Feb. 11, 1958 L. D. SOLLENBERGER 2,822,682

WEATHER-TIGHT ENCLOSURE

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Fig. 1.

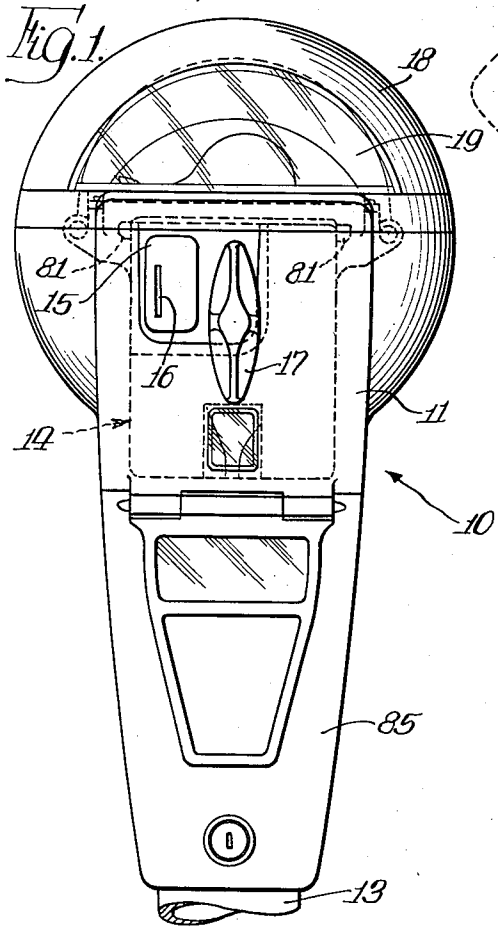
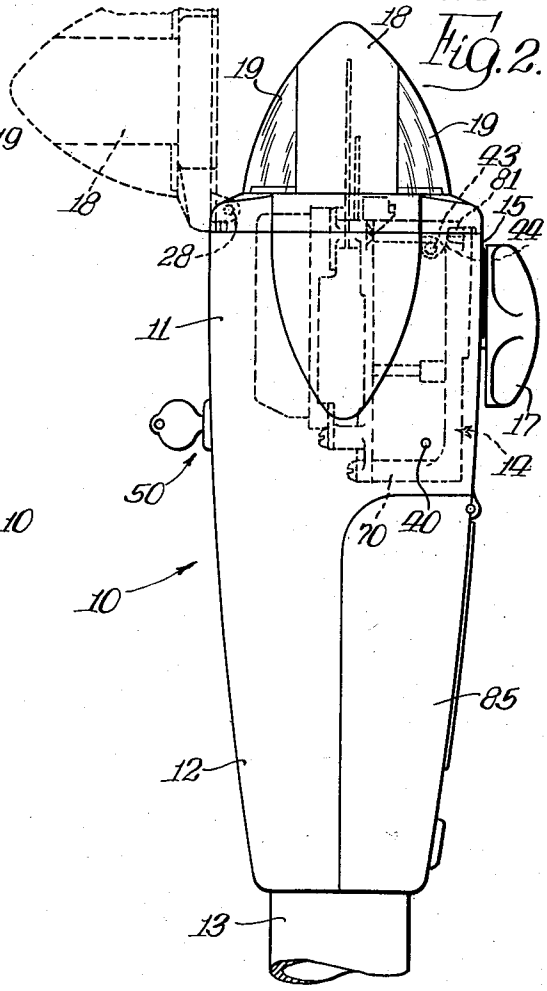


Fig. 2.



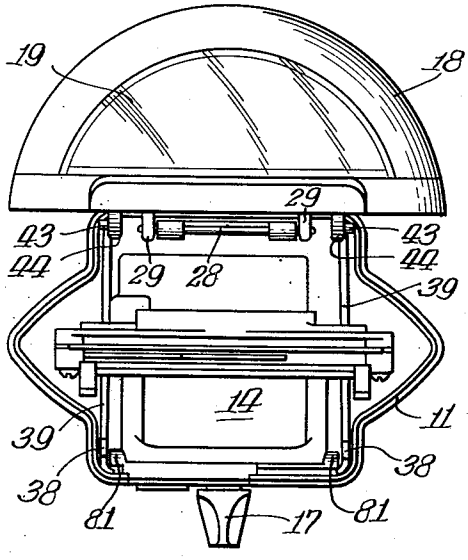


Fig. 3.

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Fig. 4.

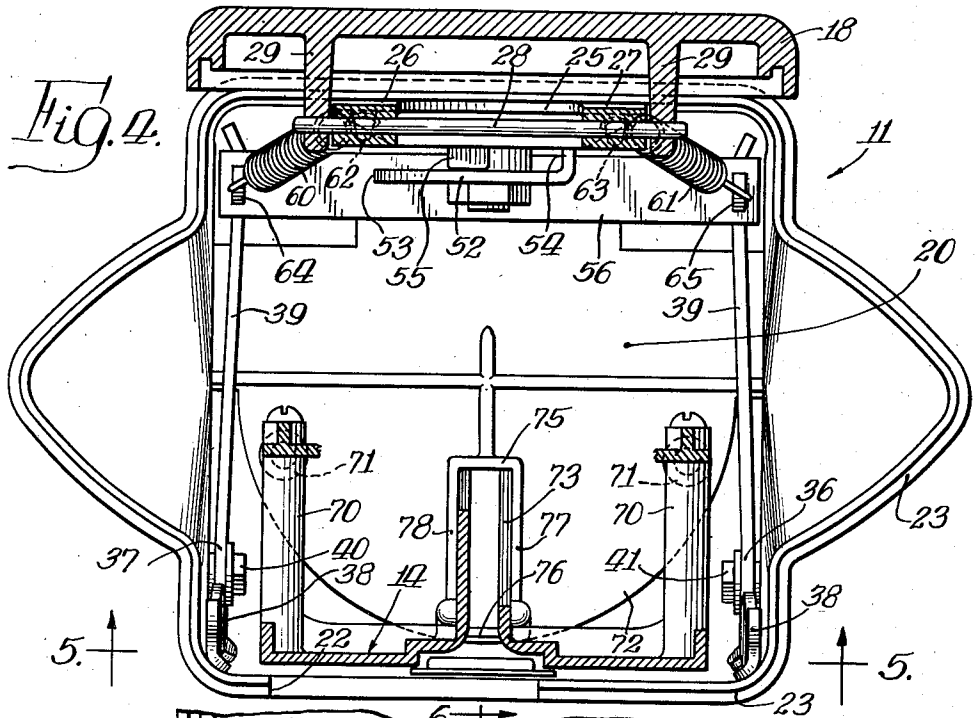
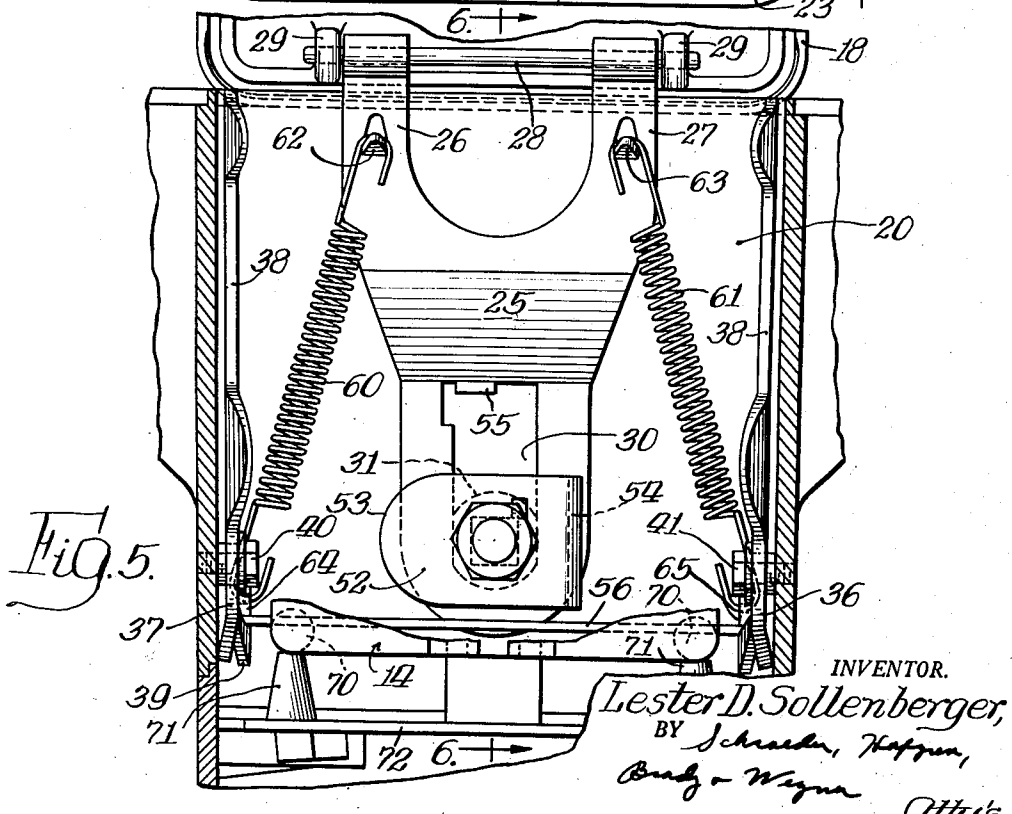


Fig. 5.



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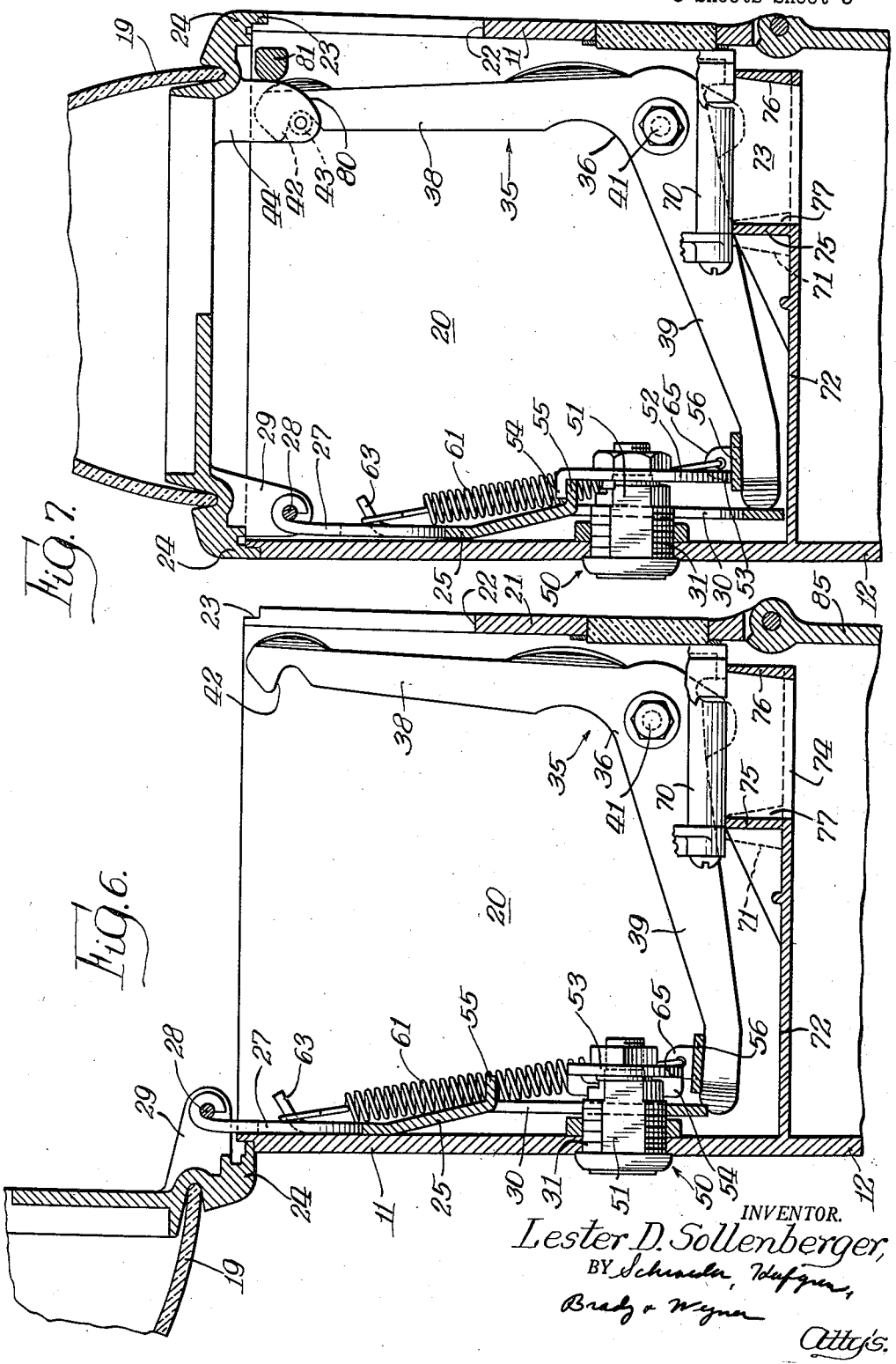


Fig. 7.

Fig. 6.

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WEATHER-TIGHT ENCLOSURE

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Application December 8, 1954, Serial No. 473,998

2 Claims. (Cl. 70—158)

This invention relates to a weather-tight housing and more particularly to a weather-tight enclosure adapted to contain a mechanism such as a parking meter.

It is the general object of the invention to produce a new and improved enclosure of the type described.

It is a more specific object of the invention to produce a weather-tight enclosure for a parking meter mechanism which is so constructed and arranged as to provide a readily openable weather-tight enclosure for the mechanism which is capable of being locked in closed position and in which the moving parts effecting such locking and opening are all completely enclosed.

It is a further object of the invention to produce an enclosure or housing for a parking meter which is proof against tampering and vandalism.

It is another object of the invention to provide a parking meter housing adapted to contain a parking meter mechanism wherein the mechanism is moved into its correct position in the housing and held in such position by the housing without the use of screws or other anchoring devices.

It is yet another object of the invention to provide an enclosure for a parking meter including a housing having a recess terminating in a stepped upper edge and a cap having a lower edge complementary in shape to the edge of the housing and hingedly connected to the housing by a hinge member positioned within the recess and vertically movable therein so that the cap may be swung to open position to expose the recess and then in closed position may have its edge in weather-tight contact with the edge of the housing and providing no exposed hinges or hinge pins.

Other and further objects and features of the invention will be readily apparent from the following description and drawings in which—

Fig. 1 is a front elevational view of a parking meter housing embodying the invention;

Fig. 2 is a side elevational view of the apparatus of Fig. 1 showing the cap in open and closed positions;

Fig. 3 is a top plan view showing the housing of Figs. 1 and 2 and the position of the parking meter mechanism therein;

Fig. 4 is a view similar to Fig. 3 but showing the parking meter mechanism removed;

Fig. 5 is a vertical sectional view along line 5—5 of Fig. 4;

Fig. 6 is a sectional view along line 6—6 of Fig. 5; and

Fig. 7 is a view like Fig. 6 but showing the cap in closed position and engaged by the locking mechanism.

While this invention is susceptible of embodiments in many different forms, there is shown in the drawings and will herein be described in detail one specific embodiment, with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the invention to the embodiment illustrated. The scope

of the invention will be pointed out in the appended claims.

Referring now to the drawings there is shown a parking meter 10 having a housing divided into an upper portion 11 and a lower portion 12. Means are provided for supporting the housing on a post 13 standing along the curb in the usual manner. The upper housing 11 houses the parking meter mechanism generally indicated at 14 which includes a coin receiving portion 15 protruding forwardly of the meter mechanism with such portion being provided with a coin receiving slot 16 and a manually actuable handle 17 for operating the meter and setting the dials, etc. The parking meter mechanism may be of the type shown in the Miller Patent 2,603,288, reference to which may be had for further details.

Hingedly mounted on the upper housing portion 11 is a cap 18 in the form of a half moon or semi disk which is provided with a pair of transparent windows 19 on either side of the center portion of the cap through which the dial and violation flags of the meter may be viewed.

Referring now to Figs. 4 to 7 inclusive, it will be noted that the upper housing portion 11 is provided with an internal recess 20 adapted to receive the parking meter mechanism 14 and the front wall 21 of the housing is provided with a cut-out portion 22 through which the coin receiving portion 15 may extend when the mechanism is properly positioned within the recess 20. The upper edge 23 of the recess 20 is stepped as shown in Figs. 6 and 7 and the lower edge 24 of the cap is stepped in a complementary fashion so that when the cap is seated upon the housing portion 11 a weather tight juncture therebetween is assured.

The cap 18 is hingedly secured to the housing portion 11 and for this purpose there is provided a hinge member 25 having an upper portion generally in the form of a yoke including two spaced legs 26 and 27 which at their upper ends are bent over a hinge pin 28 which extends through apertures in lugs 29 affixed to the inside of the cap 18. The hinge member 25 is movable upwardly within the housing recess 20 so that the complementary stepped portions 23 and 24 of the housing edge and cap edge respectively may continue even at the location of the hinge. For this purpose the hinge member 25 is provided with a slot 30 embracing a bushing 31 fixed in a side wall of the housing portion 11. By virtue of this construction the hinge member 25 may slide upwardly when the cap is pivoted to open position (illustrated in Fig. 6) and downwardly to the position shown in Fig. 7 when the cap is closed.

For locking the cap in closed position there is provided a crank arm means 35 comprising a pair of crank levers 36 and 37 each having a substantially vertically upwardly extending arm 38 and a generally horizontally extending arm 39. The crank levers are pivoted at 40 and 41 respectively to the sides of the recess 20. The upwardly extending arm 38 of each crank lever is provided at its upper end with a hook portion 42 adapted to engage and hook over a rod 43 fixed to lugs 44 depending from the cap 18.

A key operated locking device is provided for pivoting the crank arms 36 and 37 about their pivots to cause engagement between the hooks 42 and rod 43 and simultaneously to lock the hinge member 25 against vertical movement. A key operated lock 50 is provided in the housing including a portion 51 rotatable in the fitting 31 and provided at its outer end with a lock member 52 having a camming portion 53 at one side thereof and a lip 54 at an opposite side thereof. Rotation of a key inserted in the lock 50 serves to rotate the lock member 52 and thus to move it from the position shown in Fig. 6 to that shown in Fig. 7. In the latter figure the lip 54

passes over the top of and engages a lip 55 provided on the hinge member 25 and thus not only moves the hinge member downwardly, but effectively prevents upward movement of such member. Rotation of the lock member 52 also causes the cam portion 53 to engage a bar 56 rockably secured to and extending between the free terminal ends of the arms 39 of the crank lever means 35, such rotation moving said ends downwardly and pivoting the crank levers in a counterclockwise direction (as seen in Fig. 6) to move them into a position engaging the hooks 42 with the rod 43. Thus the locking of the hinge member 25 at one side of the recess and the engagement of the hooks 42 and rod 43 at the opposite side of the recess serves effectively to lock the cap in position. When the cap is so locked in position, no parts of the locking mechanism are exposed and thus are not in position to be tampered with, and the overall exterior appearance of the housing and cap is smooth and neat.

A pair of tension springs 60 and 61 are provided within the recess constantly to urge the hinge member 25 downwardly and simultaneously to urge the crank lever means 35 to assume the position of Fig. 6 in which position the hooks 42 are disengaged from the rod or bar 43. The upper ends of the springs 60 and 61 are secured to lugs 62 and 63 respectively, each outstruck from the leg portions 26 and 27 of the hinge member with each spring being secured at its lower end to suitable lugs 64 and 65 fastened to the outer end of the cross bar 56.

As previously pointed out, means are provided in the housing of the present invention for locating and securing a parking meter mechanism within the recess 20 and cap 18. These means are so arranged as to permit the mechanism merely to be placed within the recess and the cap closed whereupon the mechanism is moved into proper position within the housing and firmly held therein without the use of other anchoring devices such as screws, bolts or the like. Thus according to the present invention a parking meter mechanism may be removed from the housing for replacement, inspection or repair simply by opening the cap and grasping the mechanism and withdrawing it vertically upwardly out of the recess.

The particular parking meter mechanism shown is provided along its bottom with a pair of parallel rods 70 adapted to seat upon a pair of pins 71 extending upwardly from the bottom wall 72 of the upper housing portion 11. The mechanism 14 is also provided with a coin chute 73 extending downwardly from its bottom and adapted to coincide with a slot 74 formed in the bottom 72. The bottom, adjacent the slot 74, is provided with two upstanding walls 75 and 76 joined by two parallel walls 77 and 78 upstanding from the bottom (see Fig. 4) with the walls 75—78 forming a generally rectangular slot into which the coin chute 73 is inserted when the mechanism is placed within the recess.

When a mechanism 14 is to be placed within the recess 20, it is slipped downwardly thereinto until the coin chute 73 seats within the walls 75—78 and the rods 70 are resting upon the pins 71. When so seated the mechanism is generally accurately seated within the recess, however, it will be noted that the lugs 44 on the cap are provided with a forwardly facing camming portion 80 each adapted to engage a cross piece 81 secured to the parking meter mechanism. Thus when the cap 18 is moved to the closed position shown in Fig. 7, the camming portions 80 contact the portions 81 of the mechanism and thus move the mechanism forwardly, firmly seating the coin receiving portion 15 of the mechanism within the cut-out portion 22 and accurately positioning the entire mechanism within the housing. The housing itself is locked with the mechanism so positioned by operating the lock 50 to rotate the locking member to the position of Fig. 7.

Because of the fact that the bar 56 is rockably mounted on the end of the arms 39, greater manufacturing errors can be tolerated in the apparatus as should one of the hooks 42 engage with the rod 43 before the other hook 42 makes an engagement, the rocking bar 56 may tilt slightly thus permitting one of the crank levers to pivot more than the other.

The housing portion 12 below the recess 20 and into which the slot 74 opens may of course be provided with the usual coin box for receiving coins together with a hinged door 85 which may be opened to give access to the coin box.

I claim:

1. A weather-tight enclosure for a parking meter mechanism comprising a housing having a recess therein adapted to receive the mechanism and terminating in an upper stepped edge, crank lever means pivotally mounted within the recess, said crank lever means having an upwardly extending portion terminating in a hook portion and having a substantially horizontally extending portion, a cap adapted to cover said recess and having a lower edge complementary in shape to and adapted to seat upon said stepped edge of the recess, a hinge member vertically slidably mounted in the recess and hingedly secured to the cap, tension spring means secured at one end to the hinge member and at the other end to said crank lever means adjacent the end of said horizontally extending portion, and a rotatable lock member mounted on the housing having a cam portion positioned in the recess to contact the horizontal portion of the crank lever means to pivot the same to cause the hook portion lockingly to engage the cap, said lock member having a second portion positioned to engage the hinge member to lock the same against movement upwardly.

2. A weather-tight enclosure for a parking meter mechanism comprising a housing having a recess therein adapted to receive the mechanism and terminating in an upper stepped edge, a pair of crank levers pivotally mounted within the recess each having an arm portion extending upwardly from said pivotal mounting and each terminating at its upper end in a hook portion, each of said crank levers having a second arm portion extending substantially horizontally from said pivotal mounting, a horizontal bar extending between and rockably secured to the free ends of said second arm portions, a cap adapted to cover said recess and having a lower edge complementary in shape to and adapted to seat upon said stepped edge of the recess, a hinge member vertically slidably mounted in the recess and hingedly secured to the cap, a pair of tension springs each secured at its upper end to the hinge member and at its lower end to said bar, and a key operated locking device mounted on the housing and including a rotatable lock member having a cam portion positioned in the recess to contact said bar and move the same downwardly to cause the hook portion of the arms lockingly to engage the cap, said lock member having a second portion positioned to engage the hinge member to lock the same against movement upwardly.

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