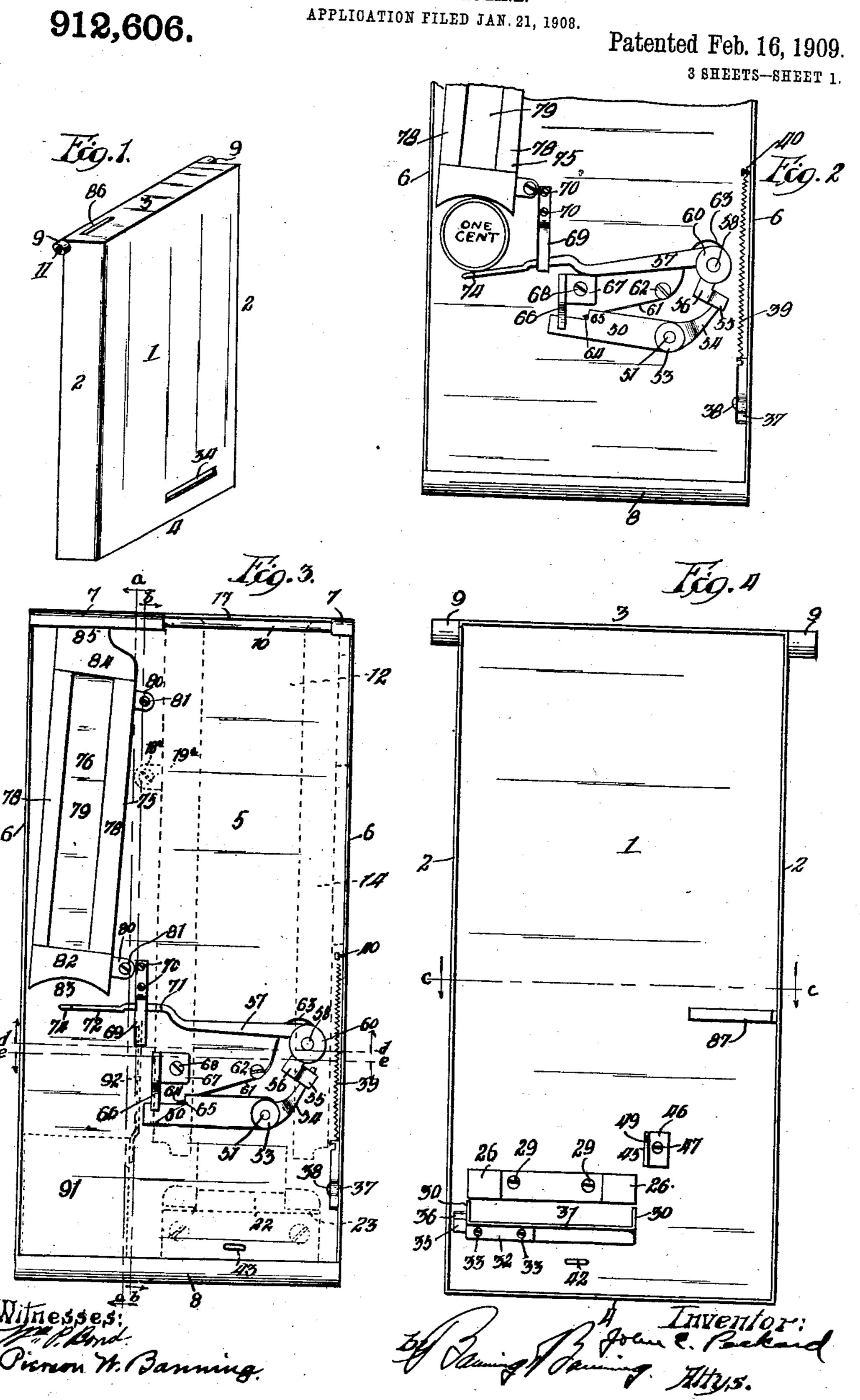
J. E. PACKARD.

VENDING MACHINE.

PLICATION FILED TAX OF 2000

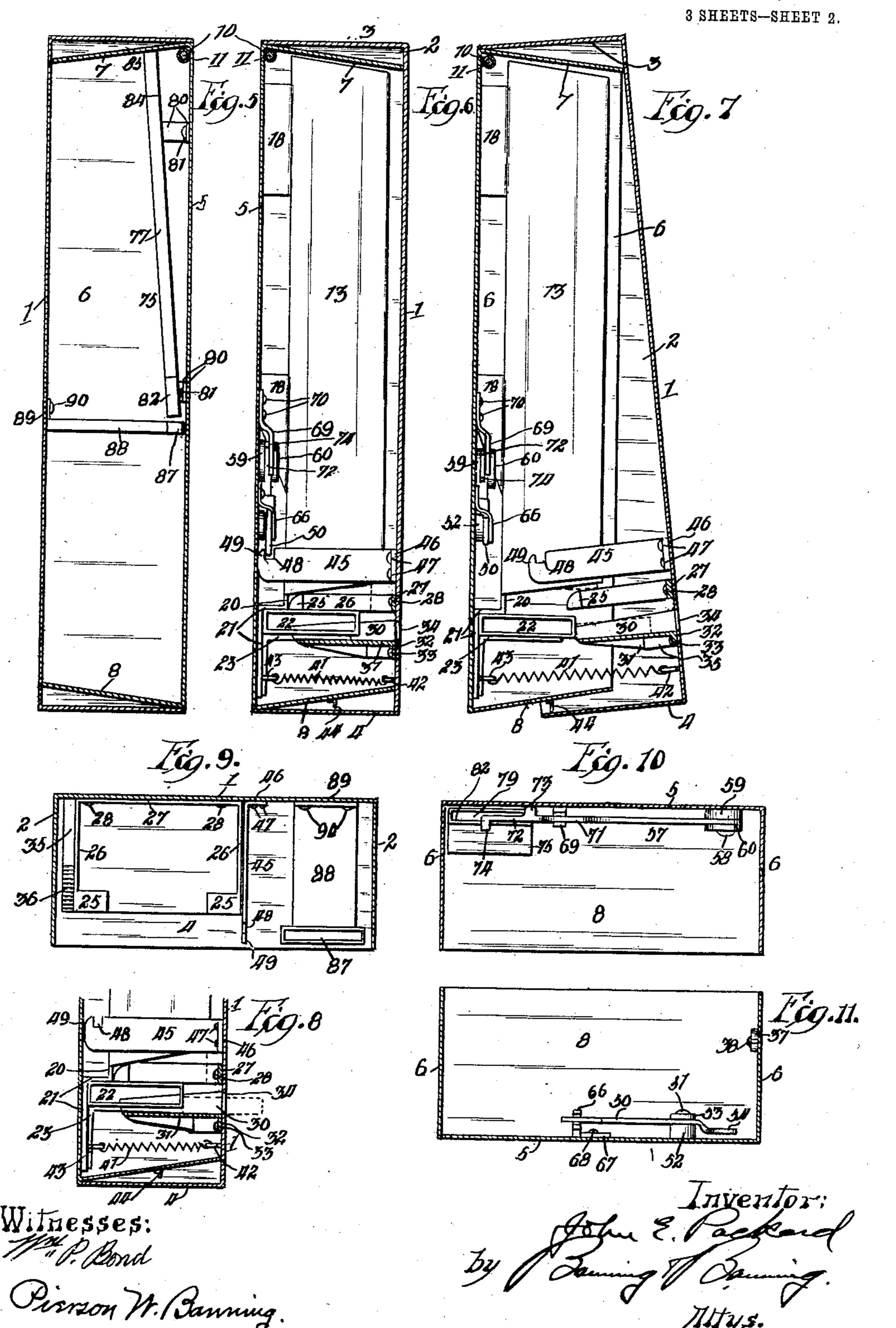


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912,606.

APPLICATION FILED JAN. 21, 1908.

Patented Feb. 16, 1909.



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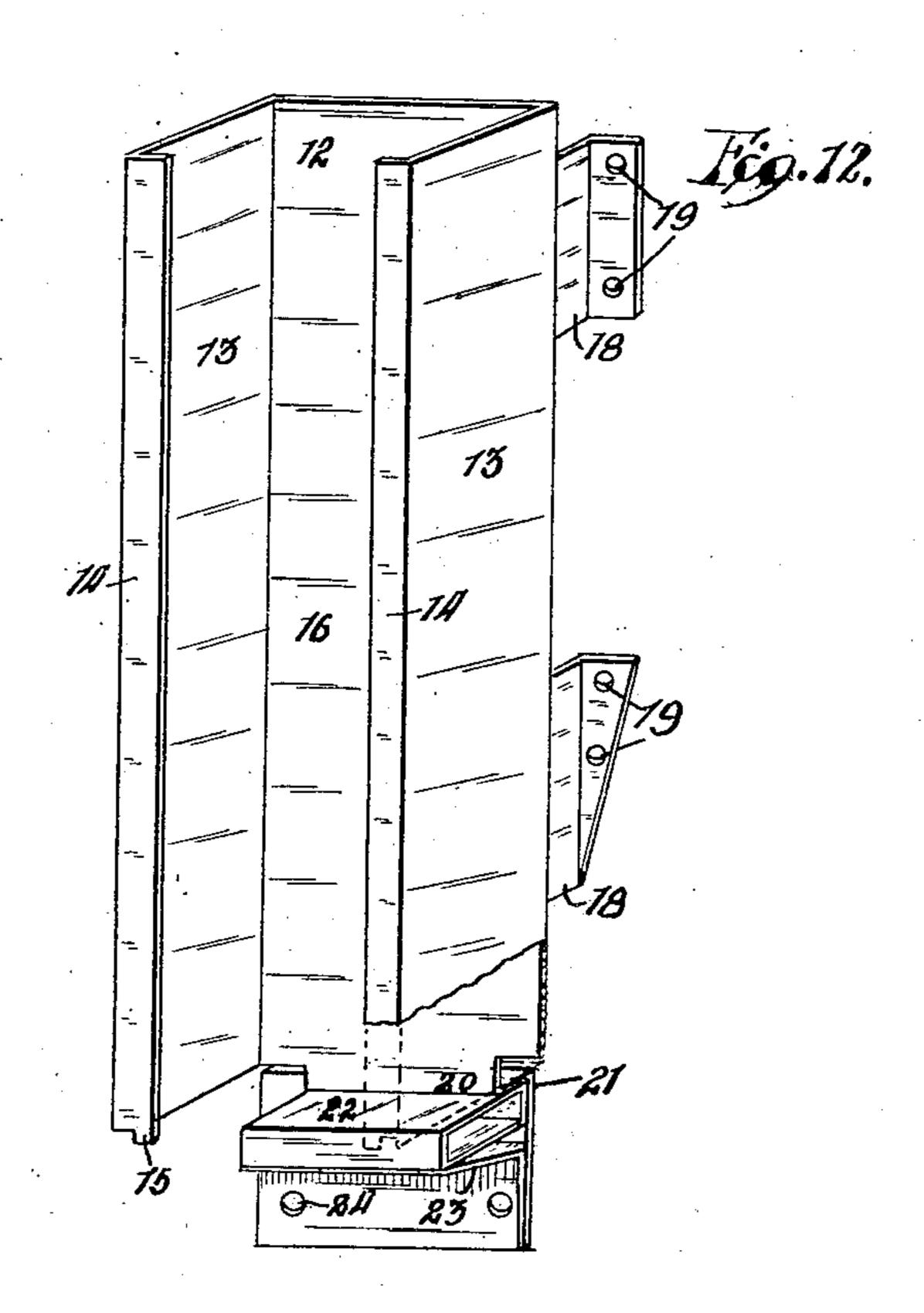
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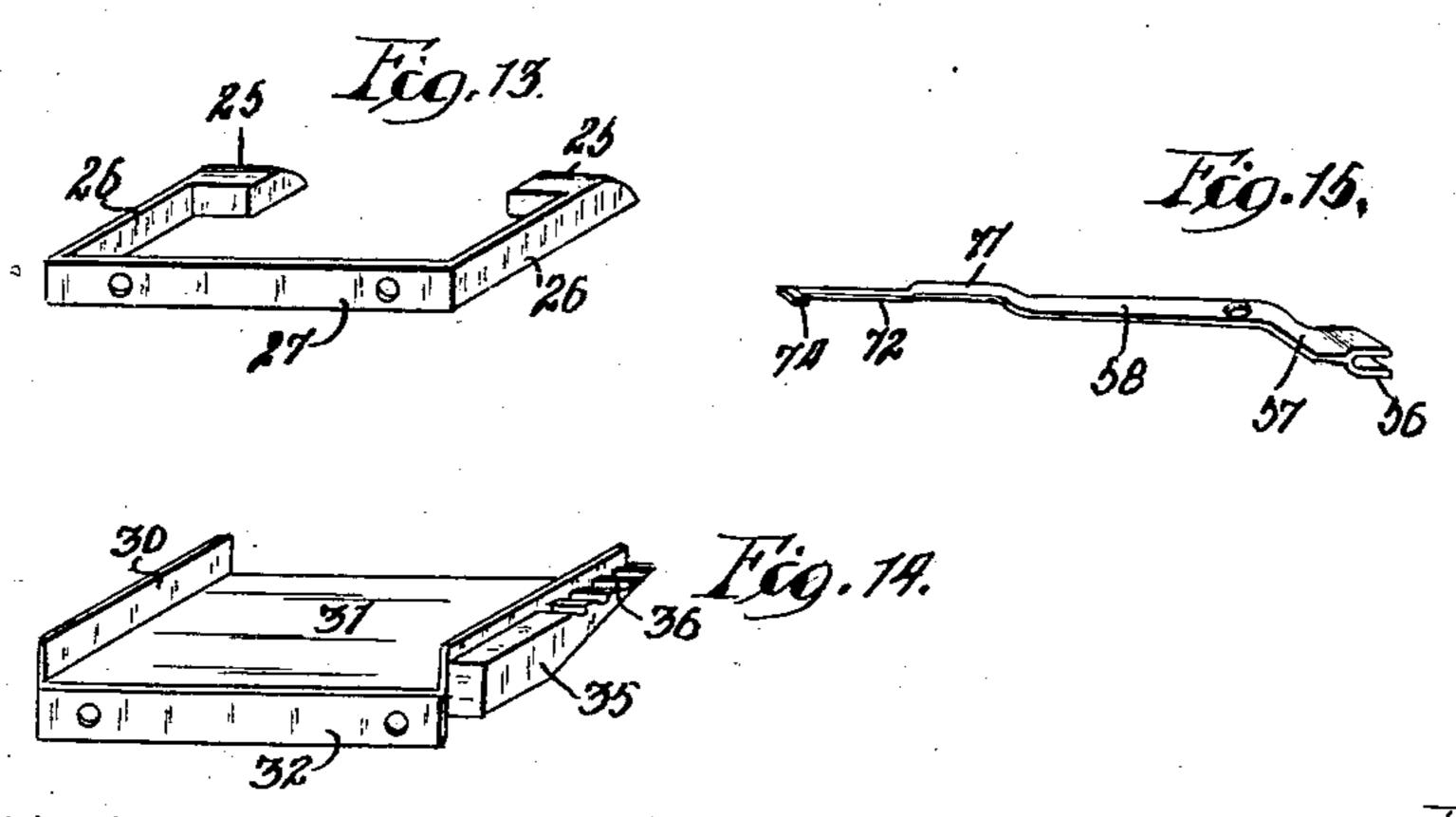
912,606.

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3 SHEETS-SHEET 3.





Witnesses:

Person W. Banning

by Baining To Baining

UNITED STATES PATENT OFFICE.

JOHN E. PACKARD, OF CHICAGO, ILLINOIS.

VENDING-MACHINE.

No. 912,606.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed January 21, 1908. Serial No. 411,973.

To all whom it may concern:

Be it known that I, John E. Packard, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification.

This invention relates to that type of vending machines operated by the deposit of a coin to expel or discharge a single pack-

age of the vendible article.

The objects of the invention are to construct a small and compact vending machine especially adapted for use in places of enter-15 tainment, and which can be located on each seat, if so desired, and be completely operative for discharging an article on the deposit of a coin of the proper denomination; to construct a vending machine with two 20 independent casings, one having a fixed relation and the other movable on the fixed casing, in such manner as to discharge an article in position to be received by the purchaser; to construct a vending machine formed of two casings, the inner casing having a fixed relation and the outer casing having a pivotal support on the inner casing, in such manner as to be movable forward and backward, and in so moving discharge 30 an article to be received by the purchaser; to construct a two-casing vending machine, one casing fixed and the other casing movable, and have the two casings inclose a vending mechanism operative through the 35 movements of the movable casing; to construct a two-casing vending machine, one casing fixed and the other casing movable, and locating on the fixed casing, within the two casings, a package receptacle and a pack-40 age support, and locating on the movable casing, within the two casings, a package discharger operating to partially project a package into position to be received by the purchaser; to construct a two-casing vend-45 ing machine having inclosed within the casing a receptacle and a support for the packages and carried by the fixed casing; to furnish the movable casing with a package discharger and means for locking 50 and unlocking the two casings and have the discharger operate when the casings are unlocked, to eject a package; to construct a vending machine with two casings, one fixed and the other movable, and locating within 55 the two casings a receptacle and support for the packages, a discharger for a single pack-

age, a catch and latch for interlocking the two casings when closed, a trip lever for disengaging the catch and latch, and a coin chute for depositing a coin on the trip lever and cause the deposited coin to disengage the catch and latch; and to improve generally the construction and operation of the several elements entering into the formation of the vending machine as a whole.

The invention consists in the features of construction and combinations of parts here-

inafter described and claimed.

In the drawings illustrating the invention Figure 1 is a perspective view, on a reduced 70 scale as compared with the remaining figures, showing the vending machine closed; Fig. 2 an elevation of the fixed casing with the upper portion broken off, and showing the latch, trip lever and coin chute of the 75 mechanism for releasing the interlock between the two casings; Fig. 3 an elevation of the interior of the fixed casing, showing the latch, the trip lever, the coin chute in full lines, and showing in dotted lines the 80 package receptacle and the support for the packages; Fig. 4 an elevation, showing the interior of the movable casing with the parts carried thereby, said parts being a catch, a package discharger, a receiving shelf 85 for the discharged package, and a coin carrier; Fig. 5 a cross section longitudinally on the lines a-a of Fig. 3, looking in the direction of the arrow, showing the two casings closed; Fig. 6 a cross section longi- 90 tudinally on the lines b-b of Fig. 3, looking in the direction of the arrow, with the casings closed; Fig. 7 a similar view to Fig. 6 on the same line b-b of Fig. 3, looking in the direction of the arrow, showing the mov- 95 able casing carried forward in position to discharge a package; Fig. 8 a similar view to Fig. 6, showing the package partially ejected and in position to be taken by the purchaser, the package being shown in 100 dotted lines; Fig. 9 a cross section on line c—c of Fig. 4, looking in the direction of the arrow; Fig. 10 a cross section on line d—d of Fig. 3, looking in the direction of the arrow; Fig. 11 a cross section on line e-e of 105 Fig. 3, looking in the direction of the arrow; Fig. 12 a perspective elevation of the package receptacle and the supporting shelf for the packages at the lower end thereof; Fig. 13 a perspective view of the package dis- 110 charger; Fig. 14 a perspective view of the shelf receiving the discharged package from

the package discharger; and Fig. 15 a perspective view of the trip lever for disengaging the interlocking catch and latch of the

two casings.

The construction shown has the outer casing arranged as the movable casing, and this casing is made of sheet metal formed into shape to have a front wall 1, side walls 2, one on each side, a top wall 3, and a bot-10 tom wall 4; and, as shown, the casing is of a rectangular shape of greater length than width. The construction shown has the inner casing arranged as the fixed casing, and this casing is also made of sheet metal 15 formed into shape to have a rear wall 5, side walls 6, one on each side, a top wall 7, and a bottom wall 8, and the top and bottom walls are inclined downwardly and upwardly respectively, so as to furnish a clearance that 20 will permit the outer casing to be moved fore and aft for operating the machine. The outer casing, at the sides, fits closely against the sides of the inner casing, and the length of the inner casing, at the rear, is 25 a trifle less than the length of the outer casing, so as to have the outer casing overlie the inner casing at the sides, top and bottom, as shown in Figs. 5 and 6, when the casings are closed. The outer casing, at each rear 30 corner, has bearings or sockets 9, and the inner casing, at the upper rear corner on the inside, has a tube 10 for the passage of a pivot rod 11, which rod extends through the bearings or sockets 9 and the tube 10, and 35 furnishes a pivotal connection at the top and rear for allowing the lower end of the outer casing to be moved forward and backward,

or in and out in use. A package receptacle is located within 40 the interior of the two casings, and, as shown, is fixedly attached to the rear wall of the inner casing. This package receptacle, as shown, is made of sheet metal formed into shape to have a rear wall 12. 45 side walls 13, one on each side, and strips 14 at the front with a space between the strips; and each strip, at the lower end, projects below the end proper of the receptacle, so as to furnish stops 15 for re-50 tention of the package in the chamber 16 of the receptacle. The top wall 7 of the inner casing is cut away as shown in Fig. 3, so as to furnish an opening 17 for filling the chamber 16 of the package receptacle 55 with the articles to be vended. It is preferred to make the walls of the two casings and of the package receptacle of sheet metal, but the casings and the package receptacle could be made of cast metal, or other ma-60 terial, if so desired. The package receptacle, in the arrangement shown, is attached to the rear wall of the inner casing by angle brackets 18 rearwardly extending from the rear wall of the receptacle, and having, in 65 one member, holes 19 for the passage of

screws, or other fastening means, and, as shown by dotted lines in Fig. 3, the opposite side of the package receptacle has an ear 18a and a screw 19a for attaching that side of the package receptacle to the rear wall of the 70 inner casing. The construction shown has the rear wall of the package receptacle cut away on each side so as to form a neck or strip 20, which neck or strip is continued with a horizontal and vertical ex- 75 tension 21 to furnish a support and backing for the lower end of the package receptacle. A support 22 is located below the package receptacle a sufficient distance for the lowermost package to rest thereon, and for the 80 next succeeding package to abut at its forward side against the stops 15 and prevent the withdrawal of only the lowermost package. This support 22, in the form shown, is rectangular in cross section, with top, 85 bottom and side walls, but could be of other formation in cross section, so long as a support is furnished, for the lowermost package to rest thereon in position to be discharged. The support 22, as shown, is mounted on a 90 bracket shelf 23 having a horizontal and a vertical portion, and the vertical portion, as shown, has holes 24 for the passage of screws, or other fastening means, by means of which the bracket 23 and the extension or strip 21 95 of the package receptacle are attached to the rear wall of the inner casing. The construction shown has the package discharger attached to and movable with the outer casing. This discharger, in the form shown, 100 has side lugs 25 inwardly projecting from the rear end of side arms 26 rearwardly extending from a front cross bar 27, so as to leave an open space, between the lugs, the side bars and the cross arm or bar, of the 105 proper dimensions to receive thereinto a package resting on the package support 22, for the lugs to engage the rear edge of the package, and with the forward movement of the outer casing draw the lowermost 110 package out to be discharged. The cross bar or arm 27 is attached to the front wall of the outer casing on the inside by screws or rivets 28, so as to have the discharger, as a whole, move with the outer casing. A 115 cross bar 29 is located below the cross bar or arm 27, and is of greater width than the cross bar or arm 27, so as to furnish a shoulder or rest for the forward edge of the package and hold the package at the 120 forward edge against dropping, until the discharger has carried the caught package to the position where the package will drop in front of the fixed support at the lower end of the package receptacle, and in with- 125 drawing a package the next higher package is supported by the lugs against dropping down until the caught package has been fully discharged and the discharger has been returned to normal position for the next 130

package to drop into the space between the lugs and arms of the discharger, so as to rest on the support 22 in position to be withdrawn by the next forward movement of the

5 discharger.

The caught and discharged package drops from the discharger when clear of the support 22, onto a shelf, also attached to and movable with the outer casing. This shelf, 10 as shown, has side plates or walls 30 and a bottom plate or wall 31, and is opened at the front and rear as shown in Fig. 14, so as to permit the caught package resting on the shelf or bottom 31 to abut at its rear edge 15 against the front face of the support 22, and be shoved outwardly, with the return of the outer casing to normal position, as shown in Fig. 8, to be received by the purchaser. The shelf or bottom 31, at the forward side, has 20 a downturned flange 32, by means of which, and suitable screws or rivets 33, the shelf is attached to the inside of the front wall of the outer casing in position to be in alinement with an opening 34, formed in the 25 front wall of the outer casing and through | which the package is projected, with the return of the outer wall and the discharging mechanism attached thereto to normal position.

The discharging mechanism should be maintained against return to normal position until the limit of the forward throw of the outer casing has been reached so as to project the package, and for this purpose, in 35 the arrangement shown, a bar 35 is attached to one of the side walls or plates of the shelf, as shown in Fig. 14, and this bar has, on its upper face, a ratchet 36 the teeth of which are engaged by the acting end of a 40 reversible pawl 37, mounted on a pivot 38 inwardly projecting from one side wall of the inner casing, as shown in Fig. 2. This pawl is a reversible one and operates automatically so as to present an engaging face, 45 against the return of the discharger until the full forward movement of the outer casing has been completed; and, as shown, the reversing of the pawl 37 is automatically performed by a spring 39, one end of which 50 is attached to the upper end of the pawl and the other end of which is attached to a pin 40, inwardly extending from the side wall of the outer casing, as shown in Figs. 2

The outer casing, after withdrawal to the limit of its forward movement, should be returned to normal position, with the discharger or ejector carried thereby; and for this purpose, in the arrangement shown, a 60 coiled spring 41 is utilized, one end of the coiled spring entering into an eye or loop 42 on the inner face of the outer wall of the movable casing, and the other end of the coiled spring entering into an eye or loop | 65 43 on the inner face of the fixed casing or | carries the arm or member 56 thereof later- 130

the continuation of the neck of the package receptacle, as shown in Figs. 6 and 7. This spring is contracted, when the two casings are in closed relation, and is expanded and under tension, when the outer casing is 70 swung forward, as shown in Fig. 7, and the tension is sufficient to return the outer casing to normal position, with a release of the pull thereon, as shown in Figs. 7 and 8. A stop 44 is attached to the under face of the 75 bottom 8 of the fixed casing, in the construction shown, which stop is located and arranged to engage, the upper face of the bottom 4 of the movable casing and limit the forward movement of such outer casing in 80

ejecting or discharging the package.

The two casings should be interlocked, when in their closed position, and incapable of separation until a coin of the proper denomination has been deposited. The inter- 85 lock shown has a catch forming one member, which catch is in the shape of a bar or arm 45 having a flange or ear 46 at its forward end, by means of which and suitable screws or rivets 47 the catch is attached to the in- 90 ner face of the front wall of the outer casing, so as to move with the outer casing. The rear end of the arm or bar 45 has therein a notch or recess 48 to be engaged by the latch of the interlock; and as shown, to fa- 95 cilitate the passage of the catch member of the interlock to receive the latch member thereof, the extreme rear end of the arm or bar 45 has a rounded corner edge 49, which permits the ready passage of the catch un- 100 derneath the latch of the interlock. The latch member of the interlock, in the arrangement shown, consists of an arm or plate 50, mounted at its fixed end on a pin or pivot 51, projecting out from a boss or 105 head 52 attached to the rear wall of the inner casing, and the arm or plate 50 is held on the pin or pivot 51 by a washer 53, or in other suitable manner. The arm or plate 50 has its free end in position to pass over 110 the rear end of the catch member of the interlock and drop into the notch 48, when the two casings are closed, as shown in Fig. 6. An arm 54 extends from the pivoted end of the latch member of the interlock, and the 115 outer end of this arm 54 enters a slot between ears 55 on the arm or member 56 of a bell crank lever, as shown in Figs. 2 and 3. The member or arm 56 of the bell crank lever joins the arm or member 57 of such le- 120 ver, and the lever, as a whole, constitutes a trip lever for the latch member of the interlock. The lever 56 and 57, as a whole, is mounted on a pin or pivot 58, extending out from a boss or head 59 secured to the rear 125 wall of the inner casing; and the arm or lever is held on the pin or pivot 58 by a washer 60 or otherwise. The downward movement of the arm or member 57 of the trip lever

ally, and such lateral movement carries the arm 54 downwardly, raising the free end of the arm or plate 50 and disengaging the latch member from the catch member of the 5 interlock. A spring 61 serves as the means for throwing the latch into engaging position, and the body of this spring passes under a stop or pin 62, and its upper end 63 engages with the boss or head 59, and its 10 lower end 64 is turned so as to engage a shoulder 65 on the latch member of the interlock, as shown in Figs. 2 and 3, so that, with the upward movement of the latch, the spring 61 will be placed under tension, 15 which tension is sufficient to return the latch into engagement with the catch with the dropping of the coin from the arm or member 57 of the trip lever. A keeper 66 on an ear 67, attached by a screw 68, or 20 otherwise, to the rear wall of the inner casing holds the acting end of the latch so as to have a direct line play or movement, and a keeper 69, attached by screws 70, or otherwise, to the rear wall of the inner casing, 25 holds the arm or member 57 of the trip lever so as to have a direct line play or movement.

The bar or member 57 of the trip lever, in the form shown, has an upward bend 71 adjacent to its outer or free end; and the 30 outer or free end 72 of this arm or member of the trip lever has a rearwardly extending lug or projection 73 and a forwardly extending lug or projection 74, which furnish a stop and support and a rest for the 35 deposited coin, and by which the weight of the coin will carry down the outer or free end of the arm or member 57 of the trip lever and cause the arm or member 56 of such lever to act and elevate or raise the 40 acting end of the latch 50 and disengage such end from the notch 48 in the arm or bar 45 of the catch member of the interlock between the two casings when closed.

A coin chute 75 is employed for depositing 45 the coin on the outer or free end of the trip lever, and this coin chute 75, as shown, is formed with a back or rear wall 76, side walls 77, and front strips 78 on each side, with a space between the strips, so as to fur-50 nish a passageway 79 for the descent of the coin. The coin chute, as shown, is attached to the rear wall of the inner casing by brackets or ears 80 and screws 81, or otherwise, so as to have the proper relative posi-55 tion to deposit the coin on the outer or free end of the trip lever, as shown in Fig. 2. The coin chute, at its lower end, has a closed casing 82 with a curved under face 83, and with an interior chamber or passage in aline-60 ment with the passage 79 of the body of the coin chute, and the upper end of the body of the coin chute has a closure 84 with a neck 85, the walls of which surround the passage in communication with the passage 79 65 of the body of the chute, and with a slot or

opening 86 through the top walls of the two casings, shown in Fig. 1, which passage allows a coin of the proper denomination to be entered into the closure at the upper end of the body of the coin chute and descend 70 in the passage of the body of the coin chute to rest upon the outer or free end of the trip lever.

The deposited coin, after operating the trip lever and raising the latch, is to be re- 75 moved from its rest on the outer or free end of the trip lever, and for this purpose a coin carrier 87 is provided in the construction shown. This coin carrier 87, as shown, has an inner chamber or recess to remove the 80 coin, from the outer or free end of the trip lever, as the outer casing is moved forward and the carrier is located, when in normal position, below and in line with the discharge end of the coin chute, so that the de- 85 posited coin will pass through the chamber or recess of the carrier 87 and rest on the outer or free end of the trip lever and be held in the coin carrier, resting on the outer or free end of the trip lever. The coin carrier 87 90 is supported by an arm or bar 88, having, at its rear end, an ear 89, by means of which and a screw 90, or otherwise, the coin carrier is attached to the inner face of the rear wall of the movable casing, so that the coin, 95 which is held in the coin receiver or cradle 87, is withdrawn from engagement with the outer or free end of the trip lever by the forward movement of the coin carrier 87 with the forward movement of the outer casing, 100 and such coin is free to drop from the coin carrier 87, allowing the trip lever to return to normal position ready for the next operation. The coin held by the coin carrier, when released from engagement with the 105 outer or free end of the trip lever, drops into a coin receiver 91, having on one side an upwardly extending guard 92 and located at the bottom of the inner casing, as shown by dotted lines in Fig. 3.

The operation will be understood from the foregoing description, but briefly is as follows: The machine has the two casings separated for filling the package receptacle with the packages to be vended, and this 115 can be done by removing the pivot pin or rod at the upper end of the casings, which will allow the upper end of the casings to be opened at the top for inserting or depositing the packages in the receptacle. 120 After the receptacle has been filled with the packages, the two casings are pivotally united at the top by inserting the pivot rod or pin through the bearings therefor in the two casings, and the two casings are inter- 125 locked by the engagement of the catch and the latch, making the machine ready for use. A coin of the required denomination is dropped into the coin chute, through the slot or opening 86 and descends through the 130

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coin chute and the coin cradle or receiver 87 to strike or engage the outer or free end of the trip lever. The weight of the coin resting on the outer or free end of the trip 5 lever is sufficient to depress such end, moving the arm or member 56 of the trip lever laterally to act on the arm 54 and disengage the latch from the catch, breaking the interlock between the two casings. The 10 purchaser, by taking hold of the outer casing at the lower end, can swing such casing forward, and in so doing the bottom package, resting on the shelf 22 and within the space of the injector or discharger, will be 15 drawn forward clear of the forward edge of the shelf 22 and drop onto the receiving shelf, resting on the bottom 31 of such shelf, and the package thus caught will be carried forward with the forward swing of the outer 20 casing. The limit of swing forward of the outer casing is one to bring the rear side of the package clear of the front edge of the shelf 22, so that the purchaser, by releasing the outer casing, allows the spring 41 to act 25 and return the outer casing to its normal position; and, with such return of the casing, the deposited package will be pushed out through the opening 34 in the front wall of the outer casing and into position to be 30 grasped by the purchaser and removed. The return of the outer casing to normal position brings the operating parts into normal position for the trip lever to be engaged by the next deposited coin and have 35 the operation just described repeated, and the operations can be continued until the package receptable has been emptied of the contained packages, and when this is the case the casings can be separated or opened 40 and the package receptacle again filled ready for operation. The caught coin, as the outer casing is swung or advanced forward, drops from the coin cradle or carrier into the receptacle therefor, or any 45 suitable place of deposit. The vending machine of the present in-

vention, preferably, is of small capacity and is more especially designed or intended for use on the seats of theaters, halls and 50 other places of public assembling; and is to be placed in position so as to be readily accessible to the occupant of a seat for the occupant to deposit a coin of the proper denomination and receive in return therefor 55 the vended article; and the essential feature of the invention is two casings, one having a fixed relation and the other movable, and inclosing within the two casings a vending mechanism, operated by the move-60 ments of the movable casing to discharge a

package.

What I claim as new and desire to secure

by Letters Patent is:

1. In a vending machine, the combination 65 of two companion casings, one casing con-

sisting of a rear wall, side walls, one on each side, a top wall and a bottom wall, and the other casing consisting of a front wall, side walls, one on each side, a top wall and a bottom wall, the side walls of the two casings 70 closely fitting one into the other, one casing having a fixed relation and the other casing pivoted at its upper end to the fixed casing and having a swinging fore and aft movement from its pivotal attachment, and a 75 vending mechanism inclosed within the casing and operative to discharge a package from the swinging movement of the movable casing, said vending mechanism including a stationary receptacle and a bottom support 80 for the to-be vended packages, both located on the fixed casing, a package receiver and dropper and a shelf for the dropped package, both carried by the swinging casing, substantially as described.

2. In a vending machine, the combination of two casings, one casing consisting of a rear wall, side walls, one on each side, a top wall and a bottom wall, and the other casing consisting of a front wall, side walls, one on 90 each side, a top wall and a bottom wall, the side walls of the two casings closely fitting one into the other, one casing fixed and the other casing pivotally attached at its upper end and movable fore and aft at its lower 95 end on the fixed casing, and a vending mechanism inclosed within the two casings and operative to discharge a package from the swing of the movable casing, said vending mechanism comprising a stationary recept 100 tacle for the to-be vended packages, a support located below the lower end of the package receptacle with a space of the thickness of a package between the end of the package receptacle and the support, both the package 105 receptacle and the support attached to the rear wall of the fixed casing, a package receiver and dropper having an open center to receive and drop a package, and a shelf located below the package receiver and dropper 110 with a space between the two of the thickness of the dropped package, the package receiver and dropper and the shelf, both carried by the movable casing, substantially as described.

3. In a vending machine, the combination of an outer movable casing consisting of a front wall, side walls, one on each side, a top wall and a bottom wall, an inner fixed casing consisting of a rear wall, side walls, 120 one on each side, a top wall and a bottom wall, the side walls of the outer casing fitting closely over and against the side walls of the inner casing and the top wall of the outer casing pivotally connected with the top wall 125 of the inner casing at the rear edge, for the lower end of the outer casing to swing fore and aft, and a vending mechanism inclosed within the casing and operative to withdraw a package with the outward movement of 130

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the lower end of the outer movable casing and to drop and discharge a package with the inward movement of the lower end of the outer movable casing, substantially as described.

4. In a vending machine, the combination of an outer movable casing consisting of a front wall, side walls, one on each side, a top wall and a bottom wall, an inner fixed 10 casing consisting of a rear wall, side walls, one on each side, a top wall and a bottom wall, the side walls of the outer casing fitting closely over and against the side walls of the inner casing and the top wall of the outer casing pivotally connected with the top wall of the inner casing at the rear edge, for the lower end of the outer casing to swing fore and aft, a vending mechanism inclosed within the casing and operative to withdraw a package with the outward movement of the lower end of the outer movable casing and to drop and discharge a package with the inward movement of the lower end of the outer movable casing, said vending 25 mechanism comprising a stationary receptacle for the to-be vended packages, a bottom support below the lower end of the package receptacle with a space corresponding to the thickness of a package between the lower 30 end of the receptacle and the bottom support, and means carried by the movable casing and adapted to receive, drop and discharge a package with the forward and backward swing of the movable casing, substantially

35 as described. 5. In a vending machine, the combination of an outer movable casing consisting of a front wall, side walls, one on each side, a top wall and a bottom wall, an outer fixed 40 casing consisting of a rear wall, side walls, one on each side, a top wall and a bottom wall, the side walls of the outer casing fitting closely over and against the side walls of the inner casing and the top wall of the 45 outer casing pivotally connected with the top wall of the inner casing at the rear edge, for the lower end of the outer casing to swing fore and aft, a vending mechanism inclosed within the casing and operative to 50 withdraw a package with the outward movement of the lower end of the outer movable casing and to drop and discharge a package with the inward movement of the lower end of the outer movable casing, said vending 55 mechanism comprising a stationary receptacle for the to-be vended packages, a bottom support below the lower end of the package receptacle with a space corresponding to the thickness of a package between the lower 60 end of the receptacle and the bottom support, an open receiver and dropper into which a package is entered from the package receptacle to be withdrawn and dropped, and a shelf below the package receiver and 65 dropper with a space between the two of the

thickness of a package for the dropped package on the shelf to engage the bottom support below the package receptacle and be discharged with the return of the movable casing to normal position, substantially as 70 described.

6. In a vending machine, the combination of two companion casings one casing closely fitting into the other, one casing having a fixed relation and the other casing having a 75 swinging movement fore and aft at its end on the fixed casing, a package receptacle carried by the fixed casing, a fixed package support below the discharge lower end of the package receptacle on the fixed casing, a 80 discharger for a single package and carried by the movable casing, a shelf on the movable casing and receiving the package from the discharger and coacting with the fixed package support to partially project the 85 package through an opening therefor in the front of the movable casing, substantially as described.

7. In a vending machine, the combination of two casings, one casing consisting of a 90 rear wall, side walls, one on each side, a top wall and a bottom wall, and the other casing consisting of a front wall, side walls, one on each side, a top wall and a bottom wall, the side walls of the two casings closely fitting 95 one into the other, one casing fixed and the other casing pivotally attached at its upper end and movable fore and aft at its lower end on the fixed casing, a vending mechanism inclosed within the two casings and 100 operative to discharge a package from the swing of the movable casing, said vending mechanism comprising a stationary receptacle for the to-be vended packages, a support located below the lower end of the package 105 receptacle with a space of the thickness of a package between the end of the package receptacle and the support, both the package receptacle and the support attached to the rear wall of the fixed casing, a package re- 110 ceiver and dropper having an open center to receive and drop a package, a shelf located below the package receiver and dropper with a space between the two of the thickness of the dropped package, the package receiver 115 and dropper and the shelf both carried by the movable casing, and a spring located belew the support and shelf of the two casings and conecting the movable casing with the fixed casing for returning the movable cas- 120 ing to normal position after each discharging operation, substantially as described.

8. In a vending machine, the combination of two casings, one casing consisting of a rear wall, side walls, one on each side, a top 125 wall and a bottom wall, and the other casing consisting of a front wall, side walls, one on each side, a top wall and a bottom wall, the side walls of the two casings closely fitting one into the other, one casing fixed and the 130

other casing pivotally attached at its upper end and movable fore and aft at its lower end on the fixed casing, a vending mechanism inclosed within the two casings and 5 operative to discharge a package from the swing of the movable casing, said vending mechanism comprising a stationary receptacle for the to-be vended packages, a support located below the lower end of the package 10 receptacle with a space of the thickness of a package between the end of the package receptacle and the support, both the package receptacle and the support attached to the rear wall of the fixed casing, a package 15 receiver and dropper having an open center to receive and drop a package, a shelf located below the package receiver and dropper with a space between the two of the thickness of the dropped package, the package receiver and dropper and the shelf, both carried by the movable casing, and a stop depending from the bottom of the fixed casing and adapted to be engaged by the inner face of the bottom of the movable casing for lim-25 iting the advance of the movable casing, substantially as described.

9. In a vending machine, the combination of a casing consisting of a fixed section open at the front and a forward and back-30 ward movable section open at the rear, the side walls of the two sections closely fitting and engaging one with the other the depth of the casing when closed, and the movable section mounted on and inclosing the fixed 35 section, and a vending mechanism inclosed within the casing, said mechanism composed of a member containing the to-be vended packages, said member having a cross opening at the bottom exposing for 40 withdrawal the lowermost one of the packages, and a member entering into the bottom opening of the first named member and receiving thereinto said lowermost package for withdrawing and dropping said package 45 with the forward traverse of the movable section of the casing for said dropped package to be discharged by and from the rearward traverse of the movable section of the casing, substantially as described.

10. In a vending machine, the combination of a casing consisting of a fixed section open at the front and a forward and backward movable section open at the rear, the side walls of the two sections closely fitting 55 and engaging one with the other the depth of the casing when closed and the movable section mounted and bodily movable on and inclosing the fixed section, and a vending mechanism inclosed within the casing, said 60 mechanism composed of a member containing the to-be vended packages, said member having a cross opening at the bottom adapted to expose the lowermost one of the packages, and a member entering the bot-65 tom opening of the first named member and |

receiving thereinto said lowermost package for withdrawing and dropping therefrom the said package with the forward traverse of the movable section of the casing, for said dropped package to be discharged by 70 and from the rearward traverse of the movable section of the casing, substantially as described.

11. In a vending machine, the combination of a casing consisting of a fixed section 75 open at the front and a forward and backward movable section open at the rear, the side walls of the two sections closely fitting and engaging one with the other the depth of the casing when closed and the movable sec- 80 tion mounted and bodily movable on and inclosing the fixed section, a stationary package receptacle on one section of the casing said receptacle having a cross opening at the bottom adapted to expose the lowermost 85 one of the packages at its lower end, a package receiver and dropper on the other section of the casing, said receiver and dropper entering the bottom opening of the package receptacle for receiving, withdrawing and 90 dropping said lowermost package in the receptacle with the forward movement of the movable section of the casing and means carried by the two sections of the casing and operative to discharge the dropped 95 package by and from the return movement of the movable section of the casing, substantially as described.

12. In a vending machine, the combination of a casing consisting of a fixed section 100 open at the front and a forward and backward movable section open at the rear, the side walls of the two sections closely fitting and engaging one with the other the depth of the casing when closed and the movable 105 section mounted and bodily movable on and inclosing the fixed section, a stationary package receptacle on one section of the casing and adapted to expose a package at its lower end, a support below the package receptacle 110 and spaced apart therefrom to expose the lowermost package in the receptacle between the lower end of the receptacle and the support, a package receiver and dropper adapted to receive and drop the exposed lowermost 115 package between the support and package receptacle, and a shelf below the package receiver and dropper and on which the dropped package rests to be discharged with the return movement of the movable section of 120 the casing, substantially as described.

13. In a vending machine, the combination of a casing consisting of two companion sections closely fitting one into the other, one section having a fixed relation and the other 125 section having a bodily movement fore and aft on the fixed section, a stationary package receptacle and a package support on the fixed section of the casing, a discharger for a single package carried by the movable sec-

tion of the casing, and a shelf on the movable casing receiving the package from the discharger and coacting with the fixed package support to partially project the package 5 through an opening therefor in the front of the movable section of the casing, substan-

tially as described.

14. In a vending machine, the combination of a casing formed of two companion 10 sections, one section constituting the body and the other section the cover of the casing, the body section having a fixed relation and the cover section having bodily movement fore and aft, and the two 15 sections forming a casing with a front wall, a rear wall, duplicate side walls fitting one into the other and duplicate top and bottom walls with a space between the top and bottom walls to permit of the bodily 20 movement of the cover section, and a vending mechanism inclosed within the casing, said mechanism composed of a package receptacle open at its lower end to expose a package, a package receiver and dropper, 25 and means operative with the backward movement of the cover section of the casing to discharge the dropped package, substantially as described.

15. In a vending machine, the combina-30 tion of a casing formed of two companion sections, one section constituting the body and the other section the cover of the casing, the body section having a fixed relation and the cover section having a bodily movement 35 fore and aft, and the two sections forming a casing with a front wall, a rear wall, duplicate side walls fitting one into the other and duplicate top and bottom walls with a space between the top and bottom walls to permit 40 of the bodily movement of the cover section, a vending mechanism inclosed within the casing, said mechanism composed of a package receptacle, a support below the lower end of the package receptacle, with a space above 45 the support exposing the lowermost package in the receptacle, a package receiver and dropper having an open center adapted to receive the lowermost package in the package recep-

tacle and drop the same, and means for dis-50 charging the dropped package on the return movement of the cover section of the casing,

substantially as described.

16. In a vending machine, the combination of a casing formed of two companion 55 sections, one section constituting the body and the other section the cover of the casing, the body section having a fixed relation and the cover section having a bodily movement fore and aft, and the two sections 60 forming a casing with a front wall, a rear wall, duplicate side walls fitting one into the other and duplicate top and bottom walls with a space between the top and bottom walls to permit of the bodily movement 65 of the cover section, a vending mechanism the package receptacle, a package receiver 130

inclosed within the casing, said mechanism composed of a package receptacle, a support below the lower end of the package receptacle, with a space above the support exposing the lowermost package in the receptacle, 70 a package receiver and dropper having an open center adapted to receive the lowermost package in the package receptacle and drop the same, a shelf located below the package receiver and dropper with a clearance for a 75 package between the two, said shelf coacting with the support below the lower end of the package receptacle for discharging a package with the return movement of the cover section of the casing, substantially as de- 80 scribed.

17. In a vending machine, the combination of a casing formed of two companion sections, one section constituting the body and the other section the cover of the casing, 85 the body section having a fixed relation and the cover section having a fore and aft movement, a stationary package receptacle on the fixed body section of the casing, a fixed package support below the discharge 90 lower end of the stationary package receptacle, and means carried by the movable cover section of the casing for discharging a package with the fore and aft movement of the movable cover section of the casing, 95

substantially as described.

18. In a vending machine, the combination of a casing formed of two companion sections, one section constituting the body and the other section the cover of the casing, 100 the body section having a fixed relation and the cover section having a fore and aft movement, a stationary package receptacle on the fixed body section of the casing, a fixed package support below the discharge 105 lower end of the stationary package receptacle, a discharger for a single package carried by the cover section of the casing, and a shelf on the cover section of the casing and receiving the package from the discharger 110 and coacting with the fixed package support to partially project the package through an opening therefor in the front of the movable cover section of the casing, substantially as described.

19. In a vending machine, the combination of two casing sections, one section having a fixed relation and consisting of a rear wall, a wall on each side, a top wall and a bottom wall, and the other section movable 120 on the fixed section and consisting of a front wall, a wall on each side, a top wall and a bottom wall, the side walls of the two sections closely and snugly fitting one into and against the other, and the top and bottom 125 walls having a clearance to permit the movable section to swing fore and aft at its lower end of the fixed section, a package receptacle, a package support located below

and dropper, and a shelf located below the package receiver and dropper, the receptacle, package support, package receiver and dropper and shelf constituting a vending 5 mechanism located and operating within the casing to discharge a single package with each complete forward and backward throw of the movable section of the casing, sub-

stantially as described.

20. In a vending machine, the combination of two casing sections, one section having a fixed relation and consisting of a rear wall, a wall on each side, a top wall and a bottom wall, and the other section movable 15 on the fixed section and consisting of a front wall, a wall on each side, a top wall and a bottom wall, the side walls of the two sections closely and snugly fitting one into and against the other, and the top and bottom 20 walls having a clearance to permit the movable section to swing fore and aft at its lower end on the fixed section, a package receptacle, a package support located below the package receptacle, a package receiver and dropper, a 25 shelf located below the package receiver and dropper, the receptacle, package support, package receiver and dropper and shelf constituting a vending mechanism located and operating within the casing to discharge 30 a single package with each complete forward and backward throw of the movable section of the casing, and a locking means for the two sections of the casing, adapted to be engaged and hold the two sections closed, 35 and to be disengaged and allow the movable section of the casing to be carried forward and backward for receiving and discharging a package, substantially as described.

21. In a vending machine, the combina-40 tion of two casing sections, one section having a fixed relation and consisting of a rear wall, a wall on each side, a top wall and a bottom wall, and the other section movable on the fixed section and consisting of a front 45 wall, a wall on each side, a top wall and a

bottom wall, the side walls of the two sections closely and snugly fitting one into and against the other, and the top and bottom walls having a clearance to permit the movable section to swing fore and aft at its lower 50 end on the fixed section, a package receptacle, a package support located below the package receptacle, a package receiver and dropper, a shelf located below the package receiver and dropper, the receptacle, package support, 55 package receiver and dropper and shelf constituting a vending mechanism located and operating within the casing to discharge a single package with each complete forward and backward throw of the movable section of 60 the casing, and an interlocking means between the two sections of the casing adapted to be engaged and hold the two sections closed, and to be released and allow a forward and backward movement of the movable section 65 of the casing to withdraw and discharge a package, substantially as described.

22. In a vending machine, the combination of an outer movable casing consisting of a front wall, side walls, one on each side, 70 a top wall and a bottom wall, an inner fixed casing consisting of a rear wall, side walls, one on each side, a top wall and a bottom wall, the side walls of the outer casing fitting closely over and against the side walls 75 of the inner casing and the top wall of the outer casing pivotally mounted on the top wall of the inner casing, for the lower end of the outer casing to swing fore and aft, and a vending mechanism inclosed within the cas- 80 ing and operative to withdraw a package with the outward movement of the lower end of the outer movable casing and to drop and discharge a package with the inward movement of the lower end of the outer movable 85

casing, substantially as described.

JOHN E. PACKARD.

Witnesses:

OSCAR W. BOND, WALKER BANNING.