Abstract: A rodent bait dispenser is disclosed including a base (12) and a lid (14) hinged on the base. The base and lid bound an interior space. There is a lock (64) for locking the base and lid in a closed condition. Removable containers (104, 126) are provided within the interior space for receiving rodent bait. Holes (32, 58) in the side walling of the dispenser allow rodents to enter and gain access to the bait.
RODENT BAIT DISPENSER

FIELD OF THE INVENTION

This invention relates to a rodent bait dispenser.

BACKGROUND TO THE INVENTION

It is often necessary to provide poisonous rodent bait in factories and other areas, particularly where food and other edible products are processed or stored. Care must be taken to ensure that people, especially children, and domestic animals cannot access the bait.

BRIEF DESCRIPTION OF THE INVENTION

According to the present invention there is provided a rodent bait dispenser including a base, a lid closing-off the base and defining with the base an interior space, means for locking the base and lid in a closed condition, a removable container within said space for receiving rodent bait, and a hole in the walling of the dispenser for allowing rodents to enter and gain access to the bait.

BRIEF DESCRIPTION OF THE DRAWINGS

For a better understanding of the present invention, and to show how the same may be carried into effect, reference will now be made, by way of example, to the
accompanying drawings in which:

Figure 1 is a top plan view of a rodent bait dispenser;
Figure 2 is an elevation taken in the direction of arrow A in Figure 1;
Figure 3 is a central section through the dispenser;
Figure 4 is a top plan view of the base of the dispenser;
Figure 5 is an underneath plan view of the lid of the dispenser;
Figure 6 is a pictorial view of a tray which forms the lower part of a bait container;
Figure 7 is a side elevation of the tray;
Figure 8 is a top plan view of the tray;
Figure 9 is a front elevation of the tray;
Figure 10 is a pictorial view of an inverted receptacle which fits on the tray;
Figure 11 is a side elevation of the receptacle;
Figure 12 is a top plan view of the receptacle;
Figure 13 is a front elevation of the receptacle; and
Figure 14 is a pictorial view of the dispenser with the lid open.

DETAILED DESCRIPTION OF THE INVENTION

Referring firstly to Figures 1 and 2, the rodent bait dispenser 10 illustrated comprises a base 12 and a lid 14 each moulded in a synthetic plastic material. The base 12 and lid 14 are connected together by two hinges 16 and bound an interior space. Each hinge comprises a post 18 moulded integrally with, or secured to, the
external face of the walling of the base 12 and protruding above the upper edge of the walling of the base. The posts 18 each have a hole in them. Short hollow studs 20 are moulded integrally with the walling of the lid 14 and protrude outwardly therefrom. The studs 20 are passed through the holes in the posts 18 and their outer ends are thereafter splayed open in the manner of a rivet thereby hingedly mounting the lid on the base.

The base 12 (see also Figure 4) comprises a front wall 22, a bottom wall 24, two angled side walls 26 and two further side walls 28 which are at right angles to the front wall 22. The base further has a low rear wall 30.

In the upper edge of each of the angled side walls 26 there is a recess 32. The recesses 32 can be semi-circular or semi-oval or of the shape illustrated.

An angled internal wall 34 extends inwardly from the junction between each wall 28 and the contiguous wall 26. A rib 36 protrudes upwardly from the bottom wall 24 and extends partway across the base from the low rear wall 30. The rib 36 is midway between the walls 28.

The base has a rear foot 38 (see Figures 2 and 3) which protrudes downwardly from the bottom wall 24. It also has two further feet 40 (see also Figure 4) which can be hollow. A thin film of plastics material can be left during moulding, the film
initially closing off the bores in the feet 40.

A metal spike 42 (see particularly Figures 3 and 4) is moulded into a boss 44 which is itself moulded integrally with the bottom wall 24. The spike has a reduced diameter section 46 near its upper end.

The lid 14 (Figures 1, 2, 3 and 5) comprises a top wall 48, a depending front wall 50, angled side walls 52, further side walls 54 which are at right angles to the front wall 50 and a shallow rear wall 56.

The angled side walls 52 each have a recess in the lower edge thereof, the recesses being designated 58 and being semi-circular (see Figures 2 and 3). The recesses 32 and 58 co-operate, when the lid 14 is in its closed position, to provide rodent entry and exit holes to and from the dispenser. These holes are designated 60 in Figures 2 and 3.

The underside of the top wall 48 of the lid 14 is formed with two depending ribs 62. As best seen in Figure 3 the top wall 48 of the lid is not horizontal but slopes from front to rear. Thus the ribs 62 are wider adjacent the wall 50 than they are adjacent the wall 56.

A key operated lock is diagrammatically shown at 64 in Figures 3 and 5,
the lock 64 being mounted on a hollow boss 66 provided therefor on the underside of the top wall 48. The lock has a locking plate 68 (Figures 3 and 5) which swings in a horizontal arc when the key (not shown) is turned in the lock.

As a result of the provision of the hollow boss 66 there is a recess 70 in the top face of the wall 48. The lock 64 protrudes upwardly into the recess 70. A flexible cover 72 of rubber or rubber-like synthetic plastics material is provided to close-off the recess 70. The cover 72 has a stud 74 protruding downwardly therefrom. Immediately adjacent the boss 66 there is a sleeve 76 which protrudes downwardly from the wall 48. The sleeve 76 is open at both ends. The stud 74 is pressed into the upper end of the sleeve 76 to secure the cover in place. Between the stud 74 and the remainder of the cover there is a thinner section 78 which forms a hinge. The hinge permits the cover 72 to be lifted off the recess 70.

A metal clip 80 (Figure 5) slides onto the lower part of the body of the lock 64 to prevent the lock being lifted from the recess 70 through the opening in the bottom wall of the boss 66. The stepped configuration of the body of the lock provides a downwardly facing surface which prevents the lock being pushed downwardly through the opening in the bottom wall of the boss 66.

The locking plate 68, when the dispenser is locked closed, is in the reduced diameter section 46 of the spike 42. The lid cannot as a consequence be lifted
to the open position. The locked position is shown in Figure 3.

The dispenser further includes a tray 82 (Figures 6 to 9) forming the lower part of the bait container. The tray 82 comprises a base 84, upstanding side walling 86 and two columns 88 and 90 constituted by upward extensions of the side walling 86. The tray is generally square in plan view but at one corner the tray is cut away to form a short angled wall 92. The base 84 of the tray slopes upwardly from front to rear as seen in Figure 7.

Each column 88, 90 comprises an angled front edge 94 and a vertical rear edge 96. The column 88 is wider than the column 90 measured in the front to rear direction, as a result of the provision of the angled wall 92 adjacent the column 90.

A boss 98 and a series of parallel ribs 100 are moulded onto the base 84. The ribs 100 extend in the front to rear direction. A vertical rod (not shown) has its lower end moulded into the boss 98.

The dispenser also includes a receptacle 104 which is shown in Figures 10 to 13. Each receptacle 104 comprises two side walls 106 and 108, a rear wall 110, a top wall 112 and frame 114 which constitutes the front wall of the receptacle and which bounds an opening 116. The receptacle 104 is open at the bottom. Each side wall 106, 108 is stepped so that the lower part 118, 120 thereof is thinner than the
remainder of the side wall. A socket 122 is moulded onto the underside of the top wall 112 to receive the upper end of the vertical rod moulded into the boss 98.

The receptacle 104 is dimensioned so that it fits into the tray 82 between the rear walling of the tray and the vertical rear edges 96 of the columns 88 and 90. The steps where the lower parts 118, 120 of the side walls 106, 108 join the remainders of the side walls rest on the upper edges of the side walling 82. The receptacle 104 is thus trapped between the part of the walling 86 which is at the rear of the tray and the vertical edges 96. The upper end of the vertical rod which extends upwardly from the base enters the socket 122. Blocks of bait (not shown) with a hole through them can be slid onto the vertical rod before the receptacle is pressed onto the tray.

A second receptacle is also provided. This is similar to that shown in Figures 10 to 13 except in that the boss 98, ribs 100, vertical rod and socket 122 are omitted. This receptacle has a front wall which extends the full width of the receptacle and down to a level which lies, when the receptacle is fitted to the tray, about midway between the tops and bottoms of the columns 88, 90. A rib can extend along the bottom edge of the front wall of this receptacle to strengthen it. The part of the tray 82 ahead of the front wall of the receptacle acts as a feed trough. The angled wall 92 of the tray of this receptacle is on the other side.

Rodents can enter and leave the dispenser through the holes 60 provided
therefore in the angled walls 28, 52. The shape of the dispenser is such that, if used in an area where, for example, boxes are stacked and sorted, it is difficult, if not impossible, to place boxes in such a manner that they close-off the entry and exit holes.

If desired the base can be screwed or otherwise secured to a floor or wall to prevent it being removed. The screws pass downwardly through the hollow feet 40.

To fill the receptacle 104, the entire container is lifted out of the dispenser after unlocking the dispenser and opening the lid. The receptacle is lifted off the tray to expose the vertical rod. Bait in block form with a bore through it is then dropped onto the vertical rod, and the receptacle pressed down onto the tray.

To fill the second form of container, the tray and pressed on receptacle are lifted out of the dispenser. The receptacle and tray are then separated with the receptacle inverted. The receptacle is then filled with rodent bait in pellet or granular form and the inverted tray pressed on to it. The container comprising the receptacle and tray is then reinserted into the space provided therefore in the dispenser.

The lid 14 is then swung closed and the lock 64 secured, the locking plate 68 of the lock 64 coming into co-operating relationship with the section 46 of the rod 44.

To inhibit prising open of the dispenser, the upper edge of the walling of
the base is stepped and the lower edge of the walling of the lid is correspondingly stepped. The lower edge of the lid thus overlaps the upper edge of the base and hence it is difficult to insert an implement between the two.
CLAIMS:

1. A rodent bait dispenser including a base, a lid closing-off the base and bounding with the base an interior space, means for locking the base and lid in a closed condition, a removable container within said space for receiving rodent bait, and a hole in the side walling of the dispenser for allowing rodents to enter and gain access to the bait.

2. A rodent bait dispenser as claimed in claim 1, wherein said dispenser comprises a front wall, a rear wall, the front wall being longer than the rear wall, side walls at right angles to the rear wall and extending towards the front wall from the rear wall, and angled walls extending between the ends of the front wall and the forward ends of said side walls, there being an access hole in each of said angled walls.

3. A rodent bait dispenser as claimed in claim 2, wherein each of said holes is constituted by a recess in the lower edge of the angled wall of the lid and a recess in the upper edge of the angled wall of the base, the recesses being juxtaposed when the lid is closed thereby to form said holes.

4. A rodent bait dispenser as claimed in claim 1, wherein said base has a base wall and there is a rod protruding upwardly from said base wall, said rod having a circumferential groove therein, and there being a lock mounted on the lid, a locking
plate of said lock entering said groove when the lid is closed and the lock in its locked position.

5. A rodent bait dispenser as claimed in any one of claims 1 to 4, wherein the lid is hingedly mounted on the base.
**INTERNATIONAL SEARCH REPORT**

### A. CLASSIFICATION OF SUBJECT MATTER

**IPC 7** A01M25/00

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

**IPC 7** A01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

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### Further documents are listed in the continuation of box C.

### Patent family members are listed in annex.

### Special categories of cited documents:

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- **"P"** document published prior to the international filing date but later than the priority date claimed

### Date of the actual completion of the international search

14 February 2001

### Date of mailing of the international search report

21/02/2001

Name and mailing address of the ISA

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Piriou, J-C

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**Information on patent family members**

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