May 5, 1931. J. G. SCHOFIELD 1,803,440

COIN CONTROL FOR VENDING MACHINES

Original Filed July 25, 1929 8 Sheets-Sheet 1

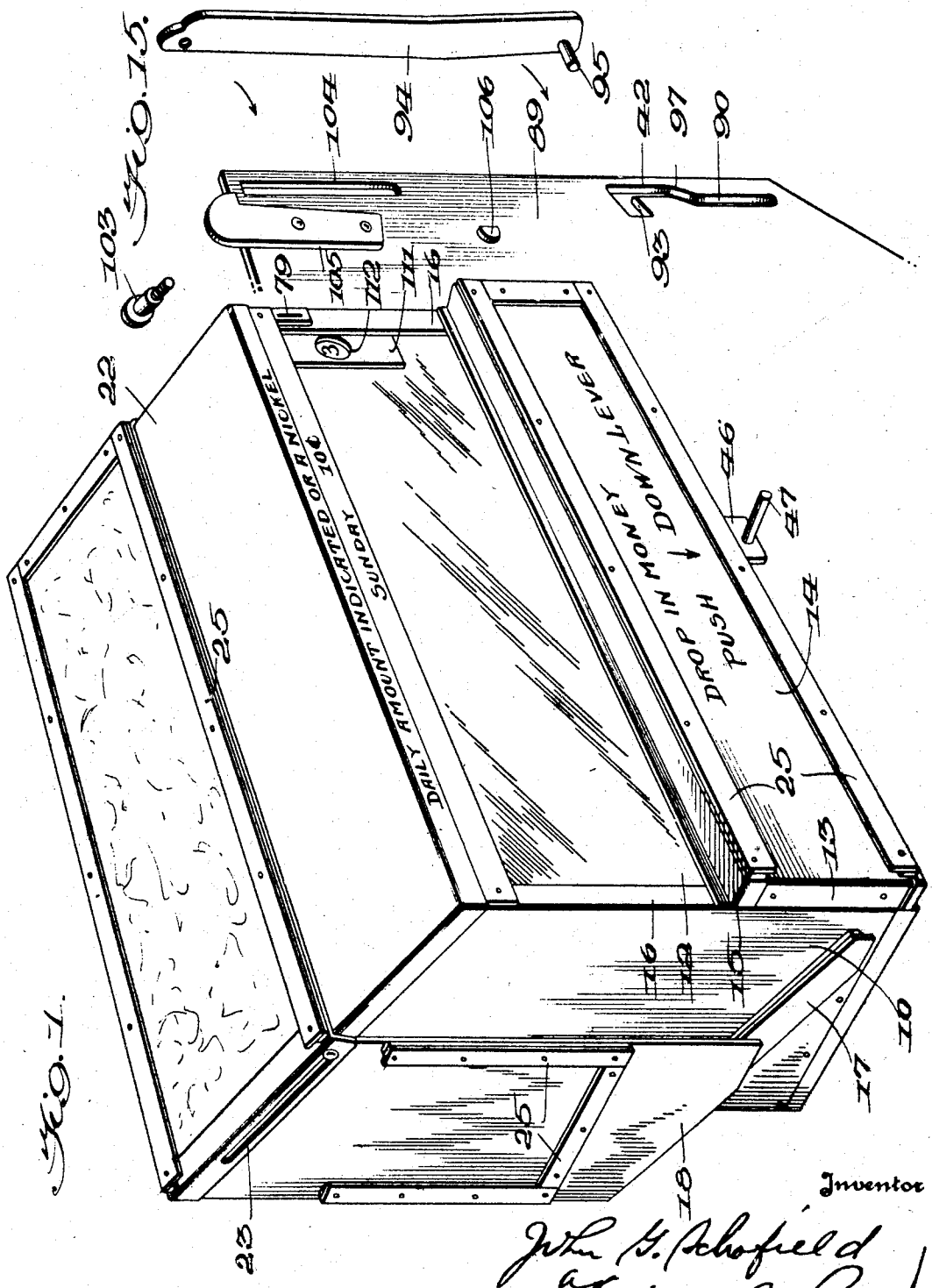


Fig. 1.

Fig. 1a.

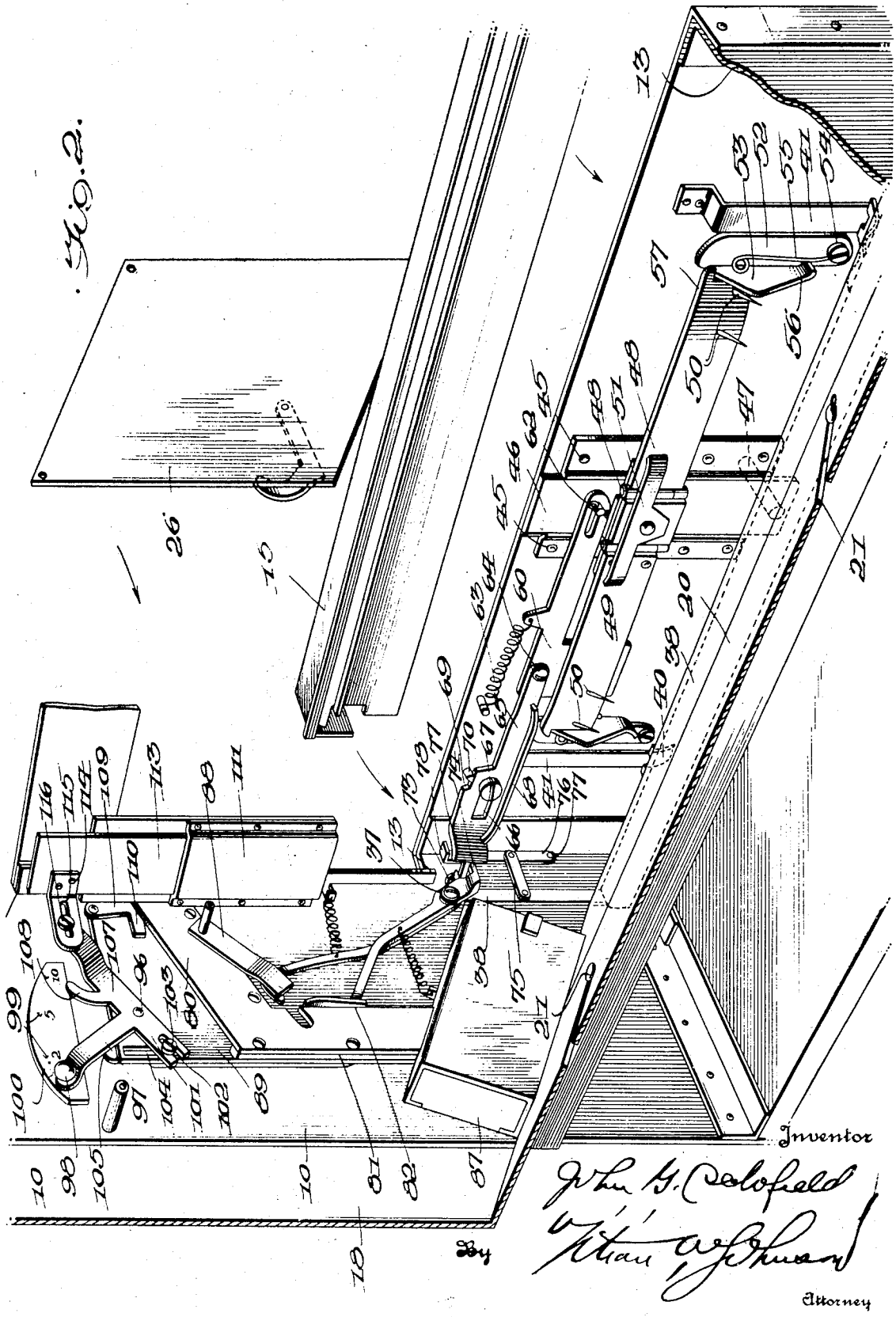
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COIN CONTROL FOR VENDING MACHINES

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Fig. 2.



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Fig. 10.

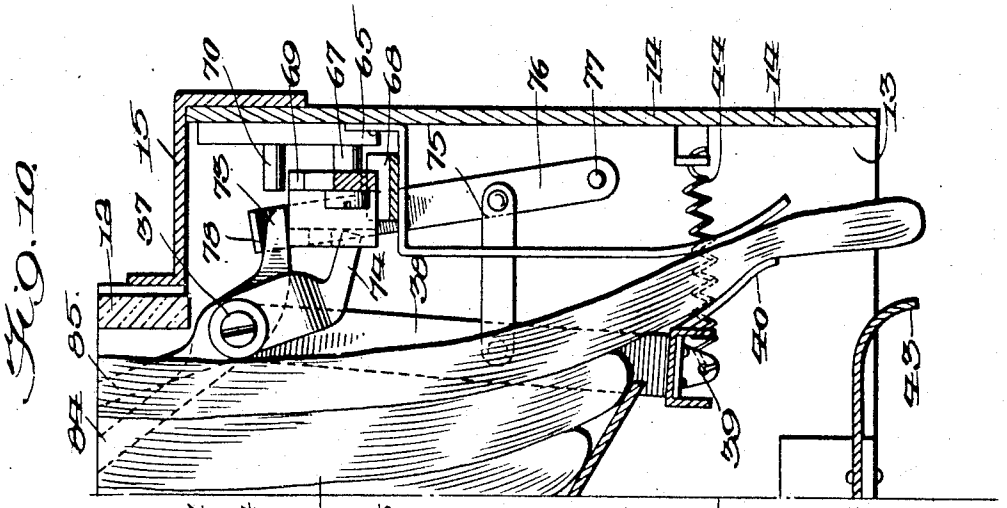
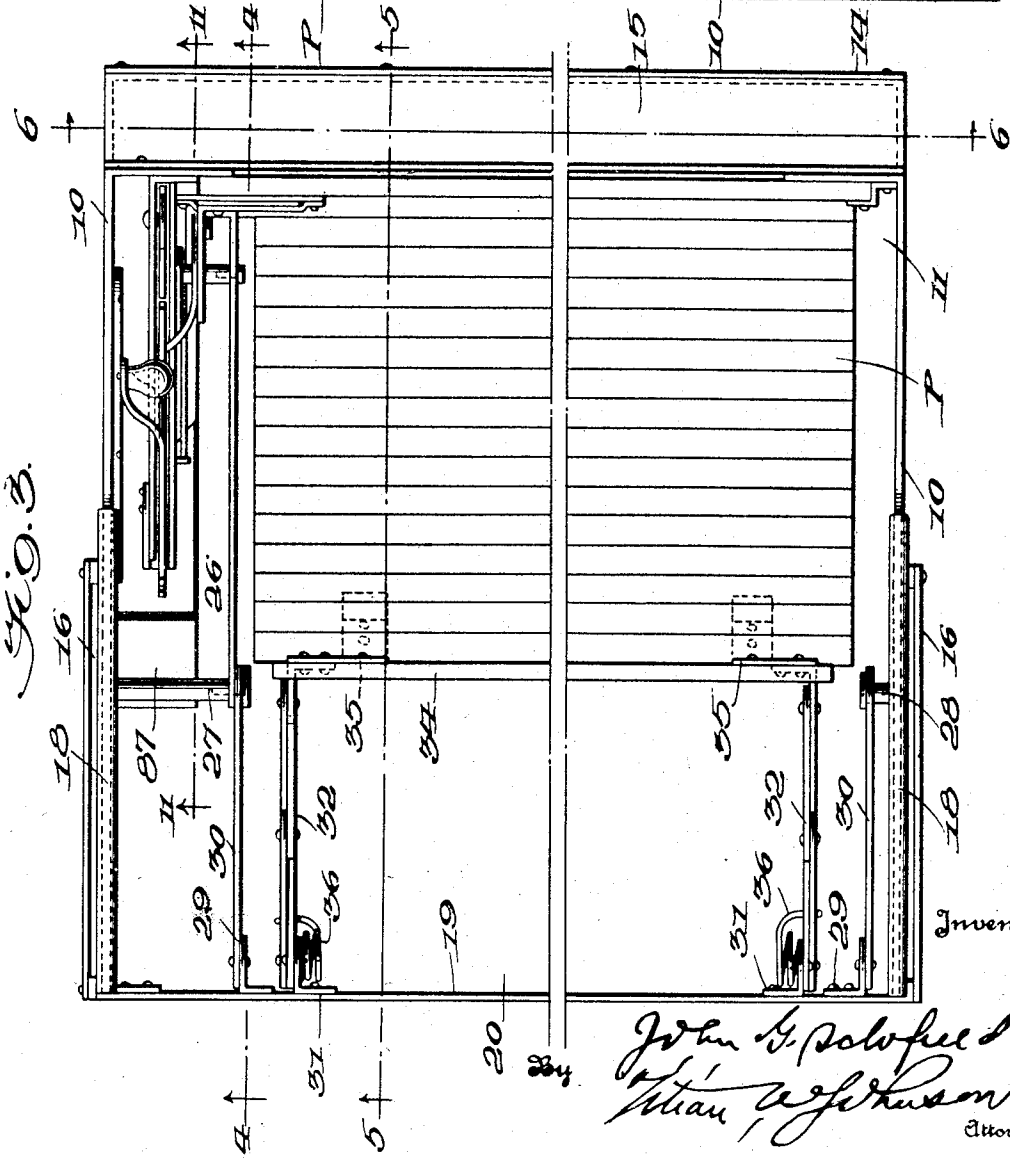


Fig. 3.



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COIN CONTROL FOR VENDING MACHINES

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Fig. 3.

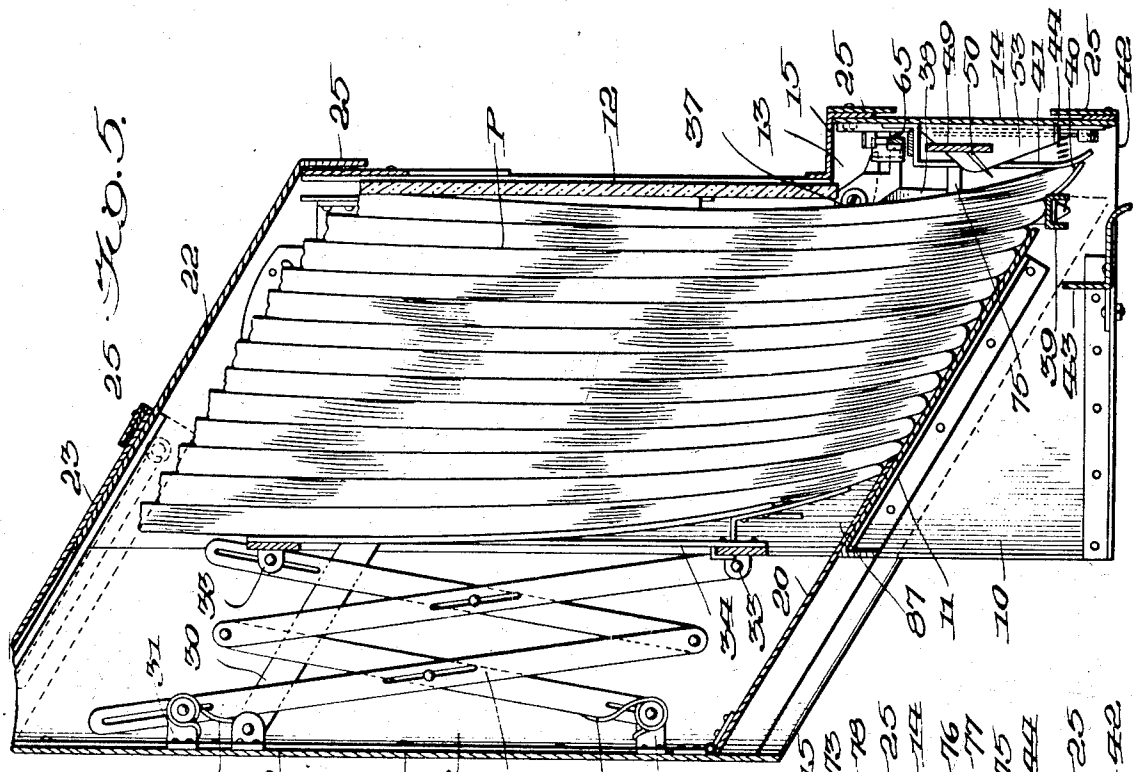
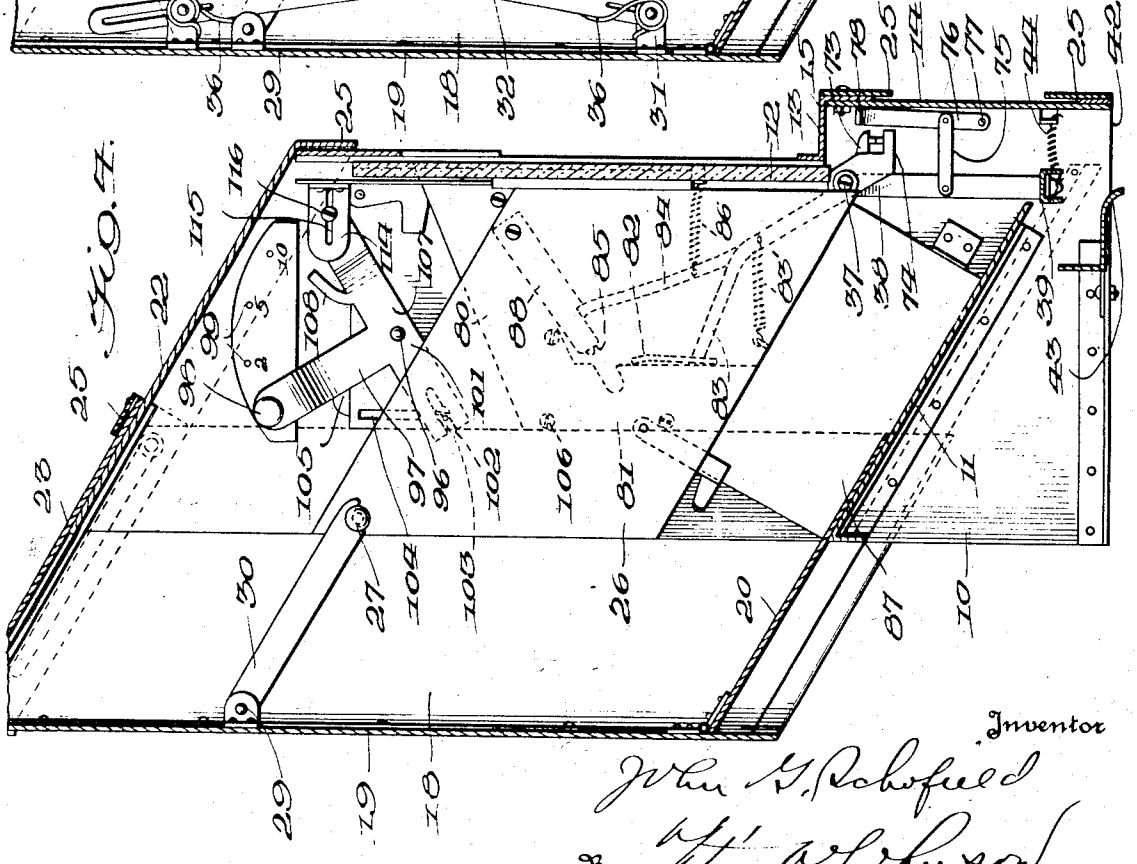


Fig. 4.



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Fig. 6.

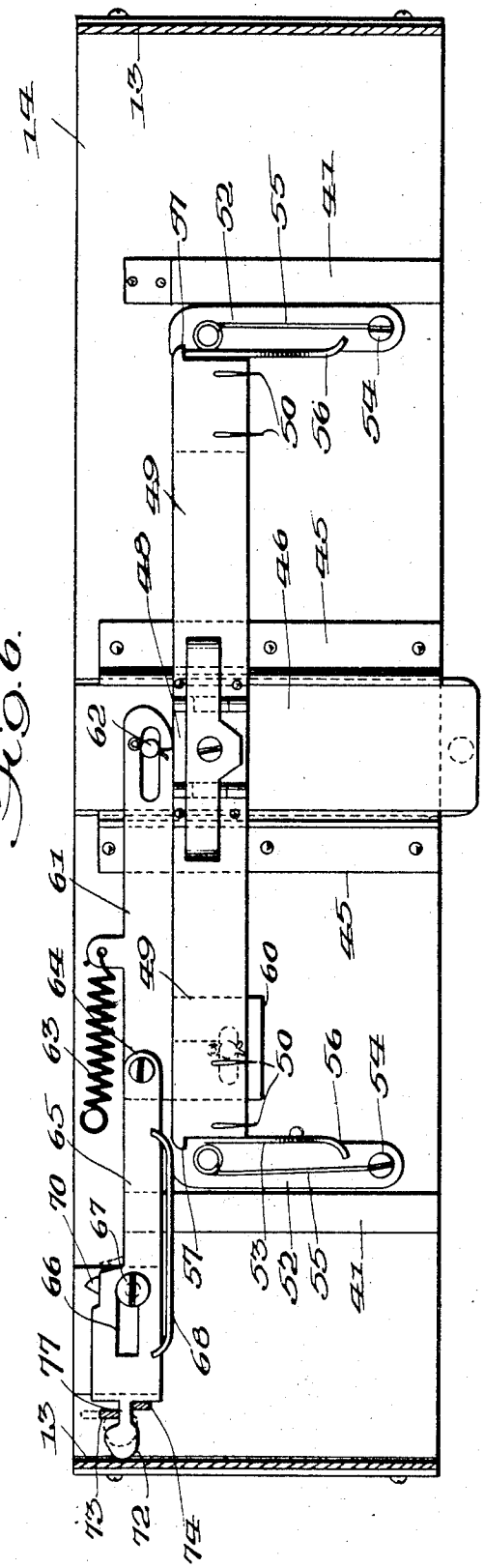
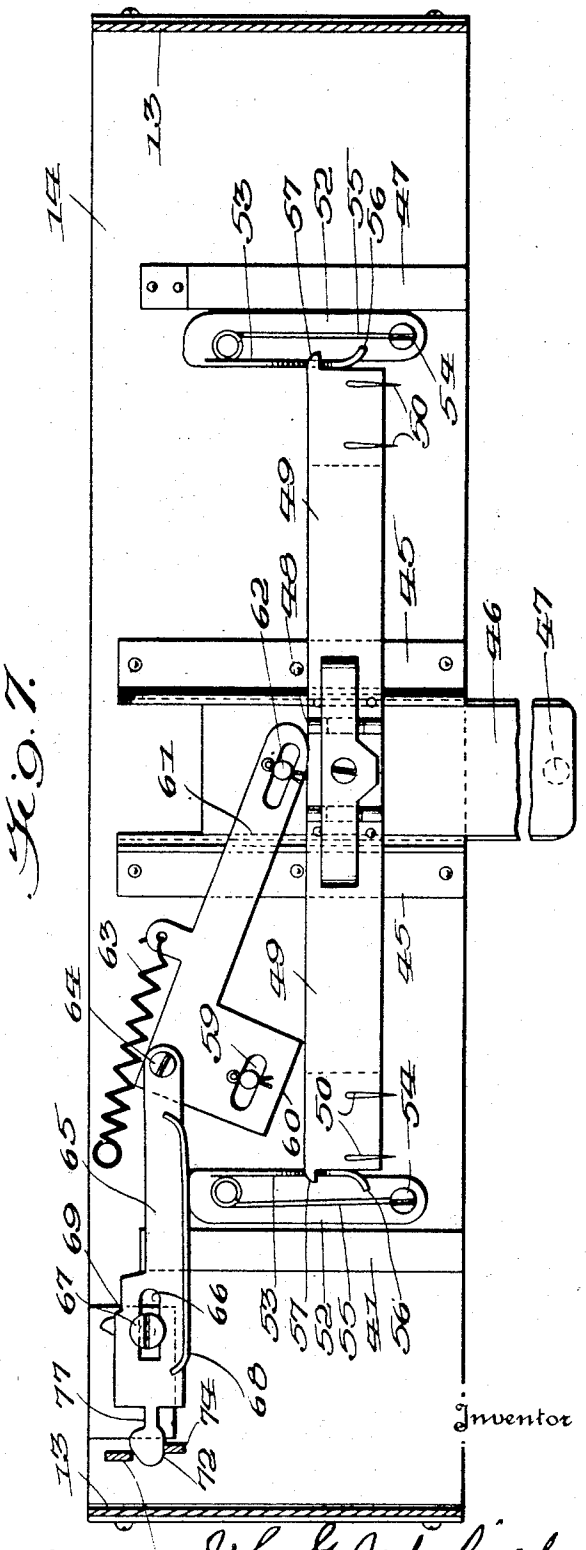


Fig. 7.



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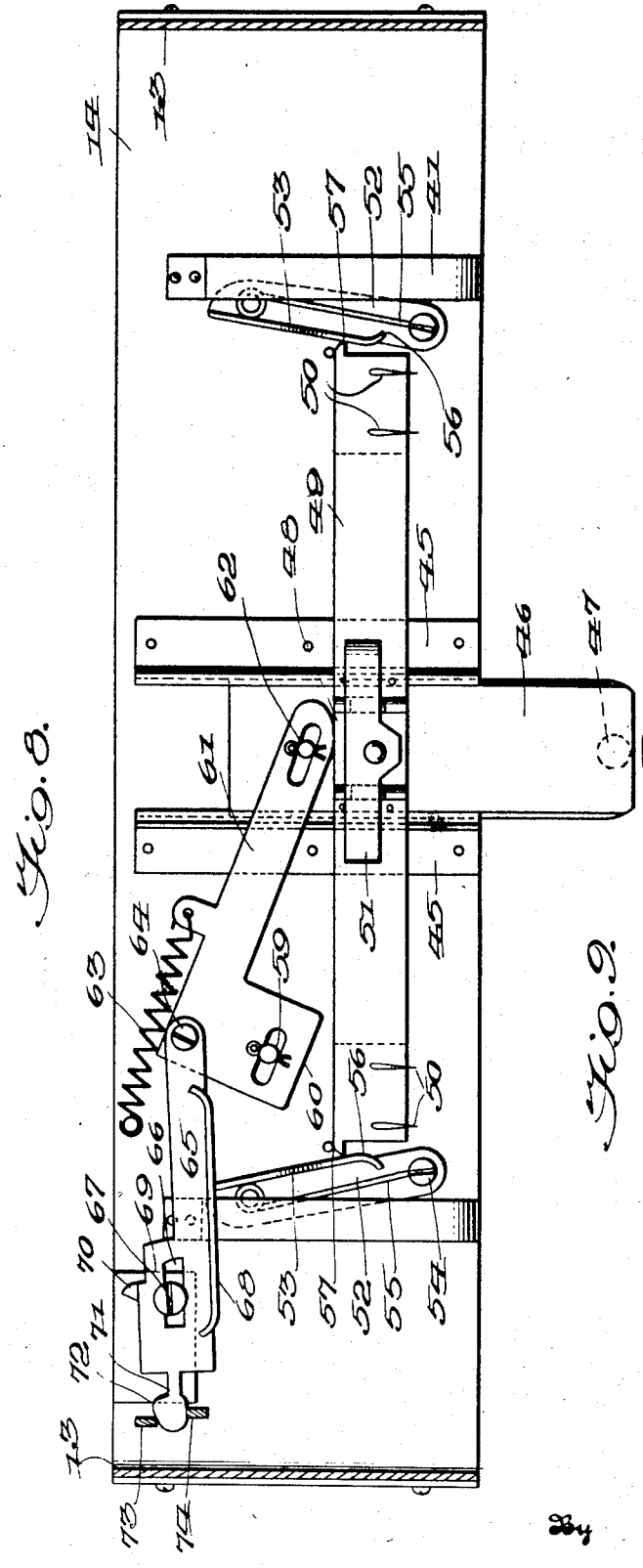


Fig. 8.

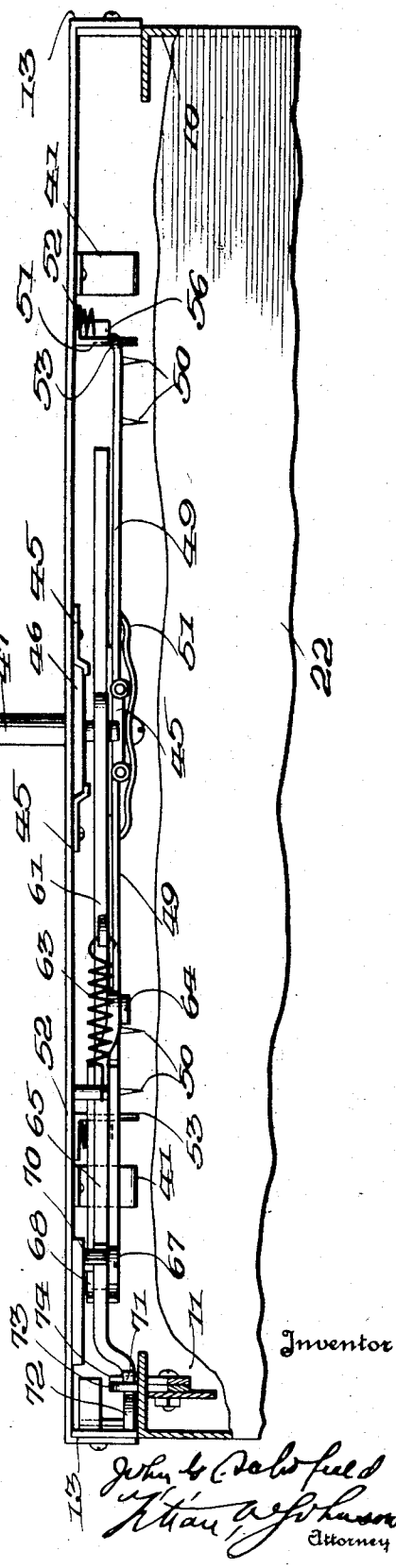


Fig. 9.

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Fig. 12.

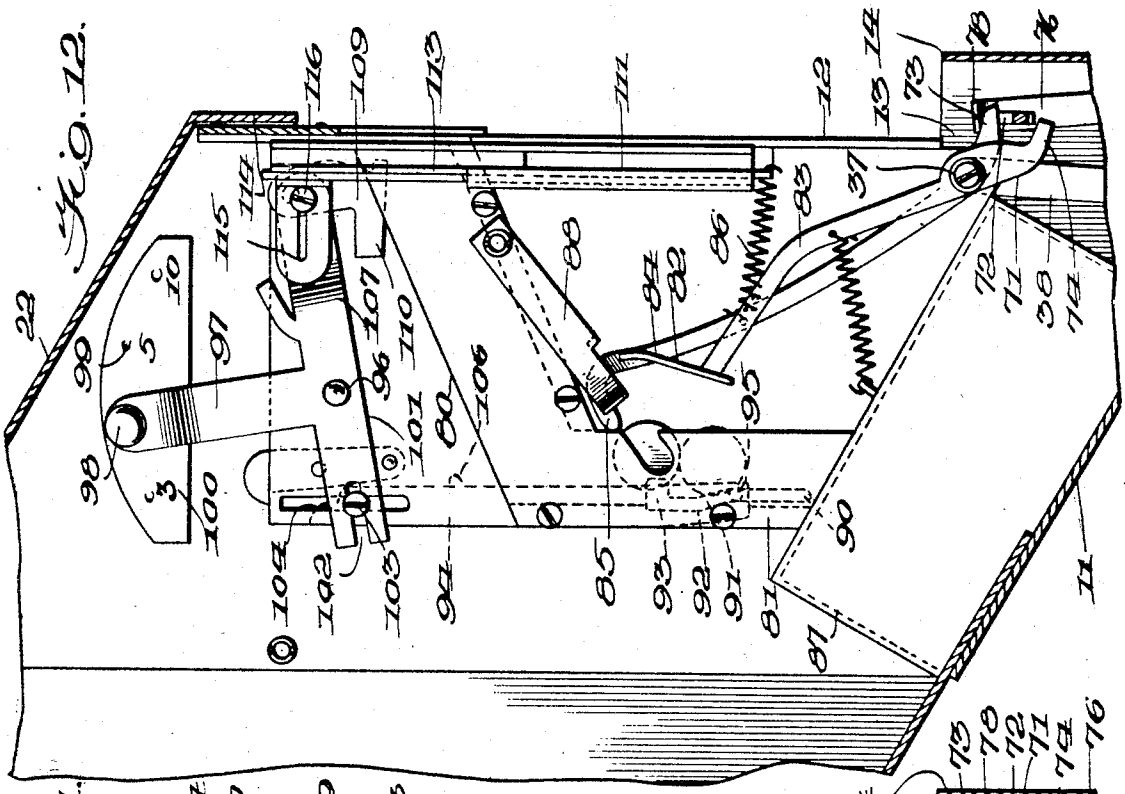
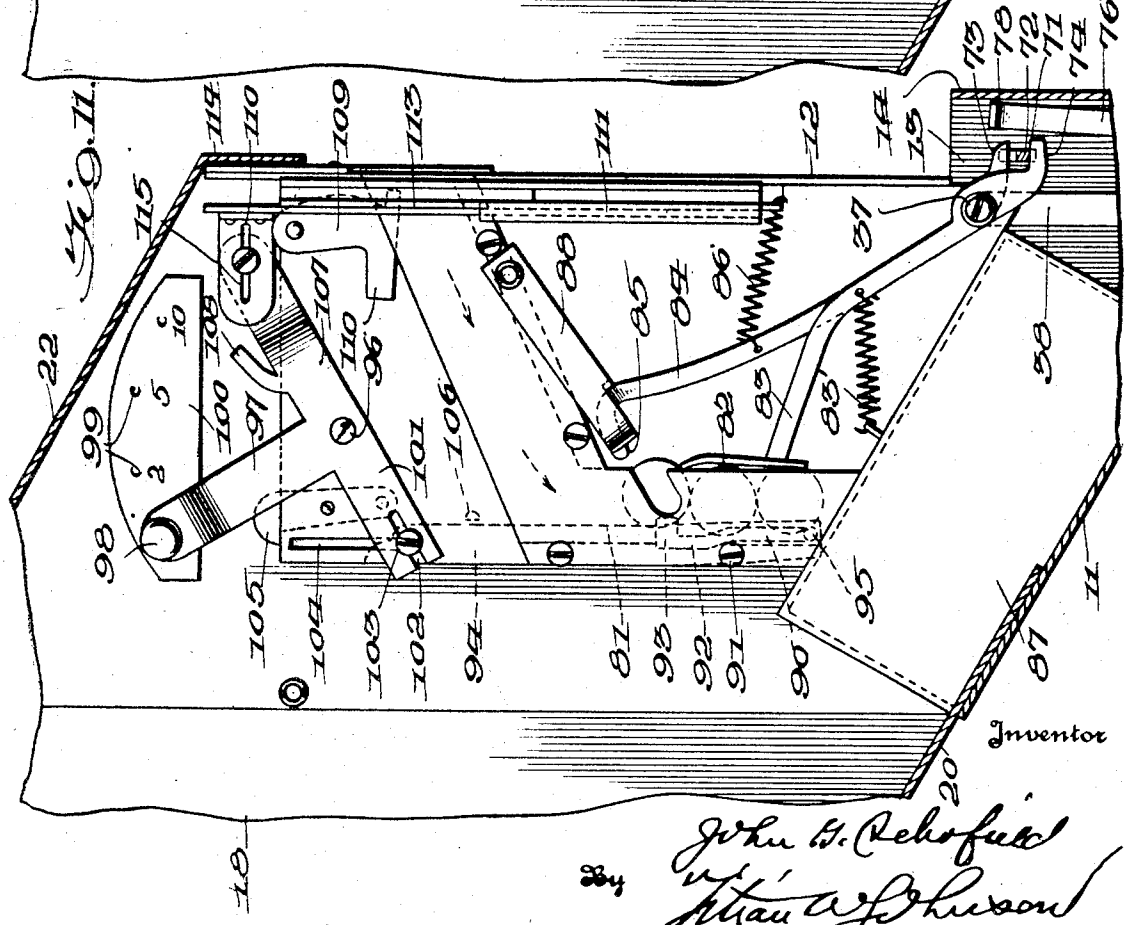


Fig. 11.



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Fig. 14.

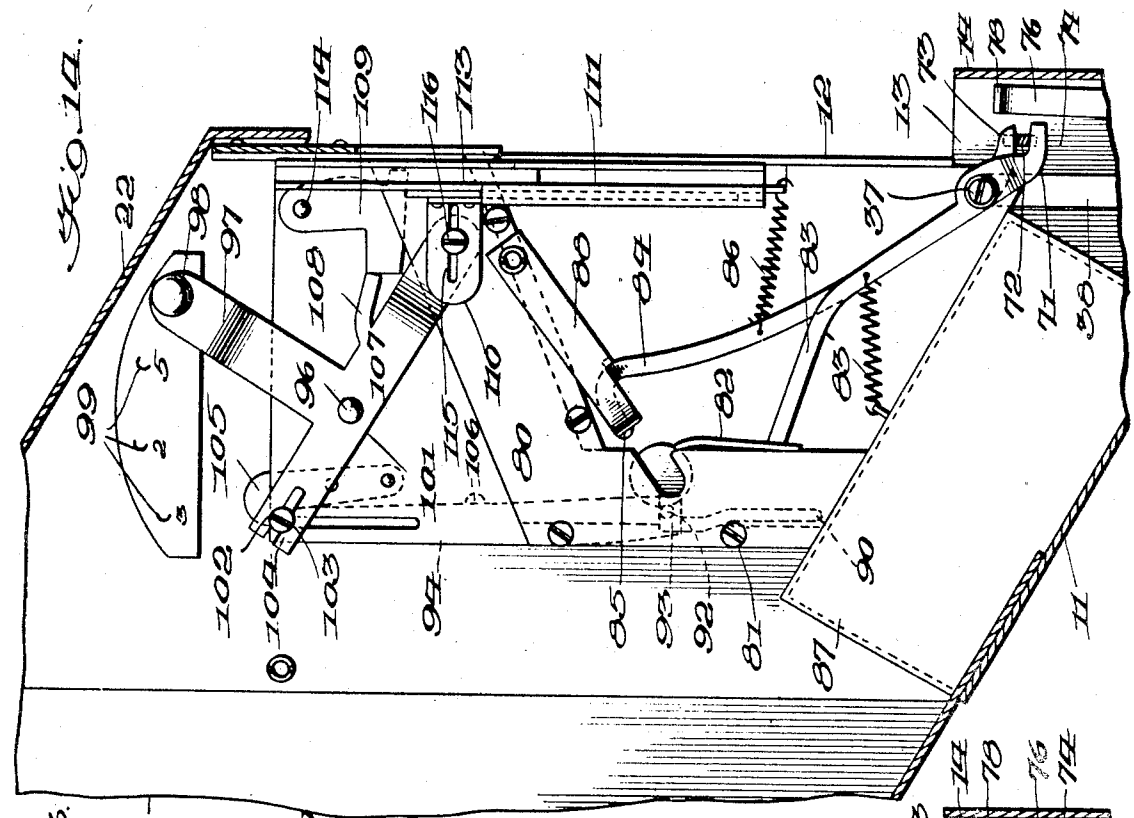
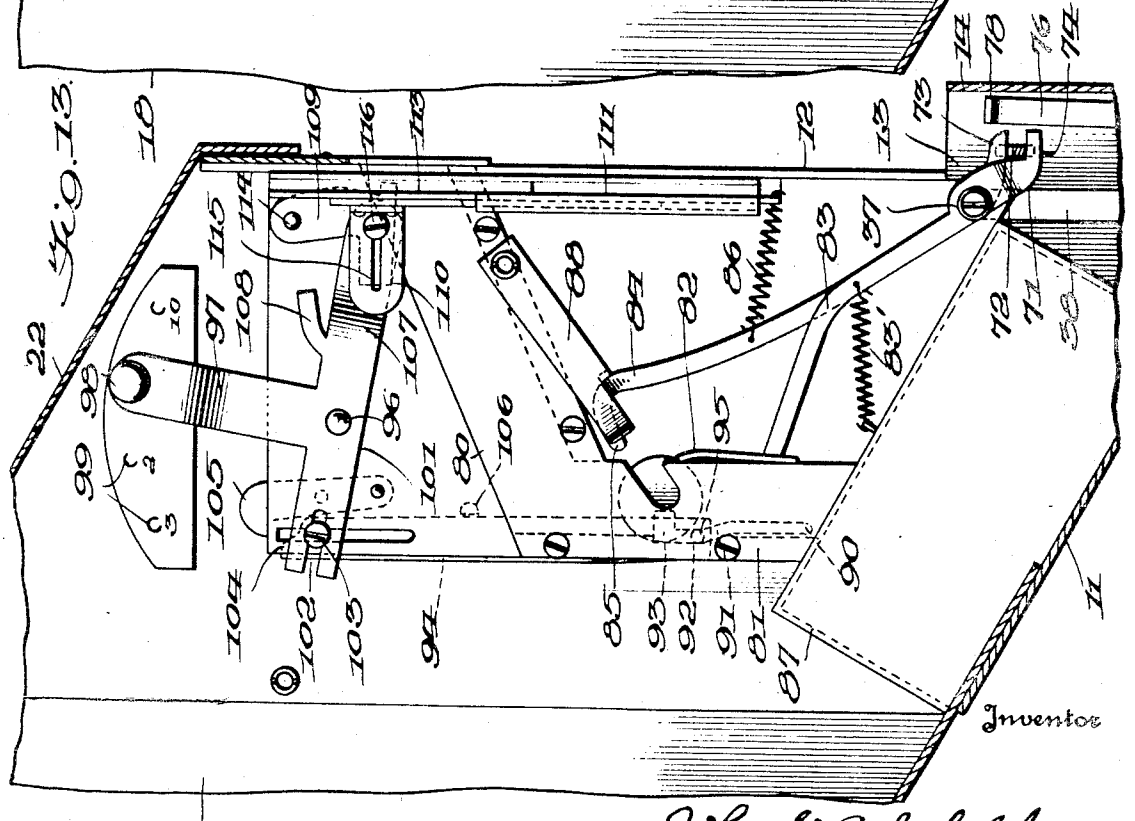


Fig. 13.



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1,803,440

UNITED STATES PATENT OFFICE

JOHN G. SCHOFIELD, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO NEWSPAPER MECHANICAL SALES COMPANY, OF WASHINGTON, DISTRICT OF COLUMBIA, A CORPORATION OF DELAWARE

COIN CONTROL FOR VENDING MACHINES

Original application filed July 25, 1929, Serial No. 380,870. Divided and this application filed October 4, 1929. Serial No. 397,267.

This invention relates to vending machines and has special reference to a coin control for vending machines of the type adapted especially for the vending of newspapers and like articles.

This application is a division of my copending application Serial Number 380,870 filed July 25, 1929.

Vending machines for the sale of newspapers have to meet certain peculiar requirements not met with in the sale of most other articles since the usual vending machine has its coin control arranged for the reception of coin deposits of uniform value while newspapers usually have a week day edition which sells at one price, a Sunday edition selling at another price and sometimes special editions at another price or prices. Moreover, it sometimes happens that the same publishing company owns two or more papers which have different prices. For instance, a publishing company may own a morning paper selling for two cents on week days and five cents on Sunday and an evening paper selling at three cents on week days and ten cents on Sunday. Consequently, a vending machine acceptable for use by a newspaper publisher must have its coin control arranged with a considerable degree of flexibility as regards the amount of the deposit necessary to free the delivery mechanism of the machine for delivery of the paper. Attempts have been made to overcome the usual one price release in such machines by providing several coin actuated release mechanisms in the one machine, respectively working upon the insertion of a particular coin or coins and any one of which, upon the insertion of the proper coin deposit, acting to free the delivery mechanism. Naturally, this leads to multiplication of parts with the attendant cost and liability to derangement. Other attempts have been made to provide machines which operate only after the insertion of a certain number of coins and, while these are not so complicated as those last mentioned, they are impracticable for newspaper purposes especially in five and ten cent editions of papers usually costing two or three cents since few people carry five one cent pieces at a time and fewer still carry ten such coins.

In order to overcome these and other objections the present invention has several important objects.

One of these objects is to provide a novel and improved coin actuated release mechanism in a vending machine of this type wherein coins of different values are adapted to actuate the release mechanism in accordance with the position in which the coin control is set.

A second important object of the invention is to provide an improved coin controlled release mechanism adapted for effective operation, in accordance with its setting, upon the deposit of a certain definite number or kind of coins.

A third important object of the invention is to provide an improved coin controlled release mechanism adapted for effective operation upon the deposit of one or more like coins or a coin of selected value, that is upon deposit of, say, two like coins as cents, a different number of cents, a nickel or a dime, the coin release will work if the number and character of coins deposited agrees with the setting.

A fourth important object of the invention is to provide a novel and improved setting device for such a coin control.

A fifth important object of the invention is to provide an improved coin control for machines of this description having a single coin slot for receiving coins of different denominations, the mechanism of the control being readily adjustable to accommodate coins of different numbers and sizes.

A sixth important object of the invention is to provide, in such a single slot coin control device, automatic means for adjusting the size of the slot.

With the above and other objects in view as will be hereinafter apparent, the invention consists in general of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings and specifically claimed.

In the accompanying drawings like char-

acters of reference indicate like parts in the several views, and:

Figure 1 is a perspective view of the complete invention.

Figure 2 is a partially disassembled perspective sectional inside view, looking from the left rear corner of the invention and showing the front and right side especially.

Figure 3 is a plan view of the invention with the cover or lid removed, the view having its longitudinal middle portion broken out.

Figure 4 is a section on the line 4—4 of Figure 3.

Figure 5 is a section on the line 5—5 of Figure 3.

Figure 6 is an enlarged section on the line 6—6 of Figure 3 with the parts in the position assumed when the delivery mechanism is raised.

Figure 7 is a view similar to Figure 6 but showing the delivery mechanism partly depressed.

Figure 8 is a view similar to Figure 6 but showing the delivery mechanism with the parts in the positions assumed during upward movement.

Figure 9 is a plan view of that part of the invention shown in Figure 6.

Figure 10 is a greatly enlarged view looking from the interior toward the lower front right hand corner of the invention and showing the mechanism for holding the latch in released position until the paper is withdrawn.

Figure 11 is an enlarged section on the line 11—11 of Figure 3 and showing the coin mechanism set for three cents.

Figure 12 is a view similar to Figure 11 but showing the coin mechanism set for two cents.

Figure 13 is a view similar to Figure 11 but showing the coin mechanism set for five cents (a nickel).

Figure 14 is a view similar to Figure 11 but showing the coin mechanism set for ten cents (a dime).

Figure 15 is a disassembled view of certain details of the coin mechanism.

In the present embodiment of the invention a complete vending machine has been shown in order to make clear the manner in which this peculiar coin control device acts to release the delivery mechanism and also in order to make clear how the coin control may be locked in position by insertion of the proper coin or coins.

In this embodiment it will be seen that there is provided a telescopic casing so that articles of different thicknesses such as daily and Sunday newspapers may be held in suitable quantities. The front section of this casing is provided with side walls 10 and between these side walls is located a bottom 11 inclined upwardly from the front to rear. The side walls 10 extend somewhat below this bottom and terminate in horizontal bottom edges while the top edges of said side walls are parallel to the bottom 11. The upper part of the front of the casing is closed in by a glass panel 12 below which there are provided extensions 13 extending forwardly from the side walls and united by a lower front strip 14, the extensions being preferably formed by flanging the ends of the strip 14. This strip 14 is thus spaced forwardly from the side walls 10 and the space formed is closed at the top by a cover plate 15. At each side of the glass panel 12 the respective side wall 10 is flanged inwardly as at 16 and these flanges 16 not only stiffen the structure but one of the flanges also affords space for the cutting of a coin slot as will be presently set forth.

On each side wall 10 there is provided a guide rail or bar 17 inclined parallel to the top edge of the respective side wall and positioned on the outside thereof about opposite the bottom 11. Slidably engaged with these rails 17 are the side walls 18 of the rear section of the casing, these side walls having their top edge coterminous of the walls 10. The walls 18 are closed at the rear by a rear wall 19 which forms the rear wall of the casing whether expanded or collapsed and a bottom 20 is provided which is slidable over the bottom 11, the two sections of the bottom being connected by pin and slot connections 21. (See Fig. 2.)

The top of the casing is closed by a hinged lid having a front section 22 flanged at its sides and having its flanges connected by pin and slot connections 23 with the rear lid section 24 which has hinge connection with the rear of the rear casing section. On the outside of the casing, wherever desired, suitable channel members 25 are arranged to form card holders for the reception of instruction cards, advertising signs and other like matter.

Within the casing and spaced from the right wall 10 by suitable means is a dividing plate 26 which separates the front part of the casing into a magazine, lying between the plate 26 and left side wall, and a coin mechanism section to the right of said plate. At the top rear corner this plate is secured to the adjacent side wall by a bolt 27 and a corresponding but shorter bolt 28 extends inwardly from the left wall 10. On the rear wall is fixed a pair of brackets 29 to which are pivoted arms 30 the free ends of which are notched to engage the bolts 27 and 28 respectively, the arms when thus engaged holding the casing expanded and, when disengaged permitting collapse or telescoping of the rear section on the front section. Also on the rear wall are pairs of brackets 31 which support the rear ends of lazytongs 32, the front ends of which are connected to brackets 33 on a

presser frame 34 having at its bottom a spring extension 35. This frame is urged forwardly by the lazytongs springs 36 and keeps the papers P urged forwardly so that the front paper is in position for delivery.

At each side of the machine adjacent the front thereof is a pivot bolt 37 on which is pivoted the upper end of a hanger 38, the two hangers having their lower ends connected by a cross channel 39. Fixed to this channel to extend downwardly and forwardly therefrom are the channel fingers 40 which, it will be noticed from Figure 5, support the paper next to be delivered, the succeeding paper resting on the channel itself and the remainder on the magazine bottom. Fixed to the inside of the front plate 14 are stop fingers 41 against which the lower part of the paper which is supported on the channel fingers 40 rests. It will now be obvious that, so long as the cross channel 39 is in its forward position no paper can pass down for delivery through the delivery slot 42, it being noted that the front edge of this slot is formed by the bottom edge of the plate 14 while the rear edge of the slot is formed by a guard plate 43. Springs 44 serve to hold this cross-channel normally forward but can yield to permit the channel to swing rearwardly when the paper at the front is forced down by the feeding mechanism now to be described.

This mechanism is especially shown in Figures 2 and 6 to 9 inclusive and it will there be seen that there is secured to the inside of the plate 14 at about the center a pair of vertical guide strips 45 between which is slidably mounted an operating bar 46 which has its lower end projecting below the lower edge of the plate 14 to permit the operating handle 47 to extend forwardly into position for convenience in grasping by the purchaser. On the rear face of this operating bar 46 is carried a boss 48 to the sides of which are hinged the pin plates 49 provided adjacent their free ends with rearwardly and downwardly projecting feeder pins 50. These plates 49 have their free ends urged forwardly by the double leaf spring 51 which is fixed to the boss 48 and has oppositely extending arms engaging said pin plates. Adjacent the free end of each pin plate is a vertically disposed cam arm 52 having at the edge next the respective pin plate a cam flange 53. Each arm is pivoted at its lower end on a pivot screw 54 and is urged towards its pin plate by a spring 55. The cam flange 53 of each cam arm has its upper edge inclined downwardly and rearwardly from the top to about the center and from that point downwardly and forwardly and terminates at the bottom in an outwardly curved end 56. Each pin plate is provided on its extremity with a finger 57 which normally rests on the upper part of the edge of its cam flange 53.

In the operation of this part of the device, assuming the mechanism free to move, depression of the handle 47 moves the bar 46 downward and this carries the pin plates down with it. As these plates move down their free ends move at first rearwardly so that the pins 50 enter the paper and carry it down, the cross channel 39 swinging back by the action of the lower part of the paper on the fingers 40. Next, further downward movement of the pin plates causes them to pull the pins slightly out of the paper and at the lower limit of movement the fingers ride off the cam edge and lie against the curved portions 56 so that upward movement of the handle 47 and bar 46 will now cause the pin plates to move upwardly in their forward position, the cam arms 52 swinging out as in Figure 8 to permit this upward movement. On reaching the upper limit of movement the pin plate fingers 57 rise high enough to permit the cam arms to resume their normal position under the influence of the springs 55. Obviously, each repetition of this movement pushes the paper down one step until it is protruded sufficiently far below the slot 42 to be easily grasped by the purchaser.

The latching mechanism which controls the operation of the delivery or feeder just described may also be seen in the same figures as that mechanism and too in Figure 10. This latching mechanism is constructed as follows. About half way between the center and right end of the plate 14 there is provided on its inner side a pivot pin 59 on which is loosely pivoted the vertical arm 60 of a latch lever having its horizontal arm 61 extending over the rear face of the operating bar and connected thereto by a pin and slot connection 62. A spring 63 normally holds this horizontal arm raised and thus also acts to hold the operating bar 46 raised. At the angle of the latch lever is a pivot screw 64 on which is pivoted one end of a latch link 65. This link is provided with a slot 66 through which passes a screw 67 engaging in the front plate 14. This slot is of such size that the lever may not only slide longitudinally on the screw 67 but may also rise and fall on said screw, being normally held raised by a spring 68. On the upper edge of this link 65 is a shoulder 69 adapted, when the link is raised, to engage after slight movement toward the bar 46 upon its depression with a fixed stop 70 thus preventing further movement of the link and depression of the bar 46. When, however, the link is depressed (see Fig. 7) the shoulder 69 clears the stop and full movement of the link and depression of the bar is permitted. Extending longitudinally from the link at the free end thereof is a stem 71 carrying a double cam head 72, both the upper and the lower edges of this head forming cams. This cam head works between two fingers pivoted on the

right hand screw 37, there being an upper finger 73 and a lower finger 74. As will be understood when the description of the coin control is reached these fingers form part of this control and it may be here mentioned that, so long as the proper coin deposit has not been made, the finger 73 will be more free to lift than is the figure 74 to drop while, if the proper coin deposit is made the finger 73 cannot lift and the finger 74 may be forced down. Consequently, if the proper coin deposit is not made and an attempt is made to depress the handle 47 the upper edge of the cam head 72 will lift the finger 73 and the shoulder 69 will engage the stop 70, the spring 68 holding the link 65 up. If, however, the proper coin deposit is made then the finger 73 will be held from lifting and an attempt to depress the handle 47 and deliver a paper will result in the lower finger 74 yielding under the influence of the cam head 72 and the link 65 being forced downwardly by engagement of said cam head with the upper (now immovable) finger 73 so that the shoulder 69 clears the step 70 and full operation of the handle is permitted.

As will be hereinafter explained, downward movement of the finger 74 frees the coin deposit from restraining finger 73 but this finger will now be locked down until the paper delivery has been completed. To this end (see Fig. 10) the right hand hanger 38 is connected by a link 75 with a complete operation latch arm 76 pivoted as at 77 at its lower end and having a finger 78 which, when the arm 76 is swung rearwardly by the previously described movement of the cross channel 39 swinging rearwardly as the paper is moved down, engages over the finger 73 as shown in said finger and thus holds it from rising until the paper delivery is complete whereupon the forward movement of the cross channel 39 to its normal position causes forward movement of the arm 76 and freeing of the finger 78 from the finger 73 so that this finger is now in its normal condition and will rise if any attempt is made to feed out a second paper for one deposit of coin.

In the member 16 at the right of the machine there is provided a coin receiving slot 79 and, as shown best in Figures 11 to 14 inclusive, there is a coin chute having a rearwardly and downwardly inclined portion 80 leading from this slot and terminating rearwardly in a vertical portion 81 which latter portion is open at its front side. This latter portion is closed in normal conditions at its lower front part by a plate 82 which is carried on the end of a lever 83, this lever being that which carries the finger 74. The lever 83 is normally held down as in Figure 11 by a spring 84 but rises to the position shown in Figure 12 upon depression of the finger 74 in the manner previously described. Carrying the finger 73 is a coin lever 84 having a rearwardly extending foot 85 the end of which engages the single coin or uppermost of several coins when such coin or coins are in the vertical portion 81 of the coin chute. A spring 86 normally holds this lever raised as shown in Figure 11 but, when there are no coins or an insufficient number in the vertical portion 81 this lever may move rearwardly and downwardly upon lifting of the finger 73 as previously described. Thus, if the proper deposit of coins be made the finger 73 cannot lift and the delivery mechanism latch will release to permit delivery of a paper as previously described, the movement of the latch lifting the plate 82 and freeing the coin or coins to drop into the box or till 87. A guide and stop 88 for the free end of the coin lever is secured to the coin chute and not only limits forward movement of the coin lever but serves to guide the foot into proper engagement with the coin. The coin chute is carried by a plate 89 and in the lower rear part of this plate is a cam slot having a vertical lower end 90 the upper part of which connects to an upwardly extending rearwardly inclined portion 91 above which is a second vertical portion 92 terminating in a forwardly extending horizontal portion 93. At the rear of the coin chute is a coin selecting bar 94 having a cam pin 95 at its lower end fitting in the cam slot just described.

The distance between this pin and the plate 82 is such as to prevent downward movement of the proper coin so long as the plate 82 is in its normal position closing the front of the coin chute. For instance, when the pin 95 is in the portion 90 of the cam slot the distance between the pin and plate 82 is here indicated as slightly less than the diameter of a cent so that in its lowest position (Figure 11) three cents are shown as supported in the coin chute and in its next higher position (Figure 12) two cents are thus supported. If the bar be raised till the pin 95 is in the portion 92 of the cam slot then the distance between the pin and plate is increased to hold a five cent piece and if the pin is positioned forwardly in the portion 93 the distance is decreased to hold a dime. In order to adjust the bar to its desired position there is provided on the plate 89 a pivot 96 on which is pivoted the middle of a T-lever having an arm 97 carrying a pin 98 adapted to be selectively engaged in one of the sockets 99 of a fixed quadrant 100. This T-lever is also provided with a rear arm 101 having a slot 102 wherethrough passes a pin 103 carried by the upper end of the bar 94. This pin also fits loosely in a slot 104 formed in the upper part of the plate 89 so that the upper end of the bar 94 is thereby guided. Adjacent this slot there is provided a fixed bar 105 for camming the upper end of the bar 94 rearwardly, the rear edge of the bar 105 being inclined and shouldered for that purpose and the upper end of

the bar 94 having a rounded shoulder to assist in the camming operation. It will be seen from Figure 14 that this camming effect is only produced when the pin 98 is engaged in the forward socket 99 at which time the bar 94 is raised to its uppermost position and its upper end is cammed rearwardly it rocks on the fulcrum 106 so that its lower end moves forwardly, the pin 95 moving into the portion 93 of the cam slot so as to set the coin control for a dime. Also the T-lever has a forward arm 107 carrying a finger 108 and depending from a pivot on the plate 89 is a swinging arm 109 having a rearwardly extending projection 110. The lower end of this arm lies just behind the upper part of the coin slot, projecting into the coin chute for that purpose, and insertion of cents and nickels merely causes the arm to swing rearwardly out of the way so long as the pin 98 is set for nothing more than a nickel. When the T-lever is set for dimes, however, the finger 108 engages the finger 110 and pushes the swinging arm forwardly to close the upper part of the coin slot so that the latter, under these conditions will admit nothing of greater diameter than a dime. Thus when the bar 94 is set for dimes the coin slot is also set for dimes only.

Alongside the coin chute is a tubular guide 111 which lies vertically behind the glass front and has a window 112 in its front so that portions of a price slide or strip 113 may be exposed therethrough to show numbers corresponding to the required coin deposit, one such number being disclosed through the window in Figure 1. Secured to this price strip is a bracket 114 having a slot 115 wherethrough passes a screw 116 to connect the strip to the arm 107. By this means movement of the T-lever sets the price strip to expose a figure showing the amount to be inserted to operate the machine.

The operations of the several portions of the mechanism having been heretofore described it is not again necessary to repeat these operations. It may be said, however, that the invention is prepared for service by placing any desired number of papers in the magazine and setting the T-lever to the proper position in accordance with the price at which the papers are sold. The cover is then closed and secured. When a person wishes to buy a paper he notes the figure exposed on the price strip and deposits coins in accordance therewith. After this he grasps the handle 47 and, by one or more vertical reciprocations he feeds the foremost paper downwardly until it can be grasped and withdrawn or he may continue to reciprocate the handle to feed the paper fully out although the former method is preferable. Should he insert the wrong number of coins, as one when two are indicated or one or two when three are indicated, then the uppermost coin in the vertical part of the coin chute will not be in position to stop movement of the lever 84 and the unlatching mechanism will not free the feeder. Similarly, any other effort to obtain a paper for less than its value by inserting coins of less value than the paper will be frustrated.

It is to be noted that, although the present embodiment is disclosed as for four values, viz, two cents, three cents, five cents and ten cents, the device may be modified to suit any desired values and any number of different values in reason.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

It is obvious that minor changes may be made in the form and construction of the invention without departing from the material spirit thereof. It is not, therefore, desired to confine the invention to the exact form herein shown and described, but it is desired to include all such as properly come within the scope claimed.

Having thus described the invention, what is claimed as new, is:

1. In a coin controlled vending machine, a coin chute having a coin holding portion provided with a longitudinal slot, a movable pivoted bar adjacent said chute and carrying a pin projecting through the slot to travel therein into said chute to travel therein and spaced from the opposite side of the chute at a distance less than the diameter of a coin to be held, and adjusting means to vary the position of the free end of said bar and the pin longitudinally of the chute whereby to vary the number of coins held.

2. In a coin controlled vending machine, a coin chute having a coin holding portion, a movable bar adjacent said chute and carrying a pin projecting into said chute and spaced from the opposite side at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar and pin longitudinally of the chute whereby to vary the number of coins held, and camming means for varying the position of said pin toward and from the opposite side as the pin is adjusted longitudinally whereby to vary the size of coins held.

3. In a coin controlled vending machine, a coin chute having a coin holding portion, a movable bar adjacent said chute and carrying a pin projecting into said chute and spaced from the opposite side at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar and pin longitudinally of the chute whereby to vary the number of coins held, an adjustable value indicating device visible from the exterior of the machine, and an operative connection between said adjusting means and value indicating device to move the latter as the former is moved.

4. In a coin controlled vending machine, a coin chute having a coin holding portion, a movable bar adjacent said chute and carrying a pin projecting into said chute and spaced from the opposite side at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar and pin longitudinally of the chute whereby to vary the number of coins held, camming means for varying the position of said pin toward and from the opposite side as the pin is adjusted longitudinally whereby to vary the size of coins held, an adjustable value indicating device visible from the exterior of the machine, and an operative connection between said adjusting means and value indicating device to move the latter as the former is moved.

5. In a coin controlled vending machine, a coin chute having a coin holding portion, a movable bar adjacent said chute and carrying a pin projecting into said chute and spaced from the opposite side at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar and pin longitudinally of the chute whereby to vary the number of coins held, camming means for varying the position of said pin toward and from the opposite side as the pin is adjusted longitudinally whereby to vary the size of coins held, a coin slot at the intake end of said chute, and means controlled by the movement of said adjusting means for varying the effective size of said cam slot.

6. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, including a lever pivoted transversely of said chute and having a free end swinging transversely of the chute toward and from the open side and a blade fixed to the free end of the lever transversely thereof and normally extending across said open side, an article delivery mechanism, and means controlled by the action of the delivery mechanism to move said means away from said side to free the held coins.

7. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, an article delivery mechanism, means controlled by the action of the delivery mechanism to move said means away from said side to free the held coins, and means to adjust the effective length of said coin holding portion.

8. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, an article delivery mechanism, means controlled by the action of the delivery mechanism to move said means away from said side to free the held coins, and means to adjust the effective length and width of said coin holding portion.

9. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, an article delivery mechanism, means controlled by the action of the delivery mechanism to move said means away from said side to free the held coins, said coin holding portion having the side opposite the said open side also open, a movable bar closing said last open side and having its lower end spaced from said movable means at a distance less than the diameter of a coin to be held, and adjusting means to vary the position of said bar longitudinally of the chute whereby to vary the number of coins held.

10. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, an article delivery mechanism, means controlled by the action of the delivery mechanism to move said means away from said side to free the held coins, said coin holding portion having the side opposite the said open side also open, a movable bar closing said last open side and having its lower end spaced from said movable means at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar longitudinally of the chute whereby to vary the number of coins held, and camming means for varying the position of said pin toward and from the opposite side as the pin is adjusted longitudinally whereby to vary the size of coins held.

11. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, an article delivery mechanism, means controlled by the action of the delivery mechanism to move said means away from said side to free the held coins, said coin holding portion having the side opposite the said open side also open, a movable bar closing said last open side and having its lower end spaced from said movable means at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar longitudinally of the chute whereby to vary the number of coins held, an adjustable value indicating device visible from the exterior of the machine, and an operative connection between said adjusting means and value indicating device to move the latter as the former is moved.

12. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, an article delivery mechanism, means controlled by the action of the delivery mechanism to move said means away from said side to free the held

coins, said coin holding portion having the side opposite the said open side also open, a movable bar closing said last open side and having its lower end spaced from said movable means at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar longitudinally of the chute whereby to vary the number of coins held, camming means for varying the position of said pin toward and from the opposite side as the pin is adjusted longitudinally whereby to vary the size of coins held, an adjustable value indicating device visible from the exterior of the machine, and an operative connection between said adjusting means and value indicating device to move the latter as the former is moved.

13. In a coin controlled vending machine, a coin chute having a coin holding portion provided with an open side, movable means normally closing said open side, an article delivery mechanism, means controlled by the action of the delivery mechanism to move said means away from said side to free the held coins, said coin holding portion having the side opposite the said open side also open, a movable bar closing said last open side and having its lower end spaced from said movable means at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar longitudinally of the chute whereby to vary the number of coins held, a coin slot at the intake end of said chute, and means controlled by the movement of said adjusting means for varying the effective size of said cam slot.

In testimony whereof I affix my signature.

JOHN G. SCHOFIELD.