

PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION.

Improvements in or relating to Coin Freed Apparatus or the like.

We, BRECKNELL, MUNRO & ROGERS, LIMITED, a British Company, of 3, Lawrence Hill, in the City and County of Bristol, and WILLIAM EDWARD BRYAN, a British subject, of London Road, Kegworth, near Derby, in the County of Leicester, do hereby declare the nature of this invention to be as follows:—

This invention relates to coin freed apparatus or the like and has for its chief object to provide such an apparatus that may be operated more than once upon the insertion of a single coin.

According to the present invention there is provided a coin freed apparatus wherein the release mechanism is controlled by means arranged to permit two or more operations of the release mechanism upon the insertion of a single coin equivalent in value to two or more times the value of the coin which can be normally inserted into the apparatus to effect a single release of the said mechanism.

The present invention further consists in a coin freed apparatus in which a coin, on acting to operate the release mechanism or the like, is moved into another position in which it will again effect or permit the operation of the release mechanism, the coin being finally delivered to the money receptacle.

Thus, the mechanism may be so arranged that two or more packets may be obtained by the insertion of one coin such as one shilling.

One constructional form of the present invention will now be described by way of example.

The coin, after being inserted into the machine, is led (preferably after passing through a coin testing mechanism) into a passageway where it acts as a connecting means between two levers, one of said levers being connected to a detent which normally locks a drawer or the like and the other lever being rocked by the initial and partial opening movement of the said drawer or the like. Thus, when the drawer is pulled forward the coin is moved along the passageway, and at the end of its travel is permitted to fall into a second passageway below the first.

[Price 1/-]

The coin is moved along this second passageway either by the action of its own weight, or positively by the return movement of the drawer operating on one of the rocking levers hereinbefore referred to. A suitable projection may be provided on such lever for this purpose.

When the coin comes to the end of said second passageway, it falls into a third passageway where it again acts to couple together the two levers hereinbefore referred to, so that the second initial and partial opening movement of the drawer withdraws the detent from its locking position to permit the drawer to be fully opened again.

Suitable projections or surfaces are provided on these levers so as to permit of their being connected either by a coin in the first passageway, or by a coin in the third passageway. When a coin comes to the end of this third passageway it is allowed to drop into the money receptacle.

Of course further passageways could be provided if desired so that the drawer could be opened for instance three times for the insertion of one shilling.

If desired, another passageway may be provided into which coins of lesser value are fed and only act to connect together the two levers hereinbefore referred to for one stroke (or less strokes than the coin of larger value,) thus sixpence may only permit a single operation of the drawer, while one shilling may permit two operations.

A double rack or other means may be provided to ensure that the motion of the drawer shall not be reversed during its opening and closing movement.

The invention may be used to control the opening of a plurality of drawers which are connected together by interlocking mechanism so that only one of them may be opened at one time.

Dated this 9th day of February, 1928.

JOHNSONS & WILLCOX,
47, Lincoln's Inn Fields, London, W.C. 2,
Agents.

COMPLETE SPECIFICATION.

Improvements in or relating to Coin Freed Apparatus or the like.

We, THE THRISSELL ENGINEERING COMPANY LIMITED, formerly known as Brecknell, Munro & Rogers Limited, a British Company, of 3, Lawrence Hill, in the City and County of Bristol, and WILLIAM EDWARD BRYAN, a British Subject, of London Road, Kegworth, near Derby, in the County of Leicester, 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:—

The present invention relates to a coin freed apparatus of the type in which the release mechanism is controlled by means arranged to permit two or more operations of the release mechanism upon the insertion of a single coin equivalent in value to two or more times the value of the coin which can be normally inserted into the apparatus to effect a single release of the said mechanism.

This invention has for its object to provide an improved and simplified construction of apparatus of the aforesaid kind.

This invention consists in a coin freed apparatus or the like of the type hereinbefore referred to wherein the locking mechanism is moved to its release position by the initial opening movement of the delivery mechanism acting through the inserted coin, and after the delivery mechanism has been actuated the coin is led to another position so that it will again permit of the operation of the release mechanism, the coin being finally delivered to the money receptacle.

Thus, the mechanism may be so arranged that two or more packets may be obtained by the insertion of one coin such as one shilling.

One constructional form of the improved coin freed apparatus is diagrammatically indicated in the accompanying drawing, which shows an elevation of the drawer and release mechanism.

The Figure shows a coin chute 1 of winding form leading from an inlet 2 to an outlet 3, with an auxiliary passage 4, leading to an intermediate part of said chute 1. On the front side of the coin chute 1 as viewed in the drawing is a lever 5 which is pivoted about a fixed axis 6 and connected to a detent 7 normally positioned within the path of a projection 8 on a drawer 9 adapted to be reciprocated from right to left in the direction of the arrow in order to deliver the articles for sale. A spring 10 tends to force said lever towards its normal position.

A second lever 11 pivoted about a fixed axis 12 is provided on the rear side of the coin chute 1 as viewed in the drawings, said lever being connected to an arm 13 whose end 14 is adapted to be moved on the initial opening movement of the drawer by means of a cam 15 on said drawer. A spring 16 tends to press said lever 11 towards its normal position as viewed in the Figure.

The lever 5 carries studs, 17, 18, 19 which project into the coin chute 1, slots 20, 21 and 22 being provided in the front side of the coin chute to allow of the movement of said studs when the lever is rocked. The lever 11 carries similar studs 23, 24 and 25 which on the movement of the lever, extend through slots 26, 27, 28 in the rear side of the coin chute.

The apparatus works in the following manner:—

When a coin of predetermined denomination is inserted into the apparatus it is led (preferably after passing through coin testing mechanism) into the inlet 2 of the chute 1 and passes to the position 29. Then on an attempt being made to open the drawer by moving it towards the left, the cam 15 acts upon the end 14 of the arm 13 and raises it, thereby turning the lever 11 towards the left.

The pin 23 on said lever presses against the coin in position 29 and forces it to the left, thereby pressing back the pin 17 and forcing the lever 5 to the left, which causes the detent 7 to be raised out of the path of the projection 8 so as to permit the full opening of the drawer.

In this opening movement of the drawer the lever 11 is forced into the position indicated by the centre line 30, and the pins 23, 24 and 25 on said lever are moved to the positions 23¹ 24¹ 25¹.

Such movement of the lever forces the coin into the position 31, and the pin 17 is moved thereby to the position 17¹ and accordingly the lever 5 is moved into the position represented by the centre line 32, the pins 18 and 19 being moved to the position 18¹ and 19¹.

When the coin has been forced to the position 31 it falls to the position 33, and on the closing of the drawer 9, the lever 5 is moved back to its initial position, and the middle pin thereon is moved from the position 18¹ to 18 thereby moving the coin to the position 34, said coin acting on the second pin of the lever 11 and forcing it from position 24¹ to 24. The coin then

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falls from the position 34 to the position 35.

5 The drawer 9 may now be opened a second time, as the initial opening movement of said drawer will cause the pin 25 to press on the coin 35 and thereby force back the pin 19 so as to turn the lever 5 and raise the detent 7 out of the path of the projection 8 of the drawer.

10 In this second opening movement of the drawer the coin 35 will be moved to the position 36 from which it will fall down the outlet 3 into the money receptacle.

15 When the drawer is again closed the parts will return to the positions shown in the drawing under the influence of the springs 10 and 16.

20 If desired, the apparatus may be adapted to permit more than two operations of the release mechanism for the insertion of one coin.

25 The apparatus is also adapted to permit of a single operation of the drawer when a coin of smaller denomination is inserted. In that case the coin (preferably after passing through coin testing mechanism) is led to the auxiliary passage 4 and passed therethrough direct to the position 34 whence it falls to the position 30 35 and then permits of only a single actuation of the drawer before it is delivered through the outlet 3 to the money receptacle or the like.

35 If desired the auxiliary passage 4 may be omitted, so that then the apparatus is only adapted to receive a coin that permits of two actuations of the delivery mechanism or drawer.

40 The pin 24 may be dispensed with as the lever 11 will return to its initial position under the action of the spring 16.

45 Having now particularly described and 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. A coin freed apparatus or the like of the type hereinbefore referred to wherein the locking mechanism is moved to its release position by the initial opening movement of the delivery mechanism acting through the inserted coin and after the delivery mechanism has been actuated the coin is led to another position so that it will again permit of the operation of the release mechanism, the coin being finally delivered to the money receptacle. 50 55

2. A coin freed apparatus or the like as claimed in Claim 1 wherein a coin transmits movement from a member actuated by the initial movement of a delivery slide to a member connected to the locking mechanism, and after the said slide has been completely actuated the coin is led into another position in which it may again act to transmit movement from the first mentioned member to the second mentioned member in order to permit a further actuation of the said slide. 60 65 70

3. A coin freed apparatus or the like as claimed in the preceding claiming clauses wherein the coin travels in a zig-zag path through a chute. 75

4. A coin freed apparatus or the like as claimed in the preceding claims wherein the member actuated by the delivery slide and the member connected to the locking mechanism consists of two pivoted levers which act alternately to move the coin from one operative position in the zig-zag chute to another operative position. 80

5. The improved coin freed apparatus constructed and operating substantially as hereinbefore described and as illustrated in the accompanying drawings. 85

Dated this 10th day of December, 1928.

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Agents.

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

