April 6, 1965 E. L. HEIM 3,176,816

MONEY-ACTUATED DEVICES

Filed Sept. 21, 1961 2 Sheets-Sheet 1

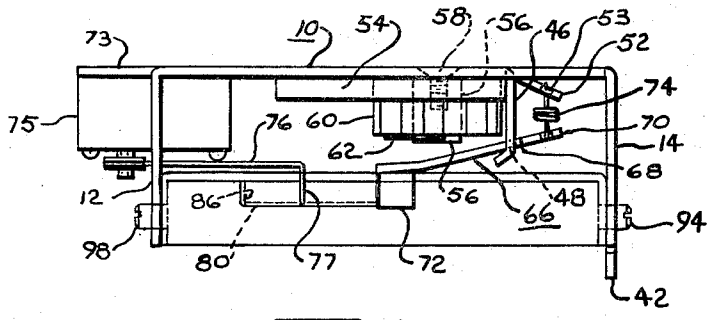


FIG. 1

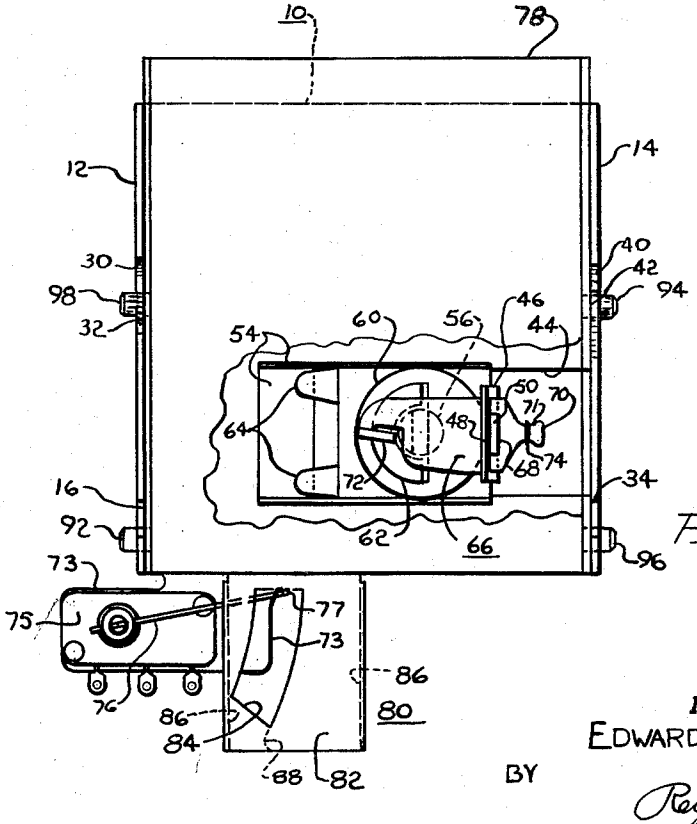


FIG. 2

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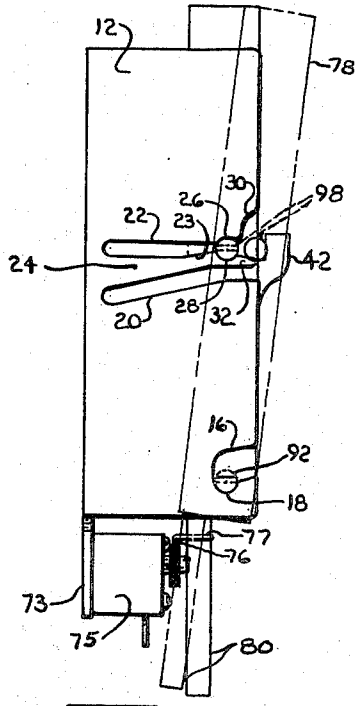


FIG. 4

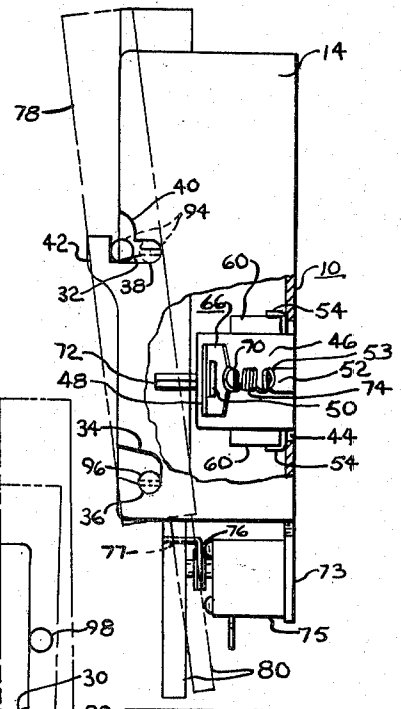


FIG. 3

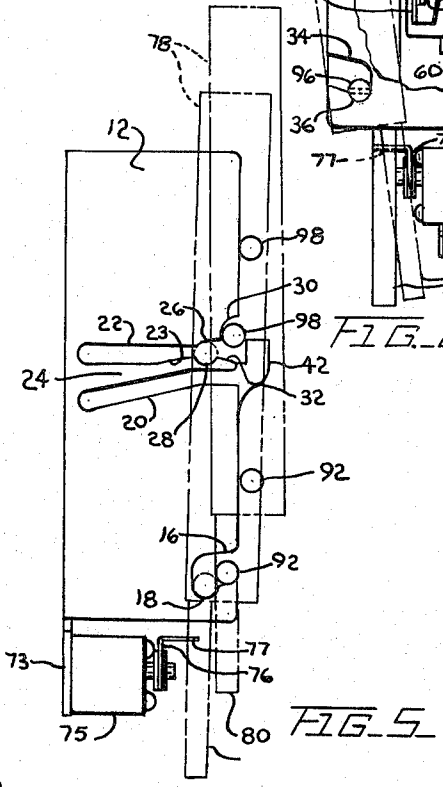


FIG. 5

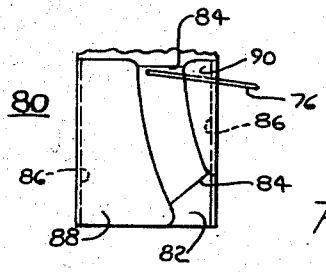


FIG. 6

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3,176,816

MONEY-ACTUATED DEVICES

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Filed Sept. 21, 1961, Ser. No. 139,702
14 Claims. (Cl. 194—9)

This invention relates to improvements in money-actuated devices. More particularly, this invention relates to improvements in mountings for slug rejectors.

It is, therefore, an object of the present invention to provide an improved mounting for slug rejectors.

Slug rejectors are customarily equipped with horizontally-extending pins; and mountings for slug rejectors customarily have slots in which those pins can be disposed and held. Latches are customarily provided for those mountings, and those latches hold the horizontally-extending pins of the slug rejectors within the slots in those mountings. While the latches are quite usable, they constitute added items of cost, they require additional assembly operations, and they require the use of dexterity during the assembling of the slug rejectors with the mountings and also during the removal of those slug rejectors from those mountings. It would be desirable to provide a mounting that could releasably hold a slug rejector but that did not require the use of latches. The present invention provides such a mounting; and it is, therefore, an object of the present invention to provide a mounting for slug rejectors which can releasably hold a slug rejector but which does not require the use of latches.

The mounting provided by the present invention has a resilient finger which is made integral with that mounting and which helps define one side of a slot in which one of the horizontally-extending pins of a slug rejector can be held. That resilient finger can yield to permit the said one horizontally-extending pin to be forced into that slot but will thereafter restore itself to hold the said one horizontally-extending pin against accidental separation from that slot. In this way, the mounting provided by the present invention is enabled to readily accommodate the slug rejector and to hold that slug rejector against accidental separation, and yet is enabled to avoid the use of latches. It is, therefore, an object of the present invention to provide a mounting for slug rejectors which has a resilient finger that defines one side of a slot for one of the horizontally-extending pins on a slug rejector.

The mounting provided by the present invention has a second slot which accommodates a second horizontally-extending pin of the slug rejector. A forwardly-extending ear is provided adjacent that second slot, and that ear will be engaged by the horizontally-extending pin that is to be disposed in the second slot before the horizontally-extending pin which is to be disposed in the first slot can engage and enter that first slot. That ear will preclude the application of hurtful forces, to the resilient finger of the mounting, by the first horizontally-extending pin of the slug rejector. Consequently, the resilient finger of the mounting provided by the present invention can not be bent beyond its elastic limits by the application of undue forces to that slug rejector during the assembling of that slug rejector with that mounting. It is, therefore, an object of the present invention to provide a mounting with an ear which must be engaged by one of the horizontally-extending pins of a slug rejector before a

second horizontally-extending pin of that slug rejector can be inserted into the slot in the mounting which is defined by the resilient finger.

In many instances it is desirable to position a switch immediately adjacent the outlet of a slug rejector, and to position the actuator of that switch so it will intercept and be moved by coins issuing from the said outlet of that slug rejector. It is very desirable to position the switch on the mounting for the slug rejector so the leads which connect that switch to the circuit controlled by that switch will not be subject to flexing and breaking during the assembling and disassembling of that slug rejector and that mounting. Usually, a coin chute is provided adjacent the actuator of the switch so that coins issuing from the slug rejector will be confined and guided into engagement with, and then past, the actuator of that switch; and, in some instances, that chute is positioned so it is always fixed relative to that switch. Such an arrangement has the advantage of avoiding any application of hurtful stresses to the switch actuator or to the switch during the assembling or separating of the slug rejector and the mounting; but that arrangement can lead to misalignments between that coin chute and the coin outlet of the slug rejector. It is possible to avoid misalignment between the coin chute and the coin outlet of the slug rejector by mounting that coin chute on the frame of the slug rejector; but such an arrangement can lead to the application of hurtful stresses to the switch or the actuator therefor during the assembling or separating of the slug rejector and the mounting. The present invention avoids any misalignments between the outlet of the slug rejector and the coin chute and yet avoids the application of hurtful stresses to the switch or to the switch actuator therefor by holding the coin chute and the outlet of the slug rejector in fixed relation and by making the rear of the coin chute substantially open. It is, therefore, an object of the present invention to hold the coin chute and the outlet of the slug rejector in fixed relation and to make the rear of the coin chute substantially open.

Other and further objects and advantages of the present invention should become apparent from an examination of the drawing and accompanying description.

In the drawing and accompanying description a preferred embodiment of the present invention is shown and described but it is to be understood that the drawing and accompanying description are for the purpose of illustration only and do not limit the invention and that the invention will be defined by the appended claims.

In the drawing, FIG. 1 is a plan view of a slug rejector mounting which is made in accordance with the principles and teachings of the present invention and of a slug rejector held by that mounting,

FIG. 2 is a partially-broken, front elevational view of the slug rejector mounting and slug rejector shown in FIG. 1,

FIG. 3 is a partially-broken, elevational view of the right-hand side of the slug rejector mounting and slug rejector shown in FIG. 1,

FIG. 4 is an elevational view of the left-hand side of the slug rejector mounting and slug rejector shown in FIG. 1,

FIG. 5 is a further elevational view of the left-hand side of the slug rejector mounting and slug rejector shown in FIG. 1, and it shows the slug rejector as it appears

when first placed against the mounting and also shows that slug rejector as it appears when the horizontally-extending pins thereon are adjacent the slots in that mounting, and

FIG. 6 is a fragmentary rear view of the coin chute which is secured to the slug rejector.

Referring to the drawing in detail, the numeral 10 generally denotes the central wall of a channel-like mounting that is made in accordance with the principles and teachings of the present invention. The numeral 12 denotes the left-hand side wall of that mounting, and the numeral 14 denotes the right-hand side wall of that mounting. Preferably, the channel-like mounting is formed from a single sheet of metal.

A slot 16 is formed in the side wall 12 adjacent the bottom of that side wall; and that slot inclines downwardly and inwardly from the leading edge of that slot, as shown by FIGS. 4 and 5. A notch 18 is contiguous with the inner end of the slot 16 and extends downwardly from that inner end of that slot. An elongated slot 20 is formed in the side wall 12 adjacent the vertical midpoint of that side wall; and that slot extends horizontally inwardly and then inclines downwardly, as shown by FIGS. 4 and 5. The slot 20 extends almost all the way to the central wall 10 of the channel-like mounting. A slot 22 is formed in the side wall 12, and that slot is disposed above the level of the slot 20. The slot 22 is generally horizontal; and a notch 26 is provided adjacent the leading edge of that slot and a further notch 30 is disposed outwardly of the notch 26.

The slots 20 and 22 coact to define an elongated resilient finger 24 that extends, cantilever-fashion, toward the free edge of the left-hand side wall 12. The finger 24 has an upwardly-inclined surface 23, an arcuate notch 28, and has a downwardly-inclined surface 32 on the upper face thereof. The inclined surface 32 coacts with the notch 30 to define a generally V-shaped entrance for the slot 22. The inclined surface 32 also coacts with the notch 28 to provide a cusp; and that cusp is spaced from the notch 26 a distance which is smaller than the diameter of the horizontally-extending pin 98 of the slug rejector 78. As a result, a moderate amount of force must be exerted to cause the horizontally-extending pin 98 to pass into the space defined by the notches 26 and 28. Similarly, a moderate amount of force must be exerted to move that horizontally-extending pin from that space.

The numeral 34 denotes a slot which is provided in the right-hand side wall 14 adjacent the bottom of that side wall; and that slot inclines downwardly and inwardly from the free edge of that side wall, as shown by FIG. 3. A notch 36 is contiguous with the inner end of that slot and extends downwardly from that inner end of that slot. The slot 34 and the notch 36 are comparable to the slot 16 and the notch 18. Furthermore, the slot 34 and the notch 36 are in horizontal registry with the slot 16 and the notch 18, respectively.

The numeral 38 denotes a horizontally-directed slot which is generally in horizontal registry with the space defined by the notches 26 and 28. A notch 40 is contiguous with the upper edge of the slot 38, and an outwardly and upwardly extending ear 42 is provided adjacent the free edge of the side wall 14. That ear projects upwardly to block direct entry of the horizontally-extending pin 94 on the slug rejector 78 into the slot 38. The space between the ear 42 and the notch 40 is large enough to permit the insertion therebetween of the pin 94 on the slug rejector 78; and, consequently, although the ear 42 blocks direct entry to the slot 38, the pin 94 on the slug rejector 78 can be introduced into that slot by causing that pin to pass through the notch 40.

Referring particularly to FIGS. 2 and 3, the numeral 44 denotes a generally rectangular opening in the central wall 10 of the channel-like mounting. A wide ear 46 extends forwardly from the left-hand edge of that opening, and that ear is preferably formed by punching it out of the central wall 10. A slot 48 is formed in the wide ear 46 adjacent the free edge of that ear; and a projection 50 extends upwardly from the inner edge of that slot. The free edge of the ear 46 is bent so it inclines forwardly and to the left from the plane of that ear, as that ear is viewed in FIG. 1. The bending of that free edge gives access to the free edge of the projection 50. A narrow ear 52 also extends forwardly from the plane of the central wall 10, but that ear is inclined at a shallow angle to that central wall. That ear is preferably formed by punching it out of the wide ear 46. A reduced width portion 53 is provided on the ear 52, and that reduced width portion serves as a neck which is adjacent the free end of that ear. A sheet 54 of insulation is disposed against the inner face of the central wall 10, and that sheet of insulation extends to the left from the opening 44. That sheet is provided with forwardly extending flanges adjacent the upper and lower edges thereof, as shown by FIGS. 1–3.

The core of an electromagnet is denoted by the numeral 56, and the rear face of that core abuts the front face of the sheet 54 of insulation. A screw 58 extends through an opening in the central wall 10 of the channel-like mounting and seats in a threaded socket in the rear of the core 56 to fixedly secure that core and the sheet 54 in position relative to that central wall. A coil 60 surrounds the core 56, and a shading ring 62 is provided at the front face of the core 56. Terminals 64 are connected to the coil 60, and those terminals will be connected to the circuit which is intended to control the actuation of the electromagnet.

The numeral 66 generally denotes the armature of the electromagnet which has the core 56; and that armature has a slot 68 therein. That slot is telescoped over the projection 50 on the wide ear 46, and that slot and that projection facilitate pivoting of the armature 66 relative to the core 56. An ear 70 is provided on the right-hand end of the armature 66, and a reduced-width portion 71 is provided adjacent that ear. That reduced-width portion serves as a neck which accommodates one end of a helical extension spring 74. The other end of that helical extension spring is accommodated by the neck 53 on the ear 52. An ear 72 is formed on the armature 66 adjacent the other end of that armature, and that ear extends forwardly from the front face of that armature.

The numeral 73 denotes a downwardly-directed extension of the central wall 10 of the channel-like mounting. That extension is preferably made integral with that central wall and with the side walls 12 and 14. As indicated particularly by FIG. 2, that extension is adjacent the left-hand side of the bottom edge of the central wall 10. A switch 75 is suitably secured to the front face of the extension 73, and that switch is provided with a rotatable switch actuator 76. That switch actuator is shown in the form of a stiff wire which is bent to have a portion that extends parallel to the plane of the central wall 10 and has a second portion 77 which extends at a right angle to the plane of that central wall. That second portion constitutes the coin-receiving portion of that switch actuator.

The slug rejector 78 is made so it can accept coins and slugs within a predetermined diameter range; and that slug rejector will reject spurious coins and slugs. That slug rejector will accept authentic coins and deliver those coins to a coin chute which is generally denoted by the numeral 80. That coin chute has a front wall 82, has an arcuate slot 84 in that front wall, has rearwardly-extending side walls 86, has a plate 88 that is secured to one of those side walls and that extends parallel to the front wall 82, and has a narrow plate 90 that is secured to the other of those side walls and that also extends parallel to the front wall 82. The confronting edges of the plates 88 and 90 are arcuate; the confronting edge of the plate 88 being concave and the confronting edge of the plate 90 being convex. Those arcuate edges are spaced apart to define a slot which is generally similar to the slot 84 but

which is open at the bottom thereof. The slot 84 has a length which is greater than the length of travel of the free end 77 of the actuator 76 as that actuator moves to actuate the switch 75.

In addition to the two upper horizontally-extending pins 98 and 94, the slug rejector 78 has two horizontally-extending pins 92 and 96. The pin 92 is disposable within the slot 16 and the notch 18, and the pin 96 is disposable within the slot 34 and the notch 36, all as shown by FIGS. 3 and 4.

To assemble the slug rejector 78 with the channel-like mounting provided by the present invention, that slug rejector will be placed in the uppermost dotted-line position shown by FIG. 5. When that slug rejector is in that position, the horizontally-extending pins 98 and 92 will engage the free edge of the wall 12 at points disposed, respectively, above the space defined by the notches 26 and 28 and above the slot 16. Also, when that slug rejector is in that position, the horizontally-extending pins 94 and 96 will engage the free edge of the wall 14 at points disposed, respectively, above the slots 38 and 34. At this time, as shown particularly by FIG. 5, the coin chute 80 will be disposed wholly forwardly of the forward edge of the coin-receiving portion 77 of the switch actuator 76. This is important because it keeps that coin chute from applying any stresses to the actuator 76 or the the switch 75 irrespective of how the slug rejector 78 is handled as it is moved to the uppermost dotted-line position shown in FIG. 5.

Subsequently, the slug rejector 78 will be moved downwardly; and, as it is so moved, the horizontally-extending pin 94 thereon will strike and be held by the upper edge of the ear 42 on the wall 14 of the channel-like mounting. At such time, the pin 94 will be in register with the notch 40, the pin 98 will be in register with the notch 30, the pin 96 will be in register with the slot 34, and the pin 92 will be in register with the slot 16. As a result, the slug rejector can then be moved toward the central wall 10 of the channel-like mounting, and can thereby be moved to the lowermost dotted-line position shown in FIG. 5. In that dotted-line position, the pin 98 will be lodged within the notch 30, the pin 92 will be resting upon the lower edge of the slot 16 and intermediate the notch 18 and the free edge of the side wall 12, the pin 94 will be lodged within the notch 40, and the pin 96 will be resting upon the lower edge of the slot 34 and intermediate the notch 36 and the free edge of the side wall 14. At this time, the ear 42 will keep the slug rejector 78 from being moved downwardly and outwardly relative to the channel-like mounting but will permit the pins 92 and 96 to be moved inwardly of the slots 16 and 34, respectively, while permitting the pins 98 and 94 to be moved inwardly of the slots 22 and 38, respectively.

Usually the pins 92 and 96 will be moved inwardly of the slots 16 and 34, respectively, before the pins 98 and 94 are moved inwardly of the slots 22 and 38, respectively. Consequently, the slug rejector 78 will usually assume the inclined position shown by dotted lines in FIGS. 3 and 4 before it is moved into the fully-seated vertical position shown by dotted lines in FIGS. 3 and 4. When the slug rejector 78 is in the inclined position shown by dotted lines in FIGS. 3 and 4, the plates 88 and 90 of the coin chute will be spaced forwardly of that portion of the elongated arm of the switch actuator 76 which is adjacent the coin-receiving portion 77. Consequently, those plates can not apply any stresses to that actuator. If the ear 42 were not provided, the slug rejector 78 could, of course, have the upper end thereof tilted even further outwardly; and if that were done, the plate 90 could engage the elongated portion of the switch actuator 76 and could apply stresses to that switch actuator and to the switch 75. However, because of the ear 42 on the side wall 14, the plate 90 will always be spaced away from the elongated portion of the actuator 76; and hence that actuator and the switch 75 will be protected against the application of objectionable stresses thereto.

Once the pins 92 and 96 have been seated within the notches 18 and 36 at the inner ends of the slots 16 and 34, respectively, a force can be applied to the upper portion of the slug rejector 78 to urge that upper portion toward the central wall 10. That force will enable the pin 98 to coact with the inclined portion 32 of the finger 24 to apply a downwardly-directed force to the free end of that finger. That force will be sufficient to cause the inclined portion 32 of that finger to move far enough down from the upper portion of the notch 26 to permit the pin 98 to move between that portion of that notch and the cusp defined by the inclined portion 32 and the notch 28. The pin 98 will then move past that cusp and come to rest in the space defined by the notches 26 and 28; and thereupon the cusp will move back up and block accidental removal of the pin 98 from the space defined by the notches 26 and 28. At this time the pin 94 will be disposed within the inner end of the slot 38, as shown particularly by FIG. 3.

It will be noted that during the assembling of the slug rejector 78 with the channel-like mounting, the chute 80 was held wholly out of register with the coin-receiving portion 77 of the switch actuator 76 as long as the pins 98 and 92 abutted the free edge of the wall 12 and the pins 94 and 96 abutted the free edge of the wall 14. This means that the coin chute could not apply any stresses to the switch actuator 76 or to the switch 75 until after the pins 98, 92, 94 and 96 had been moved inwardly of the free edges of the walls 12 and 14.

When that inward movement does occur, it occurs after the pin 98 has been moved down into register with the notch 30, the pin 94 has moved down into register with the notch 40, the pin 92 has moved down into register with the slot 16, and the pin 96 has moved down into register with the slot 34. By that time, the lower portion of the plate 88 will have moved downwardly out of register with the coin-receiving portion 77 of the switch actuator 76; and hence the slug rejector 78 can be moved inwardly of the free edges of the walls 12 and 14 without applying any stresses to the switch actuator 76, the coin-receiving portion 77 of that switch actuator then being in register with the slot defined by the arcuate edges of the plates 88 and 90. The further downward movement of the slug rejector 78 which is needed to enable the pins 92 and 96 to come to rest within the notches 18 and 36, respectively, and to place the pins 98 and 94 in register with the slots 22 and 38, respectively, also can not apply any stresses to the actuator 76 because the coin-receiving portion 77 of that actuator will be in register with the slot defined by the plates 88 and 90 and will also be in register with the slot 84. Further, as indicated previously, any inclination of the slug rejector 78 relative to the free edges of the side walls 12 and 14 will be so closely limited by the ear 42 that the coin chute 80 will be unable to engage that switch actuator at that time. The forcing of the pin 98 into the space between the notches 26 and 28 also can not cause stresses to be applied to the actuator 76 because the slug rejector 78 will then move to the vertical position shown by dotted lines in FIGS. 3 and 4; and at such time, the chute 80 will be displaced an appreciable distance from the elongated portion of the switch actuator 76.

In removing the slug rejector from the channel-like mounting, the inserting procedures is reversed; but here also the switch actuator 76 will be protected from the application of hurtful stresses. Specifically, if the slug rejector is initially tilted to the inclined position shown by dotted lines in FIGS. 3 and 4, is then raised upwardly to the lowermost dotted-line position in FIG. 5, and is finally moved upwardly to the uppermost position shown by dotted lines in FIG. 5, the chute 80 will not even engage the switch actuator 76. Furthermore, even if the slug

rejector 78 were to be tilted outwardly to a sharper angle than that shown by dotted lines in FIGS. 3 and 4, after the pin 94 had been raised upwardly beyond the upper edge of the ear 42, hurtful stresses still could not be applied to the switch actuator 76. That sharper inclination might be able to hold the coin-receiving portion 77 of the switch actuator 76 in the arcuate slot defined by the confronting edges of the plates 88 and 90, but it would not be able to apply hurtful forces to the switch actuator 76 or to the switch 75, because the bottom of that slot is open. This means that there could be no obstruction which could hold and distort or bend the coin-receiving portion 77 of the switch actuator 76.

Furthermore, it will be noted that when the slug rejector is in the vertical position shown by dotted lines in FIGS. 3 and 4, the slot 38 will coact with the slots 16 and 34 to define a vertical plane which is parallel to the central wall 10. The three slots 38, 34 and 16 will coact to prevent movement of the slug rejector 78 inwardly toward the central wall 10 beyond that plane; and, as a result, the pin 93 will be unable to apply hurtful stresses to the finger 24.

It should also be noted that the ear 42 will keep the pin 93 from resting on the outer tip of the resilient finger 24 and then being moved downwardly to apply hurtful stresses to that finger during the assembling of the slug rejector 78 with the channel-like mounting. In this way, the present invention provides an inexpensive and simple mounting for slug rejectors, and yet protects the switch actuator 76 from hurtful stresses and also protects the resilient finger 24 from hurtful stresses.

Whenever the slug rejector 78 is in the vertical position shown by FIGS. 3 and 4 and the coil 60 is de-energized, the finger 72 on the armature 66 will extend into the coin passageway of that slug rejector and prevent the acceptance of coins. That coil may be de-energized when that slug rejector is to be assembled with, or separated from, the channel-like mounting; and hence it would be desirable to cause the slug rejector 78 to be moved in such a way, relative to the channel-like mounting, as to keep that slug rejector from applying hurtful stresses to the finger 72 or to the armature 66. The forward edges of the side walls 12 and 14 of that channel-like mounting will keep the slug rejector 78 from approaching the finger 72 until the pins 92 and 96 enter the slots 16 and 34, respectively; and those pins will usually enter those slots before the pins 93 and 94 move inwardly of the outer edges of the side walls 12 and 14. The overall result is that the slug rejector will usually be rotated from the inclined position to the vertical position of FIGS. 3 and 4; and that rotation will permit the finger 72 to enter the coin passageway of that slug rejector without any application of hurtful stresses to that finger or to the armature 66.

The use of the ear 46 and of the slot 48 therein to mount the armature 66 is desirable because it automatically provides the desired spacing between the finger 72 and the slots 16, 34 and 38. That spacing is important in enabling the slug rejector 78 to be assembled with, and separated from, the channel-like mounting without applying any hurtful stresses to the finger 72 or to the armature 66. If the armature 66 were to be held by a bracket which was separate from, and was merely fastened to, the channel-like mounting, that spacing would have to be carefully set; and that spacing could be aberrated if the said bracket were, somehow, to become shifted relative to the channel-like mounting. By using the ear 46 and the slot 48 therein, rather than a separate bracket, the present invention automatically provides the required spacing between the ear 72 and the slots 16, 34 and 40.

Whereas the drawing and accompanying description have shown and described a preferred embodiment of the present invention it should be apparent to those skilled in the art that various changes may be made in the form of the invention without affecting the scope thereof.

What I claim is:

1. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a U-shaped metal bracket which has a center wall and two flanges that project forwardly from said center wall, an elongated resilient finger that is defined on one of said flanges by two elongated slots, said finger having a notch therein and a cusp intermediate said notch and the free end thereof, said notch being adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said cusp normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said cusp larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved past said cusp and into said notch, said resilient finger thereafter moving back toward its normal unstressed position to enable said notch and said portion of said flange to confine said one horizontally-extending pin, a third slot in the other flange of said mounting, said third slot being at substantially the same level as said notch, an ear that extends forwardly and upwardly from said other flange and that overlies the outer end of said third slot, said ear permitting another of said horizontally-extending pins on sad slug rejector to enter said third slot but keeping said other horizontally-extending pin from moving uninterruptedly along a path at right angles to the free edge of said other flange as it approaches said third slot, further slots in said flanges below the level of said notch and said third slot that can accommodate further horizontally-extending pins on said slug rejector, a second ear that is bent out of said center wall, said second ear having a slot therein, an electromagnet that is secured to said center wall adjacent said second ear and that has the armature thereof extending through said slot in said second ear, said second ear serving as a pivot for said armature, said armature having a projecting portion thereon that can extend into a coin passageway in said slug rejector, a switch secured to said center wall and having a switch actuator with a coin-receiving portion, said slug-rejector having a coin chute depending downwardly therefrom which is disposable in register with said coin-receiving portion of said switch actuator, said coin chute defining a coin passageway and having a slot in one wall thereof which can accommodate said coin-receiving portion of said switch actuator, said slot in said coin chute having an open lower end whereby said coin chute can be moved relative to said coin-receiving portion of said switch actuator without applying undue stresses to said coin-receiving portion of said actuator, said horizontally-extending pins of said slug rejector being disposable in engagement with the free edges of said flanges to hold said coin chute wholly out of engagement with said coin-receiving portion of said switch actuator, said outwardly and upwardly extending ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger, said outwardly and upwardly extending ear on said other flange limiting the inclination of said slug rejector relative to said center wall and thereby limiting movement of said coin chute toward said switch actuator to keep said coin chute from applying undue stresses to said switch actuator, said outwardly and upwardly extending ear on said other flange facilitating the movement of said further horizontally-extending pins into said further slots in said flanges before the first said and said second horizontally-extending pins are moved into said notch and

into said third slot, whereby said slug rejector will usually have the lower end thereof fixed relative to said projecting portion on said armature of said electromagnet before the upper end of said slug rejector is moved into assembled relation with said mounting, said second ear providing a fixed and predetermined spacing between the slot in said second ear and said notch and said third slot and said further slots in said flanges.

2. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket which has a center wall and two flanges that project forwardly from said center wall, an elongated resilient finger that is defined on one of said flanges by two elongated slots, said finger having a notch therein and a cusp intermediate said notch and the free end thereof, said notch being adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said cusp normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said cusp larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved past said cusp and into said notch, said resilient finger thereafter moving back toward its normal unstressed position to enable said notch and said portion of said flange to confine said one horizontally-extending pin, a third slot in the other flange of said mounting, said third slot being at substantially the same level as said notch, an ear that extends forwardly and upwardly from said other flange and that overlies the outer end of said third slot, said ear permitting another of said horizontally-extending pins on said slug rejector to enter said third slot but keeping said other horizontally-extending pin from moving uninterruptedly along a path at right angles to the free edge of said other flange as it approaches said third slot, further slots in said flanges below the level of said notch and said third slot that can accommodate further horizontally-extending pins on said slug rejector, a switch secured to said center wall and having a switch actuator with a coin-receiving portion, said slug rejector having a coin chute depending downwardly therefrom which is disposable in register with said coin-receiving portion of said switch actuator, said coin chute defining a coin passageway and having a slot in one wall thereof which can accommodate said coin-receiving portion of said switch actuator, said slot in said coin chute having an open lower end whereby said coin chute can be moved relative to said coin-receiving portion of said switch actuator without applying undue stresses to said coin-receiving portion of said actuator, said horizontally-extending pins of said slug rejector being disposable in engagement with the free edges of said flanges to hold said coin chute wholly out of engagement with said coin-receiving portion of said switch actuator, said outwardly and upwardly extending ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger, said outwardly and upwardly extending ear on said other flange limiting the inclination of said slug rejector relative to said center wall and thereby limiting movement of said coin chute toward said switch actuator to keep said coin chute from applying undue stresses to said switch actuator, said outwardly and upwardly extending ear on said other flange facilitating the movement of said further horizontally-extending pins into said further slots in said flanges before the first said and said second horizontally-extending pins are moved into said notch and into said third slot, said second ear providing

a fixed and predetermined spacing between the slot in said second ear and said notch and said third slot and said further slots in said flanges.

3. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket which has a center wall and two flanges that project forwardly from said center wall, an elongated resilient finger that is defined on one of said flanges by two elongated slots, said finger having a notch therein and a cusp intermediate said notch and the free end thereof, said notch being adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said cusp normally being spaced from said portion of said flange a distance smaller than the diameter of said horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said cusp larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved past said cusp and into said notch, said resilient finger thereafter moving back toward its normal unstressed position to enable said notch and said portion of said flange to confine said one horizontally-extending pin, a third slot in the other flange of said mounting, said third slot being at substantially the same level as said notch, an ear that extends forwardly and upwardly from said other flange and that overlies the outer end of said third slot, said ear permitting another of said horizontally-extending pins on said slug rejector to enter said third slot but keeping said other horizontally-extending pin from moving uninterruptedly along a path at right angles to the free edge of said other flanges as it approaches said third slot, further slots in said flanges below the level of said notch and said third slot that can accommodate further horizontally-extending pins on said slug rejector, a switch having a switch actuator with a coin-receiving portion, said slug rejector having a coin chute which is disposable in register with said coin-receiving portion of said switch actuator, said coin chute defining a coin passageway and having a slot in one wall thereof which can accommodate said coin-receiving portion of said switch actuator, said slot in said coin chute having an open end whereby said coin chute can be moved relative to said coin-receiving portion of said switch actuator without applying undue stresses to said coin-receiving portion of said actuator, said horizontally-extending pins of said slug rejector being disposable in engagement with the free edges of said flanges to hold said coin chute wholly out of engagement with said coin-receiving portion of said switch actuator, said outwardly and upwardly extending ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger, said outwardly and upwardly extending ear on said other flange limiting the inclination of said slug rejector relative to said center wall and thereby limiting movement of said coin chute toward said switch actuator to keep said coin chute from applying undue stresses to said switch actuator.

4. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug ejector that comprises a bracket which has a center wall with two flanges projecting therefrom, an elongated resilient finger that is defined on one of said flanges by two elongated slots, said finger having a notch therein and a cusp intermediate said notch and the free end thereof, said notch being adapted to coact with an adjacent portion of said flange to accommodate and confiine one of said horizontally-extending pins on said slug rejector, said cusp normally being spaced from said portion of said flange, a distance smaller than the diameter of said one

horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said cusp larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved past said cusp and into said notch, said resilient finger thereafter moving back toward its normal unstressed position to enable said notch and said portion of said flange to confine said one horizontally-extending pin, a third slot in the other flange of said mounting, said third slot being at substantially the same level as said notch, an ear that extends forwardly and upwardly from said other flange and that overlies the outer end of said third slot, said ear permitting another of said horizontally-extending pins on said slug rejector to enter said third slot but keeping said other horizontally-extending pin from moving uninterruptedly along a path at right angles to the free edge of said other flange as it approaches said third slot, further slots in said flanges that can accommodate further horizontally-extending pins on said slug rejector, a switch secured to said center wall and having a switch actuator with a coin-receiving portion, said slug rejector having a coin chute depending downwardly therefrom which is disposable in register with said coin-receiving portion of said switch actuator, said coin chute defining a coin passageway and having a slot in one wall thereof which can accommodate said coin-receiving portion of said switch actuator, said slot in said coin chute having an open lower end whereby said coin chute can be moved relative to said coin-receiving portion of said switch actuator without applying undue stresses to said coin-receiving portion of said actuator, said horizontally-extending pins of said slug rejector being disposable in engagement with the free edges of said flanges to hold said coin chute wholly out of engagement with said coin-receiving portion of said switch actuator, said outwardly and upwardly extending ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger, said outwardly and upwardly extending ear on said other flange limiting the inclination of said slug rejector relative to said center wall and thereby limiting movement of said coin chute toward said switch actuator to keep said coin chute from applying undue stresses to said switch actuator.

5. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket which has a center wall with two flanges, an elongated resilient finger on one of said flanges, said finger having a notch therein and a cusp intermediate said notch and the free end thereof, said notch being adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said cusp normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said cusp larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved past said cusp and into said notch, said resilient finger thereafter moving back toward its normal unstressed position to enable said notch and said portion of said flange to confine said one horizontally-extending pin, a slot in the other flange of said mounting, an ear that extends forwardly and upwardly from said other flange and the overlies the outer end of said slot, said ear permitting another of said horizontally-extending pins on said slug ejector to enter said slot but keeping said other horizontally-extending pin from moving uninterruptedly along a path at right angles to the free edge of said other flange as it approaches said slot, said ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger.

6. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket which has a center wall with two flanges projecting therefrom, an elongated resilient finger on one of said flanges, said finger having a pin-receiving surface thereon that is adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said pin-receiving surface on said finger normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said pin-receiving surface larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved into engagement with said pin-receiving surface, said resilient finger thereafter moving back toward its normal unstressed position to enable said pin-receiving surface and said portion of said flange to hold said one horizontally-extending pin, a slot in another flange on said mounting, an ear that extends forwardly and upwardly from said other flange and that overlies the outer end of said slot, said ear permitting another of said horizontally-extending pins on said slug rejector to enter said slot but keeping said other horizontally-extending pin from moving uninterruptedly along a path at right angles to the free edge of said other flange as it approaches said slot, a switch having a switch actuator with a coin-receiving portion, said slug rejector having a coin chute which is disposable in register with said coin-receiving portion of said switch actuator, said coin chute defining a coin passageway and having a slot in one wall thereof which can accommodate said coin-receiving portion of said switch actuator, said slot in said coin chute having an open end whereby said coin chute can be moved relative to said coin-receiving portion of said switch actuator without applying undue stresses to said coin-receiving portion of said actuator, said horizontally-extending pins of said slug rejector being disposable in engagement with the free edges of said flanges to hold said coin chute wholly out of engagement with said coin-receiving portion of said switch actuator, said ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger, said ear on said other flange limiting tilting of said slug rejector relative to said mounting and thereby limiting movement of said coin chute toward said switch actuator to keep said coin chute from applying undue stresses to said switch actuator.

7. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket with a flange thereon, an elongated resilient finger on said flange, said finger having a pin-receiving surface thereon that is adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said pin-receiving surface on said finger normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said pin-receiving surface larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved into engagement with said pin-receiving surface, said resilient finger thereafter mov-

ing back toward its normal unstressed position to enable said pin-receiving surface and said portion of said flange to hold said one horizontally-extending pin, a slot in another flange on said mounting, an ear that extends forwardly and upwardly from said other flange and that overlies the outer end of said slot, said ear permitting another of said horizontally-extending pins on said slug rejector to enter said slot but keeping said other horizontally-extending pin from moving uninterruptedly along a path at right angles to the free edge of said other flange as it approaches said slot.

8. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket with a flange thereon, an elongated resilient finger on said flange, said finger having a pin-receiving surface thereon that is adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said pin-receiving surface on said finger normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger to move far enough away from said portion of said flange to make the distance between said portion of said flange and said pin-receiving surface larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved into engagement with said pin-receiving surface, said resilient finger thereafter moving back toward its normal unstressed position to enable said pin-receiving surface and said portion of said flange to hold said one horizontally-extending pin, and an ear on another flange of said mounting, said ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger.

9. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket with a flange thereon, an elongated resilient finger on said flange, said finger having a pin-receiving surface thereon that is adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said pin-receiving surface on said finger normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger in the plane of said flange to move far enough away from said portion of said flange to make the distance between said portion of said flange and said pin-receiving surface larger than the diameter of said one horizontally-extending pin, whereby said one horizontally-extending pin can be moved into engagement with said pin-receiving surface, said resilient finger thereafter moving back toward its normal unstressed position to enable said pin-receiving surface and said portion of said flange to hold said one horizontally-extending pin, said resilient finger being an integral part of said flange, said resilient finger being dimensioned so it does not project outwardly beyond the free edge of said flange, whereby said portion of said flange and said rest of said flange can tend to protect said finger from injury and from accidental bending.

10. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket with a flange thereon, an elongated resilient finger on said flange, said finger having a pin-receiving surface thereon that is adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said pin-receiving surface on said finger normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but responding to bending of said resilient finger to move far enough away from said portion of said flange to make the distance between said portion of said flange and said pin-receiving surface larger than the diameter of said one horizontally-extending pin, said resilient finger being an integral part of said flange, said resilient finger being dimensioned so it does not project outwardly beyond the free edge of said flange, whereby said portion of said flange and said rest of said flange can tend to protect said finger from injury and from accidental bending.

11. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket with two flanges thereon, an elongated resilient finger on one flange, said finger being adapted to coact with an adjacent portion of said flange to accommodate and confine one of said horizontally-extending pins on said slug rejector, said finger normally being spaced from said portion of said flange a distance smaller than the diameter of said one horizontally-extending pin but being bendable to make the distance between itself and said portion of said flange larger than the diameter of said one horizontally-extending pin, and an ear on another flange of said mounting, said ear on said other flange limiting movement of said slug rejector along said free edges of said flanges and thereby keeping said one horizontally-extending pin from applying hurtful stresses to said resilient finger.

12. A slug rejector and a mounting therefor which comprises a switch, an actuator for said switch, a coin chute that is movable with said slug rejector, said switch actuator being immediately adjacent said coin chute and being in the path which said coin chute follows as said slug rejector is tilted relative to said mounting, whereby unlimited tilting of said slug rejector relative to said mounting could cause said coin chute to apply hurtful stresses to said switch actuator, and a member on said mounting that limits tilting of said slug rejector relative to said mounting as said slug rejector engages said mounting during the assembling of said slug rejector with and during the separating of said slug rejector from said mounting and thereby keeps said coin chute from applying hurtful stresses to said switch actuator.

13. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket which has a center wall with two flanges, slots in said flanges to accommodate said horizontally-extending pins, an ear that is bent out of said center wall, said ear having a slot therein, an electromagnet that is secured to said center wall adjacent said ear and that has the armature thereof extending through said slot, said ear serving as a piovt for said armature, said armature having a projecting portion thereon that can extend into a coin passageway in said slug rejector, said flanges and said slots coacting with said horizontally-extending pins on said slug rejector to precisely position said slug rejector relative to said ear, said ear providing a fixed and predetermined spacing and orientation between said slot in said ear and said slots, whereby said armature will be held precisely in position relative to said slug rejector.

14. The combination of a slug rejector, which has horizontally-extending pins thereon, and a mounting for said slug rejector that comprises a bracket which has a center wall with two flanges, a notch in one of said flanges and a slot in another of said flanges to accommodate two of said horizontally-extending pins, further slots in said flanges that can accommodate further of said horizontally-extending pins, an ear that extends forwardly and upwardly from said other flange, a second ear that is bent out of said center wall, a slot in said second ear, an electromagnet that is secured to said center wall adjacent said second ear and that has the armature thereof extending through said slot in said second ear, said second ear serving as a pivot for said armature, said armature having a projecting portion thereon that can extend into a coin passageway in said slug rejector, said outwardly and up-

wardly extending ear on said other flange facilitating the movement of said further horizontally-extending pins into said further slots in said flanges before the first said and said second horizontally-extending pins are moved into said notch and into the first said slot, whereby said slug rejector will usually have the lower end thereof fixed relative to said projecting portion on said armature of said electromagnet before the upper end of said slug rejector is moved into assembled relation with said mounting, said second ear providing a fixed and predetermined spacing between said slot in said second ear and said notch and the first said slot.

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