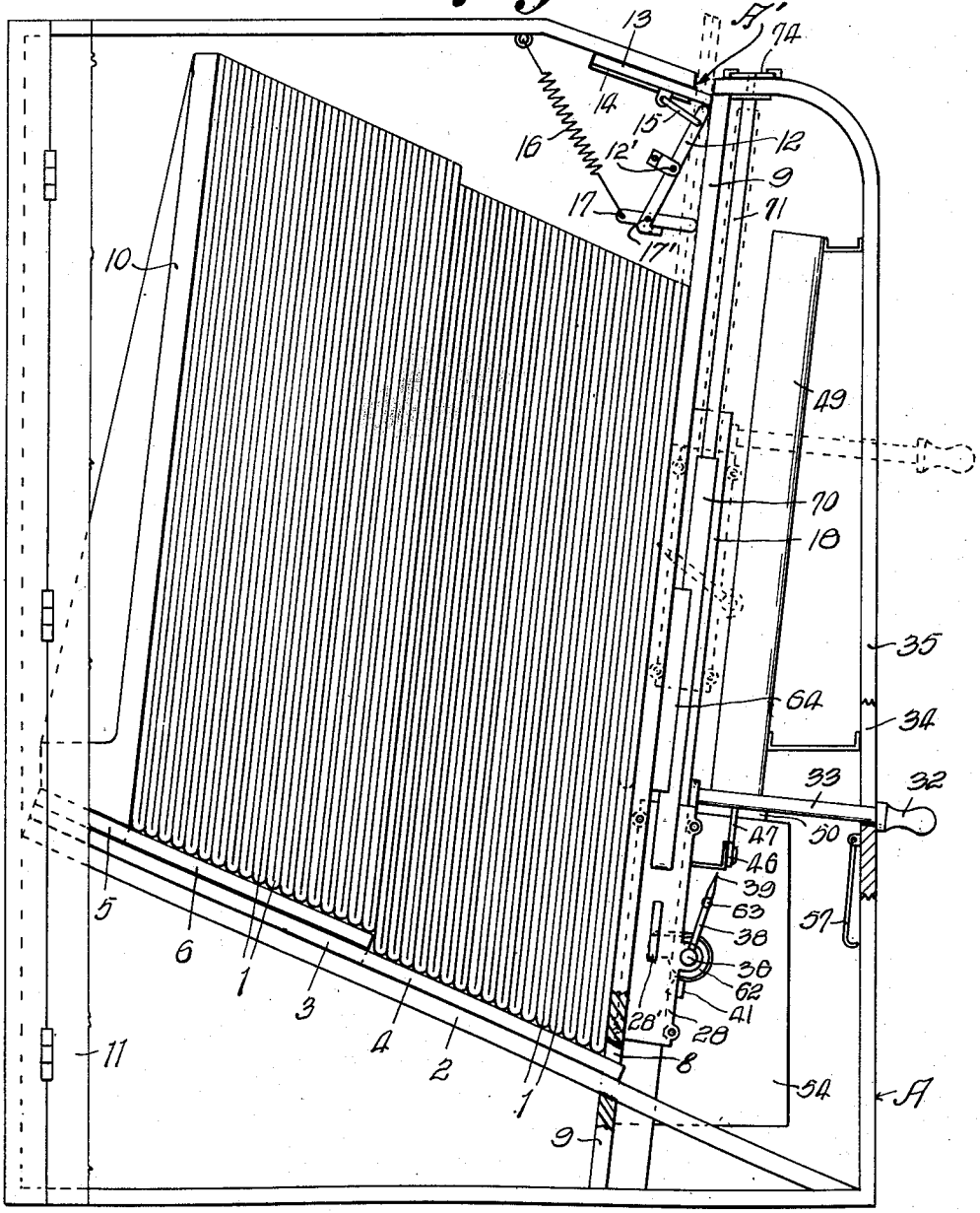
March 26, 1940. T. L. HEATON 2,195,305

COIN CONTROLLED VENDING AND CHANGE MAKING MACHINE

Filed Aug. 27, 1937 5 Sheets-Sheet 1

Fig. 1.



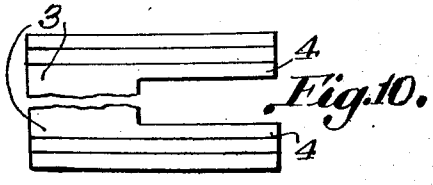


Fig. 10.

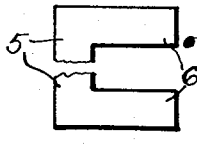


Fig. 11.

INVENTOR.
T. L. Heaton.
BY
Fredk Pierson
ATTORNEY

March 26, 1940. T. L. HEATON 2,195,305

COIN CONTROLLED VENDING AND CHANGE MAKING MACHINE

Filed Aug. 27, 1937 5 Sheets-Sheet 2

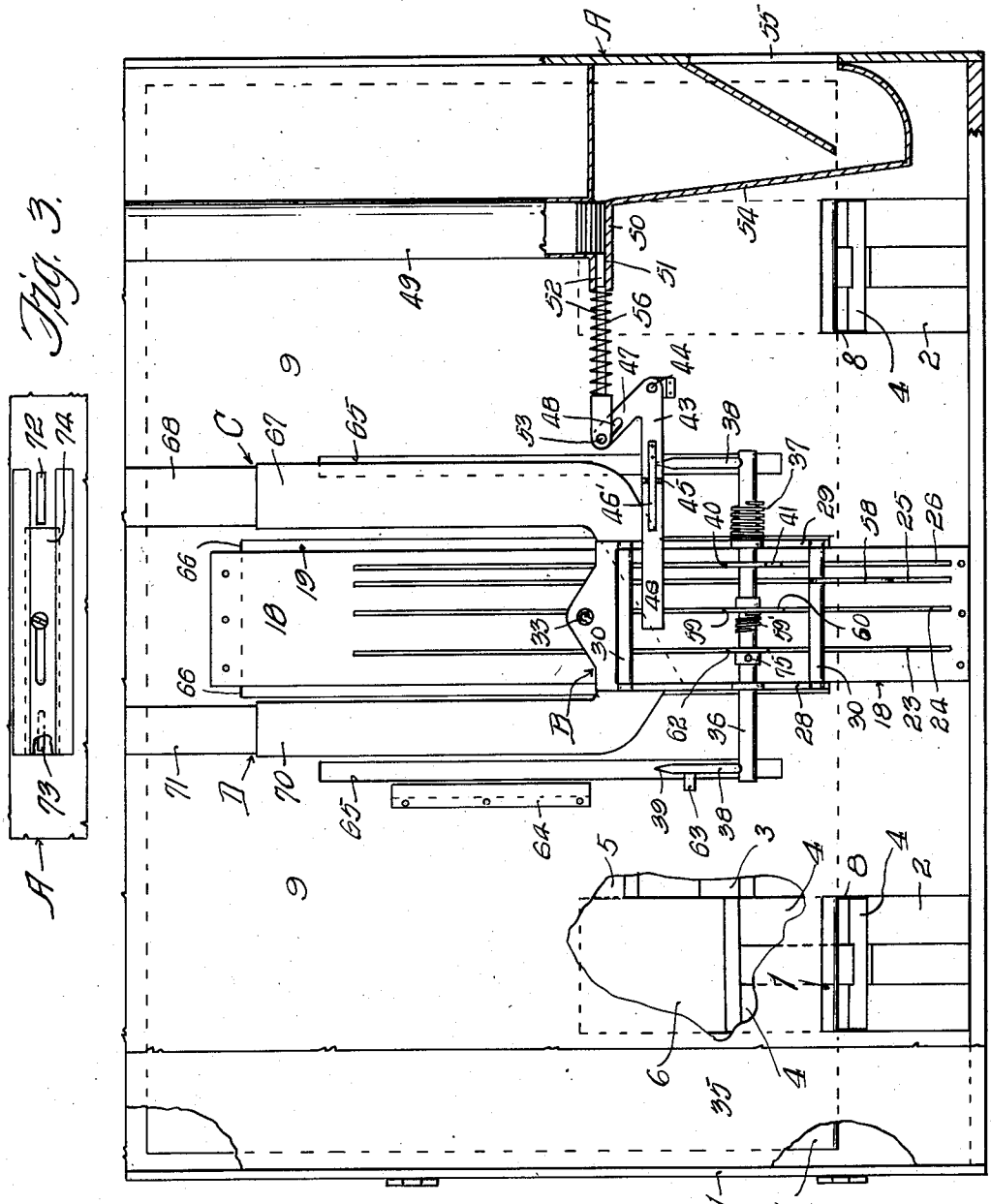


Fig. 3.

Fig. 2.

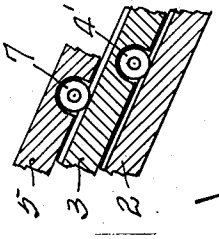


Fig. 4.

INVENTOR.
T. L. Heaton.
BY Fredk. Thurston
ATTORNEY.

March 26, 1940. T. L. HEATON 2,195,305

COIN CONTROLLED VENDING AND CHANGE MAKING MACHINE

Filed Aug. 27, 1937 5 Sheets-Sheet 3

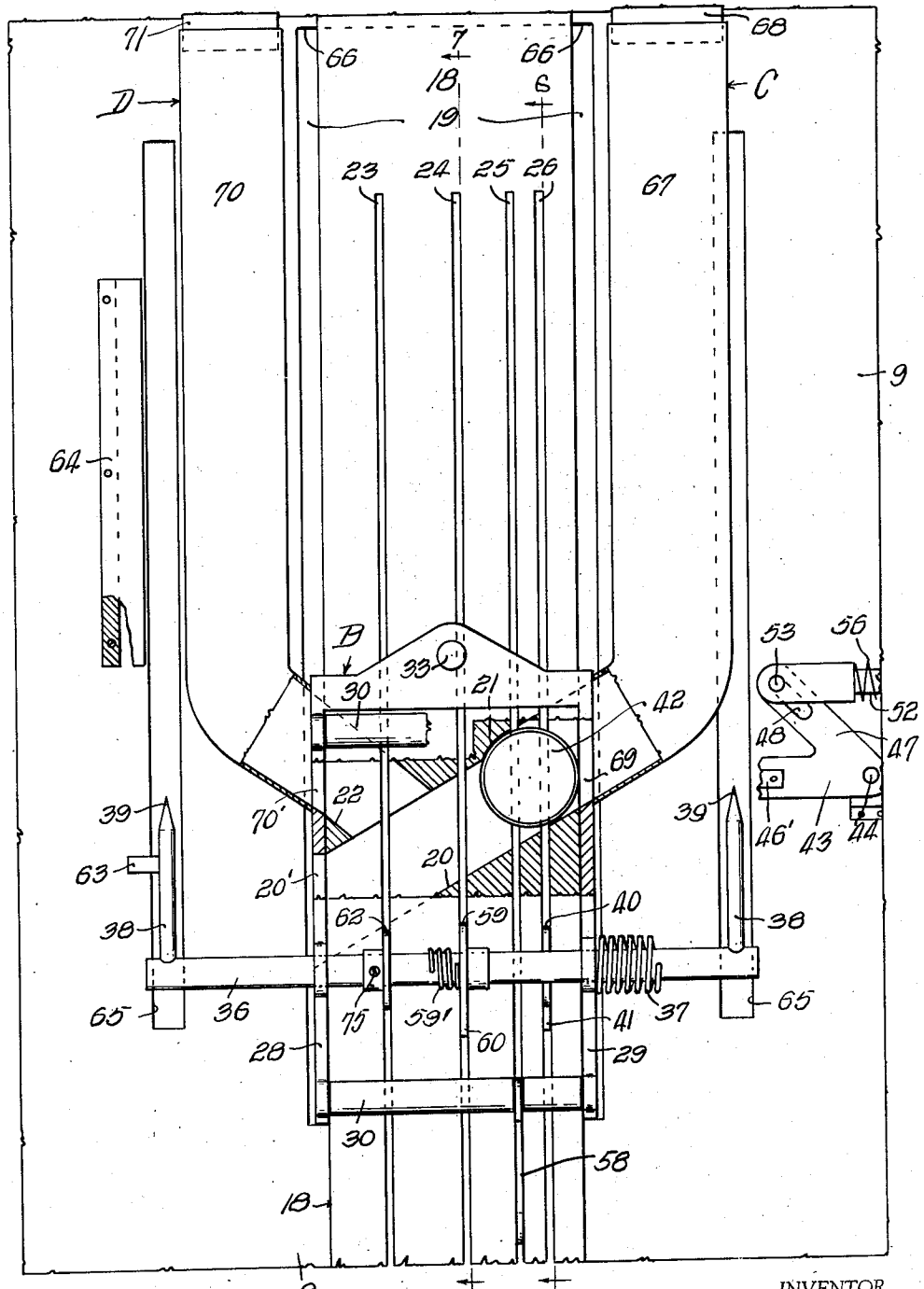


Fig. 5.

INVENTOR.
T. L. Heaton.
BY Fredk. J. Pearson.
ATTORNEY.

March 26, 1940. T. L. HEATON 2,195,305

COIN CONTROLLED VENDING AND CHANGE MAKING MACHINE

Filed Aug. 27, 1937 5 Sheets-Sheet 4

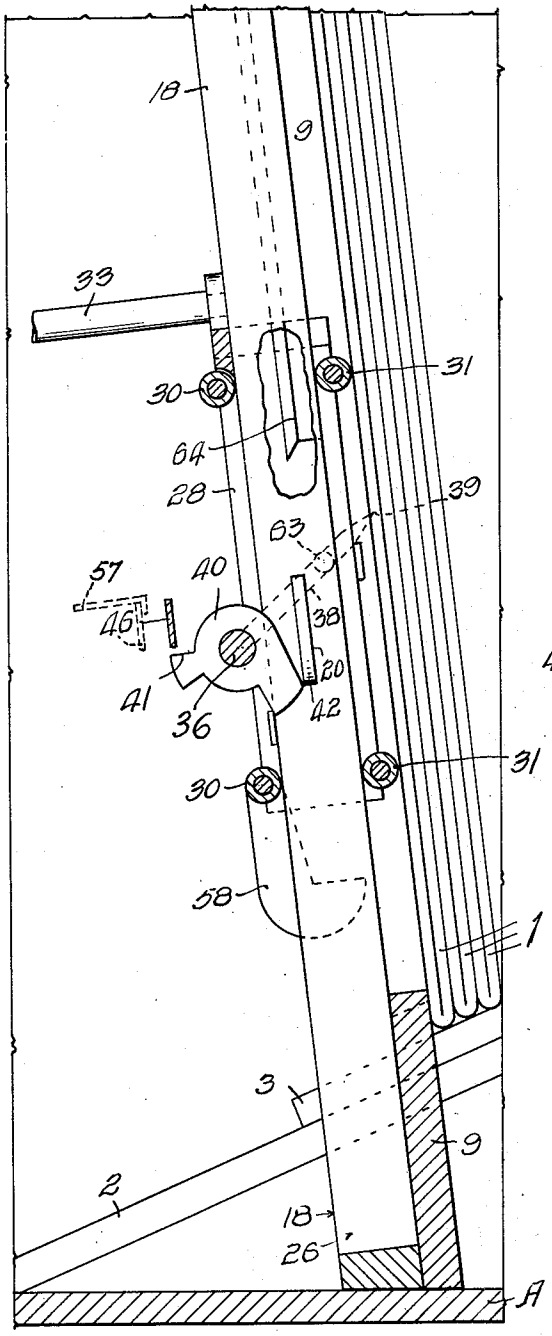


Fig. 6.

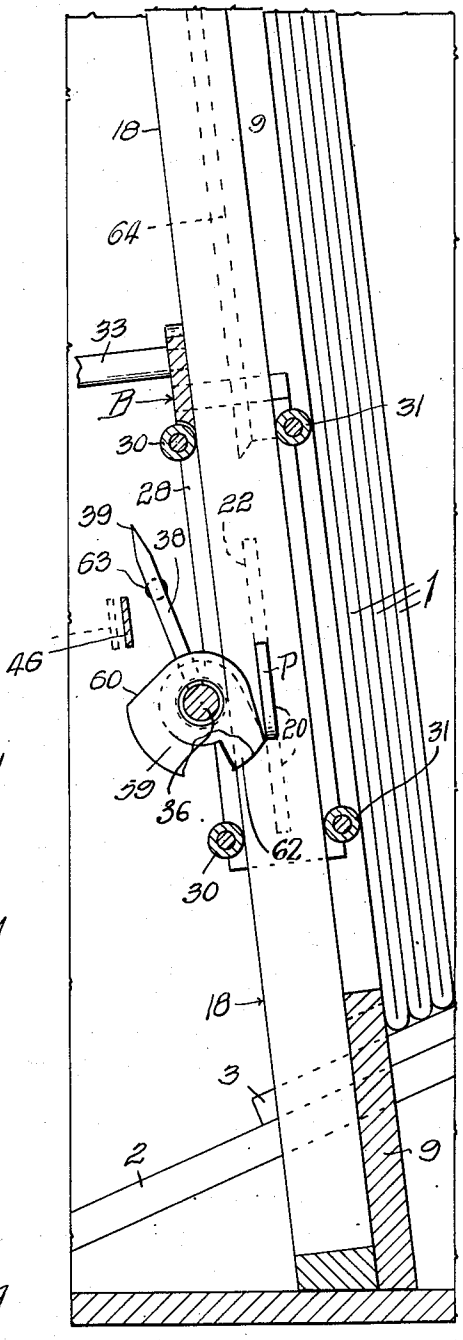


Fig. 7.

INVENTOR.
T. L. Heaton.
BY Fredk J. Parsons
ATTORNEY.

March 26, 1940. T. L. HEATON 2,195,305

COIN CONTROLLED VENDING AND CHANGE MAKING MACHINE

Filed Aug. 27, 1937 5 Sheets-Sheet 5

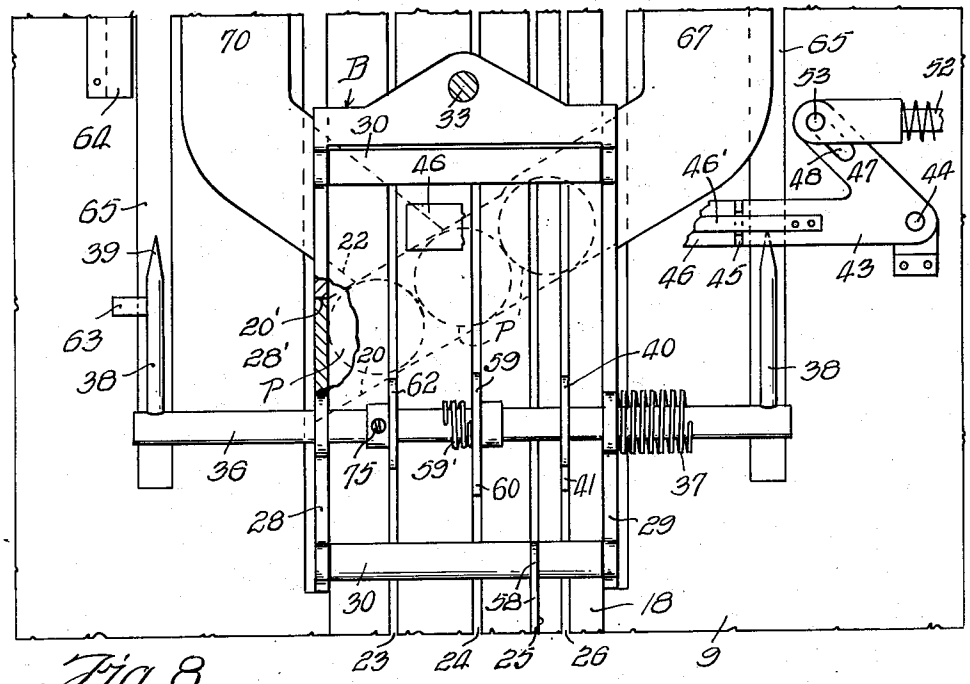


Fig. 8.

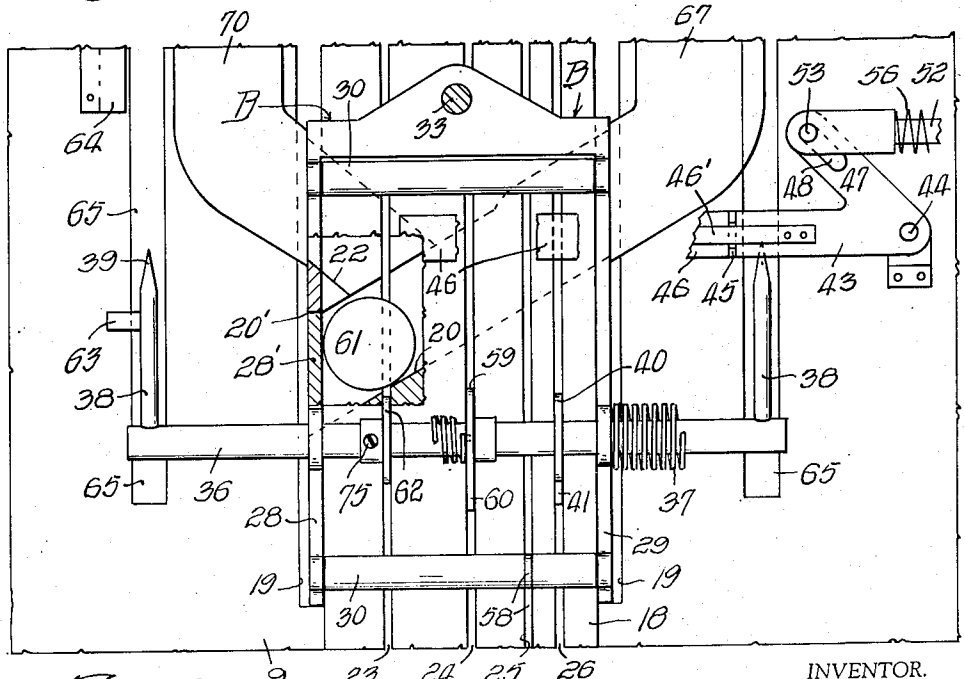


Fig. 9.

INVENTOR.
T. L. Heaton.
BY
Fredk. J. Haseltine
ATTORNEY.

Patented Mar. 26, 1940 2,195,305

UNITED STATES PATENT OFFICE

2,195,305

COIN CONTROLLED VENDING AND CHANGE MAKING MACHINE

Thomas L. Heaton, Blytheville, Ark.

Application August 27, 1937, Serial No. 161,299

6 Claims. (Cl. 194—2)

This invention relates to coin controlled vending and change making machines for the selling of periodicals such, for instance, as newspapers and like articles, but not necessarily limited thereto.

The primary object of the invention is the provision of a vending machine, constructed substantially as hereinafter described, which will sell periodicals and partially deliver same to the purchaser thereof, when the proper coin, or coins equivalent to the price of the periodical is or are introduced into the machine when previously adjusted therefor and mechanism is manipulated by the purchaser of the periodical.

Another object of the invention is the provision of a coin controlled vending machine which will only deliver one article at a time.

A further object of the invention is a coin controlled vending machine which can be adjusted to function with a five cent coin, a ten cent coin, and three one cent coins when the cost of the article is less than five cents.

A further object of the invention is a coin controlled vending machine which will function with a five cent coin when the article costs but three cents, and which will return to the purchaser of the article, two cents change.

A further object of the invention is a vending machine which can be adjusted to function with three one cent coins when the article costs three cents, but will not function to vend the article purchased, if less than three cents is deposited in the machine.

A further object of the invention is a coin controlled vending machine which will function with a single dime when a five and one cent coin chute has been blocked against the entrance of coins thereinto.

All of the above and still other objects and advantages of the present invention will become apparent from a study of the following specification, when read in connection with the accompanying drawings, wherein like characters of reference denote corresponding parts throughout the several views, wherein:

Fig. 1 is a side elevation of a vending machine embodying the features of my invention.

Fig. 2 is a front elevation of the machine with parts thereof broken away.

Fig. 3 is a detail showing the coin slots in the top of the casing.

Fig. 4 is a fragmentary detail showing a portion of the gravity movable floor.

Fig. 5 is a detail, in front elevation, of the major parts of the coin actuated mechanism.

Fig. 6 is a view taken on line 6—6 of Fig. 5, showing the carriage raised a short distance with the paper gripper engaging a paper to be elevated.

Fig. 7 is a view taken on line 7—7 of Fig. 5, showing the carriage raised a short distance by an intermediate penny in a coin slot.

Fig. 8 is a detail, in front elevation, of the coin actuated mechanism and showing three pennies in the coin slot.

Fig. 9 is a detail, in front elevation, of the coin actuated mechanism and showing a ten cent piece in the coin slot.

Fig. 10 is a detail in plan view of one of the gravity movable floor members.

Fig. 11 is a detail in plan view of the other of the gravity movable floor members.

In carrying out the invention, I employ a suitable housing, or casing designated, generally as A, adapted to hold the desired number of periodicals, newspapers, or the like 1. The periodicals are held upon a suitable gravity movable floor. The floor shown, in one embodiment thereof, consists of a plurality of inclined sills 2. A lower floor member 3, including spaced forwardly projecting arms 4, is suitably mounted so as to slide toward the delivery side of the housing as the periodicals are delivered one at a time. Suitable anti-friction means 4' is disposed between the sills 2 and the floor member 3, and its arms 4, so as to facilitate self downward sliding movement thereof with the weight of the papers thereon. A second or upper floor member is mounted on the first floor member and it consists of the floor member 5 including spaced forwardly projecting arms 6 and suitable anti-friction means 7 adapted to be disposed between the two floor members to facilitate sliding movement of the second floor member. The arms 4 and 6 of the floor members 3 and 5 as they move by gravity downwardly and forwardly as each paper is discharged are adapted to pass through openings 8 formed in a leaning wall 9 at the front end of the housing A. The lead paper in the housing is adapted to stand against the wall 9 and be guided thereby in its discharge from the housing, and as will be apparent hereinafter.

Both floor members 3 and 5 move downwardly and forwardly together, by gravity, as the periodicals on the arms 4 of the floor member 3 are discharged one at a time. When the papers have been discharged from the arms 4 of the lower floor member 3, they are then discharged from the arms 6 of the upper floor member 5, one at a time. As they are discharged from the arms 6 of the upper floor member 5, they move,

by gravity, on the arms 4 of floor member 3. This arrangement permits the lower floor to slide downwardly on the sills 2, and the upper floor to slide downwardly on the lower floor member 3 and its arms 4. The arms 4 and 6 pass through the opening 8 in the leaning wall 9 during downward movement thereof. This arrangement does away with a spring between the papers and the back wall of the housing A and the papers move by gravity with the floors. The weight of the follower 10 keeps the papers packed closely together. The floor members are moved back to their starting positions, by hand, after the papers have been discharged so that the floor arms can be reloaded with periodicals.

Behind the last paper in the housing, I arrange a backing plate 10 of the desired weight, which is carried forward on and with the floor of the housing.

The housing A is provided with a suitable side door 11 which may be opened for placing the periodicals on the floor of the housing.

The housing A is provided in the top wall thereof with a periodical discharge passage, or opening A' so that a lead periodical within the housing can be discharged upwardly through the opening A'. The discharge opening A' is normally and automatically closed by means of a slide door 13 which is mounted at its side edges in suitable ways 14 formed on the side walls of the housing A. The means for operating the slide door 13 includes a plate like member 12, which is pivotally supported midway its upper and lower edges, as at 12'. The plate like member 12 normally assumes an inclined position with its upper edge in contact with the leaning wall 9 and with its lower edge spaced therefrom. A stop member 17 is pivotally connected intermediate its ends, as at 17', to the lower end of the plate like member 12. A suitable spring 16 connects the inner end of the stop member 17 with the top wall of the housing A to the rear of the slide door 13. The forward end of the stop member 17 normally engages the leaning wall 9 and prevents rearward sliding movement of the slide door 13 should any one try to move the slide door rearwardly from the outside of the housing A. The upper end of the plate like member 12 is connected with the slide door 13 by means of a suitable link 15, so that arcuate movement of the upper end of the plate like member 12 will cause sliding movement of slide door 13 in the ways 14 for opening and closing the discharge opening A'. This arrangement of parts prevents the slide door 13 from being opened until the forward end of the stop member 17 is engaged by the upper edge of a periodical being elevated for discharge from the housing A through discharge opening A'. When a lead periodical is being elevated, the upper edge thereof strikes the forward end portion of the stop member 17 causing the stop member 17 to turn on its pivotal connection 17' and allow the periodical to move past the forward end of the stop member 17 in its upward movement. As the periodical is moved upwardly past the forward end of the stop member 17, the upper edge of the periodical engages the inner face of the upper end portion of the plate like member 12, causing the plate like member 12 to turn on its pivotal connection 12', and, through the link connection 15 the slide door 13 is caused to move rearwardly thereby opening the discharge opening A' to allow the periodical being discharged to pass upwardly through the discharge passage A'. After the periodical has been elevated so that the upper edge thereof projects through the discharge passage A', the purchaser thereof pulls the periodical upwardly through the discharge passage A', and, as soon as the periodical has been removed from the housing A through the discharge passage A', the spring 16 pulling on the stop member 17 causes the plate like member 12 to be moved back to its normally inclined position, and, in doing so, causes the slide door 13 to be moved therewith, through the link connection 15, to again close the periodical discharge passage A'.

Directly in front of the lead periodical and adjacent the mid-portion thereof, I arrange mechanism for elevating the papers, one at a time for delivering same to the purchaser thereof.

A suitable coin holder 18 is secured to the front side of the inclined wall 9. The holder 18 is vertically disposed and spans a suitable opening 19 in the mid-section of the wall. The holder 18 is provided with an inclined coin passage or pocket 20 which is open to the ends thereof, and, the upper end of the coin passage 20 being wider at its upper end than the remainder of its length, thus provides a shoulder 21 against which a coin such, for instance as a nickel or five cent piece will rest to prevent it passing on to the lower end of the coin passage, whereas, if three pennies are introduced into the coin passage 20, they will occupy the full length of the passage.

A second inclined coin passage 22 is formed in the coin holder 18 and it is open only to one side of the holder, the opposite side from the enlarged end of coin passage 20, and, the passage 22 connects, or communicates at its lower or inner end with the coin passage 20 between the center and lower end thereof. The passage 22 is used for dimes, or ten cent pieces.

The coin holder 18 is also provided with a plurality of spaced longitudinal parallel slots, or passages open to the front and back sides of the coin holder. The slots are designated 23, 24, 25 and 26.

Mounted to slide up and down, up by manual operation and down by gravity, on the coin holder 18, is a suitable carriage designated, generally as B. The carriage includes in one embodiment thereof, a pair of side plates designated 28 and 29 and anti-friction rollers 30 engaging the front side of the coin holder and anti-friction rollers 31 engaging the rear face of the coin holder 18. The side plate 28 is provided with a coin passage opening 20' which is closed by means of a plug closure 28' when the machine is to be operated by nickels or five cent pieces only, so that if any other coin or coins are used, they will pass out the lower end of the coin passage 20 and drop into the interior of the housing. In other words, when the machine is supposed to be operative with nickels only, it cannot be operated by means of any other coins as they will pass through and out of the coin passage 20 through opening 20', due to the inclination of the passage, and due to the fact that the plug closure 28' is removed from the opening 20' in the side wall 28 of the carriage B. The upper end of the carriage B is provided with a handle 32 for moving the carriage by means of a stem 33 which projects forwardly therefrom and passes through a slot 34 in the front wall 35 of the housing, which is in advance of and spaced from the inclined wall 9.

A suitable rocker shaft 36 is rotatably mounted on the front side of the carriage B, transversely

of the slots 23, 24, 25 and 26 in the coin holder 18. This shaft is spring controlled, as at 37, for urging rotation of the shaft 36 in one direction, that is, counter-clockwise, viewing Fig. 5 from the right hand side thereof. The inner end of the coiled spring 37 is anchored to the side member 29 of the carriage B, and the other end of the spring is anchored to the shaft 36, as shown in Fig. 2. A suitable paper gripper in the form of an arm 38 is carried by each end of the shaft 36 and the free end of each arm is pointed as at 39 to grip a paper to be partially discharged from the housing thereby. The shaft 36 is rotated clockwise by means which will now be described.

When the machine is to be used for dispensing ten cent periodicals only, such, for instance as Sunday newspapers, the machine is adjusted for the use of ten cent coins by placing the plug closure 28' in the opening 20' in the side plate 28 of the carriage B, and, the member 62, which is normally loosely mounted on the shaft 36, is securely fastened to the shaft 36 by tightening the set-screw 75 against the shaft 36. When this adjustment has been made, and the coin passage 72 closed by means of the slide closure 74, the coin passage 73 for dimes only, will be opened for the insertion of dimes to travel to the coin passage 20 through the passages 73 and 22, respectively. When the ten cent coin 61, as shown in Fig. 9, has been introduced into the passage 20 through the passages 73 and 22, for the purchase of ten cent periodicals, the coin contacting member 62 now secured to the rocker shaft 36 will engage and ride past the ten cent coin 61 when the carriage is being raised upwardly. The member 62 in riding past the coin 16, causes the rocker shaft 36 to turn, which causes the pointed grippers 38 to engage the lead periodical in the housing A and elevate the same as the carriage is moved upwardly from this point. However, when pennies are used to turn the shaft 36, the set screw 75 is loosened against the shaft so that the member 62 will not turn the shaft when it engages the lowermost penny, but will be turned only by the member 40 coming in contact with the uppermost penny.

A suitable coin contacting member 40 is secured to the rocker shaft 36 and it is slidably receivable in the coin holder slot 26. The member 40 is provided with an extension to form a shoulder 41, which when a single coin such as a nickel 42 is introduced into the coin passage 20, will actuate coin changing mechanism providing the periodical to be delivered costs less than the amount of the coin introduced, say for instance, three cents. If, however, the periodical costs five cents, change making mechanism is rendered neutral by means of hook 57 connected to the front wall of the housing A. If the paper costs a nickel, the owner of the machine moves the hinged arm 46 of the change maker mechanism forwardly and fastens the hook 57 over the same to hold it out of contact with the shoulder 41 on the member 40, as shown in dotted lines in Fig. 7.

The coin changing mechanism consists of a lever 43, pivoted as at 44, at one end thereof, and the lever is provided with a hinge connection, as at 45, between the pivot connection and the free end thereof to divide the lever into two sections so that section 46 thereof will be free to be moved laterally by the cam face 60 of member 59 when the hinged section 46 is not held out of the path of the cam face by means of the hook 57. This arrangement renders the change mechanism neutral as the lever section cannot be raised by the shoulder 41 on member 40. The lever 43 also includes an angular projecting arm 47, slotted as at 48.

A suitable coin holder 49 is suitably supported within the housing in front of the inclined wall 9 and it is adapted to contain change such, for instance, as pennies. The lower end of the tube 49 is provided with a closure 50 having a slot 51 for slidably receiving one end of a plunger 52, which plunger 52 is as thick as two pennies, one on the other. The opposite end of the plunger is connected as at 53, to the slotted arm 47. A change receiving tray 54 is disposed adjacent the lower end of the tube 49 to receive the coins discharged from the tube so that the purchaser of the paper can reach through an opening 55 in the housing to collect the change coming to him or her.

A suitable spring 56 is mounted on the plunger 52 to bring the lever 43 back to normal position after it has been raised by the shoulder 41 of the coin contacting member 40 for ejecting two pennies in change in one operation from the bottom of the tube 49. The hinged end 46 is normally held in alignment with the lever section 43 by means of a suitable spring 46' secured at one end to the lever section 43.

A suitable coin discharging member in the form of a hooked arm 58 is carried by and depends from the lower end of the carriage B, and, this hooked arm rides in the slot 25 of the coin holder 18. This device will discharge or eject the five cent coin from its passage 20 when the carriage is raised to its uppermost position due to the fact that the shoulder of the member 58 contacts the lower edge of a coin to the left side of the center of the coin which causes the coin to be elevated and discharged into the housing as the lower edge of the side wall 29 of the carriage passes the mouth of pocket 20 in the upward travel of the carriage.

When there are three pennies P introduced into the coin passage 20, the intermediate coin is contacted by a suitable member 59. The member 59 is loosely mounted on the rocker shaft 36 so as to turn clock-wise thereon. The member 59 is urged to return to normal position by means of a coiled spring 59' anchored at one end to the member 59 and at its other end to the shaft 36. The member 59 projects into the coin holder slot 24 and it is adapted to slide up and down in the slot 24 during movement of the carriage B. When the carriage has been raised a sufficient distance, as shown in Fig. 7, the member 59 contacts the middle coin P, causing the member 59 to turn relative to the shaft in riding past the coin. This causes the cam face 60 of the member 59 to engage the hinged end 46 of the lever 43 thereby moving the hinged end 46 forwardly out of alignment with the lever 43 so that the change making mechanism will not function. The spring 59' returns the member 59 to normal position after being actuated by a coin in the upward travel of the carriage B. This prevents a paper being discharged for two cents when the cost thereof is three cents. The reason why a three cent paper cannot be purchased for two cents is because the member 59 is loosely mounted on the shaft 36 and is controlled by a spring 59' which is connected at one end to the member 59 and at its opposite end to the shaft. This arrangement causes the member 59 to turn on the shaft when the cam face 60 comes in contact with the middle coin P and permits the cam to slide past this coin without turning the shaft 36 to actuate the grippers 39. The shaft cannot turn for actuating the grippers until the member 40 on

shaft 36 contacts the uppermost coin P in the coin slot 20. If only two pennies were delivered to the coin passage 20, the two coins would be discharged from the lower open end of the coin passage 20 just as soon as the carriage had been elevated to such a position as to cause the lower end of the side plate 28 of the carriage to uncover the lower open end of the coin passage 20. Thus, no paper could be discharged as the shaft 36 would not be turned to cause the grippers 38 to contact the lead periodical in the housing.

During the upward movement of the carriage, the coin contacting member 40 secured to the rocker shaft is adapted to engage and ride past the uppermost penny adjacent the slots 25 and 26 to turn the rocker shaft, causing the paper grippers to engage the lead paper in the housing and move the same upwardly during continued upward movement of the carriage.

In order to prevent the carriage from falling by gravity after the grippers 38 have engaged the lead paper in the housing, should it be released by the operator before it has reached the end of its upward travel, I provide one of the grippers with a lateral arm 63. The arm 63 is moved with the side gripper 38 to frictionally engage and ride as a resistance member, after the grippers have engaged the lead paper in the housing, against the inner face of a track member 64. This prevents the spring 37 from returning the shaft 36 to its normal position until the carriage B has moved high enough to cause the arm 63 to disengage the inner face of the track 64. As long as the arm engages the track enough resistance is set up to prevent the carriage from falling, if released, by the hand of the operator. The lateral arm 63 is adapted to return adjacent the outer face of the track member 64 after a paper has been discharged from the housing, and the carriage is returned by gravity to normal position.

The grippers pass through slotted openings 65 in the inclined wall 9, and, upward movement of the carriage is limited by the upper ends of the carriage striking the wall 9, as at 66, at the upper end of travel of the carriage.

Telescopic coin tubes are associated with the coin passages 20 and 22 which will now be described.

The coin tube designated generally as C, which is used for nickels and pennies, comprises a lower or outer section 67 and an upper or inner section 68. The lower section 67 is secured to one of the side walls of the carriage and the passage therein registers at its lower end with a slot 69 in said side wall of the carriage. The slot 69 registers with the coin passage 20. The lower section 67 of the coin tube moves upwardly and downwardly with the carriage and telescopes with the upper section 68, thereby shortening the tube when the carriage is raised and lengthening the tube when the carriage is lowered. When the carriage is raised a predetermined distance, the mouth of the coin passage 20 is uncovered and exposed to the interior of the housing so that a nickel will be ejected from the passage by a coin ejector 58 carried by the carriage B, as hereinbefore explained.

When three pennies are introduced, the carriage is raised a predetermined distance, the lower end of the coin passage 20 is exposed to the interior of the housing to permit the pennies P to be discharged by gravity into the housing B just as soon as the lower edge of the side wall 28 of the carriage passes the lower-most penny. This is also true when a ten cent coin is introduced into the coin holder pocket 20.

When three pennies are to be introduced into the slot 20 for the purchase of the paper, an opening 20' in the side wall 28 of the carriage is adapted to be closed by a suitable removable closure 28'. The closure 28' is adapted to be manually inserted into and removed from the opening 20'. When the opening 20' is open, by removal of the closure 28' a penny will pass through the opening so that pennies will not operate the machine, but will pass out of pocket 20 directly into the housing A. The closure 28' is always removed when papers cost a nickel so that pennies will not operate the machine.

The coin tube designated, generally as D, which is used for ten cent coins, comprises a lower section 70 which is secured at its lower end to the other side wall of the carriage. The lower end of the tube registers with a slot 70' in said side wall of the carriage, and, this slot registers with the coin slot or passage 22 when the carriage is in its lowermost position. The lower section 70 of ten cent coin tube moves upwardly with the carriage and telescopes with an upper section 71, thereby shortening the tube when the carriage is raised and lengthening the tube when the carriage is lowered.

The upper ends of the upper sections of the coin tubes C and D are associated with coin slots 72 and 73, respectively, in the wall of the housing. Pennies and nickels are inserted through slot 72, and dimes through slot 73. A suitable slide member 74 is employed to selectively cover the coin slots 72 and 73, so that when pennies and nickels are used, slot 73 will be closed against the insertion of a coin thereinto, and, when dimes are used, slot 72 can be closed against the insertion of coins thereinto.

It may be here stated, that when pennies are used in the machine, the coin contacting member 62 is loosened with relation to the rocker shaft by loosening of the set-screw 75 against the shaft 36 so as not to turn therewith, but is movable independently of the rocker shaft, so that if one or two pennies only are introduced, the shaft will not turn to actuate the gripper arms during upward movement of the carriage A. In this instance, the coin or coins will fall by gravity into the housing A after the carriage has been raised a sufficient distance to cause the lower edge of the side wall 28 of the carriage to uncover the lower end of the coin passage 20.

When ten cent coins are to be used only, as shown in Fig. 8, the coin contacting member 62 is secured to rotate with the rocker shaft by means of a suitable fastening device 75 so as to turn therewith.

From the foregoing description, it is clearly apparent that pennies and nickels can be introduced through coin chutes 67 and 68, and that dimes are introduced through the other coin chutes 70 and 71. That merchandise will be delivered for three pennies, but not less, for a nickel, and, if a nickel is introduced for a three cent article, two cents change will be automatically discharged from the machine as the plunger will eject two pennies by one operation thereof. However, adjustments, as described, must be made when pennies and dimes are used to operate the machine, and the closure 28' must be removed from the opening 20' when nickels are used so that pennies, if introduced, will pass on through the pocket 20 and into the housing A.

The many advantages of the herein described

invention will readily suggest themselves to those skilled in the art to which it appertains.

From the foregoing description, it is evident that a simple device for this purpose has been disclosed, but it is to be understood that I do not desire to restrict, or limit myself to the very details of the construction shown and described, which is merely illustrative, it being obvious that changes, not involving the exercise of invention, may be made without conflicting or departing from the spirit of the invention within the scope of the appended claims.

What I claim is:

1. In combination, an inclined track having a plurality of longitudinal slots therethrough, an open ended inclined coin receiving passage within the track and disposed transversely thereof so as to cross the slots, and a coin passage communicating with the coin receiving passage adjacent the lower end thereof, a carriage mounted for up and down movement on the track, said carriage having side openings registering with the upper end of the coin receiving passage and the upper end of the said coin passage communicating with the coin receiving passage, when the carriage is in its lower-most position, a coin discharge opening in one side wall of the carriage adapted to register with the lower end of the coin receiving passage, a cross-shaft rotatably mounted on the carriage, article grippers secured to the shaft to move therewith, resilient means connecting the carriage with the shaft to urge the shaft to normal position, a coin contact member secured to the shaft and projecting into one of the slots for contact with a five cent coin introduced into the coin receiving passage, means for making change including a pivoted lever and an arm hinged to one end thereof, a shoulder on the coin contacting member adapted to contact the hinged arm and turn the lever on its pivot when the carriage is moved upwardly to actuate the change mechanism when change is to be returned, means for holding the hinged arm out of contact with the said shoulder when change is not to be returned, a second coin contacting member on the shaft and projecting into one of the slots, said member being spring controlled in movement on the shaft in one direction and coin controlled in movement on and relative to the shaft in the other direction to move the hinged arm out of contact with the shoulder on the coin contacting member to render the change mechanism inoperative when three pennies are introduced into the coin receiving passage from the upper end thereof, and a third coin contacting member on the shaft and projecting into one of the slots, said member adapted to be secured to the shaft by fastening means when a ten cent coin is to be introduced into the coin receiving passage through the said inclined coin passage and adapted to be loosely mounted on the shaft when three one cent coins are to be introduced into the coin receiving passage from the upper end thereof, and a closure adapted to be applied to the coin discharge opening in the side wall of the carriage when three pennies or a dime are to be introduced into the coin receiving passage.

2. A device as defined in claim 1, including means to prevent the carriage from falling by gravity if released by the operator thereof before it has reached its uppermost position on the coin holder.

3. A periodical vending machine having, in combination, a housing having an inclined floor and a forwardly leaning wall having a pair of slotted gripper openings therein for holding periodicals in a forwardly inclined position, means for moving the periodicals forwardly after a lead periodical has been discharged from the housing through a top opening therein, a coin holder secured to the leaning wall and spanning an opening therein, said coin holder being provided with a plurality of spaced parallel longitudinal slots, an inclined transversely disposed coin passage, a manually actuated carriage mounted on the coin holder for up and down movement thereon, a rotatable cross shaft mounted on the carriage, periodical grippers secured to the cross shaft to move therewith, a coin contacting member secured to the shaft and projecting into one of the longitudinal slots so that when the carriage is raised, said member will contact the last of three one cent coins introduced into the coin passage, said coin contacting member adapted to turn the cross shaft when starting to ride over the face of said last introduced one cent coins and thereby cause the grippers to move through the slotted gripper openings in the leaning wall to point contact the face of the lead periodical in the housing, and upon continued upward travel of the carriage elevate the lead periodical and partly discharge the same through the said top wall opening, and one of the side walls of the said carriage adapted to uncover the lower end of the inclined coin passage to allow the three one cent coins to be discharged from said coin passage, by gravity, into the housing before the carriage has been raised to its uppermost position.

4. A periodical vending machine having, in combination, a housing having an inclined floor and a forwardly leaning wall having a pair of slotted gripper openings therein for holding periodicals in a forwardly inclined position, means for moving the periodicals forwardly after a lead periodical has been discharged from the housing through a top opening therein, a coin holder secured to the leaning wall and spanning an opening therein, said coin holder being provided with a plurality of spaced parallel longitudinal slots, an inclined transversely disposed coin passage adapted to accommodate three one cent coins or a five cent coin, a shoulder formed on the upper wall of said coin passage to heighten a portion of the passage and to provide a stop for a five cent coin when introduced into the passage instead of three one cent coins, a manually actuated carriage mounted on the coin holder for up and down movement thereon, a rotatable cross shaft mounted on the carriage, periodical grippers secured to the cross shaft to move therewith, means holding a stack of pennies and for making two cents change for a five cent coin when the periodical costs but three cents and said means including a hinged lever arm, a coin contacting member secured to the cross shaft and provided with a shoulder, said coin contacting member projecting into one of the said longitudinal slots so that when the carriage is raised to a predetermined elevation said member will contact the five cent coin, said coin contacting member adapted to turn the cross shaft when starting to ride over the face of the five cent coin and thereby cause the grippers to move through the slotted gripper openings in the leaning wall to point contact the lead periodical in the housing and move the shoulder on said coin contacting member to a position to contact the said hinged lever arm, and, upon continued upward

movement of the carriage move the hinged lever arm upwardly to actuate the change making means and simultaneously therewith start elevating the lead periodical to partly discharge the same through the said top wall opening, a five cent coin discharge member carried by the carriage for removing the five cent coin from the coin passage before the carriage has reached its uppermost position, a spring controlled coin contact member, spring controlled in one direction, mounted loosely on the cross shaft and adapted to turn on the shaft when starting to ride over the intermediate penny when three pennies are introduced into the said coin passage, and over the last of two pennies when only two pennies are introduced into the coin slot, to move the said hinged lever arm out of the path of upward travel of the shoulder on the first mentioned coin contact member so that no change will be made, the second mentioned coin contact member being movable relative to the cross shaft so that the shaft will not turn to bring the grippers into contact with the lead periodical when two pennies only have been introduced into the coin passage, and one of the side walls of the carriage adapted to uncover the lower end of the coin passage to allow the pennies introduced into the coin passage to be discharged therefrom before the carriage has been raised to its uppermost position.

5. A machine, as defined in claim 4, including a passage communicating with the coin passage for the introduction of a ten cent coin into the coin passage, means for preventing the introduction of pennies or nickels into the coin passage when ten cent coins are to be used, a ten cent coin contact member mounted on the cross shaft, a fastening device for securing the ten cent contact member to the cross shaft when ten cent coins are used and to loosen the said member on the shaft when pennies and nickels are to be used, said ten cent contact member when tightened to the shaft, adapted to turn the shaft when starting to ride over the ten cent coin in raising the carriage and said ten cent coin being discharged from the coin passage when the carriage has been raised sufficient to uncover the lower end of the coin passage.

6. A machine as defined in claim 4, wherein one of the side walls of the carriage is provided with an opening adapted to register with the lower end of the inclined coin passage when in its lowermost position so that pennies introduced into the coin passage, when the periodical costs five cents, will pass out of the coin passage and through the opening in the side wall of the carriage, and means for closing the opening in the side wall of the carriage when three pennies are to be used, or when a nickel can be introduced and change therefor is to be made.

THOMAS L. HEATON.