



Application Date: Oct. 19, 1929. No. 31,764/29.

Complete Left: Jan. 31, 1930.

Complete Accepted: Jan. 19, 1931.

341,544

PROVISIONAL SPECIFICATION.

A Coin Freed Apparatus for Playing a Game of Skill.

We, CHUBBS AUTOMATIC MANUFACTURING Co., LIMITED, South African Building, Wembley Middlesex, British Company, and GEORGE PINDER, (British Subject), 25, Oakington Manor Drive, Wembley, Middlesex, do hereby declare the nature of this invention to be as follows:—

This relates to a coin freed amusement machine for playing a game of skill, into which coins are inserted. The machine retains a percentage of coins for the use of the machine and returns the other coins to the player at suitable intervals.

One way of working our invention is described as follows, but we do not bind ourselves to this particular form as slight alterations would produce the same results

In a case and frame of suitable size and design, we fix a row of slots for pennies to go through. Each of the slots are named with the names of articles, such as Gold, Iron, Rubber and the like. A metal bar is fixed at the back of the row of slots for a figure, such as a man, to move on. Under this bar is a rod on which is fixed a number of collars. In each of the collars an arm or cam is fixed. As the figure moves along the rod, the arms on this collar or cam trip and catch on the figure and releases a coin, causing it to fall in one of the slots.

Below the slots is fixed a slide for the coin to pass from the row of slots into a

rotatable coin holding member. The latter moves a space each time a penny is inserted being actuated by a spring controlled handle and ratchet which is geared to a suitable clock and holds a number of coins until the rotatable coin holding member is moved into the required position for them to fall out into a cup which is fixed in the bottom of the case for coins to be returned to the player. The working of this game is as follows:—

A coin is inserted into a slot and this releases a suitable locking device and allows the handle to compress a spring. The penny then comes to rest on the figure that moves along the bar and is made to trip into one of the slots by striking one of the arms. A suitable indicator is geared to the clock to show the amount of coins that the player will receive, and any springs, plungers and other levers may be employed to achieve the above mentioned invention.

Dated the 16th day of October, 1929.
CHUBBS AUTOMATIC MANUFACTURING CO., LIMITED.

For and on behalf of
Chubbs Automatic Manufacturing Company Ltd.,
GRAHAM CHUBB,
H. A. G. SORRELL,
Directors.

GEORGE PINDER.

COMPLETE SPECIFICATION.

A Coin Freed Apparatus for Playing a Game of Skill.

We, CHUBBS AUTOMATIC MANUFACTURING COMPANY LIMITED, of South African Building, Wembley, Middlesex, a British Company, and GEORGE PINDER, of 25, Oakington Manor Drive, Wembley, Middlesex, a British subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to coin freed amusement or game apparatus in which

the coins inserted, less a percentage retained by the machine, and returned to the operator in the form of winnings or prizes delivered at irregular intervals during a series of operations of the machine, the delivery of the prizes being arranged to take place according to a regularly repeated predetermined sequence.

The invention has more particular reference to apparatus in which the delivery of the prizes or winnings is associated with the operation of indicating mechanism arranged to give a pre-

!Pri

arranged series of indications during a series of operations of the machine, such indications constituting an invariable series or cycle which corresponds to the cycle or series of prize deliveries.

The object of the invention is to provide a new or improved apparatus of the character hereinbefore indicated, which will provide interest and amusement without introducing any element of chance into the operation of the machine.

The invention consists essentially in the provision in the machine of indicating mechanism arranged to give only a momentary indication during each operation of the machine, such momentary indication being varied at each successive operation of the machine according to a predetermined and invariable cycle or sequence which corresponds to the cycle or sequence of prize deliveries.

The machine may be provided with an additional indicator which is moved every time the machine is operated and which indicates whether the next operation of the machine will result in the delivery of a prize or not, but we make no claim to this indicator except when used in combination with the momentary indicator hereinbefore referred to whereby the sequence of prize deliveries may be determined.

In carrying the invention into effect according to the preferred form the momentary indicator comprises a traveling coin carrier arranged to be moved past a number of legends or indications in the view of the operator every time the machine is operated, means being provided for releasing the coin as the device passes one of the legends or indications, the selection of the legend or indication being varied at each successive operation of the machine according to a predetermined cycle corresponding to the cycle or sequence of the prize deliveries.

Certain of the legends or indications referred to above will correspond to prize deliveries, and these preferably embody indications as to what prizes will be delivered, so that the operator who has determined what legend or indication will be pointed out at the next operation of the machine also knows whether any, and if so, what prize will be delivered.

The legends or indications above referred to preferably designate a number of "stocks" or "shares" some of which give the definite return indicated on the machine, whilst others give no return, the particular "stocks" or "shares" pointed out by figure or indicator at any particular operation of the machine being regarded as the "stocks" or "shares" in which the user's money has been in-

vested.

The construction and arrangement of the machine according to the preferred embodiment of the invention is illustrated in the accompanying drawing in which:—

Figure 1 is a front elevation of the machine,

Figure 2 is a rear elevation with part of the casing removed to show the mechanism.

Figure 3 is a detail view drawn to a larger scale showing the coin distributing drum and associated mechanism.

Figure 4 is a plan of figure 3 and.

Figures 5 and 6 are sectional views of the distributing drum in two different positions.

The machine shown in the drawing has a slot 1 to receive coins or counters which pass through a chute 2 from which they are received by a sliding carrier 3, mounted on guides extending transversely across the front of the machine.

Each coin received by the carrier 3 eventually falls into a funnel shaped opening 4 which extends beneath the carrier 3 along the whole length of its travel across the machine and communicates through a chute 5 with a rotary drum 6 in which the coins are collected and from which they are distributed as hereinafter described.

The sliding carrier 3 has a pin and slot connection with the free end of a lever 7 fulcrumed at 8 near the base of the machine and controlled by a spring 9 through the medium of a bell crank lever 10 and pivotted link 11 as shown in figure 2 of the drawings.

The lever 7 is adapted to be rocked in a clockwise direction (figure 2) against the action of the spring 9 by the operation of an external hand lever 12 (figure 1) which is fixed to a rock shaft 13 carrying a lever arm 14 adapted to engage a projecting arm 15 carried by the link 11 as shown in figure 2.

The lever arm 14 and projecting arm 15 are so proportioned that the arm 14 trips past the free edge of the arm 15 when the arm 7 reaches the end of its rocking movement in clockwise direction (figure 2), and the arm 14 has a pin 16 adapted to engage a hook 17 on the end of a spring loaded lever 18 mounted on a fixed fulcrum 19, so that the arm 14 will be locked at the end of its rocking movement in the clockwise direction (figure 2) leaving the arm 7 free to be returned to its original position by the action of the spring 9. The lever 18 has an arm 18a disposed to be engaged and rocked in the anti-clockwise direction (figure 2) by the return movement of the lever 7 so as to release the arm 14 when the lever 7 returns to its

of the drum 6 will correspond to a particular slot 33 into which a coin will be dropped during the operation of the machine.

5 The shaft 26 (figure 2) is geared to a shaft 45 carrying a drum 46 marked with indications visible through a window 47 from the front of the machine and so
10 arranged on the drum 46 as to give indication as to whether the next operation of the machine will result in the delivery of a prize or not. It will be seen that the drum 46 will be rotated through one
15 step every time the drum 6 is rotated through one step so that the required indications can be given by marking the words "yes" and "no" at intervals around the surface of the drum 46 in such
20 order and spacing that the word "yes" will be visible through the window 47 only when the next operation of the machine will cause one of the compartments 36 to discharge its contents into the chute 37.

25 In the operation of the machine the user first inserts a coin in the slot 1, and then rocks the hand lever 12 towards the left (figure 1) so as to move the carrier 3 across the front of the machine. When
30 the arm 14 has tripped past the free edge of the arm 15, the carrier 3 commences its return movement under the action of the spring 9, the speed of this movement being regulated by the fliee 21.

35 As the carrier 3 makes its return movement, the trip lever 22 is engaged by one of the pins 25 so that the coin is released from the carrier and falls through one of the slots 33 into the opening 4. The
40 coin then falls through the chute 5 into one of the compartments of the drum 6.

The drum 6 is rotated through a definite angle every time the lever 7 is operated so that each of the compartments of the
45 drum will in due course receive a definite number of coins depending upon the angle of its peripheral opening.

At definite intervals in the operation of the machine one of the compartments of
50 the drum 6 will discharge its contents into the chute 37 thus delivering a prize to the user of the machine. The machine will thus deliver prizes to the users at irregular, but predetermined intervals
55 determined by the spacing of the partitions 35. The delivery of each prize will be associated with a particular legend 33 adjacent which the coin was released from the carrier 3 during the operation of the
60 machine which resulted in the delivery of a prize. Owing to the fact that the number of pins 25 is equal to the number of successive positions of the drum 6, the delivery of each prize will always be
65 associated with the release of the coin

from the carrier 3 adjacent the same legend 33. The legends 33 may therefore embody indications as to what prizes are associated with them or a separate
70 table may be provided indicating what prize, if any, is associated with each legend, so that a person knowing which legend 33 will be indicated during the next operation of the machine may know
75 whether or not a prize will be given.

The indications of the several legends 33 during successive operations of the machine will follow a predetermined cycle or sequence which can be discovered by a person who observes a sufficient number of
80 operations of the machine.

The drum 46 provides an additional indication so that even if a user is ignorant as to the position of the machine with regard to the predetermined
85 cycle or sequence of operations he is informed by the indications on the drum 46 as to whether or not the next operation of the machine will result in the delivery of a prize.

The compartment 36 provided with the wall or ledge 40 does not discharge its contents into the chute 37 owing to the fact that the coin or coins lodge on the
90 ledge 40 as the latter passes the opening to the chute 37. As the compartment passes the chute 38 however, the coins fall out as indicated in dotted lines in fig. 6 and pass through the chute 38 into the closed receptacle hereinbefore referred to. The wall or ledge 40 thus reserves a proportion of the takings for the owners of the machine and the exact proportion reserved is determined by the size of the compartment provided with the
95 wall or ledge 40.

It will be understood that the details of the mechanism described with reference to the accompanying drawings could be varied in many ways without departing from the invention. For example, the place of the star wheel 44 could be taken by a ratchet wheel which could be operated by a rocking lever actuated by the lever 7 and so arranged that the drum
100 6 be turned slowly during a large part of the rocking movement of the lever 7. Again the ratchet wheel 28 and its operating mechanism could be dispensed with, the shaft 27 being operated by the same mechanism as the drum 6. The shafts 45 and 27 could be made integral and geared to the shaft 26 through a single pair of bevel wheels.

Having now particularly described and
105 ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. Coin freed amusement or game 130

original position.

The lever 7 is normally locked in the position shown in fig. 2 of the drawings by a catch 7a connected by a rod 7b to a lever 7c which projects into the coin chute 2 so that when a coin is inserted the lever 7c will be depressed by the weight of the coin to release the lever 7. The coin continues to engage the lever 7c while it rests in the slot in the carrier 3 until the latter begins to move across the machine, whereupon the lever 7c is released and the catch 7a is positioned to lock the lever 7 when the latter returns to its original position.

In order to prevent the lever 7 from being moved back after it has begun its clockwork rocking motion (figure 2) a sliding toothed rack 8a is connected to the lever 7 by a link 8b and is engaged by a spring loaded pawl 8c which is free to swing in either direction away from the vertical position shown. After the rack 8a has passed clear of the pawl 8c in either direction of motion, the pawl will permit the return movement of the rack by riding over the teeth thereof. Any attempt to reverse the motion of the rack before it has completed its movement in one direction however, will cause the pawl to become wedged against one of the teeth of the rack, and so prevent movement of the rack in the reverse direction.

The bell crank lever 10 is mounted on a rock shaft 20 which is geared to a flier 21 whereby the movement of the arm 14 is regulated so that the sliding carrier 3 will be moved slowly across the front of the machine.

The sliding carrier 3 is fitted with a spring loaded trip lever 22 which has a cranked end 23 normally projecting into the coin slot of the carrier so as to hold the coin there, and the lever 22 is capable of being rocked in an anti-clockwise direction (figure 2) against the action of its spring so as to release the coin and allow it to fall into the opening 4. The lower end of the trip lever 22 carries a pivoted pawl 24 which will ride freely over obstructions when the carrier 3 is moving in the direction towards the right hand side of figure 2, but which will be engaged and rocked so as to free the coin in the carrier 3 during the return movement of the latter, by engagement with one of a number of pins 25 projecting radially at different angles from a shaft 26 which extends transversely across the machine. The shaft 26 is geared to a vertical shaft 27 carrying a ratchet wheel 28 which is actuated by a pawl 29 pivoted to a horizontal sliding rod 30 controlled by springs 31. One end of the rod 30 is adapted to be engaged by the lever 7

at the end of the clockwise rocking movement of the latter (figure 2) so that the shaft 26 will be rotated through a definite angle at the end of each clockwise rocking movement of the lever 7, the arrangement being such that one of the pins 25 will be brought into the position to engage the pawl 24. After each operation of the lever 7, the whole series of pins 25 being brought successively into this position during a certain number of operations of the machine.

The sliding carrier 3 is visible to the operator through a glass panel 32 (figure 1) so arranged that the operator can see when the penny falls and there are a series of slots 33 marked with legends and indications 33a arranged beneath the carrier 3 as shown in figure 1, each slot being positioned to receive the coin released by the action of one of the pins 25. The carrier 3 may have a figure 34 or other representation mounted on it to attract attention to its motion.

The rotary drum 6 is divided by radial partitions 35 into a number of compartments 36 each of which has a peripheral opening through which the coins fall by gravity from the chute 5. A chute 37 communicating with the exterior of the machine and a chute 38 communicating with a receptacle (not shown) enclosed within the machine are disposed adjacent the periphery of the drum at points below the chute 5, and are arranged as shown so that each of the compartments of the drum, after passing the chute 5, will pass the chute 37 before passing the chute 38. The peripheral openings of the drum which are not in registration for the time being with any of the chutes 5, 37 or 38 are closed by a fixed cover 37a which extends around the drum 6.

One of the compartments 36 as shown in figure 5 has its peripheral opening partly closed by a wall or ledge 40 which is fixed to the drum and which projects partly across the peripheral opening from the partition 35 which is on the leading side of the compartment in relation to the rotation of the drum.

The drum 6 is fixed to a toothed wheel 41 adapted to be engaged by a pawl 42 mounted on the arm 7 and so arranged that the toothed wheel 41 and drum 6 will be rotated through the space of one tooth every time the arm 7 is operated. A spring pressed ball 43 is adapted to engage any one of a number of recesses 44 on the face of the drum 6 so as to hold the drum against accidental displacement after it has been rotated by the motion of the arm 7. The number of successive positions of the drum 6 is made equal to the number of pins 25 so that each position

- apparatus in which the coins inserted, less a percentage retained by the machine, are returned to the operator in the form of winnings or prizes delivered at irregular intervals which occur according to a regularly repeated predetermined sequence during a series of operations of the machine wherein the machine is provided with indicating mechanism arranged to give only a momentary indication during each operation of the machine, such momentary indication being varied at each successive operation of the machine according to an invariable cycle or sequence which corresponds to the cycle or sequence of prize deliveries.
2. Apparatus according to Claim 1 wherein the indicating mechanism comprises a travelling coin carrier arranged to move past a number of legends or indications in the view of the operator every time the machine is operated, means being provided for releasing the coin as the carrier passes one of the legends or indications, selection of the legend or indication being varied at each successive operation of the machine according to a predetermined cycle corresponding to the cycle or sequence of prize deliveries.
3. Coin freed amusement apparatus comprising coin freed mechanism for traversing a coin carrier past a series of legends or indications, means for releasing the coin from said carrier as it passes one of said legends or indications to give a momentary indication and means for varying the legends chosen in successive operations of the machine according to a predetermined cycle or sequence, a drum divided by radial partitions into a number of compartments, one of which receives the coin released from the carrier at each operation of the machine, means for partially rotating said drum at each operation of the machine so as to bring its several compartments successively into position to receive a coin, and means for discharging the compartments of the drum successively at definite intervals during rotation of the drum.
4. Apparatus according to claim 3 wherein the means for releasing the coin from said carrier consists of a rotary shaft extending across the machine parallel to the path of the carrier and provided with a series of radial arms set in different angular positions so as to be brought successively into the path of a trip device mounted on said carrier and capable of releasing the coin therefrom when engaged by one of said pins.
5. Apparatus according to claim 4 wherein said rotary shaft is rotated intermittently by a ratchet wheel and pawl which is actuated once every time the machine is operated.
6. Apparatus according to claim 5 wherein said ratchet wheel also drives an auxiliary indicator adapted to indicate whether the next operation of the machine will result in the delivery of a prize.
7. Apparatus according to claim 3 wherein the means for traversing said carrier consists of a spring loaded lever arm normally locked by a coin freed fastening but capable of being rocked across the machine by an external handle for the purpose of moving said carrier across the machine when said fastening is released.
8. Apparatus according to claim 7 wherein said external handle actuates said lever arm through mechanism which releases the lever arm at the end of its movement in one direction across the machine, thus allowing said lever arm to be returned by its spring, the motion of said arm being regulated by a flie or other braking device.
9. Apparatus according to claim 8 wherein a ratchet and double acting pawl device is provided for the purpose of preventing reversal of the movement of said lever arm except at the ends of its traverse.
10. Apparatus according to claim 8 or 9 wherein said external handle is locked at the end of its operative movement by a fastening adapted to be released automatically when said lever arm has completed its return movement.
11. Apparatus for playing a game of skill constructed and adapted to operate substantially as described with reference to the accompanying drawings.
- Dated this 31st day of January, 1930.
- FRANCIS HERON ROGERS,
Agent for Applicants,
Bridge House, 181, Queen Victoria Street,
London, E.C. 4.

[This Drawing is a reproduction of the Original on a reduced scale.]

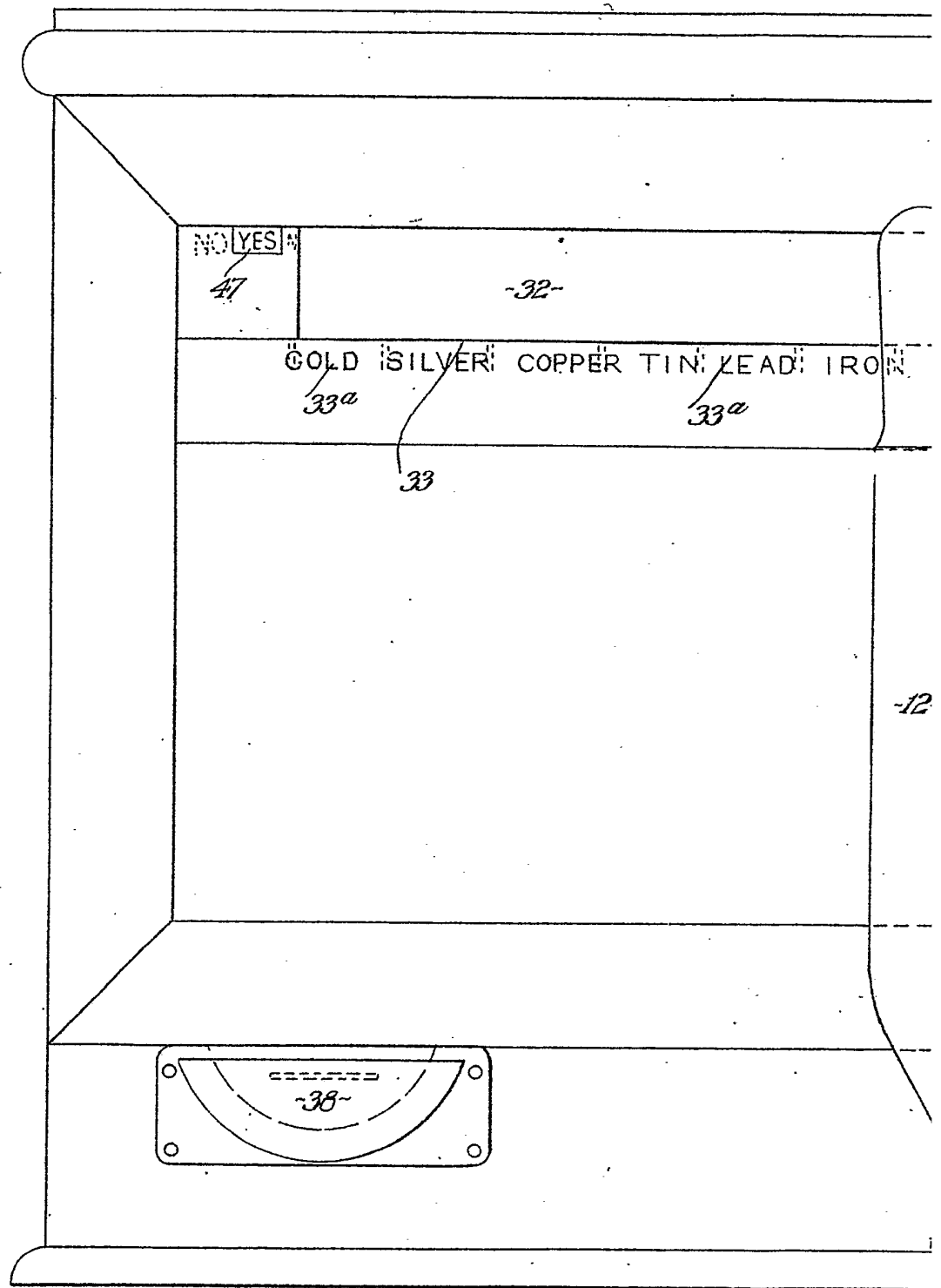


Fig. 1

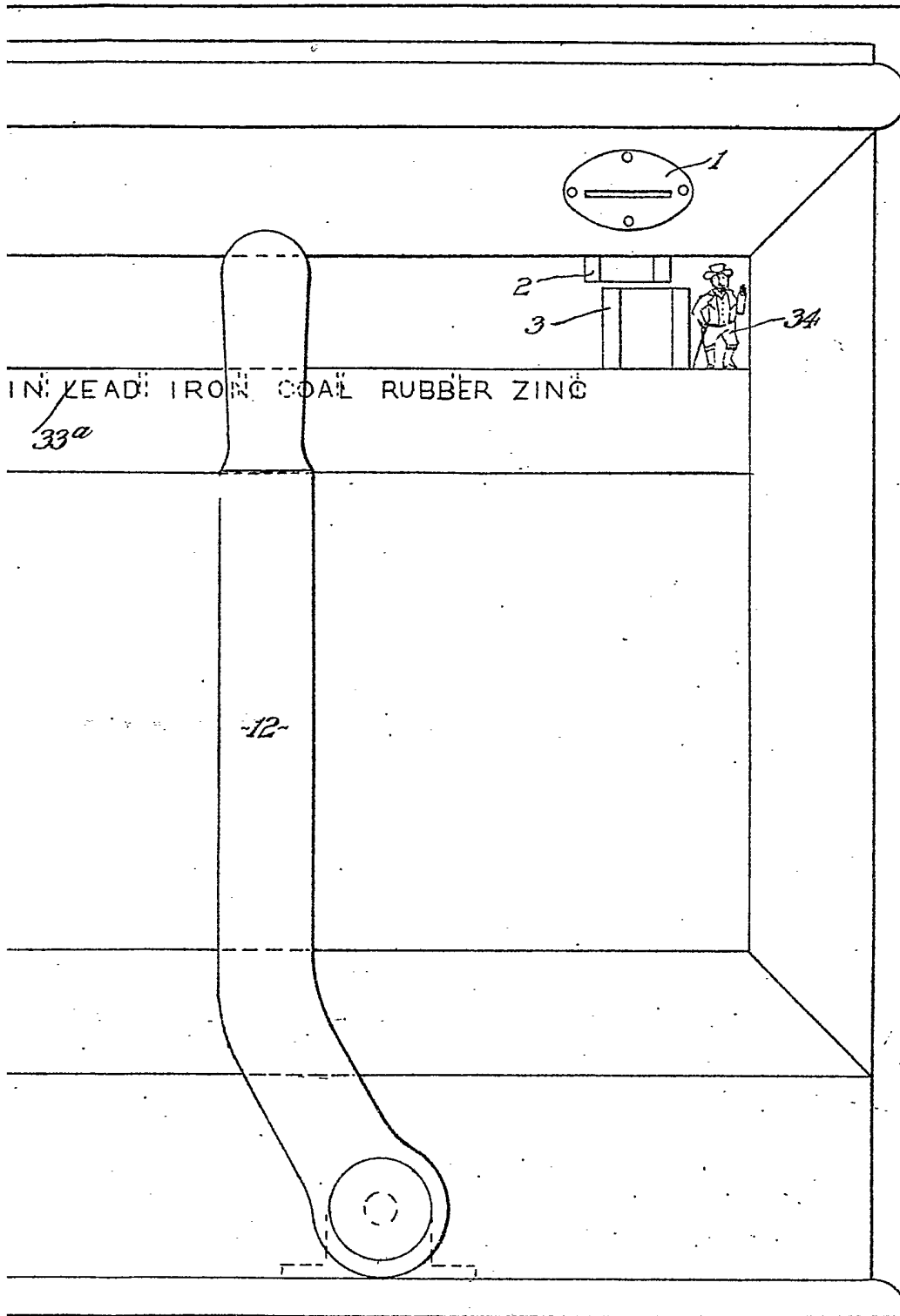
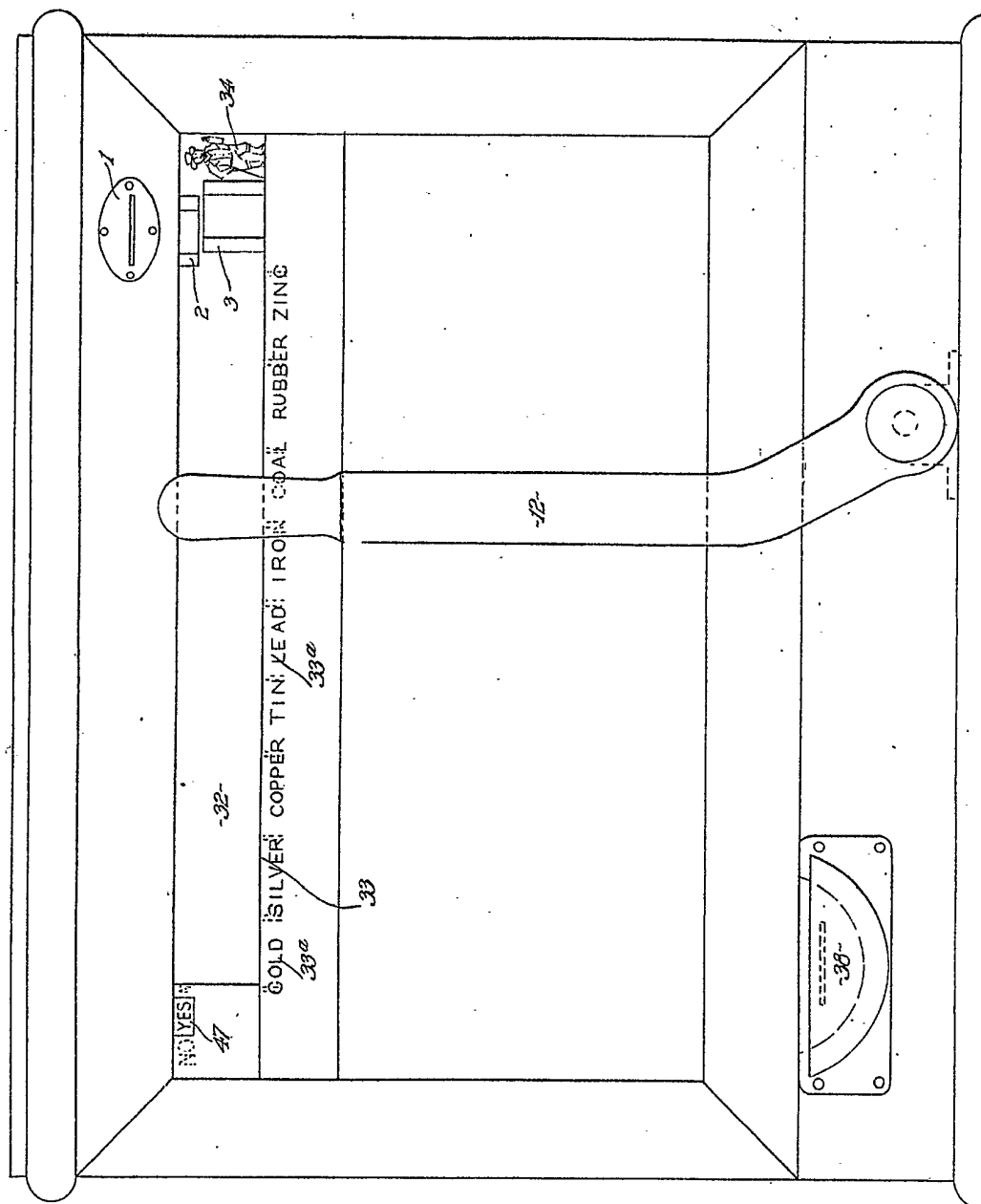


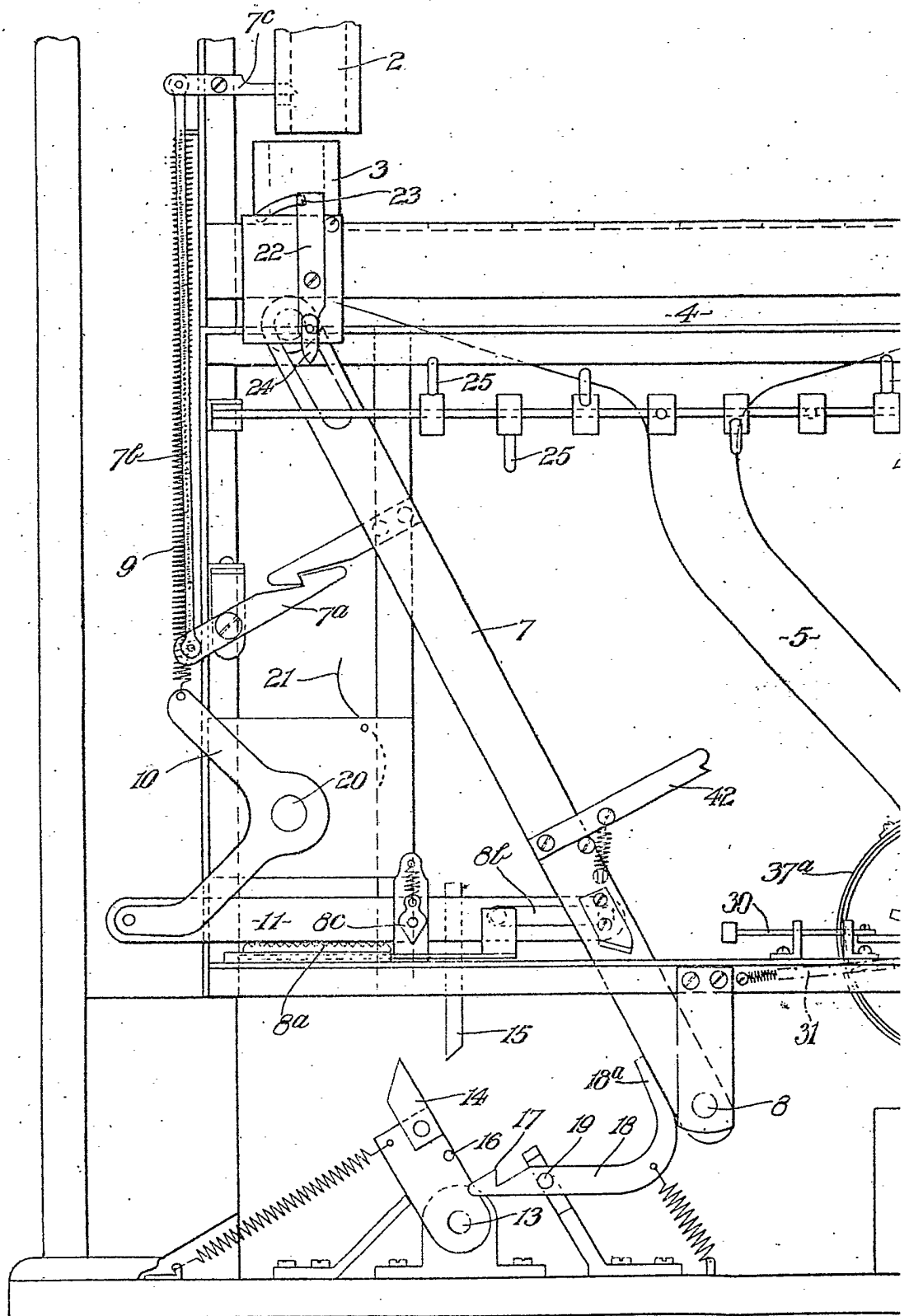
Fig. 1



[This Drawing is a reproduction of the Original on a reduced scale]

Fig. 1

[This Drawing is a reproduction of the Original on a reduced scale.]



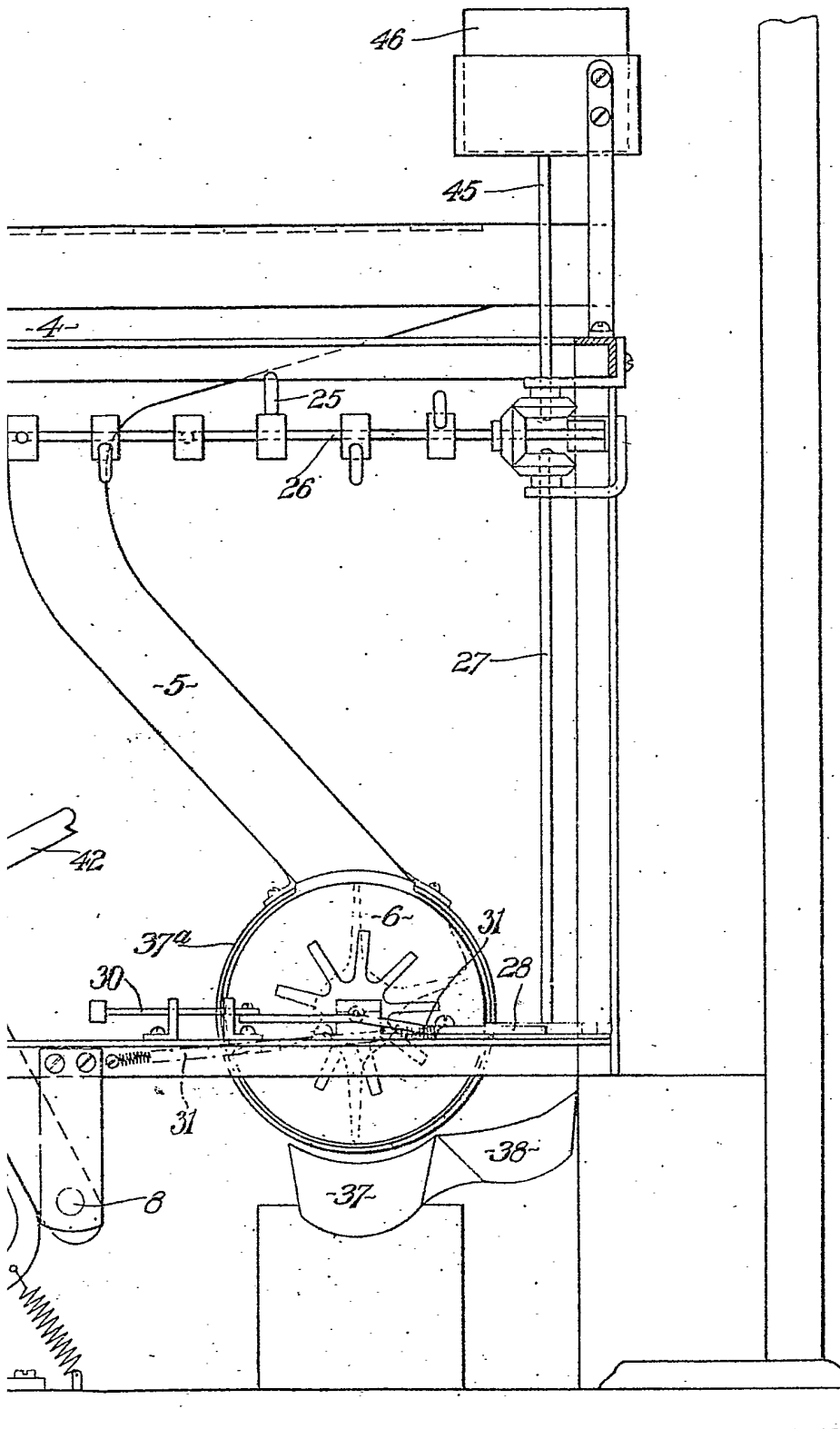
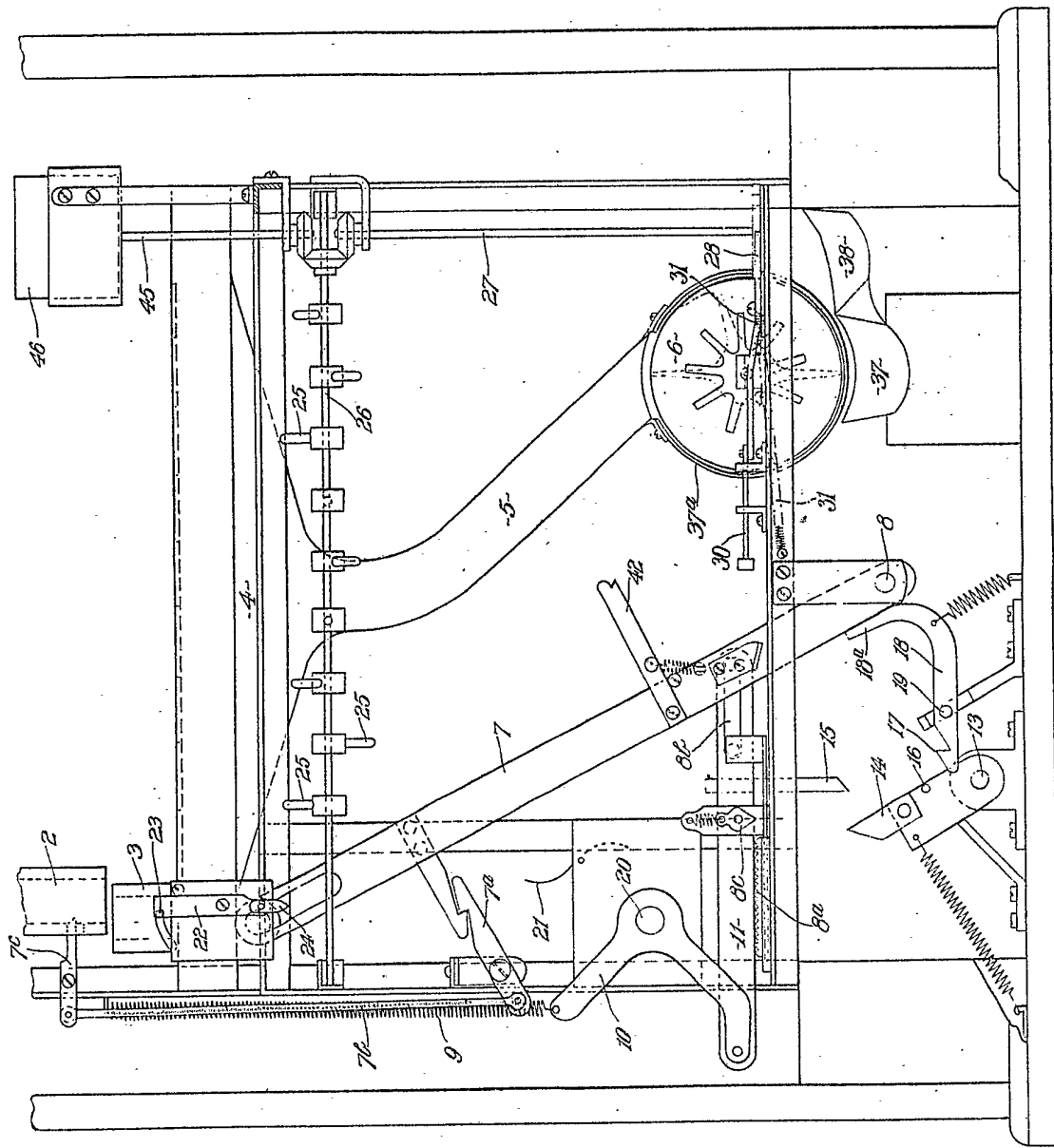
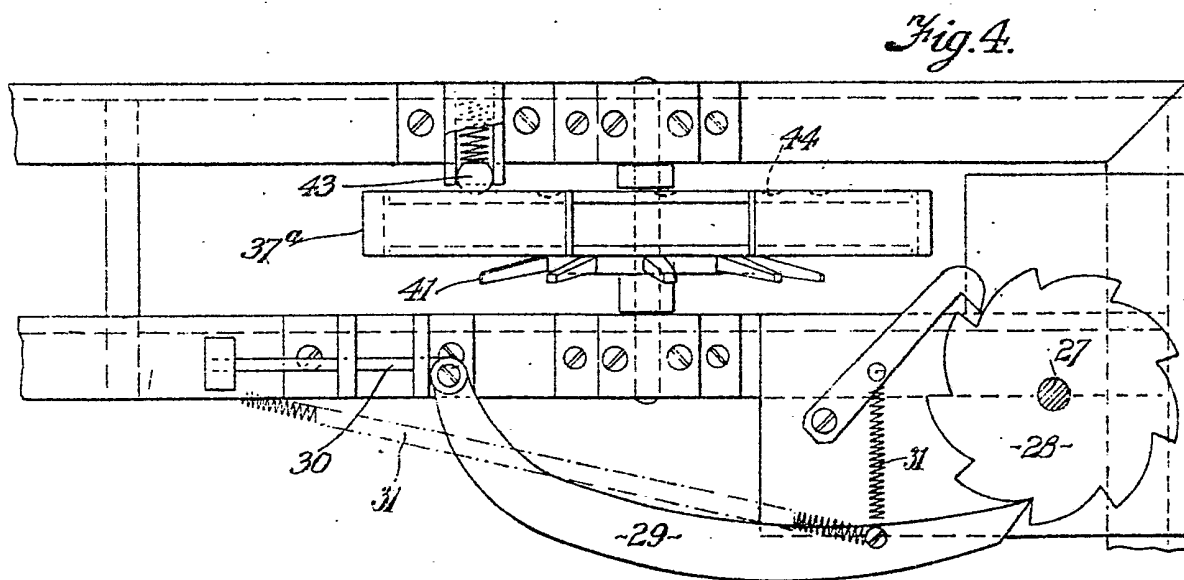
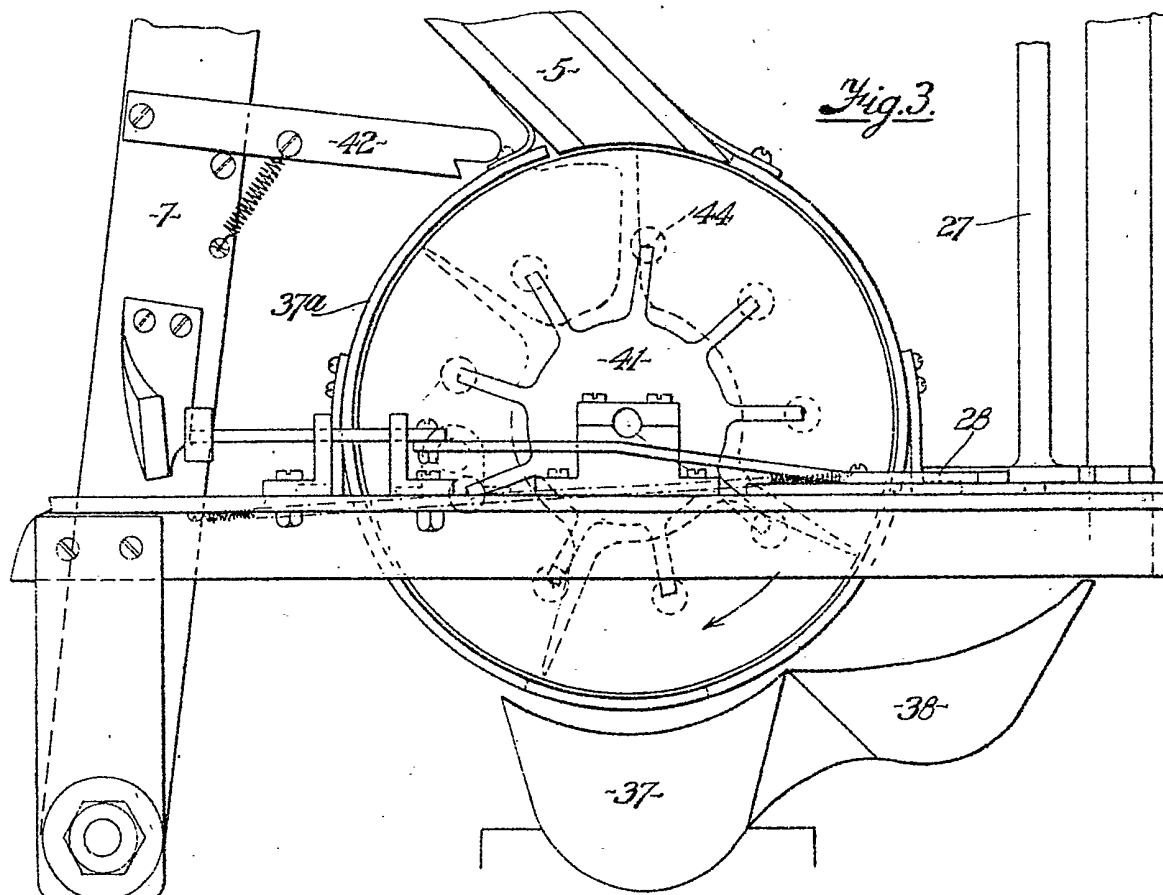


Fig. 2

Fig 2.



[This Drawing is a reproduction of the Original on a reduced scale.]



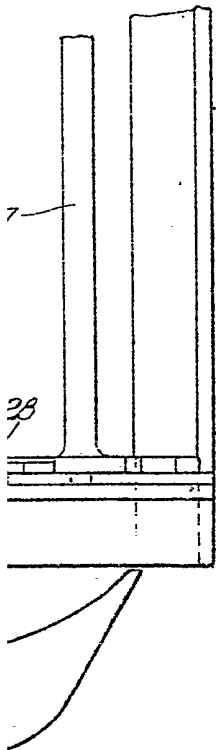


Fig. 4.

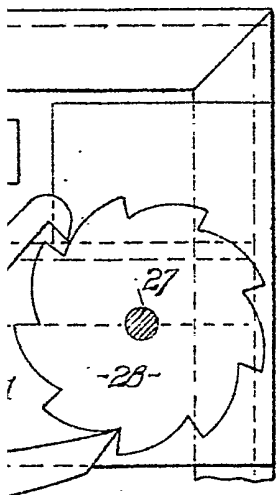


Fig. 5.

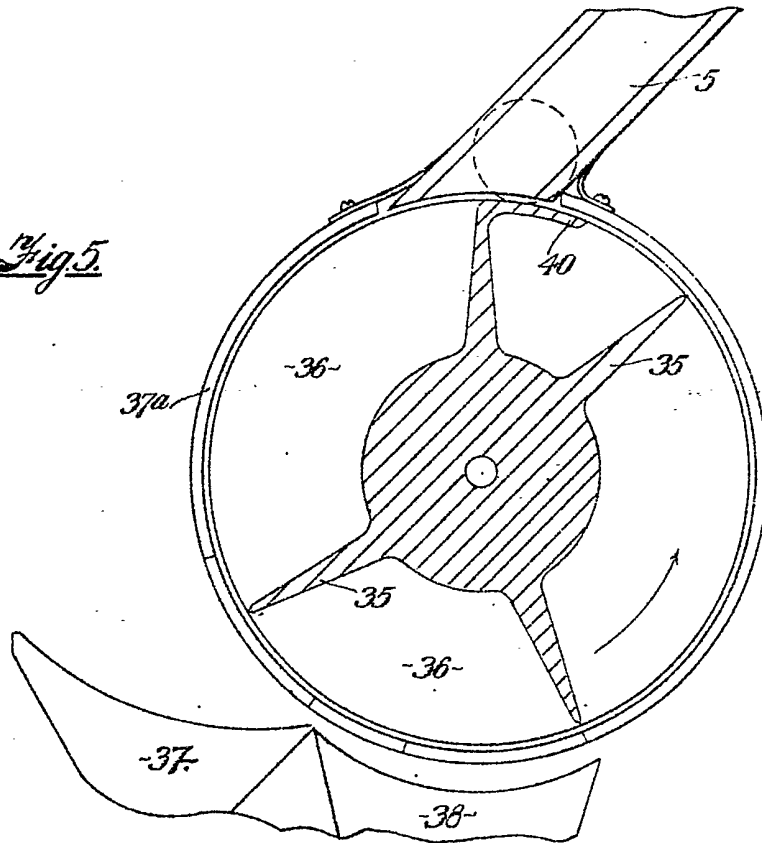
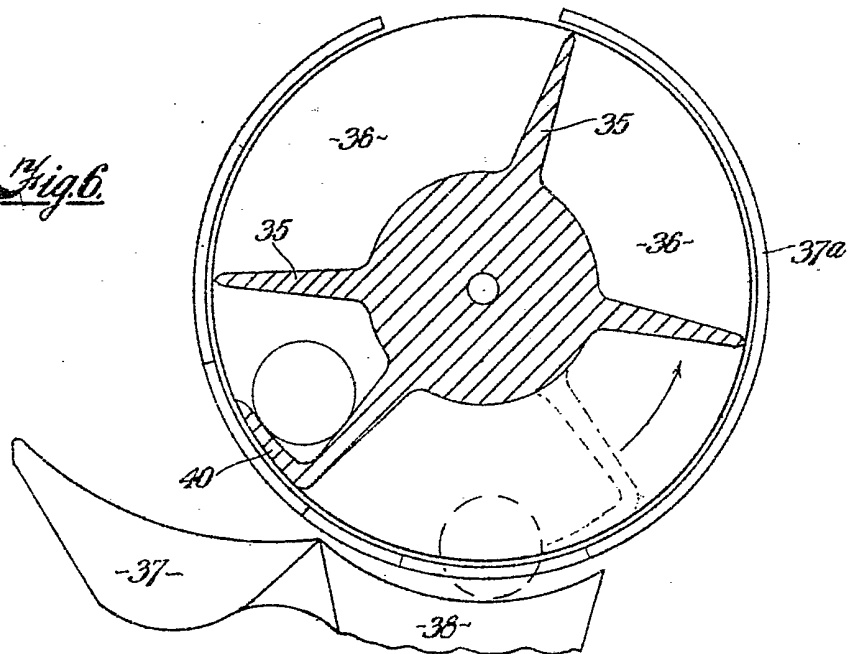


Fig. 6.



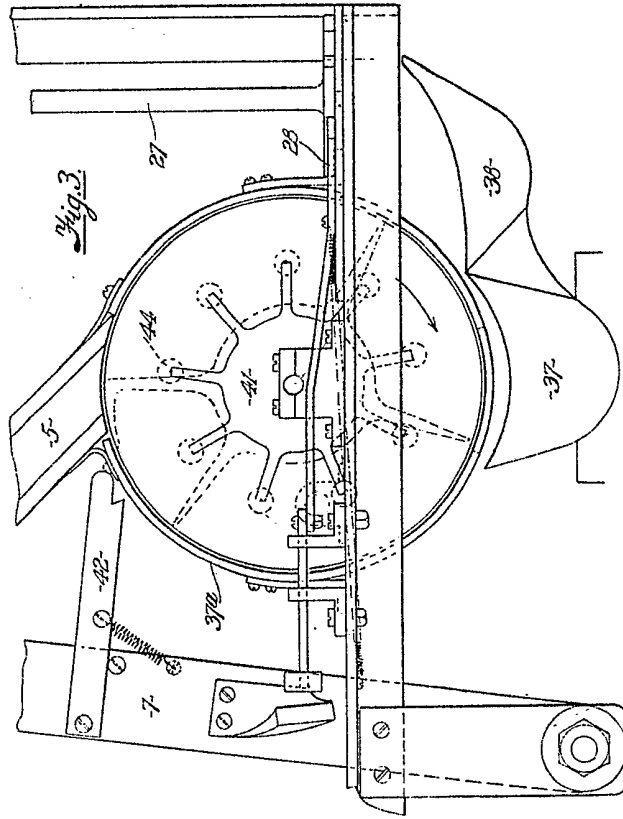


Fig. 3.

Fig. 4.

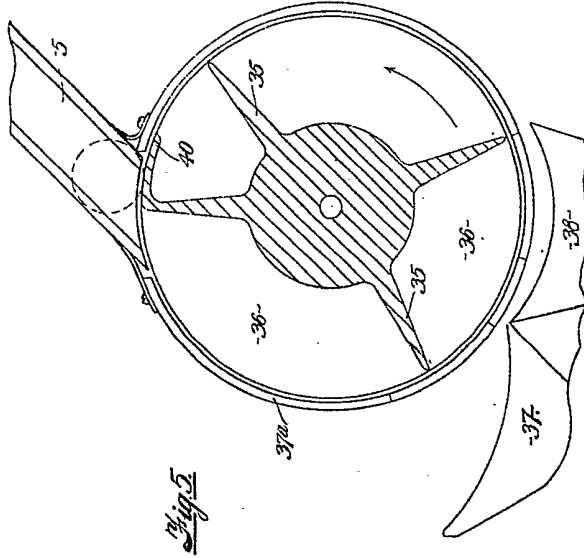
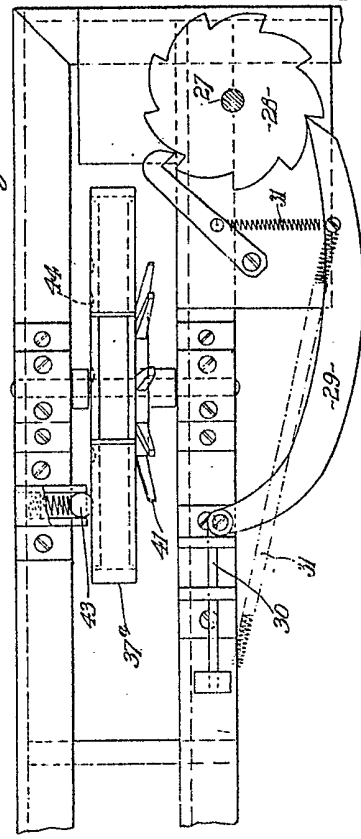


Fig. 5.

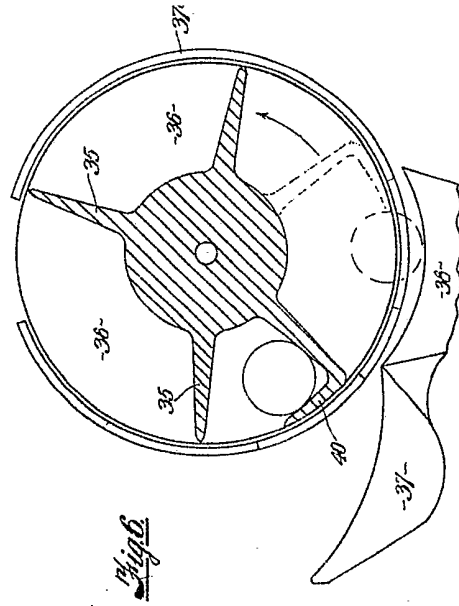


Fig. 6.

[This Drawing is a reproduction of the Original on a reduced scale]