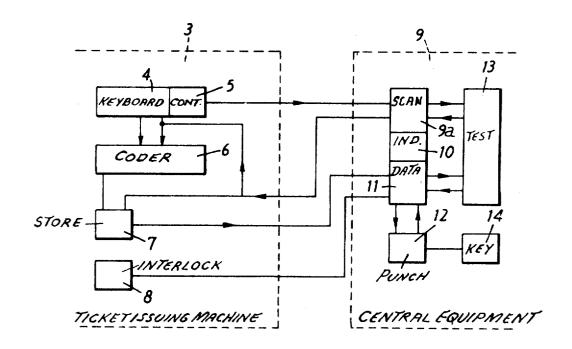
[72]	Inventor	Leslie T. J. Streets	[56]		References Cited	
		High Wycombe, England	UNITED STATES PATENTS			
[21]	Appl. No.	734,120	3,034,714	5/1962	Helsel et al.	235/92 X
[22]	Filed	June 3, 1968		-,		
1451	Patented	July 13, 1971	3,124,674	3/1964	Edwards et al	340/172.5 X
731	Assignee	Bell Punch Company Limited	3,252,149	5/1966	Weida et al	340/172.5
(73)	Massignee	• •	3,327,292	6/1967	Eriksson et al	340/172.5
		London, England				
[32]	Priority	June 7, 1967	Primary Examiner—Paul J. Henon Assistant Examiner—Sydney Chirlin Attorney—Laurence R. Brown			
[33]		Great Britain				
[31]		26243/67				
[54]	TICKET ISSUING MACHINES FOR TOTALISATOR SYSTEMS					

## SYSTEMS 12 Claims, 6 Drawing Figs. 1521 U.S. Cl. 340/172 5

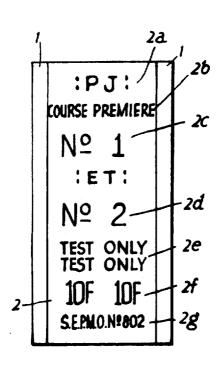
	12 Cuillis, o Drawing Figs.	
[52]	U.S. Cl	340/172.5,
		235/92
[51]	Int. Cl	G06f 15/28,
		G06f 15/28
[50]	Field of Search	340/172.5;
		235/157,92

ABSTRACT: A plurality of storing keyboard operated ticket issuing machines provide for establishing betting transactions in conjunction with central equipment which is time shared. Provisions are made for multiple betting operations such as Quinella. Special interlocks provide for retaining the keyboard status until a complete transaction is processed, and to lock out the keyboards when the race is started.



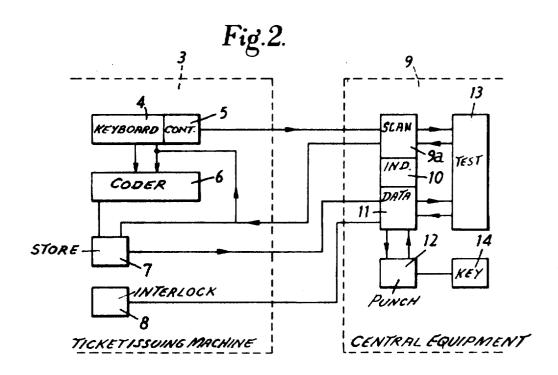
SHEET 1 OF 4

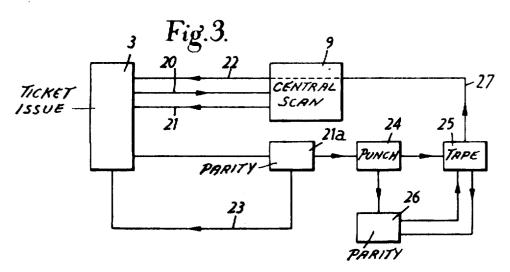
Fig.1.



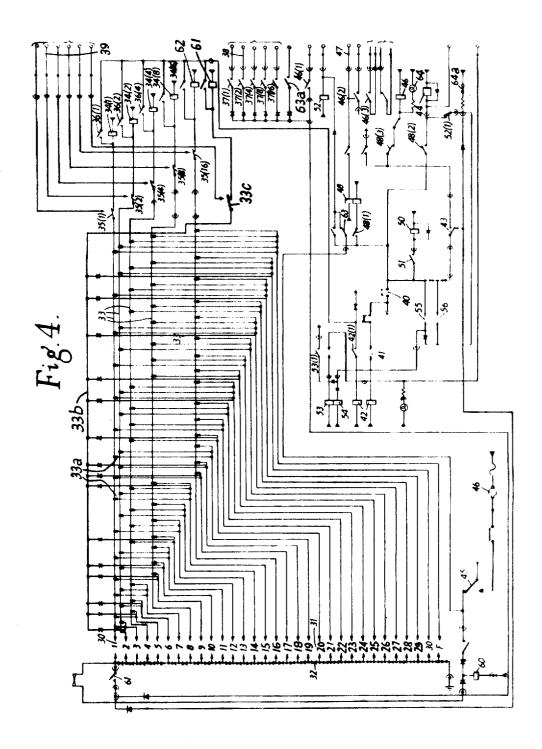
INVENTOR Leslie T. J. Streets BY

SHEET 2 OF 4

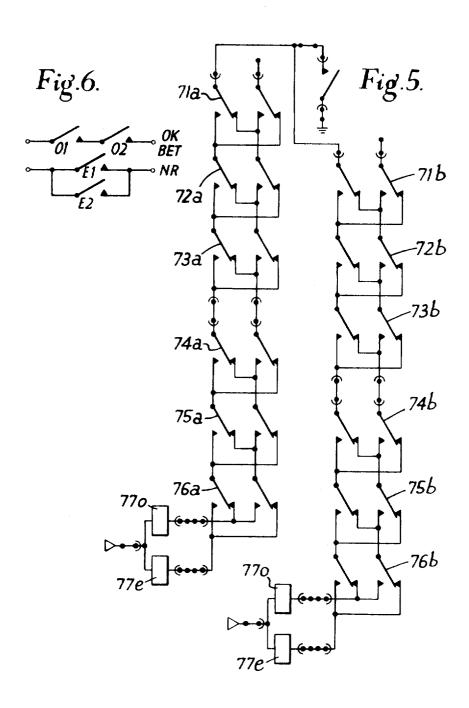




SHEET 3 OF 4



SHEET 4 OF 4



## TICKET ISSUING MACHINES FOR TOTALISATOR SYSTEMS

This invention has reference to ticket issuing machines for totalizator systems and to totalizator systems embodying such 5 ticket issuing machines.

Totalizator systems are installed for example on race courses to enable betting transactions to be effected. These systems include a totalizator central mechanism and a plurality of ticket issuing machines with interconnecting electric cir- 10 cuits between the central mechanism and each ticket issuing machine. The ticket issuing machines are disposed at a plurality of different locations, for example in a number of booths and each ticket issuing machine is arranged to issue a ticket on which is printed details of the bet transacted. In the Specification of our British Pat. No. 868,489 there is described a ticket issuing machine which prints a ticket bearing data related to a combination of two contestants in a single race in two separate phases, issuance of the ticket taking place after the second printing phase is completed. Such a ticket issuing machine is useful in recording forecast bets, that is to say, bets in which it is required that the winner and second runner shall be forecast in the correct order. Furthermore, the machine is useful to record Quinella bets; that is to say, a bet in which the winner and second runner are forecast in any order. Furthermore it can also record field bets, which are bets in which a single runner is selected and this runner is coupled with all the other runners in a forecast event. In such a machine it is required that details of a selected first runner shall be set up in the 30 ticket issuing machine so that this information may be stored. so that these details have been passed to the central equipment when the equipment is ready to receive the information. It is also required that details of the other runner and/or other information relating to that bet have also been passed to the 35central equipment before a ticket is issued to make best use of the time of the control equipment.

It is therefore an object of the present invention to provide an improved ticket issuing machine with provision for storing information and passing such information to the central con- 40 trol mechanism as is required.

It is another object of the invention to provide a totalizator system in which a ticket is not issued until details of the bet have been recorded in the central equipment.

According to one aspect of the present invention a ticket is- 45 suing machine comprises a keyboard; a printing device operable under the control of the keyboard to print on a ticket details of two selections made; ticket details of the first selection made; means to call a central equipment and when the central equipment is available to transmit details of the first 50 and second selections made to the central equipment; and means to delay operation of the printing device until the details of the two selections have been recorded on the central equipment.

totalizator system comprises a plurality of ticket issuing machines and a central equipment; each ticket issuing machine having a keyboard and a printing device operable under the control of the keyboard to print details of two selections made; means to issue the printed ticket and means to call 60 3 of the drawings, the ticket issuing machine is shown at 3 and the central equipment; the central equipment having scanning means to scan the ticket issuing machines; means to sense when a call has been received from a ticket issuing machine; means to record details of the selections made and transmitted from a selected ticket issuing machine; and means to delay 65 completion of the printing operation by the printing device until details of the two selections have been recorded at the central equipment.

The invention will now be described by way of example with reference to the accompanying drawings, where:

FIG. 1 is a view of a ticket issued by the machine;

FIG. 2 is a block diagram showing a ticket issuing machine and control equipment;

FIG. 3 is a diagram illustrating the sequence of operation of the totalizator system:

FIG. 4 is a diagram of the electrical circuit of the ticket issuing machine, and

FIGS. 5 & 6 are electrical circuit diagrams of a safety circuit embodied in the machine.

Referring to FIG. 1 of the drawings, there is shown a ticket issued by the machine. This ticket includes a pair of marginal portions 1, in which may be printed advertising or descriptive matter. The middle part of the ticket is divided up into areas 2. The first area 2a contains a code related to the type of bet to be laid, the second area 2b relates to the number of the race on which the bet is to be laid and further areas 2c, 2d provides areas in which the numbers of the selected runners are printed. The area 2c is arranged to contain information as to the kind of ticket being issued or may refer to the daily code. Thus, as shown, it may be implied that the ticket is being issued as a test; alternatively information may be printed thereon to indicate the date of the bet being transacted. A further area 2f is used to indicate the value of the bet being recorded. The area 2g may contain a code number, for example the number of the ticket machine issuing the ticket or it may contain a serial number printed on the ticket.

Referring to FIG. 2 there is shown in block form a representation of the ticket issuing machine and also in block form a representation of the central equipment. It will be apparent that each central equipment is associated with a plurality of, say 20, ticket issuing machines which are connected in parallel and which are scanned in sequence. The ticket issuing machine 3 includes a keyboard 4 which is connected to a control circuit 5 arranged to pass a signal to the central equipment 9 to ensure that details of a bet are ready to be recorded at the central equipment. A connection is also made from the keyboard 4 to a coding circuit 6 to convert the number of the key selected (and hence the number of the runner) into binary form and this binary circuit has two outputs, first to a first selection store 7 and to the central equipment 9. There is also a connection from the first selection store 7 to the central equipment. A return connection is also made from the central equipment to the first selection store 7 and from the second selection connection to the central equipment. This is arranged so that details of a second selection made can be recorded in the central equipment 9. A further connection is made from the central equipment 9 to interlock 8 in the ticket issuing machine to give permission to the ticket issuing machine to complete the printing and issuing of the ticket so that the ticket bears details of the bet recorded when the bet is recorded at the central equipment.

The central equipment includes a machine scanning circuit 9a, indication and control panels 10, as well as data processing circuits 11. The machine scanning circuit 9a is connected to the first selection store 7 and the binary circuit 6 and also receives applications for acceptance signals from the keys. The other connections are made to and from the data processing circuits. The central equipment also includes a According to another aspect of the present invention a 55 tape punch unit 12 connected to the data processing circuit 11 as well as testing circuits 13. A manual tape punch control 14 is connected to the tape punch unit 12, for example to enable the tape for punching to be located in the machine.

Referring to the sequence of operation as illustrated in FIG. this is connected to the machine scanning circuit 9 in the central equipment which circuit scans the ticket machines in turn to ascertain whether the ticket issuing machine requires to record details of the bet to be transacted. When it is required to record a bet the ticket issuing machine sends out a signal indicated at 20 to the ticket issuing machine scanner 9. When the scanner senses that this signal has been received it sends out an acceptance signal 21 to the ticket issuing machine so that the ticket issuing machine can transmit details of the bet 70 to be transacted. Details of the bet accepted are passed along the line 21 to a parity check circuit 21a which checks details of the bet with known information. For example, it checks if a bet is not allowable because it is laid on a nonrunner. If in fact a bet is laid on a nonrunner a signal will be sent out along the 75 line 23 to invalidate the bet. If the bet is not void the signal is

3

sent to the punch operate circuits 24 and these punch operate circuits send a signal to the tape punch 25 to set up the tape punch 25 to punch the details of the bet laid in binary code. The tape punch in turn sends out a signal to the odds and evens parity check circuit 26. A signal is also sent to the parity checking circuit 26 from the punch operate circuit 24 so that if there is any discrepancy between these two signals received. the tape punch is not allowed to operate. In such a case a nonoperate signal is sent to the tape punch. When details of the bet have been set up on the tape punch 25 a signal is 10 passed along a line 27 to the mechanism 8 in the ticket issuing machine giving the ticket issuing machine permission to complete the printing of the ticket.

Referring to FIG. 4 of the drawings, there is shown a bank of switches 30. Each of these switches 30 is associated with a respective key of the keyboard 4 of the ticket issuing machine 3. As shown, there are 30 switches 1-30 and each switch represents the number of a runner in a field of runners. The bank of keys is in two parts and includes a first set of contacts 20 31, a selected one of which is closed when a respective key is depressed and a second series of contacts 32, a selected one of which is opened when the respective key is depressed. Thus, on depression of a key representing the runner 6, the switch 31 associated with the sixth key 6 is closed and the switch 32 25 associated with the sixth key 6 is open. The switches 32 are connected in series and connected in the circuit of a relay 60 to be hereinafter described.

Each switch of the bank of switches 31 is connected to one or more binary code lines 33 through diodes 33a so arranged 30 that depression of one of the keys 30 will cause a signal to be passed along one or more of the lines 33 representative of the number of that key in binary code. Thus, the first binary code line of the binary code switch 33 represents the number 1, the second binary code line represents the number 2, the third bi- 35 nary code line represents the number 4, the fourth binary code line represents the number 8 and the fifth binary code line represents the number 16. Thus, for example, if the key 13 is depressed this key causes a circuit to be made to the line representing the number 13 and through this line to the first 40binary code line of the binary circuit representing the number 1 to the third binary code line representing the number 4 and the fourth binary code line of the binary circuit representing the number 8. These three numbers, 1, 4 and 8 added up enumerate the number 13. The binary code lines 33 are each connected to a respective relay 34 through a respective changeover switch 35 and each relay 34 has associated with it a respective holdon switch 36 so arranged that when the appropriate relay is energized the holdon circuit is made. The relays 34 also close respective switches 37 connected in the first leg lines 38. These first leg lines 38 are connected to the totalizator central equipment.

The Switches 35 in the first position as shown make a connection between the binary code lines 33 and the relays 34. In  $_{55}$ their other positions they make an appropriate connection to the second leg lines 39. The switches 35 are operated by a relay 42 to be hereinafter described.

In addition to the keys 30 representing the runners 1-30 there is also included an additional key F representing all the 60runners the field and related to a 'field bet.' This F Key is connected to all five of the binary code lines 33 and hence to each of the relays 34.

A parity check binary circuit line 33b is included and is connected to selected contacts of the switches 30. The selected 65 contacts are those whose numbers have an even number of positive binary connections (sometimes referred to as "-MARKS" to differentiate from spaces). Thus the contacts representing the numbers 1 and 2 (which are represented respectively by positive connections to the single lines 70 representing the numbers 1 and 2 respectively) and which have only a single positive binary connections and not connected to the line 33b. On the other hand the contacts representing the number 3 (which is represented by positive connections to the line representing the numbers 1 and 2 and 75 be validated.

hence have an even number of positive connections) is connected to the line 33b. Similarly the contacts representing the numbers 5, 6, 9, 10, 12, 15, 17, 18, 20, 23, 24, 27, 29, 30

(each having either two or four positive binary connections) are each connected to the line 33b.

The line 33b is connected to relay contacts 33(c) which contacts are also operated by the relay 42. The first relay contact 33c is connected to a relay 61 with a holdon contact 62. This relay 61 has a pair of contacts 63a in the first leg lines 38. The second relay contact 33c is connected to one of the second leg lines 39.

A parity check circuit is included in the central equipment 9 in that the binary code lines have connections from their even number positive binary connections to a check line.

This circuit is shown in FIGS. 5 and 6. Referring to FIG. 5, each of the first leg lines 38 to be connected to a respective relay and each relay has corresponding sets of contacts operated by that relay. Thus the first line of the first leg lines 38 operates the set contacts 71a, the second line operates the set of contacts 72a etcetera up to the sixth line of the first leg lines 38 which operates the set of contacts 76a. Similarly each of the second leg lines 39 is connected to a respective relay and each relay actuates a corresponding bet of electrical contacts. Thus the first line operates a pair of contacts 71b, the second line operates a pair of contacts 72b etcetera with the sixth line operating the contacts 76b. Each set of contacts 71a-76a and 71b-76b consist of two moveable contacts each connected alternatively between two fixed contacts. The normally engaged contact of one part of each set is connected to the normally disengaged contact of the other part of the set. Similarly the other engaged contact of the other part of the set is connected to the normally disengaged contact of the one part. The connection from the two connections of each pair of contacts is connected respectively to a moving contact of the next pair of contacts, actuated by the next line of the leg lines 38 or 39. Thus the respective fixed pairs of contacts of the set of contacts 71a are connected to the moveable contacts of the set of contacts 72a.

The pairs of fixed contacts of the set of contacts 76a are connected to a respective relay of a pair of relays 77c and 77e. Similarly the pairs of fixed contacts of the set of contacts 76b are connected to a respective relay of a pair of relays 78c and 77e.

The contacts 76a, 76b are actuated by a respective relay connected to the sixth line of the first leg lines 38 and second leg lines 39 respectively, and this sixth line is connected from the line 33b. It will be apparent that if an odd pair of positive binary connections are made to the first five lines of the leg lines 38 or 39 no connection is made to the sixth line. On the other hand if an even pair of positive connections are made to the first five lines of the leg lines 38 or 39 a positive connection is made to the sixth line. The contacts 71a to 75a and 71b to 75b are connected in the circuit in such a way with the respective contacts 76a, 76b so that if the contacts 76a are even when the contacts 71a to 75a are even a circuit is made to the relay 77c. If the contacts 76a are odd when the contacts 71a to 75a are odd a circuit is also made to the relay 77c. On the other hand if the contacts 76a disagree with the contacts 71a to 75b the relay 77e will operate likewise if the contacts 76b agree with the contacts 71b to 75b the relay 77e will operate whereas if the contacts 76b disagree with the contacts 71b to 75b the relay 77e will operate. If the totalizator system is operating properly the contacts 76a, 76b will agree with the contacts 71a to 75a or 71b to 75b respectively. However if there is a short circuit or a break in one of the leg lines 38, 39 this will cause the relay 77e to operate at some conditions of the switches 30. As shown in FIG. 6 the contacts 01 and 02 of the relays 77e are connected in series with the O.K. BAT circuit and the contacts E1, E2 of the relays 77e are connected in parallel with a NonRunner Relay. This will cause the nonrunner circuit in the Totalizator system to be operated when a fault in the electrical system is detected, and cause a bet not to

A switch 40 is closed when any of the keys of the keyboard 3 associated with one of the switches 30 is depressed. The switch 40 is connected in series with a microswitch 41 connected to the printing mechanism of the ticket printing machine which is only closed in the first printing cycle. That is to say, during the printing operation when details of the first selection is printed on the ticket. The relay 42 (shown in two parts in the drawings) is connected in series with the switches 40, 41 so that it will be energized only during the first printing cycle operation if this relay changes over the contacts 35 and 33c. Also connected in this circuit is a change over switch 43 which is also operated by the relay 42 to change over after one revolution of the printing machine. One of the contacts of this switch 43 is connected to the starter magnet 44 which effects the operation of the switch 45 to start the setter 46 and effect one revolution of the motor to effect the printing of the details of the first selected runner and certain other information. The printing mechanism is more fully described in the Specification of our U.S. Pat. No. 868469. Switches 19 and 41 are also 20 connected in a circuit to the relay 46 which has contacts 46 (1), 46(2), 46(3). The contacts 46(2) are connected in line to the totalizator control equipment and this serves to pass a signal to the totalizator control equipment to make application to the central equipment to record a bet, details of which 25 are also being recorded by the ticket issuing machine. A second contact 46(1) is connected in a line to the central equipment so as to be ready to receive the signal from the central equipment to the effect that a signal has been accepted and is ready to receive details of the bet transacted. When this 30 signal is received along the line 46(1) the signal is passed through the selected contacts of the switch 37 to the first leg lines 38 depending on which of the relays 36 have been closed in dependence on the number of the first runner selected. Thereby, a signal is sent out along the first leg lines 38. A 35 check signal is also sent along the line 33b to the contacts 33cand to the relay 61 which closes a holdon contact 61 and another contact 63a (if appropriate) to make a circuit in the last line of the first leg lines 38. Thus, if a runner No. 13 has been selected the switches 37(1) representing 1, 37(4) representing 4 and 47(8) representing 8 are closed so that a signal representing the number 13 is passed along the lines 38. No signal is sent along the check circuit line of the first leg lines 33. The keys of the keyboard 3 when selected are latched down and means are provided to release these keys when 45 details of the runners selected have been recorded in the central equipment. When details of the first runner have been recorded, details of the second runner are set up by depressing the appropriate number on the keyboard 30 and because the switches 35 have been changed over by the relay 42, this serves to effect the passage of the signals along the lines 39 in dependence with the second key depressed, by the second selection on the keyboard 30. A relay 48 is included to be operated when details of the first and second runners have 55 been recorded at the central equipment, by having a signal passed along line 47 to the said relay 48 which is then operated. Operation of the relay 48 closes the contacts 48(1), 48(2) and opens the contact 48(3). Contact 48(1) serves as a hold on the connection for the relay 48 and the switch 48(2) 60 causes a connection to be made to the starting magnet 44 to operate the motor 46 and effect a second printing of the ticket so that details of the second runner as well as the other remaining details, can be printed on the ticket. It will be noted that this operation does not take effect until the return pulse 65 has been returned from the central equipment indicating that details of the bet transaction have already been recorded at the central equipment. The relay 50 is operated by the closure of the contact 51 of the relay 52. This relay 52 is connected in circuit from the central equipment through which a signal is 70 supplied when a runner is selected which is a nonrunner for a particular race selected. Thus, if the Number 13 is selected by operation of the keyboard and there is no runner in that particular race for the number 13, the signal will be sent along the line to the relay 52. A further relay 53 is provided to receive 75 the generating means comprises a diode matrix.

pulses from the central equipment when the race is declared under starters orders. This relay constitutes an opposed coil to the relay 54 connected in series with the contacts 55 of a void key and in series with contacts 56 of a test 'ey. Thus, if a first runner is selected before the race starts without a second runner having been selected, the machine will not be permitted to operate further until the voic key is depressed and a void ticket issued.

A relay 60 is included to operate in the case where one of the keys 32 has inadvertently become joinmed. If this were to happen there would be an incorrect signal applied to the lines 38 or 39. If one of the keys is jammed down the appropriate contact 32 would be opened and this would operate the relay 60 to operate the contact 61 as well as to open the contact 63. Operation of the contact 63 would cause the relay (which is operated when a nonrunner is selected) to be operated and by this means the bet is declared void and the machine will not operate further until the void key is depressed and the void ticket issued. A lamp 64 in parallel with the relay 46 will be lit at the time when the central equipment has been called but has not yet answered. Likewise a different colored lamp 64 is lit during operation of the starting magnet, that is to say during issuance of a ticket.

Certain other safeguards are included in the machine. For example, a sensing switch is incorporated to operate in conjunction with the paper supply so that the machine will not operate when there is no paper available for printing in the ticket issuing machine.

I claim:

1. A totalizator system including central equipment and a plurality of ticket issuing machines each comprising a keyboard, a printing device operable under the control of the keyboard with a mechanism to print on a ticket details of two selections made, ticket issuing means to issue the printed ticket, means storing the first selection of the bet at the ticket issuing machine, means to call said central equipment in response to completion of said two selections, means to transmit details of first and second selections of a bet made from said keyboard to the central equipment at one time as a combined two bet combination signal when the central equipment is available, and means to delay completion of the printing of the second bet on the ticket until said combination signal has been processed by said central equipment.

2 A totalizator system as defined in claim 1 including indicating means controllable by said central equipment to incicate to the ticket issuing machine that an invalid first or second selection has been transmitted to and rejected by the central equipment, means controlled by the indicating means to allow the operation of the printing mechanism to issue an invalid ticket printed with an invalid first selection, means to operate the printing mechanism to print the second selection onto the ticket if the first and second selections transmitted to the entral equipment are valid, and means to issue the ticket printed with the first and second selections when the second selection is printed thereon.

3. A ticket issuing machine according to claim 1, wherein the ticket issuing machine comprises first leg lines from the storage means for transmission of the stored first selection to the central equipment and second leg lines for transmission of the second selection to the central equipment from said keyboard.

4. A ticket issuing machine according to claim 3, wherein the ticket issuing machine further comprises control means to connect alternately the first leg lines to the storage means for transmission of the stored first selection and the second leg lines to the keyboard for transmission of the second selection.

5. A ticket issuing machine according to claim 4, wherein the ticket issuing machine further comprises means to convert a selection at said keyboard into binary code signals and means to generate a parity check signal which is transmitted with the binary code signals to the central equipment.

6. A ticket issuing machine according to claim 5, wherein the converting means comprises a diode matrix, and wherein

7. A totalizator system of the type wherein a central equipment is connected with a plurality of ticket issuing machines, wherein each ticket issuing machine has a keyboard to make a selection from a plurality of selections, a printing mechanism for printing onto a ticket a first selection, means for storing the first selection, means to indicate to the central equipment that a first selection and a second selection have been made, means operable by the central equipment to transmit the first selection and the second selection thereto, indicating means controllable by the central equipment to indicate to the ticket is- 10 suing machine that an invalid first selection or second selection has been transmitted to and rejected by the central equipment, means controlled by the indicating means to allow the operation of the printing mechanism to issue an invalid ticket printed with an invalid first selection, means to operate the 15 printing mechanism to print the second selection onto the ticket if the first and second selections transmitted to the central equipment are valid and means to issue the ticket printed with the first and second selections, when the second selection has been printed thereon; and wherein the central equipment has means to scan sequentially the ticket issuing machines for indication that a first and second selection has been made, means to receive an indicated made selection from a scanned one of said ticket issuing machine means to check the made selection transmitted from the scanned ticket issuing machine and to operate the indicating means of the scanned ticket issuing machine if an invalid selection has been transmitted, means to record details of a valid first selection and second selection and means to operate the printing mechanism of the scanned ticket issuing machine and to issue a ticket with the first and second selections printed thereon, when the recording means has recorded details of the first and second selections.

8. A totalizator system according to claim 7, wherein the ticket issuing machine further comprises first leg lines associated with the storage means for transmission of the stored first selection to the central equipment and second leg lines for transmission of the second selection to the central equipment.

9. A totalizator system according to claim 8, wherein the ticket issuing machine further comprises control means to connect alternately the first leg lines to the storage means for transmission of the stored first selection and the second leg lines to the keyboard for transmission of the second selection.

10. A totalizator system according to claim 9, wherein the ticket issuing machine further comprises means to convert a selection made at said keyboard into binary code signals and means to generate a parity check signal which is transmitted with the binary code signals; and wherein the checking means of the central equipment has a parity checking circuit for operating the invalidating circuit of the ticket issuing machine if the binary code signals and parity check signal are not compatible and for transmitting the binary code signals to the recording circuit if the binary code and parity check signals 55 are compatible.

11. A totalizator system according to claim 10, wherein the means to convert a selection into binary code signals comprises a diode matrix whose inputs are connected to the keyboard of the ticket issuing machine and whose outputs are connected to the control means to connect alternately the first

leg lines and the second leg lines; and wherein the means to generate a parity check signal comprises a diode matrix whose inputs are connected to the keyboard of the ticket issuing machine and whose output is connected to the control means to connect alternately the first leg lines and the second leg lines to form a line therein; constructed so that when a selection is converted into binary code signals on an even number of matrix output lines, the parity check circuit matrix generates an output signal; and when a made selection is converted into binary code signal on an odd number of matrix output lines, the parity check circuit matrix does not generate an output signal.

12. A totalizator system according to claim 11, wherein the parity check circuit comprises a plurality of relays with sole-noids, the solenoid of a relay being connected in series with the first and second leg lines respectively, each relay having two changeover switches, the two changeover switches of the relays connected to the same leg line and being connected in parallel with noncorresponding contacts of the two chan-20 geover switches being connected together and the two changeover switches of the relays of the same leg lines with corresponding contacts of adjacent two changeover switches being connected in series, a pair of first relays having their solenoids connected in parallel with a first source of electric 25 potential and connected in series with corresponding changeover switches of the series connected changeover switches of the relays connected to the first leg lines and connected to a second source of electric potential, one of the pair of first relays having a normally open switch connected by a line to 30 the invalidating circuit of the ticket issuing machine, the other of the pair of first relays having a normally open switch connected by a line to the recording circuits of the central equipment, a pair of second relays having their solenoids connected in parallel with the first source of electric potential and connected in series through the corresponding changeover switches of the series with corresponding series-connected changeover switches connected to the second leg lines to a second source of electric potential, one of the pair of second relays having a normally open switch connected in parallel 40 with the other normally open switch connected to the line to the invalidating circuit of the ticket issuing machine, the other of the pair of second relays having a normally open switch connected in series with the other normally open switch connected to the line to the recording circuit of the central equipment; whereby, when the parity check signal in the first and second leg lines is compatible with the corresponding binary code signals, the contacts of an odd number of the series-connected changeover switches are changed to make a circuit which operates the one relays of the first and second relays to close the corresponding switches so to make a circuit to permit transmission of the binary code signals to the recording circuit of the central equipment; and whereby, when a parity check signal and the corresponding binary code signals in at least one leg line are not compatible the contacts of an even number of the series-connected changeover switches connected to the corresponding leg line are changed to make a circuit which operates the corresponding other relay of the pairs of relays to close the corresponding switch so as to make a circuit to transmit a signal to the invalidating circuit of the 60 ticket issuing machine.

65