G. F. McGILL AND M. C. BRUHN.

PORTABLE CHANGE MAKER.

APPLICATION FILED MAR. 19, 1918.

1,385,382.

Patented July 26, 1921.

3 SHEETS—SHEET 1.

FIG. 1

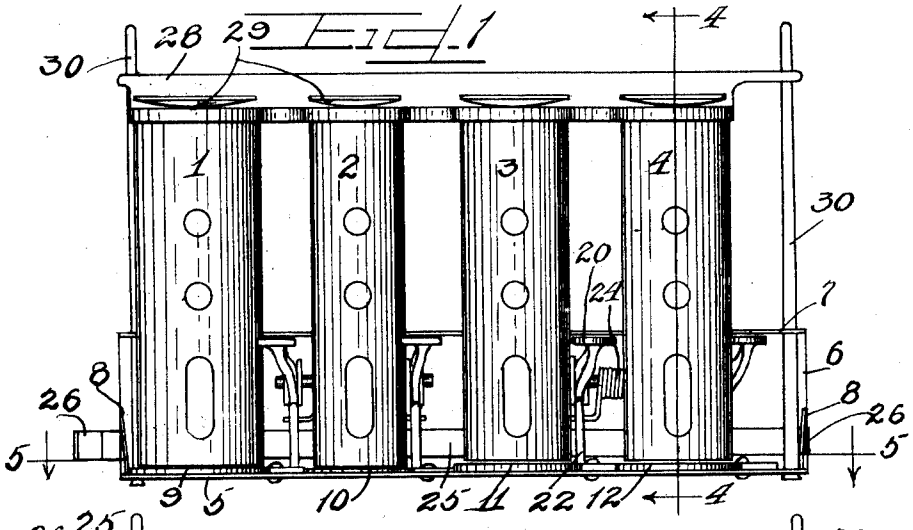


FIG. 2

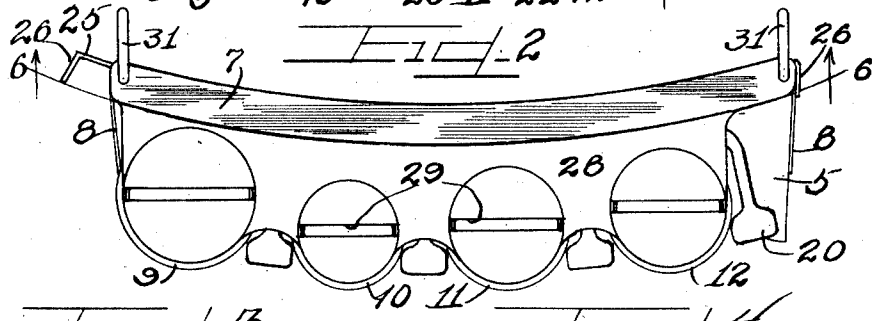


FIG. 3

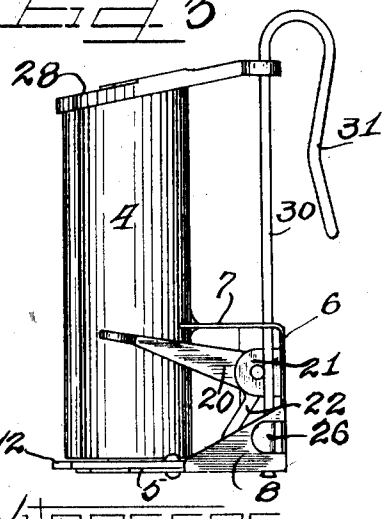
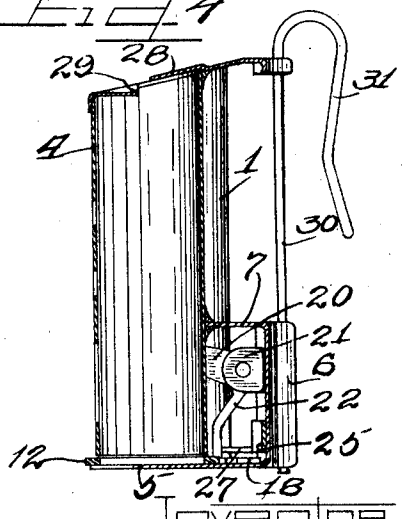


FIG. 4



Witnesses

Rudolph J. Berg.

Charles W. Hills Jr.

Inventor

Max C. Bruhn

George F. McGill.

By Charles W. Hills Atty.

G. F. McGILL AND M. C. BRUHN.

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3 SHEETS—SHEET 2.

FIG. 5

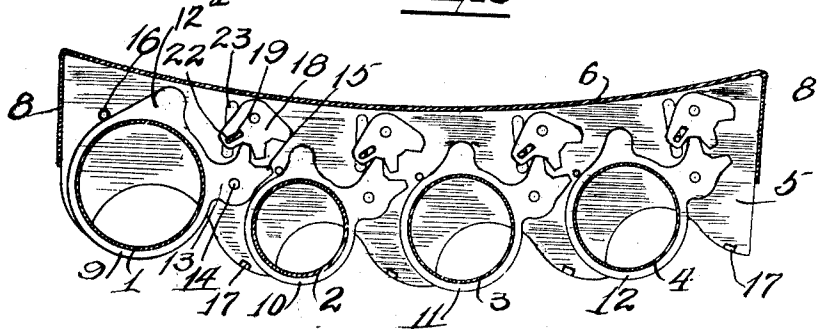


FIG. 6

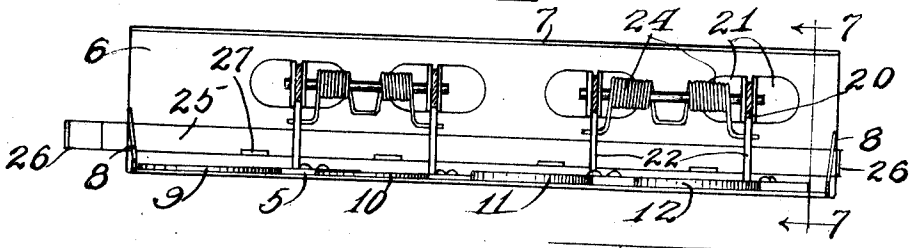


FIG. 8

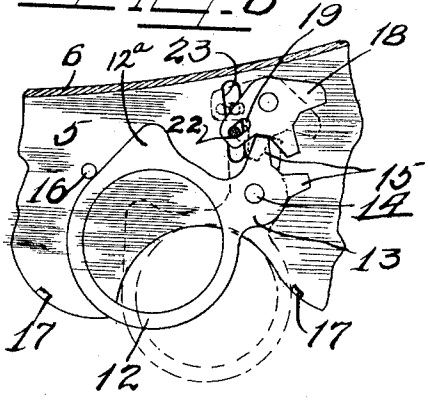
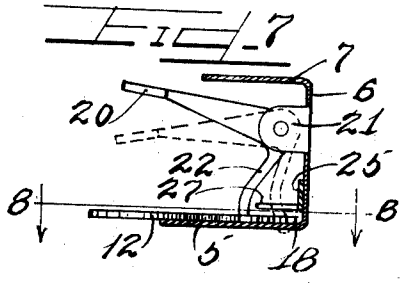


FIG. 7



Witnesses

Rudolph J. Berg.

Charles W. Hills.

Inventor

Max C. Bruhn

George F. McGill.

By Chas. W. Hills Atty.

G. F. McGILL AND M. C. BRUHN.

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3 SHEETS—SHEET 3.

FIG. 9

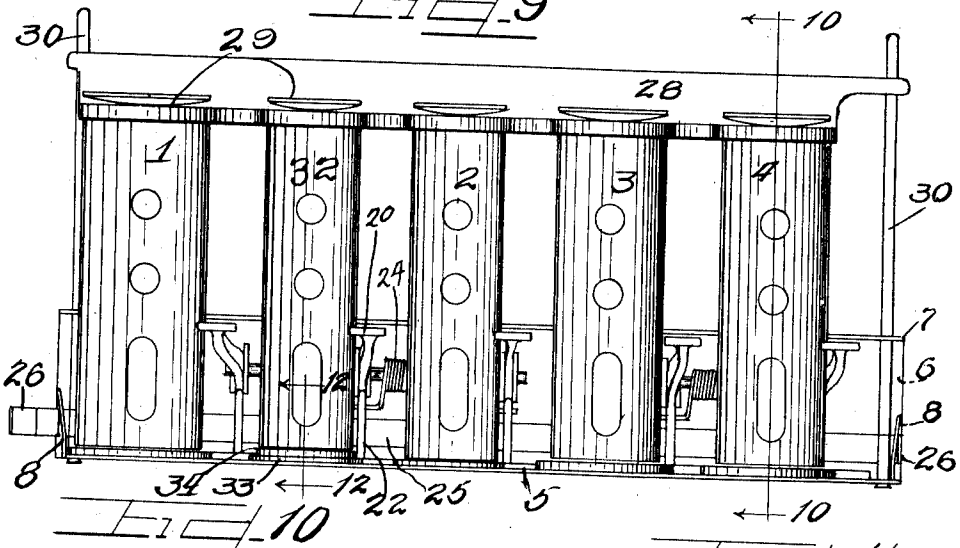


FIG. 10

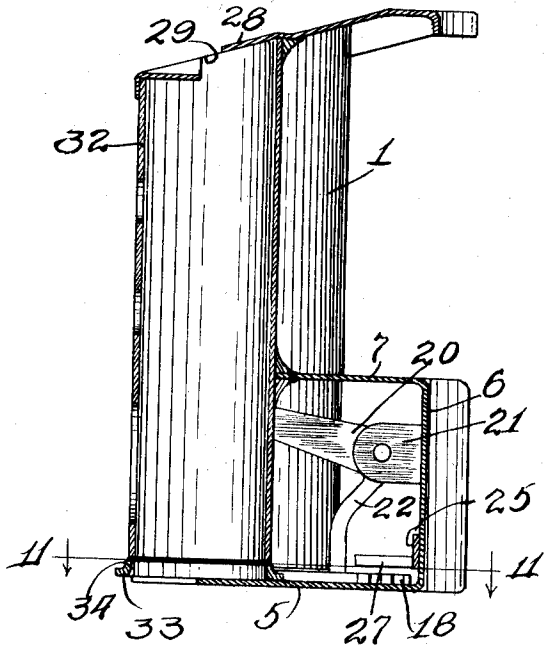


FIG. 11

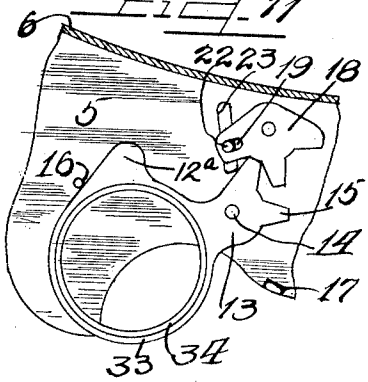
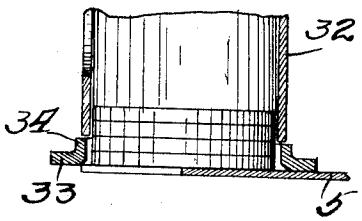


FIG. 12



Witnesses

Rudolph J. Berg.

Charles W. Hills.

Inventor

Max C. Bruhn.

George F. McGill.

By Charles W. Hills Atty.

UNITED STATES PATENT OFFICE.

GEORGE F. McGILL AND MAX C. BRUHN, OF CHICAGO, ILLINOIS.

PORTABLE CHANGE-MAKER.

1,385,382. Specification of Letters Patent. Patented July 26, 1921.

Application filed March 19, 1918. Serial No. 223,403.

To all whom it may concern:

Be it known that we, GEORGE F. McGILL and MAX C. BRUHN, citizens of the United States, and residents of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Portable Change-Makers; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

This invention pertains to an improved type of portable coin carrying change maker adapted to be worn by a person receiving coins and required to make change. The change maker of this invention permits the lowermost coin or coins in each compartment to be positively ejected by actuation of a trigger or lever, one for each compartment disposed conveniently for actuation by a person so that the hand may be placed beneath the compartment to receive the coin or coins which are ejected by a gear actuated element operated by the trigger.

It is an object of this invention to provide a coin carrier for carrying coins of different denominations in separate compartments, and permitting ready discharge of the coins from any one of said compartments independently of the others.

It is also an object of this invention to construct a change maker adapted to eject coins therefrom by means of lever controlled gear actuated ejecting elements.

It is a further object of this invention to construct a coin carrying device comprising a plurality of coin chambers, one for each denomination of the different coins carried, and each individually actuatable to eject coins by gear actuated means, and having unitary locking means serving when moved into locking position to prevent actuation of all of the ejecting means.

Another object of this invention is the construction of a change maker wherein a geared ejecting means is provided for each of several coin compartments, each means acting to carry one or more coins therewith and receiving its movement from a lever actuated gear segment.

It is furthermore an object of this invention to construct a change maker having compartments for carrying coins of different denominations, said compartments each provided with an independently actuatable toothed ejector adapted to be operated to eject a coin by means of a gear segment meshing therewith and actuatable by a spring controlled trigger.

It is an object of this invention furthermore, to provide a portable change maker of simple and effective construction positively operatable by spring controlled triggers which, when operated pivotally, swing gear segments which are in mesh with toothed coin ejectors.

Other and further important objects of this invention will be apparent from the disclosures in the specification and drawings.

The invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings:

Figure 1 is a front elevation of a change maker embodying the principles of this invention.

Fig. 2 is a top plan view thereof.

Fig. 3 is an end view of the device.

Fig. 4 is a section taken on line 4—4 of Fig. 1.

Fig. 5 is a section taken on line 5—5 of Fig. 1.

Fig. 6 is a detail view taken on line 6—6 of Fig. 2.

Fig. 7 is a detail section on line 7—7 of Fig. 6.

Fig. 8 is an enlarged fragmentary top plan view of one of the ejection mechanisms.

Fig. 9 is a front elevation of a modified form of the device.

Fig. 10 is an enlarged detail section taken on line 10—10 of Fig. 9.

Fig. 11 is a plan view of one of the ejection mechanisms.

Fig. 12 is an enlarged section taken on line 12—12 of Fig. 9.

As shown on the drawings:

The device comprises a number of tubular coin compartments of different size for different coins, one compartment denoted by the reference numeral 1, adapted to receive quarters, another denoted by the reference numeral 2, adapted to receive dimes, and the compartments or chambers denoted by the reference numerals 3 and 4, adapted to receive nickels deposited therein, and each

provided with view apertures in the front side of the compartment to permit coins, if there are any carried in said coin tubes, to be readily seen. The lower support for said tubular coin compartments 1, 2, 3 and 4, consists of a horizontal base or plate 5, which, at the rear of the device, is provided with an upright curved wall 6, which has the upper margin thereof bent inwardly, as denoted by the reference numeral 7. The ends 8, of the base plate 5, are of triangular shape, and are integral with the base plate 5, and the back wall 6.

Pivoted on the base plate 5, beneath each of the respective tubular chambers 1, 2, 3 and 4, are ring shaped ejecting or discharge elements 9, 10, 11 and 12, respectively, which are normally disposed in register beneath the tubular coin chambers so that coins deposited therein fall to the bottom thereof with the lowermost coin seating within the ring shaped ejecting means. A detail view of one of said ejecting means is shown in Fig. 8, and as illustrated, is provided with an integral tongue or extension 12^a, and an integral arm or extension 13, pivotally held on the base plate 5, by means of a pin or rivet 14. Integrally formed on the outer edge of the arm 13, is a gear segment provided with teeth 15. As shown in Figs. 5 and 8, a back stop 16, secured on the base plate 5, is provided for each of the ejecting rings to limit the inward movement thereof. Integrally formed or rigidly secured on the front edge of the base plate 5, are front stops 17, one for each of the ejecting rings to limit the outward movement thereof. Pivotally mounted on the base plate 5, to the rear of each of the arms 13, is a gear segment 18, provided with a slot 19, and having the teeth thereof in mesh with the teeth 15, of the respective ejecting ring.

For the purpose of swinging any one of said ejecting rings outwardly into a dotted line position as shown in Fig. 8, whereby the same is moved over a semi-circular cut-away portion of the base plate 5, a trigger or lever 20, is provided for each of said ejecting rings. The construction of each of the triggers 20, is identical, and a detail of a trigger is clearly shown in Fig. 7, and is pivotally mounted on inwardly turned tongues or lugs 21, struck from the rear wall 6. Each of the triggers is provided with a downwardly directed integral finger or tail 22, which engages in the slot 19, of the respective gear segment 18, and has the end thereof positioned to slidably engage in one of a plurality of guide slots 23, provided for the purpose in the base plate 5. When a trigger is depressed, the tail 22, swings inwardly or rearwardly, and being engaged in the slot 19, of the respective gear segment 18, and disposed normally at the forward end of the respective slot 23, of the base plate, pivotally swings or rotates the gear segment, the teeth of which, being in mesh with the teeth 15, of the respective ejecting ring, swing the coin ejecting ring outwardly from the frame from beneath the coin tube into register with the semi-circular cut-away portion of the base plate to permit a coin carried outwardly by the ejecting ring to fall therethrough into the hand of the operator. A coiled spring 24, one for each of the triggers 20, is provided, coiled around the pintle for the trigger with one end of each of the springs bearing against the rear wall 6, and the other end engaged behind the tail 22, of the respective trigger, so that depressing movements of the triggers are resisted by the springs and after depression of said triggers, the same are returned by said springs to normal position and the ejecting rings therewith. As already described, the inward and outward movements of the ejecting rings are limited by the stops 16 and 17, respectively.

A unitary locking means is provided to lock all of said ejecting rings from actuation, and comprises a curved slide bar 25, with the ends bent to form handles or actuating finger pieces 26, which also serve to limit the movement of said slide bar by contact with the ends 8, of the coin carrier frame. Said slide bar 25, is provided with a plurality of stops or lugs 27, which, when said slide bar is moved from normal position to locking position, move into a position in back of the respective tails 22, of the triggers, thus preventing depression of the triggers and consequent operation of any of the coin ejecting rings.

Secured across the upper ends of the coin tubes 1, 2, 3 and 4, is a single unitary cover plate 28, which is flanged downwardly and shaped to afford a cover for each one of the respective coin tubes. Each of the respective covers thus provided for the coin tubes, is provided with a coin slot 29, by which a coin of the proper denomination may be easily introduced into the respective coin tube. Rigidly connecting the base plate 5, of the carrier frame and the cover plate 28, are upright rods 30, at each end of the device which at their upper ends, are curved or bent rearwardly and downwardly to afford attaching hooks 31, adapted to be engaged over the belt of a person by whom the carrier is used.

In the modified form of the device shown in Figs. 9 to 12, inclusive, the construction of the change maker is practically the same as that already described with the exception that an additional coin compartment or coin tube 32, is provided for receiving dimes. Said coin tube 32, is disposed between the coin tubes 1 and 2, and is constructed identically the same as the coin tube 2, except that said coin tube 32, is a trifle shorter.

An ejecting ring 33, is disposed below the coin tube 32, and is constructed the same as that shown in detail in Fig. 8, but in addition has integrally formed thereon an upwardly directed ring flange 34, of a height to permit the two lowermost dimes in the coin tube 32, to seat within the ejecting ring, whereby a depression of the trigger associated with the coin tube 32, rotates the respective gear segment 18, and thereby swings the ejecting ring 33, outwardly to register with the respective semi-circular opening in the base plate to permit the two lowermost dimes carried by the ejector to fall into the hand of an operator.

It will, of course, be understood that any number of coin tubes may be provided for receiving coins of the same denomination, said coin tubes, however, being equipped with ejecting rings of different depths so that any desired number of coins may be ejected by a single operation of the respective trigger.

The operation is as follows:

In using the device, the person using the same merely drops the coins received according to their denomination in the respective coin tubes 1, 2, 3 or 4, as the case may be, and the same fall by gravity therein, stacking one upon another with the lowermost coin of each compartment seated in the coin ejecting ring element disposed in register with the lower end thereof. In order to obtain the coin desired, the operator depresses the proper trigger for the purpose, thereby rotating the respective gear segment 18, which, being in mesh with the teeth 15, of the respective ejecting ring mechanism, thereby swings the ejecting ring outwardly into a position against the respective outer stop 17, to register over the semi-circular cut-away portion of the base plate 5, which permits the coin carried in the particular ejecting ring to fall by gravity therethrough into the hand of the operator. Release of the trigger then causes the ejecting ring to be returned to registering position beneath the coin tube and against the respective rear stop 16, under the stress of the spring 24. It is due to the fact that the integral tongue or extension 12^a, integrally formed on each ejecting ring has swung into position beneath its coin tube that the remaining coins in the tube are prevented from falling downwardly on the base plate 5, in position behind the ejecting ring which would of course prevent said ring returning to normal position and would make proper operation of the device impossible.

The operation of the slidable unitary locking means 25, has been described, but it may be said that all of the triggers are locked from actuation by sliding said bar from the position shown in Fig. 6, into a position whereby the stops 27, on said bar are moved into position behind the tails 22, of the triggers to prevent depression of all of said triggers.

We are aware that numerous details of construction may be varied through a wide range without departing from the principles of this invention, and we therefore do not purpose limiting the patent granted otherwise than necessitated by the prior art.

We claim as our invention:

1. In a change maker of the class described, a coin tube, independently operatable ejecting mechanism for the coins beneath said tube comprising a pivoted ejecting ring, teeth formed thereon, a slotted pivotally mounted gear segment meshing with said teeth, a pivoted trigger, and a tail thereon engaged in the slotted gear segment to actuate the same to swing said ejecting mechanism outwardly to eject coins.

2. In a device of the class described, a coin tube, ejecting mechanism pivoted below said coin tube, teeth on said ejecting mechanism, slotted gear means in mesh with said teeth, and a spring controlled trigger member engaged in the slot of said gear means to operate said ejecting mechanism when said trigger member is depressed to eject coins from the coin tube.

3. In a device of the class described, a coin tube, an independently operatable ejecting mechanism for the coins beneath said tube comprising a pivoted ejecting ring, means limiting the outward movement of said ring to a position only slightly out of register with the coin tube to permit a coin to fall therefrom, means limiting the inward movement of said ejecting ring into position registering beneath the coin tube, gear means associated with said ejecting ring, a trigger member for said gear means for operating the same by depression of the trigger member, and resilient means connected with said trigger member to resist depression thereof and acting to automatically restore said trigger member and said ejecting ring to normal position after each actuation thereof.

4. In a change maker of the class described, a coin tube, independently operatable ejecting mechanism for the coins beneath said tube comprising a pivoted ejecting ring, an extension integrally formed thereon, teeth formed on said ring, a slotted pivotally mounted gear segment meshing with said teeth, a pivoted trigger, and a tail thereon engaged in the slotted gear segment to actuate the same to swing said ejecting mechanism outwardly to eject coins and to position the ring extension centrally beneath the tube to hold the remaining coins in said tube supported in position.

5. A change maker comprising a coin tube, an ejector ring pivotally mounted therebeneath, and having gear teeth and means en-

gaging said gear teeth for swinging said ejector.

6. The combination with a coin tube of a money changing apparatus, of ejector mechanism therefor comprising an ejector member having horizontally arranged gear teeth, and an operated gear segment meshing therewith and operable to swing said ejector member.

In testimony whereof we have hereunto subscribed our names in the presence of two subscribing witnesses.

GEORGE F. McGILL.
MAX C. BRUHN.

Witnesses:
CHARLES W. HILLS, Jr.,
FRED E. PAESLER.