Patented Dec. 27, 1898.

### L. ROUILLION.

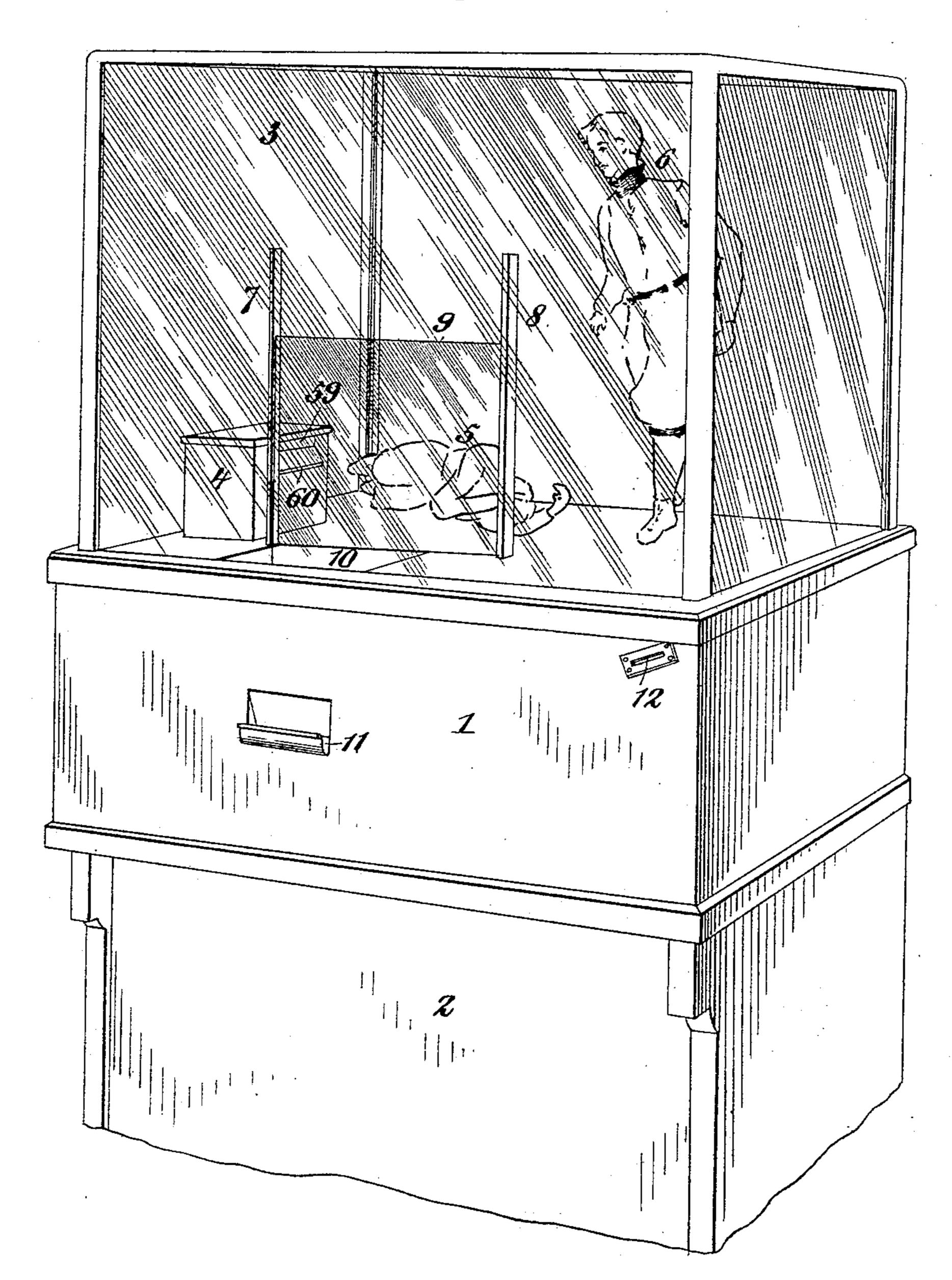
## COIN CONTROLLED VENDING APPARATUS.

(No Model.)

(Application filed Feb. 17, 1897.)

5 Sheets—Sheet 1.

Fig.1,



WITNESSES:

Harry Gara

/NVENTOR

Louis Rouillion BY Ee. M. Marblether ATTORNEYS

Patented Dec. 27, 1898.

#### L. ROUILLION.

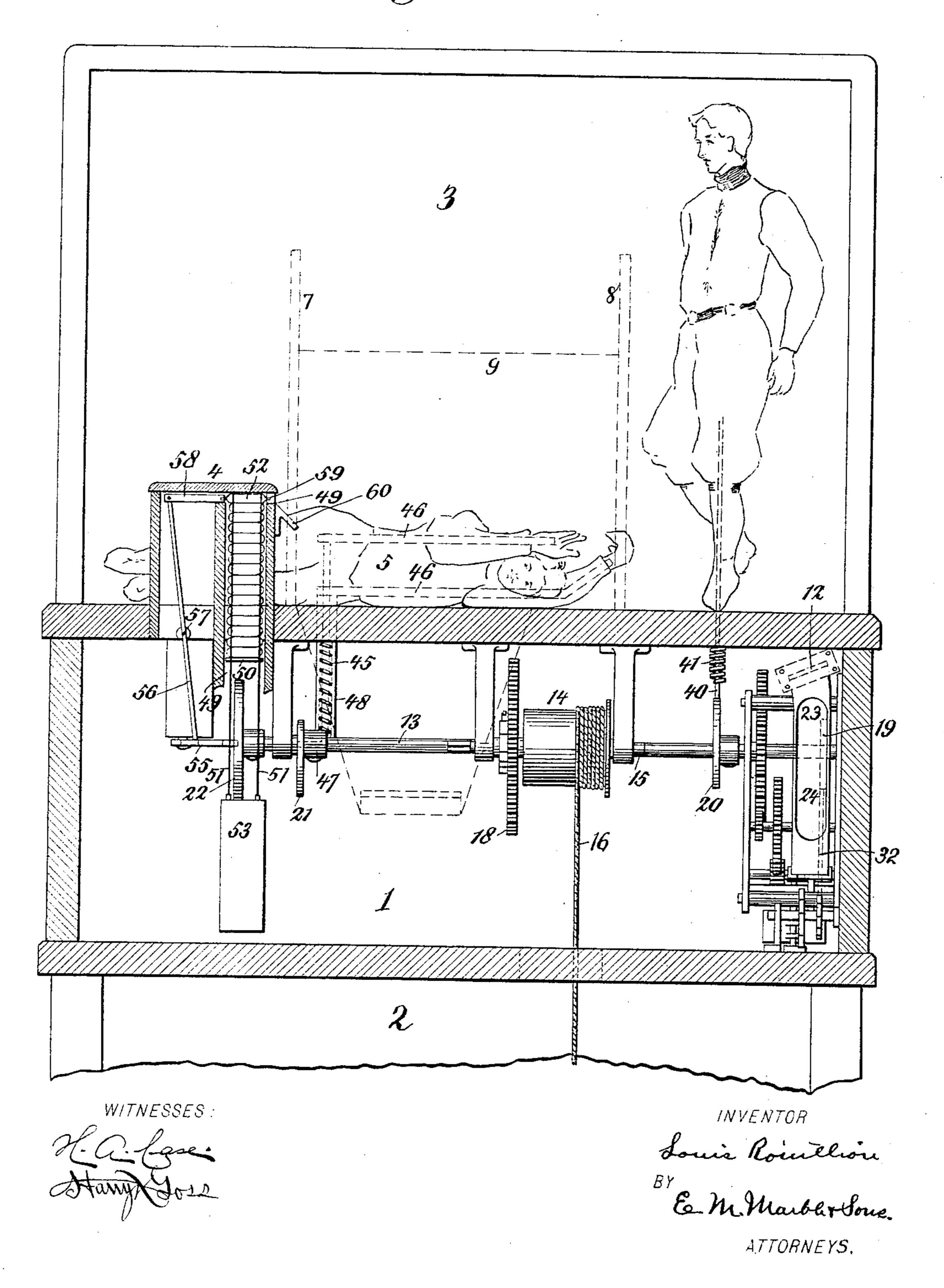
#### COIN CONTROLLED VENDING APPARATUS.

(No Model.)

(Application filed Feb. 17, 1897.)

5 Sheets—Sheet 2.

Fig. 2,



Patented Dec. 27, 1898.

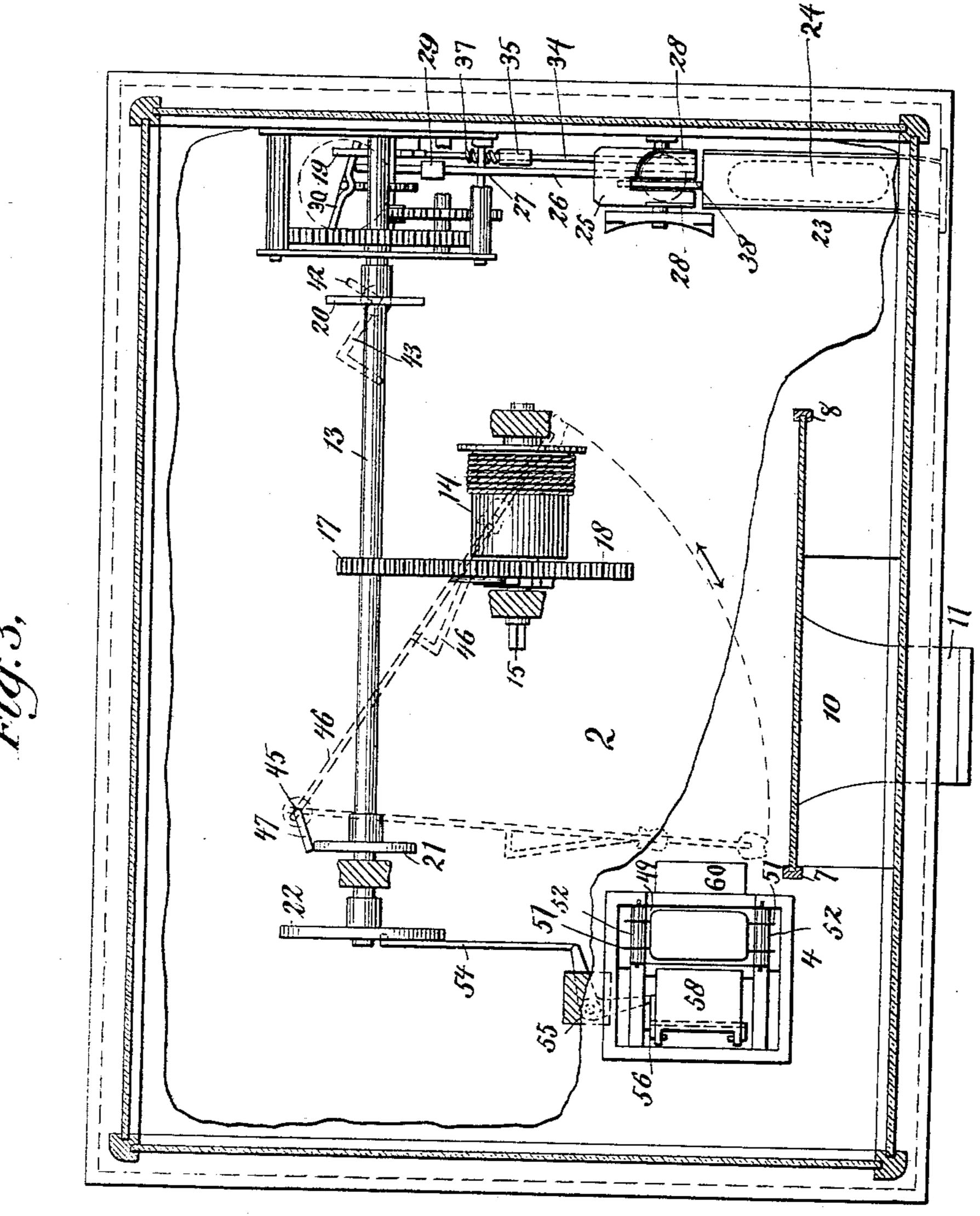
# L. ROUILLION.

# COIN CONTROLLED VENDING APPARATUS.

(No Model.)

(Application filed Feb. 17, 1897.)

5 Sheets-Sheet 3.



WITNESSES:

Sours Rouellion

BY
E. M. Marbles Som

ATTORNEYS

Patented Dec. 27, 1898.

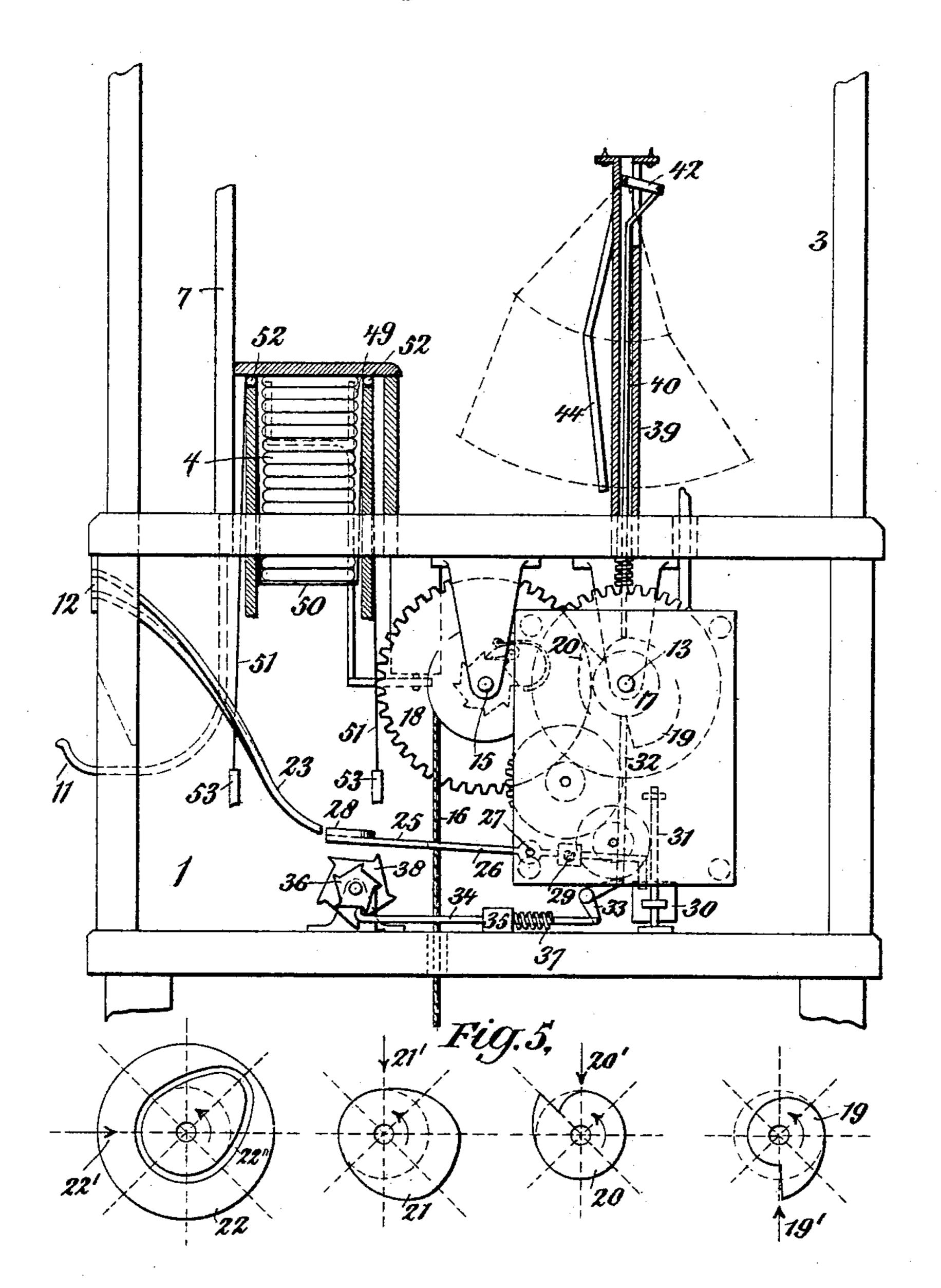
#### L. ROUILLION.

#### COIN CONTROLLED VENDING APPARATUS.

(No Model.)

(Application filed Feb. 17, 1897.)

5 Sheets-Sheet 4.



WITNESSES:

/NVENTOR

Louis Rouillion.
BY
E. M. Marbler Sonz
ATTORNEYS

Patented Dec. 27, 1898.

#### L. ROUILLION.

#### COIN CONTROLLED VENDING APPARATUS.

(No Model.)

(Application filed Feb. 17, 1897.)

5 Sheets—Sheet 5.

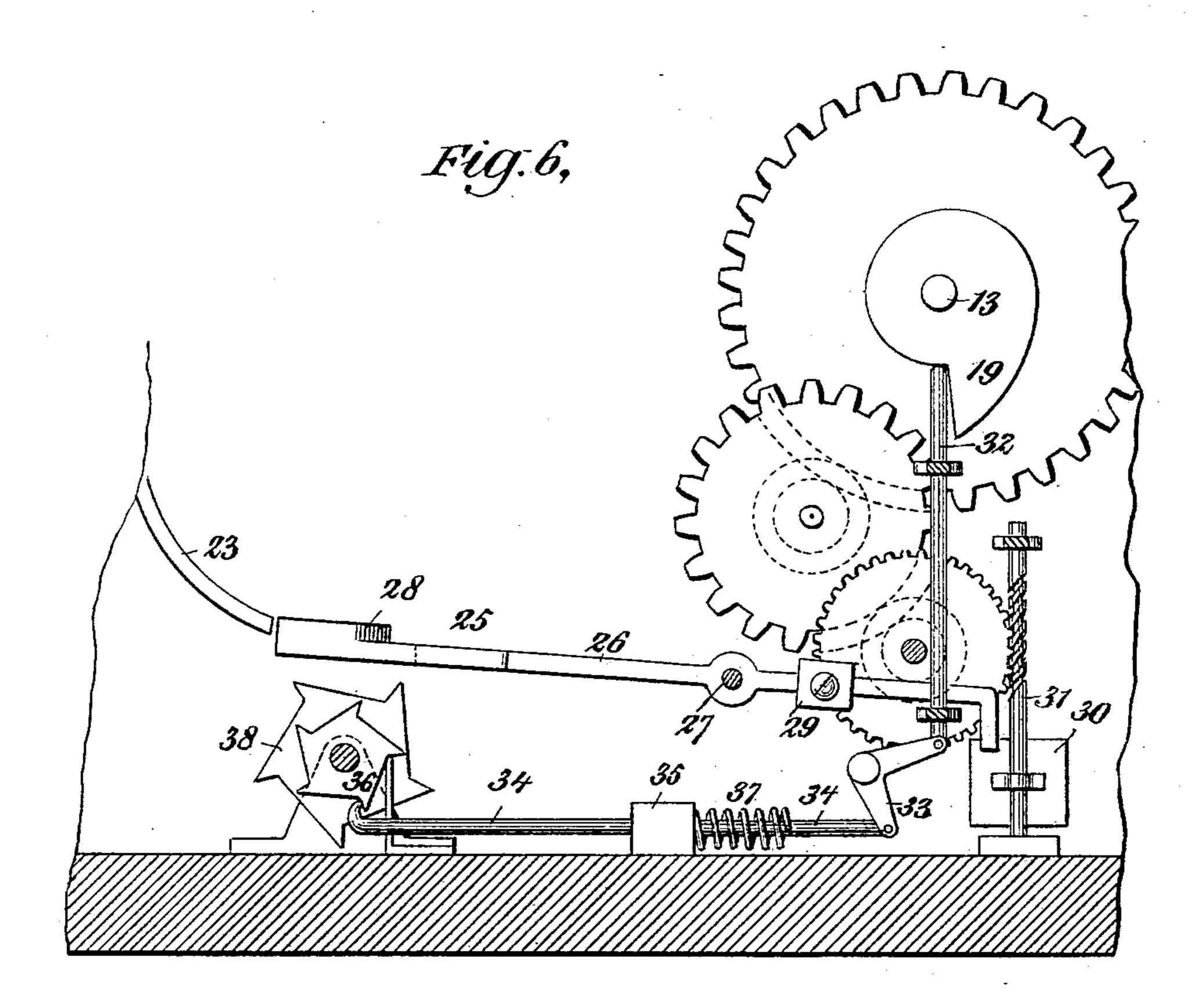
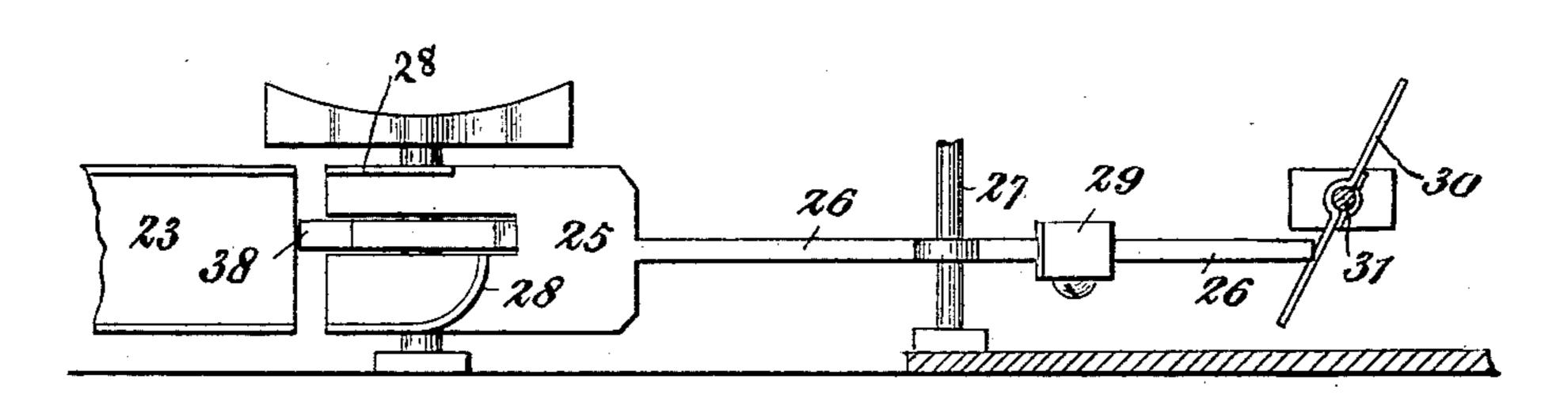


Fig. 7,



WITNESSES:

**INVENTOR** 

Louis Rouillion

B١

E. M. Marblaston

**ATTORNEYS** 

# United States Patent Office.

LOUIS ROUILLION, OF NEW YORK, N. Y.

#### COIN-CONTROLLED VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 616,495, dated December 27, 1898.

Application filed February 17, 1897. Serial No. 623,786. (No model.)

To all whom it may concern:

Beit known that I, Louis Rouillion, a citizen of the United States, residing at New York, (Brooklyn,) in the county of Kings and 5 State of New York, have invented a new and useful Vending Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to vending apparatus, and particularly to coin-controlled apparatus for vending small articles, such as candies, chewing-gum, and the like; and my in-15 vention consists in the means employed for transferring the articles sold from the magazine to the purchaser, in the mechanism used for discharging the articles sold one by one from a magazine as coins of proper de-20 nomination are deposited in the apparatus, in the mechanism which operates the automatons by which the articles sold are transferred as they issue from the magazine to the purchaser, and in the novel combination, 25 construction, and arrangement of the parts of the apparatus.

The objects of my invention are, first, to provide an apparatus for the vending of small articles which shall excite interest through 30 the use of automatons for transferring the article sold from the magazine to the purchaser; second, to provide improved coin-controlled devices for controlling the operation of the apparatus; third, to provide means for oper-35 ating all of the various mechanisms of the apparatus from a single source and in proper sequence, and, fourth, to make the whole mechanism simple, durable, not liable to derangement, and comparatively inexpensive. to These objects are attained in the invention herein described, and illustrated in the drawings which accompany and form a part of this application, in which the same reference-numerals indicate the same or corresponding

Figure 1 represents a perspective elevation of the complete apparatus. Fig. 2 is a vertical section of the apparatus, the section being taken through the magazine. Fig. 3 is a 50 horizontal section of the apparatus, taken through the upper or exhibition chamber thereof and looking downward, the top plate

of the magazine and the automatons having been removed and a portion of the plate which separates the exhibition and mechanism 55 chambers broken away to show the principal mechanism of the apparatus. Fig. 4 is a transverse elevation of the apparatus, the end of the mechanism-chamber adjacent to the coin-slot having been removed and the mag- 60 azine being sectioned. Fig. 5 shows details of the different cams used in the apparatus. Fig. 6 is a detail view of the detent and fan mechanism, and Fig. 7 shows a plan view of the coin-shelf and the ejector-wheel for re- 65 moving the coin therefrom.

In the apparatus illustrated in the drawings the articles sold are transferred from the magazine to the purchaser by automatons representing foot-ball players. As each of 70 the articles sold falls from the magazine it falls into the hands of an automaton. This automaton then moves so as to bring the article in its hands into proximity with the foot of another automaton, which then kicks the 75 article from the hands of the first automaton and between goal-posts, whence it falls into a chute leading to an exterior shelf, from which it may be removed by the purchaser. I do not limit myself, however, to the use of 80 automatons representing foot-ball players.

In the drawings, 1 is a box or case inclosing the principal mechanism of the apparatus. It is supported upon a hollow pedestal 2, only a portion of which is shown in the drawings. 85 Above the mechanism-chamber 1 is a chamber 3 inclosed in glass and which contains the automatons.

4 is the magazine, containing the articles to be sold.

5 and 6 are the automatons.

7 and 8 are goal-posts, and 9 is a glass plate between the goal-posts, the top of which represents the horizontal bar of the goal.

10 is a delivery-chute directly in front of 95 the goal, leading to a delivery-shelf 11 on the exterior of the machine, to which shelf the article sold is delivered and from which it may be removed by the purchaser.

12 is the coin-slot in which coins are placed. 100 The automaton 5 in its normal position is reclining upon the ground—that is, upon the upper plate of the mechanism-chamber 1, the upper surface of which represents a portion

616,495

of a foot-ball field with its hands in front of the kicking foot of the second automaton 6. As is more fully hereinafter described, when the coin is deposited in the slot 12 the autom-5 aton 5 swings about a pivot into a position in front of the magazine 4, its hands being then in position to receive the article sold when it drops from the magazine. Suitable mechanism then expels one of the articles in the ro magazine therefrom and into the hands of the automaton 5, which then moves backward into its first position. The automaton 6 then draws its right or kicking foot backward and kicks it forward, kicking the article sold from 15 the hands of the automaton 5 and over the top of the glass plate 9 and between the goalposts 7 and 8, thus causing it to fall into the chute 10, whence it slides onto the shelf 11.

The various mechanisms of the apparatus 20 are actuated by cams mounted upon the camshaft 13. Motion is imparted to this camshaft by a weight-drum 4, mounted upon and secured to a revolubly-mounted shaft 15 and about which is wound a cord 16, from which 25 hangs a weight not shown in the drawings, but which is within the hollow base 2 of the apparatus. The shaft 13 is driven from this drum through a pinion 17, meshing with a gear 18, mounted upon the weight-shaft 15 30 and driven therefrom by means of a pawl and ratchet, as is shown most clearly in Fig. 4.

One end of the shaft 15 is squared to receive a crank or key by which the weight may be wound up. This is shown in Figs. 2 and 3.

Upon the cam-shaft 13 are mounted four cams 19, 20, 21, and 22. The cams are shown in detail in Fig. 5. Of these cams 19 forms a part of the coin-released detent mechanism, 20 operates the kicking automaton 6, 21 the 40 reclining automaton 5, and 22 the ejector mechanism. These four mechanisms will be described separately in this order. Each of these cams has a follower which it actuates. thereby actuating its mechanism. In the de-45 tail view of the cams, Fig. 5, the cams occupy

the same relative position which they occupy upon the shaft 13, except that they are placed side by side instead of in line, and an arrow shows the point of contact of each follower, 50 with its cam, when the mechanism is at rest. These arrows are numbered 19' 20', &c. The follower of the cam 22 works in a groove 22''instead of working upon the face of the cam,

as do the followers of the other cams. Considering now the coin-released detent mechanism, a chute 23 leads from the coinslot 12. The chute 23 has in its lower side an opening 24, extending for a considerable distance and having nearly the width of the

60 chute. This opening permits coins of less diameter than the coin intended to operate the apparatus to fall through the bottom of the chute, so as not to operate the apparatus. Adjacent to the lower end of the chute 23 is

65 a small shelf 25, mounted on or forming part of a pivoted detent-lever 26, pivoted at 27. The shelf 25 is provided with slightly-raised

edges 28, which retain the coin in place. Upon the side of the detent-lever 26 opposite to the shelf 25 is a counterbalance-weight 29. 70 The weighted end of the detent-lever 26 engages a fan 30, mounted upon a worm-spindle 31 and driven from the shaft 13 by a chain

of gears, as shown in Figs. 4 and 6.

When the shelf 25 is depressed by the 75 weight of a coin upon it, the detent-lever 26 is raised out of engagement with the fan 30, and this releases the cam-shaft 13, with all the parts connected therewith, and permits the weight depending from the cord 16 to re- 80 volve the cam-shaft through the medium of the drum 14, the gear-wheel 18, and the pinion 17. The fan 30 is revolved at a high speed and by the air-pressure upon it regulates the speed of the cam-shaft. The move- 85 ment of the detent-lever is limited by the shaft of the lowest gear of the fan-chain, which acts as a stop to the lever.

32 is the follower of the cam 19. At its lower end it is connected to one arm of a bell- 9c crank 33, the other arm of which has connected to it a rod 34, passing through a sliding bearing 35 and engaging a ratchet-wheel 36. The rod 34 is of springy metal, and its end tends to spring upward, so that when the cam- 95 shaft 13 revolves and the follower 32 is pressed downward by the cam 19 and pushes the rod 34 to the left of Fig. 4 the end of the rod 34 springs upward and engages a new tooth of the ratchet-wheel 36. As shown in 100 Fig. 6, a stationary pawl holds the wheel 36 against backward movement while the rod 34 is moving to engage a new tooth of the wheel 36. As soon as the follower has passed the "peak" of the cam 19 it is pressed up- 105 ward by a spring 37, acting upon the rod 34, and the ratchet-wheel 36 is moved forward one tooth. A toothed wheel 38 revolves with the ratchet-wheel 36, its teeth adapted to pass through a slot in the coin-shelf 25. When 110 no coin is upon the shelf 25, this shelf is considerably above the wheel 38; but when a coin is upon the shelf the weight 29 is overbalanced and the shelf is depressed One tooth of the wheel 38 then lies within the slot in the 115 shelf. The revolution of the wheel 38 while the shelf 25 is depressed throws the coin from the shelf. As soon as the coin has left the shelf it rises, since it is now overbalanced by the weight 29, and the end of the detent-120 lever again engages the fan 30 and stops the revolution of the cam-shaft, one cycle of the mechanism of the apparatus having then been completed.

The mechanism which operates the kick- 125 ing automaton 6 is shown most clearly in Figs. 2 and 4. The kicking automaton itself is not illustrated in Fig. 4, but the parts which support and move the automaton are shown. The movement of the foot of the automaton is not 130 in a plane parallel to the plane of Fig. 4, but is in a plane at an angle to it. In order to simplify the illustration of the mechanism, however, in Fig.4 the mechanism which moves

616,495

the foot of the automaton has been revolved into a plane parallel to the plane of the figure.

Directly over the cam 20 and projecting upward into the chamber 3, but concealed 5 within the left leg of the automaton 6, is a tube 39, which supports the automaton. Through this tube runs a rod 40, which is the follower of the cam 20 and which is pressed against the cam by a spring 41. The rod 40 10 is connected with a crank 42 on a rock-shaft 43 at the hip of the automaton, which rockshaft is indicated in dotted lines in Fig. 3. From the rock-shaft 43 a bent rod 44 (shown in Fig. 4) projects downward through the 15 right leg of the automaton. It is bent to conform to the necessarily bent position of the right leg of the automaton.

When the cam-shaft 13 revolves after the detent mechanism has released it, the cam 20 20 in revolving presses the rod 40 steadily upward. This moves the right leg of the automaton backward; but as soon as the follower has passed the peak of the cam 20 the spring 41 impels the foot of the automaton 25 forward with considerable force, causing it to swing beyond the vertical position (the cam being shaped to permit this) and to strike the object in the hands of the other automaton with sufficient force to drive the object 30 therefrom and over the goal-plate 9. The cam then moves the foot back to its normal

position.

The reclining automaton 5 is operated by a vertical rock-shaft 45, having at its upper 35 end arms 46, which are concealed within the body of the automaton and terminate in the hands thereof, and having at its lower end a crank-arm 47, which bears against the edge of the cam 21, thus forming the follower of 40 the cam. The shaft 45 is revolubly mounted in and supported by the stationary sleeve 48 and is surrounded by a torsional spring, which keeps the crank 47 pressed against the edge of the cam 21 and has sufficient strength to 45 move the automaton when the cam permits it to do so. When the cam-shaft revolves, the cam 21 moves the crank 47, thus swinging the automaton 5 through an angle of about sixty degrees into a position in front of the maga-50 zine 4. By reference to Fig. 5, which shows the cam 21 in detail, it will be seen that this motion will take place during the first ninety degrees of the revolution of the cam-shaft. The circumference of the cam throughout the 55 next forty-five degrees is concentric, and therefore during this period of the revolution the automaton is stationary in front of the magazine. During the next ninety degrees of the revolution of the cam the spring sur-60 rounding the rock-shaft 45 moves the automaton back to its first position, the cam being shaped to permit this.

The magazine 4 has a tube 49, which contains the various objects to be sold. These 65 objects are supported upon a platform 50, suspended from cords 51, which pass over pulleys 52 at the top of the tube 49 and have at 1

their ends counterbalance-weights 53. These counterbalance-weights are sufficiently heavy to more than counterbalance the heaviest 70 load which can be placed upon the platform 50. They therefore keep the pile of objects to be sold pressed against the top of the magazine.

While the tube 49 and counterbalance- 75 weights 53 are shown in the drawings as lying within the mechanism-chamber 1 and the upper chamber 3, it is obvious that the tube 49 may extend through the bottom of the mechanism chamber into the hollow base 2, so 80 that the machine may contain a large num-

ber of the objects to be sold.

The mechanism which ejects the articles to be sold one by one from the magazine 4 is operated by the cam 22. The traveler 54, Fig. 85 3, of this cam has a pin working in the slot 22" of the cam. The traveler is connected to one arm of a bell-crank lever 55, the other arm of which is connected to a lever 56, Fig. 2, pivoted at 57 and having at its upper end 90 the ejector 58, Figs. 2 and 3, which is in line with a slot 59 at the top of the magazine of sufficient width and length to permit the passage of one of the articles to be sold. An inclined guide or slide 60 immediately beneath 95 this slot 59 serves to guide the article ejected from the magazine toward the hands of the reclining automaton. When the cam-shaft is revolved, the follower 54 is pushed forward or toward the front of the machine by the roo cam 22, thus operating the bell-crank 55 and the lever 56 and pushing the ejector 58 forward, thus throwing one of the articles to be sold from the magazine. The cam then draws back the follower-pin, thus drawing the ejec- 105 tor back to its first position.

The operation of the complete apparatus may now be described. The relative order in which the operation of the various mechanisms which constitute the complete appa- 110 ratus take place may be seen by comparing the cams by which these mechanisms are operated. As already stated, the arrows 19' 20', &c., indicate the positions of the followers when the cam-shaft is in its normal posi- 115 tion. When a coin is placed within the slot 12, it falls through the chute 23. If it be too small, it will fall through the slot 24 and so will not start the apparatus in motion. Too large a coin cannot be placed within the slot 120 12 and therefore cannot pass through the chute 23; but if the coin is of the proper size it falls through the chute 23 upon the shelf 25 of the detent mechanism and there remains until thrown off by the wheel 38. 125 The weight of the coin overbalances the weight 29 and depresses the shelf 25, thus releasing the detent mechanism and permitting the cam-shaft to revolve. The cam 21, operating the reclining automaton 5, immediately 130 moves this automaton into the position in front of the magazine 4. This movement takes place during the first ninety degrees of the revolution of the cam-shaft. During

the first forty-five degrees of the revolution of the cam-shaft the ejecting mechanism is stationary, but in the next ninety degrees of the revolution the cam 22 operates the 5 ejector 58 and drives one of the articles within the magazine through the slot 59 into the hands of the reclining automaton. During the ejection of the articles from the magazine the reclining automaton is stationary, but in 10 the ninety degrees of the revolution of the cam-shaft following the operation of the ejector the reclining automaton is moved backward to its first position by the cam 21. The cam 20 then begins to press its follower 40 15 upward, drawing back the right leg of the kicking automaton 6 against the resistance of the spring 41, and shortly after the cam 20 begins to operate the automaton 6 the cam. 19 begins to press downward its follower 22, 20 thus pushing the spring-rod 34 outward to engage a new tooth on the ratchet-wheel 36. When the cam-shaft has passed through seveneighths of its revolution, the follower 40 of the cam 20 reaches the peak of that cam, and 25 when the peak is passed the spring 41 drives the follower 40 down, causing the right foot of the automaton 6 to kick forward. The foot of the automaton kicks the article sold from the hands of the automaton 5 and over 30 the top of the goal-plate 9. The article then either drops directly into the chute 10 or else strikes the front glass plate of the chamber 3 and is thrown backward into the chute 10, through which it slides until it reaches the 35 exterior shelf 11, from which it may be removed by the purchaser. Whether the article strikes the glass or not depends upon the strength of the spring 41. The goal-plate 9 prevents the article from rebounding back of 40 the mouth of the chute. In the last eighth of the revolution of the cam-shaft the cam 20 restores the right foot of the automaton 6 to its normal position. When the revolution of the cam-shaft is almost complete, the follower 45 32 of the detent mechanism passes the peak of the cam 19 and is immediately pressed upward by the spring 37, which acts upon the pawl 34 and revolves the ratchet-wheel 36 through the space of one tooth. Revolution 50 of the ratchet-wheel 36 causes the wheel 38 to revolve and throw the coin from the shelf 28. This shelf then rises, being overbalanced by the weight 29, and the end of the detentlever engages the fan 30 and stops the appa-55 ratus. The apparatus is then in readiness to begin a new cycle of operations.

Having thus completely described my invention, what I claim, and desire to secure by

Letters Patent, is—

1. In a vending apparatus, the combination, with an automaton having a pivoted kicking member adapted to be moved with a kicking motion, of a cam, means for driving the same, mechanism for operating said kicking mem-

65 ber operated by said cam, means for moving the articles sold into a position directly in the path of said member, and coin-controlled

mechanism controlling the operation of the apparatus, substantially as described.

2. In a vending apparatus, the combination, 70 with a magazine, and an automaton having a pivoted kicking member adapted to be moved with a kicking motion, of a cam, means for driving the same, mechanism for operating said kicking member operated by said cam, 75 transferring mechanism for transferring the articles sold from the magazine into a position directly in the path of said member, and coin-controlled mechanism controlling the operation of the apparatus, substantially as 80 described.

3. In a vending apparatus, the combination, with a magazine, and an automaton having a pivoted kicking member adapted to be moved with a kicking motion, of mechanism for op- 85 erating said kicking member, transferring mechanism for transferring the articles sold from the magazine to a position directly in the path of said member, a driving device connected with and adapted to operate said 90 mechanisms in proper succession, and coincontrolled mechanism for controlling the operation of the apparatus, substantially as described.

4. In a vending apparatus, the combination, 95 with a magazine, and an automaton having a kicking member adapted to be moved with a kicking motion, of mechanism for operating said kicking member, ejecting mechanism for ejecting the articles sold from the magazine, 100 transferring mechanism for transferring the articles ejected from the magazine into a position directly in the path of said member, and coin-controlled mechanism for controlling the operation of the apparatus, substantially 105 as described.

5. In a vending apparatus, the combination, with a magazine, and an automaton having a kicking member adapted to be moved with a kicking motion, of mechanism for operating 110 said kicking member, ejecting mechanism for ejecting the articles sold from the magazine, transferring mechanism for transferring the articles ejected from the magazine into a position directly in the path of said member, a 115 driving device connected with and adapted to operate said mechanisms in proper succession, and coin-controlled mechanism controlling the operation of the apparatus, substantially as described.

6. In a vending apparatus, the combination, with a magazine, of an automaton adapted to transfer an article sold to the purchaser by forcibly propelling it, as by a blow, throw or kick, and operating mechanism therefor, a 125 second automaton adapted to transfer the article sold from the magazine to the first automaton and to hold the same in position to be acted upon by said first automaton, and operating mechanism therefor, means for trans- 130 ferring the article sold from the magazine to the first automaton, a driving device, connected with and adapted to operate said mechanisms in proper succession and coin-con-

120

616,495

trolled mechanism controlling the operation of the apparatus, substantially as described.

7. In a vending apparatus, the combination, with a magazine, a delivery device, and an 5 automaton having a kicking member adapted to be moved with a kicking motion, of mechanism for operating said kicking member, transferring mechanism for transferring the articles sold from the magazine into a posi-10 tion directly in the path of said member, and coin-controlled mechanism controlling the operation of the apparatus, the parts being so constructed and arranged that when the apparatus is operated, the articles sold are kicked 15 by the automaton into the delivery device, substantially as described.

8. In a vending apparatus, the combination, with a magazine, of automatons representing foot-ball players, one adapted to transfer an 20 article sold to the purchaser by kicking it, and the other adapted to transfer the article sold from the magazine to the kicking automaton and to hold the same in position to be kicked, mechanism for operating said au-25 tomatons, mechanism for transferring the article sold from the magazine to said second automaton and coin-controlled mechanism controlling the operation of the apparatus,

substantially as described.

9. In a vending apparatus, the combination, with a magazine, of automatons representing foot-ball players, one adapted to transfer an article sold to the purchaser by kicking it, and the other adapted to transfer the article 35 sold from the magazine to the kicking automaton and to hold the same in position to be kicked, mechanism for operating said automatons, mechanism for transferring the article sold from the magazine to said second 40 automaton, a driving device connected with and adapted to operate said mechanisms in proper succession and coin-controlled mechanism controlling the operation of the apparatus, substantially as described.

10. In a vending apparatus, the combination, with a magazine, automatons representing foot-ball players, one adapted to transfer an article sold to the purchaser by kicking it, and the other adapted to transfer the article 50 sold from the magazine to the first automaton and to hold the same in position to be kicked, and ejecting mechanism for ejecting the articles sold successively from the magazine into the hands of said second automaton, 55 of a cam-shaft having cams thereon controlling suitable mechanism for operating said automatons and ejecting mechanism, means for rotating said shaft and coin-controlled mechanism controlling the operation of the 60 apparatus, substantially as described.

11. In a vending apparatus, the combination, with a magazine, automatons representing foot-ball players, one adapted to transfer an article sold to the purchaser by kicking it, 65 and the other adapted to transfer the article sold from the magazine to the first automaton and to hold the same in position to be kicked,

and ejecting mechanism for ejecting the articles sold successively into the hands of said second automaton, of a cam-shaft having cams 70 thereon controlling suitable mechanism for operating said automatons and ejecting mechanism, means for rotating said shaft, governing mechanism controlling the speed of said shaft, and a coin-released detent mechanism 75 engaging said governing mechanism and adapted, when operated, to permit one cycle of operations of the mechanism to be performed, substantially as described.

12. In a vending apparatus, the combina- 80 tion, with a magazine, automatons representing foot-ball players, one adapted to transfer an article sold to the purchaser by kicking it, and the other adapted to transfer the article sold from the magazine to the first automaton 85 and to hold the same in position to be kicked, and ejecting mechanism for ejecting the articles sold successively from the magazine into the hands of said second automaton, of a cam-shaft having cams thereon controlling 90 suitable mechanism for operating said automatons and ejecting mechanism, fan mechanism driven from said shaft and controlling the speed thereof, and a coin-released detent mechanism engaging said fan and adapted, 95 when operated, to permit one cycle of operations of the mechanism to be performed, substantially as described.

13. In a vending apparatus, the combination, with mechanism for operating said appa- 100 ratus, of a coin-released detent mechanism comprising a balanced detent-lever, one end of which engages the operating mechanism of the apparatus and the other end of which is provided with a coin-receiver, means for 105 depositing a coin upon said coin-receiver, a toothed ejecting-wheel working in a slot in the said coin-receiver, and a ratchet-and-pawl

operating mechanism of the apparatus, and 110 operating said ejecting-wheel, and arranged to remove the coin from said detent-lever when the cycle of operations of the apparatus is completed, substantially as described.

14. The combination, with a kicking au- 115 tomaton, of an operating-shaft, means for rotating the same, a cam on said shaft, a follower for said cam connected to a crank which operates the kicking leg of the automaton, means for kicking said leg forward when the 120 follower is released by the cam, and coincontrolled mechanism controlling the rotation of said operating-shaft substantially as described.

15. The combination, with a kicking au- 125 tomaton, of an operating-shaft therefor, means for rotating said shaft, a cam on said shaft and a follower therefor passing through the stationary foot of the automaton and connected at the hip of the automaton to an arm 130 of the rock-shaft, to which is connected the frame of the kicking leg of the automaton, a spring pressing the follower against the cam, and arranged to kick forward said leg

mechanism operated by a cam driven by the

when the follower is released by the cam and coin-controlled mechanism controlling the rotation of said operating-shaft, substantially as described.

16. In a vending apparatus, the combination, with a kicking automaton, a magazine, and mechanism for operating said kicking automaton and for ejecting the articles sold from the magazine, of a transferring device comprising horizontal swinging arms mounted upon a rock-shaft and adapted to swing from in front of the kicking foot of the kicking automaton to in front of the discharge-

slot of the magazine, and provided with means for holding the article ejected from the magazine, arranged to permit said article to be kicked therefrom by the kicking automaton, an operating-shaft arranged to operate said kicking automaton and ejecting

erate said kicking automaton and ejecting mechanism, and having a cam for operating said transferring device, a follower for said cam connected with and adapted to operate said rock-shaft, means for operating said operating-shaft and coin-controlled mechanism controlling the operation of said operating

controlling the operation of said operatingshaft, substantially as described.

17. In a vending apparatus, the combina-

tion, with a kicking automaton, a magazine, and mechanism for operating said kicking automaton and for ejecting the article sold 30 from the magazine, of a reclining automaton mounted upon a vertical rock-shaft and adapted to swing from in front of the kicking foot of the kicking automaton to in front of the discharge-slot of the magazine, the hands of 35 said automaton being arranged to receive the article ejected from the magazine, and to permit said article to be kicked therefrom by the kicking automaton, an operating-shaft arranged to operate said kicking automaton 40 and ejecting mechanism, and having a cam for operating said reclining automaton, a follower for said cam connected with and adapted to operate said vertical rock-shaft and coin-controlled mechanism controlling the op- 45 eration of said operating-shaft, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS ROUILLION.

Witnesses:

FRANCES A. SPERRY, HARRY M. MARBLE.