May 16, 1939. T. G. BOGRESS 2,158,608

TOKEN DISPENSER

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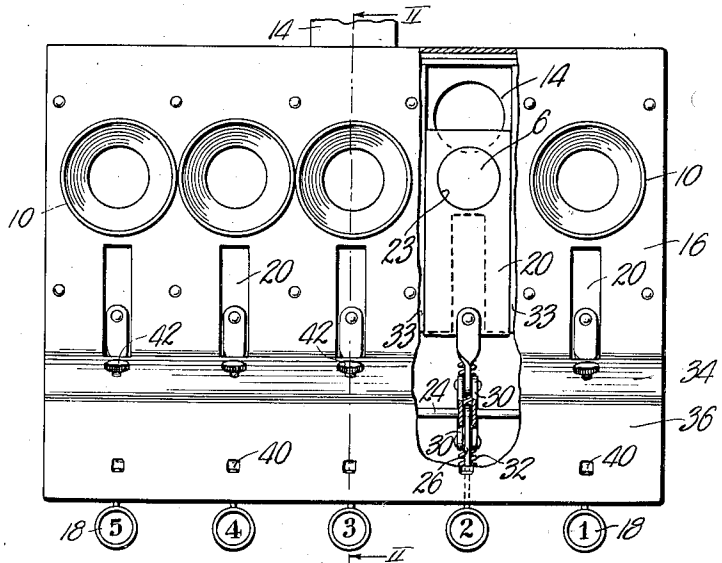


Fig. 1.

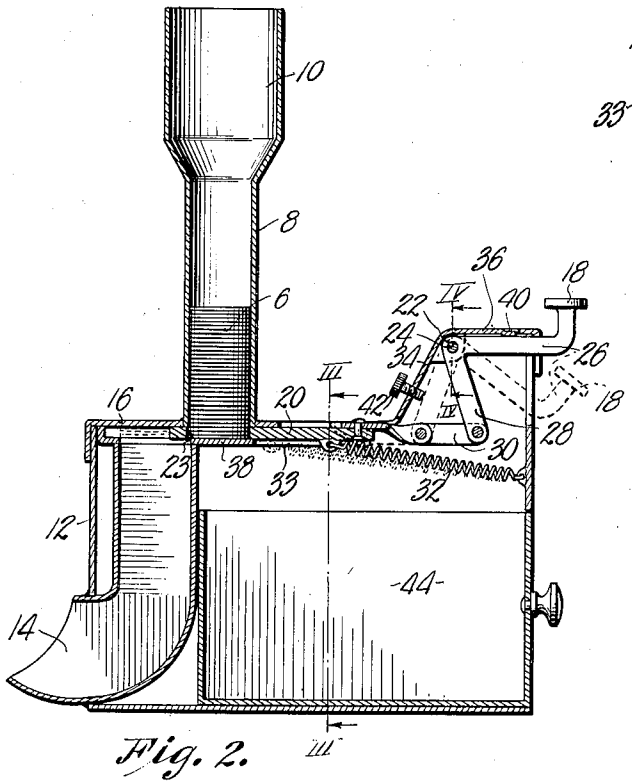


Fig. 2.

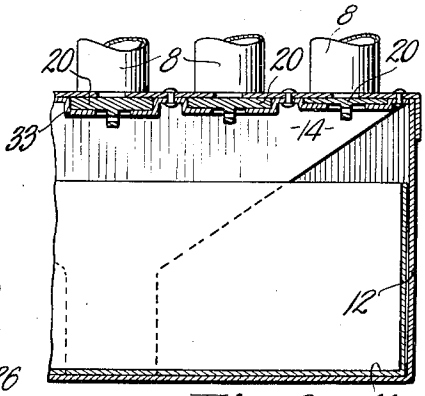


Fig. 3.

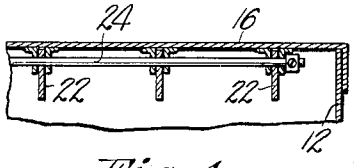


Fig. 4.

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TOKEN DISPENSER

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1 Claim. (Cl. 133—5)

This invention relates to token dispensers of the type that may be manually operated by cashiers or the like, when it is necessary to make change and present to the customer one or more tokens or coins.

The primary object of this invention is to provide a token or coin dispenser that is inexpensive to manufacture, simple in construction, durable and adjustable by the user so that the same may be maintained in working order over a long period of time without the necessity of attention of the manufacturer, distributor, or skilled mechanics.

One of the important objects of this invention is the provision of a token dispenser which has a number of token or coin magazines, each of which has a slide associated therewith that is capable of ejecting or feeding from the dispenser, a predetermined number of tokens, all in accordance with the thickness of the slide, said tokens from all the magazines of the dispenser being fed into a chute that is common to all slides of the device.

A yet further aim of this invention is the provision of a token dispenser of the aforementioned character wherein is provided unique and specially formed operating mechanism which comprises a bell-crank lever, the arms of which are engageable by adjustable movement-limiting elements so that the perforations in the slides may be maintained in axial alignment with the magazine, said limiting elements being susceptible of manipulation by the user of the dispenser so as to maintain the parts thereof in perfect working order.

A large number of minor objects will appear during the course of the following specification, referring to the accompanying drawing wherein is illustrated one embodiment of the invention; in the drawing,

Figure 1 in a top plan view of a token dispenser made in accordance with the present invention, a part thereof being broken away to reveal normally concealed units.

Fig. 2 is a vertical central sectional view through the token dispenser taken on line II—II of Fig. 1.

Fig. 3 is a fragmentary vertical sectional view through a portion of the dispenser taken on line III—III of Fig. 2, and,

Fig. 4 is a fragmentary sectional view taken along line IV—IV of Fig. 2.

It is understood that tokens that may be handled by a dispenser embodying the concepts of this invention, may be of any form so long as the same are of uniform thickness and struck from sheet metal or the like.

Tokens 6 illustrated in the accompanying drawing are shown to be round or disc shaped, with a thickness of substantially $\frac{3}{64}$''. These tokens 6 may be stacked in tubular magazines 8, the upper ends of which are flared to provide a hopper portion 10 into which is fed the tokens as they are received by the cashier or operator of the dispenser.

Case 12 formed of sheet metal or analogous material, supports the magazines 8 and there are a plurality of these magazines so that 1, 2, 3, or 4 one mill tokens may be fed into chute 14 each time the operating mechanism is actuated. One of the magazines 8 has associated therewith a finger piece 18 that indicates the 5 mill token is fed therefrom when the finger piece is pressed. Manifestly, the number of magazines 8 may be increased to suit conditions and to produce a dispenser of different physical characteristics than the one herewith illustrated.

A top 16 forms a part of case 12 and openings through the top receive the lower ends of magazines 8. Each magazine 8 has a perforated slide 20 associated therewith and the thickness of this slide 20 is varied in accordance with the number of tokens 6 to be fed into chute 14. This chute 14 is flared at its upper portion so that it lies below and in front of all magazines 8 where tokens 6 may be dropped thereinto when slide 20 is at one end of its path of travel. When slide 20 is at the forward end of its path of travel its perforation 23 overlies chute 14 and the tokens carried forward thereby are dropped by gravity into chute 14. The lower portion of chute 14 is projected exteriorly of case 12 and a tray-like end formed thereon so that tokens 6 will remain in the lower part of chute 14 to be collected by the customer.

Each slide 20 is manually manipulated through the medium of novel mechanism such as shown in Figs. 1 and 2. This mechanism comprises a bell-crank lever 22 pivotally supported by a rod 24 that is carried by top 16. One arm 26 of lever 22 has a finger piece 18 thereon and the other arm 28 of lever 22 is joined to slide 20 by a link 30. Spring 32 yieldably maintains slide 20 at one end of its path of travel.

Slides 20 are supported for rectilinear reciprocation by the specially formed guide piece 33 riveted to top 16, as illustrated in Fig. 3.

Top 16 has a raised portion which presents an inclined wall 34 and a horizontal wall 36. It is

at the juncture between these two walls **34** and **36**, that lever **22** is pivotally supported. When lever **22** is in the normal position with slide **20** in axial alignment with the overlying magazine **8**, arm **26** is substantially horizontal and parallel with wall **36**. In this position, lever **22** and the associated parts should be so disposed as to insure that perforation **23** is in alignment with the overlying magazine **8** so that tokens **6** will always be within perforation **23** and resting upon a platform **38** which is formed by the same material that creates guides **33**.

A bendable tongue **40** is struck from wall **36** immediately above arm **26** of lever **22**, and this tongue **40** is pressed against arm **26** when the machine is first assembled so that perforation **23** is in alignment as aforesaid.

During use, spring **32** often times loses its force and therefore, the height to which arm **26** and its finger piece **18** is raised, must be varied to accommodate wear, play, and spring variation. If slide **20** does not return to the proper position, adjustment of tongue **40** will overcome the difficulty. This tongue **40** becomes a stop that is set during assembly so that precision work is unnecessary as regards the parts forming the mechanism which operates slide **20**.

Inclined wall **34** carries an adjusting screw **42** which limits the movement of lever **22** by engaging arm **28**—thus, the forward movement of slide **20** may be stopped at the proper point to permit dropping tokens **6** into chute **14**.

A storage drawer **44** occupies the space within the case **16** below the operating mechanism that has just been described. This drawer may contain a desired number of tokens for introduction into magazines **8**.

Fig. 3 illustrates the manner in which slides **20** are made of metal having different thicknesses so that the desired number of tokens are ejected.

It is obvious to one skilled in the art that a token dispenser embodying this invention may be made in various ways so that the same might be included in a commercially practical device, and it is therefore desired to be limited only by the scope of the appended claim.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

A token dispenser of the character described comprising a sheet metal case having a top constituting a raised horizontal portion along one edge thereof and an inclined wall joining the raised portion with the remaining part of the top, said remaining part of the top being also horizontal and provided with a plurality of perforations therethrough; a vertical token magazine in communication with each perforation respectively; a chute in the case disposed between said perforations and the opposite edge of the top; a reciprocable slide having an opening therethrough underlying each perforation respectively to receive tokens from the respective magazines through the perforation in communication therewith when the slide is at one end of its path of travel and to deposit the token in the chute when the slide is at the other end of its path of travel; a spring for each slide to yieldably maintain the latter at said one end of its path of travel; a bell-crank lever for each slide respectively, pivotally mounted at its elbow within the case at the zone of juncture between the raised horizontal portion and said inclined wall; a link interconnecting the free end of one arm of each bell-crank lever with its respective slide, the free end of the other arm of each lever being projected exteriorly of the case and having a finger-piece thereon, said first mentioned arm of each bell-crank lever being adjacent to the inclined wall when the same is moved to position the opening of its associated slide over the said chute, said second mentioned arm being adjacent to the raised horizontal portion of the case when the opening of its associated slide is in register with the overlying perforation in the top; a set screw carried by the inclined wall for engagement with the first mentioned arm of the bell-crank lever to form an adjustable stop for the said lever and the slide; and a bendable tongue struck from the raised horizontal portion of the top, said tongue being engageable with the second mentioned arm of the bell-crank lever to form a stop, said set screw being a stop to limit the movement of the slide in one direction, said tongue being a stop to limit the movement of the slide in the other direction.

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