174 and 198 extend through slots in the edges of a plate 212 which extends across the machine and each of the members 174 and 198 is provided with a pair of shallow notches engageable with the bottoms of the slots in the plate 212. The lower ends of the members 174 and 198 are in pairs connected by springs 214 which tend to hold the notches embracing the bottoms of the slots so as to provide a yielding arrangement adapted to maintain each of the members 174 and 198 temporarily in either an upper or lower position.

The key stems 166 and 190 are provided at their upper ends with inwardly directed extensions 216 which underlie a flat plate 218 extending transversely across the machine and provided with notches for clearance of the projections 216. As shown most clearly in FIGURE 2, the plate 218 is mounted for longitudinal sliding movement and is connected at its right-hand end to a pin 220 carried by the arm 222 of a lock 224. Under operating conditions, the plate 218 is locked so that its edge portions overlie the projections 216 of the keys of both banks to prevent these keys from being raised above the positions illustrated in FIGURE 3. When, however, it is desired to lock keys out of operation because they correspond, for example, to scratched contestants or bear numbers which do not correspond to contestants in the races, the plate 218 is unlocked and moved to a position in which its notches are lined up with the projections 216 of the key stems. The keys which are to be taken out of operation may then be lifted to free their notches 170 or 194 from the corresponding pins 172 and 196 and may be then dropped to lowered positions so that their projections 216 are again below the level of the plate 218 which is relocked in its original position. The result is that not only are the removed keys lowered below the others so that their inoperative condition is readily apparent, but they are rendered completely inoperable to actuate the members 174 and 198 which must be moved to effect operation. When keys are so disengaged, the ends of their key stems are located inwardly and will rest upon the plate 212 so that the keys cannot be depressed.

Pivotaly arranged between the levers 184 are rocking members 226 most clearly illustrated in FIGURE 2 which are of conventional type arranged in cooperation with each other and by reason of limited overall rocking movement to prevent the depression of more than one of the levers 184 at a time. This action, of course, carries through to the keys 164 so that no more than one may be depressed in an operation.

Levers 184 and 208 operated by the keys 164 and 188, respectively, serve to operate the machine. The manner of this operation is, as noted above, fully set forth in our above noted copending application and, thus, need not be repeated herein. The essential aspect of the present invention is the provision of the plate 218, its locking means 222, 224 and its notches permitting passage of the cooperating key stem extensions 216 only when the plate 218 is displaced to bring the notches into alignment with the extensions 216.

It will be evident that the apparatus described provides a simple and practical arrangement providing for the disabling of any one of the keys of the machine and also permitting any of the disabled keys to be readily reinstated into an operative condition. However, this disabling and restoration can be accomplished only when the plate 218 is displaced and this can occur only when the lock 124 is unlocked. Thus, keys cannot be disabled or restored to operation by unauthorized persons.

What is claimed is:

1. A ticket issuing machine comprising a casing, a set of elongated members each including a key exposed for being gripped, and for being actuated by, the fingers of the operator, a stem extending from the key into said casing, and a protuberance formed on said elongated member and disposed within said casing, means detachably engageable by the stems of said elongated members for operating said machine, said keys being depressible for axially shifting said stems thereby to actuate said machine operating means, and means for securing said keys against being withdrawn from said casing including a locking member overlying said protuberances, said locking member having a series of notches normally positioned out of registry with said protuberances and being shiftable to a position wherein said protuberances register respectively with said notches formed in said locking member whereupon said elongated members are free for being selectively partially withdrawn from said casing for disengagement of said elongated members from said machine operating means and for then being reinserted without reengagement of said elongated members with said machine operating means, said locking member being then shiftable to its initial position for securing the selected ones of the stems of said elongated members against operating engagement with said machine actuating means.

2. A ticket issuing machine comprising a casing, a set of elongated members each including a key exposed for being gripped, and for being actuated by, the fingers of the operator, a stem extending from the key into said casing, and a protuberance formed on said elongated member and disposed within said casing, means for operating said machine including means detachably engageable by the stems of said elongated members, and means attached respectively to said stems by lost motion connections, said keys being depressible for axially shifting said stems thereby to actuate said machine operating means, and means for securing said keys against being withdrawn from said casing including a locking member overlying said protuberances, said locking member having a series of notches normally positioned out of registry with said protuberances and being shiftable to a position wherein said protuberances register respectively with said notches formed in said locking member whereupon said elongated members are free for being selectively partially withdrawn from said casing for disengagement of said elongated members from said machine operating means and for then being reinserted without reengagement

of said elongated member with said machine operating means, said locking member being then shiftable to its initial position for securing the selected ones of the stems of said elongated members against operating engagement with said machine actuating means, said lost motion connections being operative for limiting the extent of said partial withdrawal of the elongated members, and for permitting reinsertion of the latter into the casing in the manner aforesaid and beyond the initial positions thereof.

3. A ticket issuing machine comprising a casing, a set of elongated members each including a key exposed for being gripped, and for being actuated by, the fingers of the operator, a stem extending from the key into said casing, and a protuberance formed on said elongated member and disposed within said casing, means for operating said machine including means detachably engageable by the stems of said elongated members, and means attached respectively to said stems by pin and slot connections, said keys being depressible for axially shifting said stems thereby to actuate said machine operating means, and means for securing said keys against being withdrawn from said casing including a locking member overlying said protuberances, said locking member having a series of notches normally positioned out of registry with said protuberances and being shiftable to a position wherein said protuberances register respectively with said notches formed in said locking member whereupon said elongated members are free for being selectively partially withdrawn from said casing for disengagement of said elongated members from said machine operating means and for then being reinserted without reengagement of said elongated member with said machine operating means, said locking member being then shiftable to its initial position for securing the selected ones of the stems of said elongated members against operating engagement with said machine actuating means, said pin and slot connections being operative for limiting the extent of said partial withdrawal of the elongated members, and for permitting reinsertion of the latter into the casing in the manner aforesaid and beyond the initial positions thereof.

4. A ticket issuing machine comprising a casing, a set of elongated members each including a key extending outwardly freely through said casing, a stem extending from the key into said casing, and a protuberance on said key and disposed within said casing, means detachably engageable by the stems of said elongated members for operating said machine, said keys being depressible for axially shifting said stems thereby to actuate said machine operating means, and means for securing said keys against being withdrawn from said casing including a locking plate having a marginal portion overlying said protuberances, said marginal plate portion having a series of notches normally positioned out of registry with said protuberances, and means mounting said plate on the inner side of said casing for planar shifting movement to a position wherein said protuberances register respectively with said notches formed in said locking plate marginal portion whereupon said elongated members are free for being selectively partially withdrawn from said casing for disengagement of said elongated members from said machine operating means, and for then being reinserted without reengagement of said elongated members with said machine operating means, said locking plate being then shiftable to its initial position for securing the selected ones of the stems of said elongated members against operating engagement with said machine actuating means.

References Cited in the file of this patent

UNITED STATES PATENTS

1,319,687	Bates	Oct. 28, 1919
1,906,063	Hilder	Apr. 25, 1933
2,345,212	Nelson	Mar. 28, 1944
2,605,967	Stone	Aug. 5, 1952