Jan. 25, 1944. A. WEIL 2,340,255

ROACH RUN

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Fig. 1.

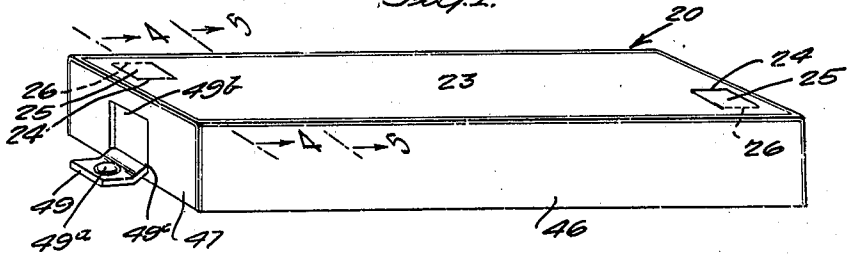


Fig. 2.

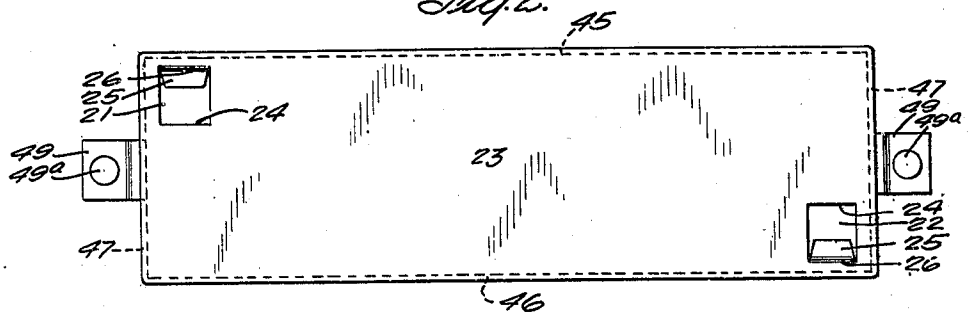


Fig. 3.

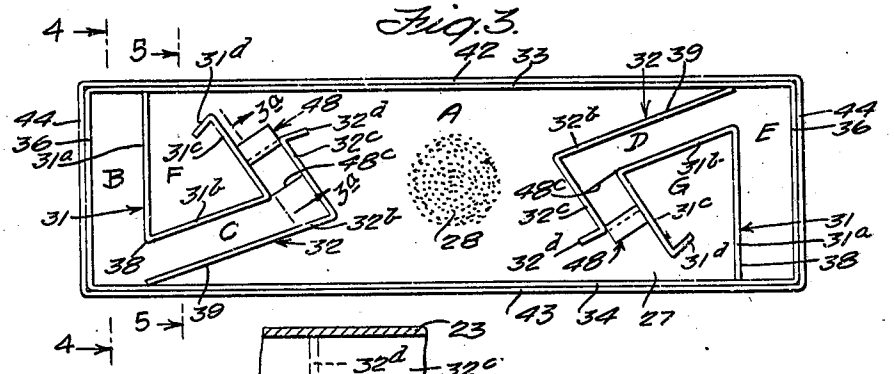


Fig. 3a.

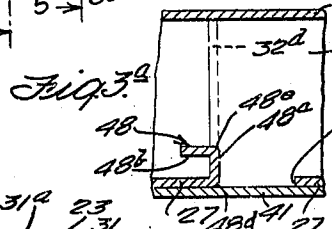


Fig. 5.

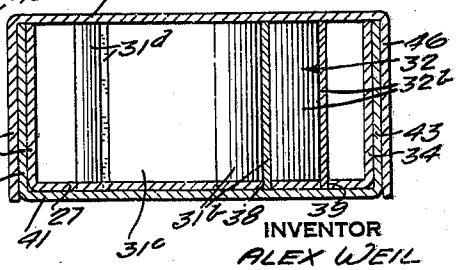
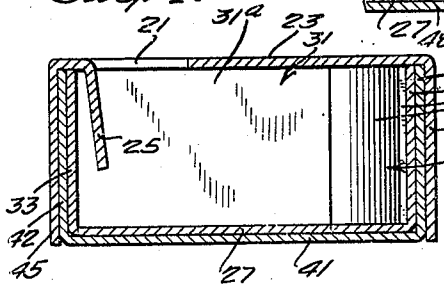


Fig. 4.



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Fig. 6.

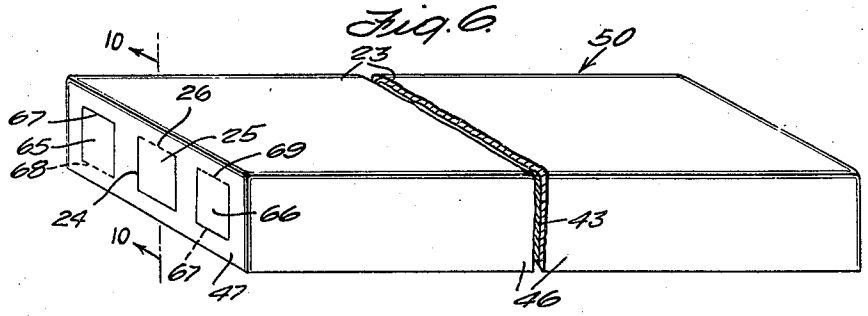


Fig. 7.

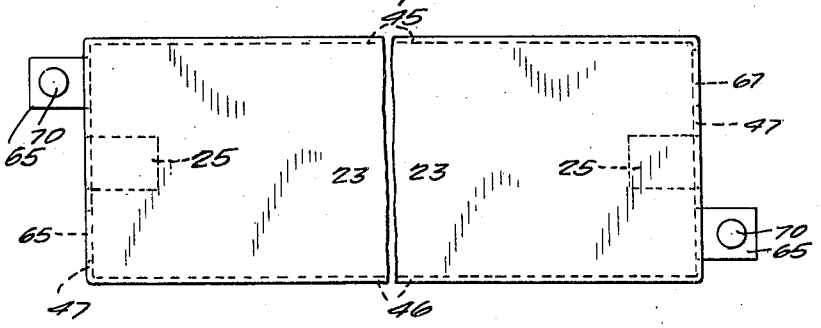


Fig. 8.

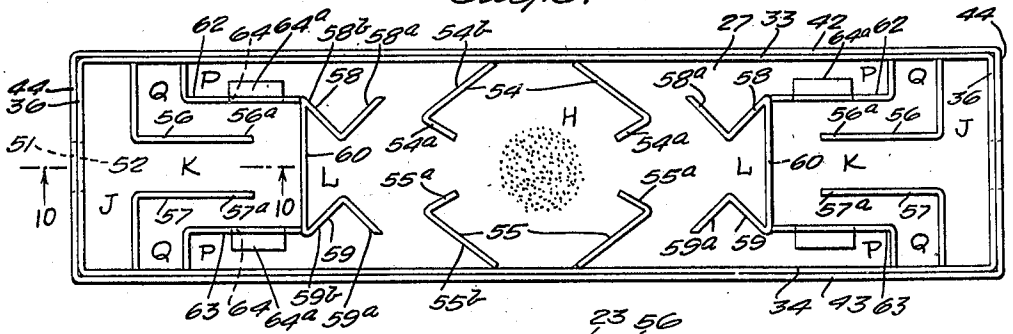
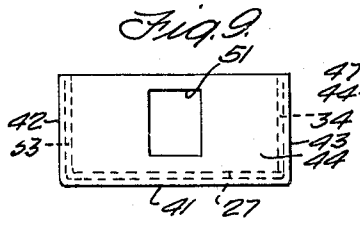


Fig. 9.



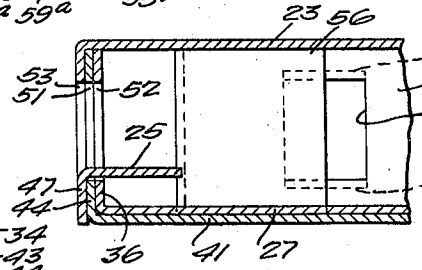


Fig. 10.

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UNITED STATES PATENT OFFICE

2,340,255

ROACH RUN

Alex Weil, New York, N. Y.

Application January 27, 1942, Serial No. 428,359

18 Claims. (Cl. 43—131)

This invention relates to the extermination of roaming or crawling insects, such as roaches.

One of the objects of this invention is to provide a practical device, capable of inexpensive manufacture, for containing a poisonous life-destroying substance, preferably in powder-like form, and in which access to the substance is easily gained by the form of life to be destroyed while spilling from or sifting out of the device of the particles of the powder-like substance is prevented within adequate range of safety. Another object is to provide a device of the above-mentioned character that will provide a natural attraction for such insects, whether or not the device contains, in the poisonous substance or otherwise, a lure. Another object is to provide a construction of the above-mentioned character which can be made up of individually simple and inexpensive parts and in which such parts can be dependably and efficiently assembled to complete the device. Another object is to provide a device of the above-mentioned character which can be handled in shipment or sale or other channels of commerce with complete safety and which can be easily and quickly conditioned, when it is ready to be put in operation, for functioning for its intended purposes.

Another object is to provide a device of the above-mentioned character which is capable of embodiment in relatively compact and small form and which can be positioned for actual use in a wide variety of locations, usually long and narrow spaces. Another object is to provide a device of the above-mentioned character that will be of dependable construction, simple and safe to handle, and in particular safe and simple in use or application on the part of the using public. Another object is to provide a device of the above-mentioned character providing for the safe prevention of access to the poisonous material on the part of humans, domestic animals or pets, or the like. Another object is to provide a device of the above-mentioned character capable of utilizing a poisonous substance in dry, granular or powder-like form without material risk of egress of particles of the substance from the device, even though free entry or exit of insects relative to the device itself is present. Another object is to provide a device of the above-mentioned character for dependably realizing the advantages of destroying life in life-forms such as roaches, by letting such life-forms pick up the particles of the poisonous substance by contact with their legs, bodies or other parts, to be subsequently taken into their bodies by absorption or by the self-grooming instincts, without material risk of contaminating the surroundings in which the device is used or people or domestic animals that might have access to the device.

Other objects are also to provide in general an improved, more efficient, and safe device for achieving extermination, to provide a device capable of inexpensive and quantity production, and to provide a device having wide flexibility of physical placement or location and thus to permit the employment of devices in adequate number in order thus more effectively to compete with other attractions to the life-forms to be exterminated. Other objects will be in part obvious or in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts as will be exemplified in the structure to be hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings in which are shown several of various possible embodiments of this invention,

Figure 1 is a perspective view of a device showing it as it would be placed or laid down on a supporting surface, such as a floor, table or the like, in actual use, and ready to be made operative for functioning;

Figure 2 is a plan view of part of the device of Figure 1;

Figure 3 is a plan view of another part of the device showing an illustrative form of construction and assembly;

Figure 3^a is a vertical sectional view as seen along the line 3^a—3^a of Figure 3;

Figure 4 is a transverse vertical sectional view as seen along the line 4—4 of Figure 1, with the device made operative for functioning, and showing also certain of the parts as they are seen along the line 4—4 of Figure 3;

Figure 5 is a transverse vertical sectional view as seen along the line 5—5 of Figure 1 and showing also certain of the parts as they appear along the line 5—5 of Figure 3;

Figure 6 is a view showing in perspective another illustrative form of device;

Figure 7 is a plan view of part of the device of Figure 6;

Figure 8 is a plan view of another or companion part of the device of Figure 6;

Figure 9 is an end elevation as seen from the left or the right in Figure 8; and

Figure 10 is a fragmentary vertical longitudinal sectional view as seen along the line 10—10 of Figure 8.

Similar reference characters refer to similar parts throughout the several views of the drawings:

Referring first to Figures 1–3, the device, generally indicated as a whole by the reference character **20**, is preferably in the form of an elongated closed casing structure, preferably made of any suitable sheet material, illustratively cardboard, and preferably is of small height and width compared to its length, and has suitable means, preferably an opening at each end portion, for permitting entry into its interior of the life-form, such as a roach. The opening or openings may be provided in any one or more of the walls of the casing structure and illustratively I have shown two openings **21** and **22** in the top wall **23**, one at each end thereof.

These openings **21** and **22** are preferably normally closed for purposes of handling or shipment, and are opened when the device is to be positioned or laid down usually in relatively long, narrow spaces such as along walls, in spaces between cabinets, furniture or the like and walls, etc., etc., and a preferred construction for these openings, particularly where the casing is made of a sheet material like cardboard comprises a suitably configured line of cutting or scoring, illustratively U-shaped, as shown at **24**, thus to provide a flap or tab **25** less securely attached or connected to the material of the wall along the line **24**, whence it may be forced out of the plane of the wall, as by pushing it downwardly as viewed in the drawings and hence inwardly of the casing structure, about a line indicated at **26** along which the sheet material is uncut or less heavily scored. The openings **24** may in this manner be quickly and easily exposed, a suitable finger pressure or the application of a simple tool sufficing to break or bend the flap element **25** inwardly of the box and into a position somewhat like that shown in Figures 2 and 4.

Usually the element **25** remains in such dependent but slightly angular position, serving in a sense also as a sort of ramp to guide the roach in its passage through the opening **21** and into the interior of the casing structure and onto the bottom **27** thereof.

The interior contains a suitable quantity of poisonous substance, preferably in powder-like form, being indicated in Figure 3 at **28**. Particularly where the substance **28**, which may be of any suitable composition and which may include a suitable ingredient or ingredients to function as a food or like lure, is in powder-like form, I provide suitable means to confine it against such shifting or movement as will effect the spilling or discharge of its particles through the opening or openings, such as the openings **21** or **22**, of the device, and thus to lessen the chance of contaminating the surroundings or, for example, any person handling or shifting the device, particularly after the openings **21**—**22** have been exposed.

Such a means may comprise suitable elements segregating the space into which each opening leads from the more remote space containing the poisonous substance, by a passage or passages somewhat labyrinthean or otherwise shaped to let the roach pass therealong while substantially blocking movement of the particles of the substance to the space into which the opening leads.

An illustrative arrangement is shown in Figure 3 where the upstanding wall members, conveniently made of sheet material like cardboard, extend between the top wall **23** and the bottom wall **27**, and have configurations as indicated at **31** and **32**. Thus element **31** may have a transversely extending portion **31a** extending from a side wall **33** toward the opposite side wall **34**, whence its several portions or sections **31b**—**31c** and **31d** extend angularly somewhat as shown in Figure 3. The companion element **32** has several portions or sections of which the first, **32b**, extends from the side wall **34** substantially parallel to the portion **31b** of element **31**, whence its next portion **32c** substantially parallels the portion **31c**, while its terminal portion **32d** extends at an angle substantially as shown.

With such an arrangement, the generally central portion of the interior of the casing is formed into a compartment generally indicated by the reference character A, which is connected to the end space or compartment B, into which the opening **21** opens, by the broken or angular passageway C.

Where the device has an opening at the other end, such as the opening **22**, the arrangement just described may be duplicated as shown in Figure 3, where elements **31** and **32**, preferably identical respectively to the above-described elements **31** and **32**, coact with the interior walls of the structure to form a passage D connecting the compartment A with the opposite end compartment E into which the opening **22** opens.

Accordingly, should the device be up-ended or in handling turned over or around, the chance of substantial transfer of particles of the material **28** to either of the end compartments B or E is greatly reduced. If handled one way, the acute-angled space between the side wall and the partition element **32** catches any shifting quantities of the substance **28**, and bars them from entry into the end compartment. If handled or positioned in another way, the angle between the parts **32c** and **32d** catches a substantial portion of any shifting particles, or these parts may coact to deflect particles into the angle between the side wall and the part **32b**. If shifted to a different position, any shifting particles can slide along the side wall **33** or the side wall **34**, as the case may be, to be caught in the angular space or compartment F or G formed by the configuration of the element **31**. And, in generally like manner, the various angularly positioned parts, in coaction with the walls of the casing structure and the proportioning of the several parts and the spaces and passages, of which Figure 3 is illustrative, greatly lessen the chance of flow or movement of particles from the central compartment A to either of the end compartments B or E. And any particles that might somehow get into the end compartment B or E have a good possibility of remaining entrapped therein as against egress through the openings **21** or **22** where the outlines of the opening are not aligned with an interior wall; thus, comparing Figures 2 and 3, the left-hand edge of opening **21** is spaced toward the right from the inside face of the end wall **36**, the right-hand edge is spaced to the left of the partition element **31a**, and the upper and lower edges as viewed in Figure 2 are spaced respectively from the inside faces of the side walls **33** and **34**.

Thus the device, even though the poisonous substance **28** in the central compartment A is in powder-like form, may be handled with reasonable safety even though the openings **21** and **22** have been exposed, and shifting of material quantities of the substance **28** into either of the end compartments B—E is materially guarded against, and this takes place whether or not the

flap elements 25 have been bent or broken into opening-exposing position.

A roach or the like enters an end compartment by way of either of the entry openings, and with the device made of an opaque material, such as cardboard, fibre board, sheet metal or the like, substantially only a small amount of light enters the device, and does so by way of the entry opening (21 or 22), and to some extent the corresponding end compartment (B or E) has a small amount of illumination from the exterior. But leading away from the end compartment is the relatively long and narrow and angular passage (C or D), and that is relatively dark, being in effect darker as the exit end to the central dark compartment A is approached. In this atmosphere of relative darkness, the roach finds a simulation of dark narrow spaces or crevices in building construction, furniture and the like which it normally seeks out as hiding places, and hence the roach soon finds its way into the dark interior compartment A, to which passage of light rays from either end opening is pretty much precluded by the arrangement and angularities of the partitioning elements above described.

Should the roach partake of any of the poisonous material 28, so much the better; whether or not it does, it may retrace its steps or pass along one of the passages to an end compartment and to an opening in the device, whence it may pass out to other surroundings, but in the process it has also picked up on its legs and body particles of the poisonous material 28 which is taken into its system either by absorption or in the process of self-grooming.

The structure above described may be mechanically effected in any suitable way, but particularly where constructed out of cardboard or the like, I prefer to utilize mechanical features to facilitate the assembly of the various parts. Thus, for example, I may first make up a rectangular box-like structure open at the top, and this may comprise the bottom 27 (Figures 3, 4 and 5) with upstanding side walls 33 and 34 and upstanding end walls 36—36, the walls being preferably integral with the bottom 27 and folded upwardly therefrom. The bottom 27, however, has cut through it slots 38 and 39 (Figures 5 and 3) of a width about equal to the thickness of the elements 31 and 32 and of respective configurations matching those of the elements 31 and 32 as seen in Figure 3, the slots being arranged at both ends of the bottom where the device is to have an opening at each end.

This box-like element with its bottom 27 thus slotted is fitted into another box-like element comprising the bottom 41 with side walls 42 and 43, and end walls 44—44, the walls being preferably integral with the bottom member 41 and being joined together at the corners in any suitable way, as by glue or glued flaps or the like.

With such an arrangement, and with the slotted box element snugly seated into the external box element, being proportioned as appears better in Figure 4, to be snugly received therein, the cardboard elements 31 and 32, suitably scored for folding or bending at the apexes of the various angles, may now be folded or bent into their angular relationships and their lower edges inserted, respectively, into the slots 38 and 39 (see Figure 5), the external bottom element 41 limiting the extent of entry of the partition elements into the slots.

The parts are so proportioned that the upper edges of the two box elements that are seated one within the other and of the several partitioning elements 31—32 lie in the same plane to receive thereagainst top wall 23 which may be secured thereto as by a suitable adhesive, the top wall 23 being secured in closing position after a suitable charge of the material 28 has been placed in the compartment A.

Preferably top wall 23 is provided with depending side flanges or side walls 45—46 and end walls 47—47, preferably integrally formed and with the contacting ends of the walls joined together in any suitable way as by glue or other adhesive, or glued flaps or the like, and these depending side walls snugly fit about the now double side and end walls of the bottom box structure, being of preferably commensurate height as shown in Figures 4 and 5, and all together forming a relatively very strong structure well able to withstand substantial vertical loads and to resist deformation, even though made of relatively light cardboard stock.

If desired, the lower two-part bottom structure may be, during assembly, secured together as by an adhesive which may conveniently be spread onto the upper face of the bottom wall 41, thus also exposing the adhesive for engagement by the bottom edges of the partition-forming elements 31—32, thus to anchor them to the composite bottom structure. Or, of course, the adhesive may be applied in any other suitable manner, and preferably also the vertical edges of the partition members 31 and 32, where they contact the side walls 33 and 34 may be sealed or anchored thereto as by an adhesive, though by seating the partition members in slots as above described, suitable accuracy of construction to provide a relatively tight butt joint with the side walls can be obtained and thus adhesive at those points may be dispensed with. Also, the several plies of the side and end walls may be adhesively or otherwise secured together, in course of assembly, if desired.

With a construction like that above described, good results are achievable. If it is desired to insure better security against entry of powder-like material into compartment B or compartment E of Figure 3, I may provide additional means at the inner end of the relatively long narrow angular passage (C or D) to aid in deflecting or blocking entry of particles or portions of the material 28 into the passage.

Such a means may comprise an element generally indicated by the reference character 48 and better shown in Figures 3 and 3a, suitably conformed to provide an upstanding part 48a across the inner mouth or end of the passage C and is of less height than the vertical dimension of the passage C, so that roaches or the like can easily get or move over it, in either direction, while the part 48a acts as a dam or barrier to stop the flow or movement of poisonous material into the passage C, acting also to deflect it against the entry into the passage C particularly where the part 48a is, as in the preferred construction, substantially aligned with the element 32d as is shown in Figures 3 and 3a.

Preferably, the device 48 has a part 48b that overlies or overhangs that side of the part 48a that is exposed in a direction from which the material 28 or parts of it would move or flow, and conveniently and preferably the part 48b extends substantially parallel to the bottom portion 27 (Figure 3a) to form with it and the part 48a a pocket-like space or chamber in which to trap moving material, the overhanging part 48b thus

coacting also to improve the action of part 48a and in preventing direct overflow of material into the passage C.

In the handling of the entire construction, should material become entrapped in the pocket underlying the part 48b, particularly where it is relatively free flowing as it can be when in powder-like form, a tilting of the structure in a suitable direction can result in the material flowing out of the pocket and into the compartment A or adjacent regions.

The device 48 may be constructed in any suitable manner and conveniently may be made integrally with the bottom part 27 and in such case may be constructed in the form of a flap defined at its two sides by the slots 38 and 39, by a line of cutting 48c and by score lines 48d and 48e about which it may be bent or folded into the above-described shape, at a suitable point in the assembly. The resultant aperture remains, of course, closed by the bottom ply 41 of the bottom structure.

Where the device is provided with entry openings in the top wall 23 (see Figures 1 and 2), I preferably provide suitable means for fastening the device down to the surface upon which it is to be laid and thus also to insure against its being turned up-side-down or otherwise improperly positioned initially for use. Thus I may provide, preferably at the ends flap-like elements 49 (Figures 1 and 3) which extend or may be extended into the plane of the bottom face of the device and which may be secured to the supporting surface by any suitable means such as, for example, thumb tacks 49a.

Preferably, the elements 49 are integrally formed with a suitable wall or walls of the device, conveniently or illustratively the end wall or walls 47, being formed by lines of cutting 49b which in outline are somewhat like an inverted U, and by a score line 49c. Thus, each flap element 49 may be folded out of the plane of the end wall 47, about the score line 49c as an axis, and its outer portion brought into engagement with the supporting surface to be secured thereto as by the thumb tack 49a.

The internal arrangements of coacting compartments and labyrinthean passage or passageway may be varied within the spirit of my invention and in Figures 6–10 I have shown an illustrative embodiment of one such possible modification, the device of this form being shown in perspective in Figure 6 where it is generally indicated by the reference character 50, and as appears from Figures 7, 8 and 10, it comprises a closed casing structure which, as in Figures 1–5, may be built up of box-like sections.

Since these box-like sections are in general the same as those employed in the form of Figures 1–5, their respective parts are correspondingly identified, and thus there may be an internal bottom wall 27 with upstanding side and end walls 33—34—36—36 received into the outer box-like bottom part which comprises the bottom wall 41 with side and end walls 42—43—44—44. The top wall 23 may again have depending side and end walls 45—46—47—47.

The bottom part 27 may again be slotted in the various configurations of the partition and passage-forming members or elements to be received into the slots and against the bottom part 41 and secured thereto, if desired, as by an adhesive and with their upper edges and the edges of the side and end walls of the bottom structure abutting against the inner face of the top wall 23 to which they may be sealed or secured as by an adhesive.

If desired also, the entry and exit opening or openings, instead of being formed in the top wall 23 as in Figures 1–5, may be provided in another wall or walls of the structure and in Figures 6–10 I have shown how they may be provided in the end walls. For that purpose, the two plies 36—44 of the end walls of the bottom part or bottom structure, better shown in Figure 8, are provided with suitable apertures 51 and 52 respectively, preferably aligned, and preferably substantially rectangular in outline. The end walls 47—47 of the upper casing part and which overlie respectively the plies 44—44 (see Figure 10) are preferably provided with normally closed openings, similar to the openings 21 and 22 of Figure 2, being thus conveniently and preferably formed by cutting or heavily scoring the sheet material along, for example, an inverted U-shaped line 24 to provide a flap element 25 which may be broken or forced inwardly about the uncut or more lightly scored line 26, into a position substantially like that shown in Figure 10, leaving an opening 53 in the wall ply 47 overlying and substantially aligned with the aligned openings 51—52, the inturned flap 25 functioning, if desired, somewhat like a ramp.

The elements subdividing the interior into various compartments and labyrinthean passages may be given configurations and locations, in this illustrative modification, somewhat as shown in Figure 8, and where the device has entry openings at its respective ends, these elements are preferably similarly positioned with respect to the transverse center line of the device as viewed in Figure 8, similar elements to either side of such a center line being identified by similar reference characters.

Thus two substantially V-shaped elements 54 and 55 coact with the internal walls of the device to form the main or central compartment H in which is contained a poisonous substance 28, illustratively in powder-like form, and at the end, adjacent the opening 53 L-shaped elements 56 and 57 coact with the walls of the casing to form an end compartment J into which the roaches are first received when they pass through the opening 53, the L-shaped arrangement of the elements providing a passageway K leading from the compartment or space J in a direction toward the compartment H.

Interposed therebetween, are two V-shaped elements 58 and 59 joined by an element 60 and, in turn, joined by L-shaped elements 62 and 63 to the walls 33 and 34 respectively, thereby forming between the space J and the compartment H several intervening spaces or compartments later herein mentioned. In the longitudinal portions of the elements 62 and 63 I provide apertures 64 which may be formed therein substantially as shown in Figure 10.

With such an illustrative arrangement, should the device be up-ended, any of the material 28 that is not caught in the angles of the V-shaped elements 54 and 55 and which may thus pass out of the central compartment H is in effect caught and guided by the parts 58a and 59a of the V-shaped elements 58 and 59, which thus act like a funnel to guide the material into the compartment L.

Where the structure is symmetrical or double-ended, while the above action is taking place at one end, a reverse action is taking place at the other end in that the parts 58b and 59b of the

elements 58 and 59 guide any material previously trapped in the compartment L out of it, whence the parts 54a and 55a of the elements 54 and 55 act like funnels to guide the material back into the compartment H.

Should any of the material bypass the funnel parts 58a—59a, it becomes entrapped in the compartments P, and any that might find its way through the apertures 64 has its chances of entering the end compartment J materially diminished due to the longitudinal parts 56a and 57a of the elements 56 and 57, which tend to deflect it into the compartments Q. Any material that can possibly get into the passage K and into the end compartment J, and from the above it will be seen that the chances are exceedingly remote, still does not have free flow out of the opening 53 whose margins (see Figures 8–10) are spaced from the top, bottom and side walls of the casing structure, leaving substantial portions of the end wall structure to stop free flow or movement of any such few particles out through the opening 53.

The height of the upper and lower edges of the aperture 64 from their respective upper and lower walls 23 and 27 may be on the order of the vertical dimension of the part 48a of Figure 3a, illustratively on the order of ⅛'' and, referring to Figures 8–10, the upper and lower edges of the opening 64 may be provided with parts 64a extending substantially parallel to or overlying respectively the upper and lower walls 23 and 27, much in the same manner as the part 48b of Figure 3a overlies the wall 27. Parts 64a—64a may be formed or made in any suitable manner and conveniently and illustratively may be made in the form of flaps integrally formed with the elements 62 and 63, as the case may be, and folded out of the plane thereof along suitable score lines that extend substantially along the upper and lower boundaries of the aperture 64. Parts 64a—64a may be folded out of the plane of their respective partitioning elements at any suitable stage in course of construction or assembly of the device.

Thus each part 64a, in coaction with the adjacent parts, forms a pocket or chamber and otherwise may act or coact to resist flow of material from the compartment P through an aperture 64, much in the same way as was described above in connection with the parts 27—48a—48b (Figure 3a).

With the entry opening or openings, in the device of Figures 6–10, in walls other than the top and bottom walls, illustratively in the end walls as above described, the device can act reversibly in that the various elements within it can function irrespective of whether the wall 23 or the wall 27–41 is made the bottom wall in laying the device down for operation. Preferably also, I provide suitable means for fastening the device to the supporting surface and conveniently and preferably such means takes the form of suitable flaps, like the flaps 49 of Figures 1–3.

Thus, for example, in each end wall 47, I provide two flaps 65 and 66, formed by U-shaped lines of cutting 67 and by a score line 68 or 69, but so related that the score line 68 of the flap 65 is at the lower end and the score line 69 of the flap 66 is at the upper end.

Thus, if the device is positioned so that the bottom ply 41 rests on the supporting surface, the flaps 65 of the two end walls 47 are folded out of the planes of the latter and their outer ends brought into engagement with the supporting surface, as indicated in Figure 7, whence they may be secured to the supporting surface as by thumb tacks 70. Should the wall 23 be made the bottom, use is made of the flaps 66 in the two end walls, instead of flaps 65.

Thus, as with the form of Figures 1–5, free particles of the poisonous substance or material that escape from the main compartment are trapped in auxiliary compartments, the relationships between the two being such that, should the device be further handled or reversely positioned, return flow of escaped particles to the main compartment, or at least a goodly portion thereof, can take place.

But an entering roach has access to any such auxiliary compartments, such as compartments F or G of Figure 3 or the compartments Q, P or L, and including the corner-like spaces between the side walls and the parts 54b and 55b of the elements 54 and 55, and thus can partake of the poisonous substance or pick some of it up by contact for subsequent absorption into the system or transfer into the system as by self-grooming.

In the form of Figures 6–10, the end compartment J receives some light through the opening 53, but relative darkness prevails in compartments Q and P while complete darkness exists in compartments H and L and the adjoining or related passages, and thus again a roach or the like finds in the dark or darker passages and compartments a simulation to dark crevices, cracks, spaces or the like in building construction, floors, walls, furniture and the like which it naturally seeks out as hiding places.

Preferably, as in the form of Figures 1–5, the roach or the like may find its way out of the device, and hence the ultimate destruction of its life does not necessarily take place within the device, though it will now be seen that it may if the roach remains within the device or returns to it as a hiding place.

The preferred dimensional shape or proportioning of the device, in either of the illustrative forms, is preferably such that it is of small cross section relative to its length; thus, for use against roaches, the device may have a length of 8 or 9 inches or so, a height, as viewed in Figures 1 and 6, on the order of ¾'', and a width on the order of, say, 2 inches. Thus a closer simulation interiorly of long, dark relatively narrow spaces or passages may be effected and also greater flexibility and adaptability of placing the device in restricted spaces is achieved.

The device will be seen to be capable of rapid and inexpensive manufacture, and is safe to handle and efficient in action. When made of sheet material like cardboard, relatively light or thin material may be employed for certain of the structural features, such as the angularly conformed passage-forming or compartment-forming elements, like those better shown in Figures 3 and 8, have, by reason of their angularities, relatively great resistance to compression and thus coact with the side and end walls to give the device substantial rigidity against distortion or deformation, and thus the lasting qualities of the device are materially enhanced. Where the upper and lower edges of these angular elements are secured to the top and bottom wall structures, as by an adhesive where cardboard is used, these reinforcing or strengthening actions are further enhanced. Thus breakage of the device as would permit the escape or leakage of

the poisonous material therefrom has less chance of taking place.

Thus it will be seen that there has been provided in this invention a device in which the various objects above mentioned together with many thoroughly practical advantages are successfully achieved.

As many possible embodiments may be made of the above invention and as many changes might be made in the embodiment above set forth, it is to be understood that all matter hereinbefore set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

I claim:

1. A device of the character described comprising a closed casing having top and bottom walls and opposed side and end walls and having means therein extending between the top and bottom walls and forming within the casing and between said top and bottom walls a plurality of compartments in one of which is contained a poisonous substance, there being an aperture in a wall of the casing forming an entry opening into another of said compartments, said means comprising transversely spaced elements forming at least one passageway connecting said two above-mentioned compartments, said elements having a configuration to give the passage angularities to resist free flow or movement of particles of the poisonous substance along either of said top and bottom walls and from said first-mentioned compartment to the second-mentioned compartment which has the entry opening therein.

2. A device as claimed in claim 1 in which said elements also have angularities which in coaction with walls of the casing form at least one auxiliary pocket-like space or compartment for trapping particles of the poisonous substance moving in the general direction toward said second-mentioned compartment.

3. A device as claimed in claim 1 in which said elements have a configuration to give said passage a substantially labyrinthean form.

4. A device of the character described comprising a casing having means forming an entrance for a roach or the like and having opposed walls between which extend elements of sheet material forming labyrinthean passage means leading from the region of said entrance means to a region spaced interiorly from the latter, there being in said casing in said second region a poisonous substance, the labyrinthean passage means having dimensions of width appropriate for the passage therealong of a roach and operating to resist the flow or movement of particles of the poisonous substance from said second region to said first-mentioned region, at least one of the walls between which said means of sheet material extends having grooves following the configuration of the sheet material means for receiving edge portions of the latter to hold it in its said configuration and against transverse shifting.

5. A device of the character described comprising a casing having means forming an entrance for a roach or the like and having opposed walls between which extend elements of sheet material forming labyrinthean passage means leading from the region of said entrance means to a region spaced interiorly from the latter, there being in said casing in said second region a poisonous substance, the labyrinthean passage means having dimensions of width appropriate for the passage therealong of a roach and operating to resist the flow or movement of particles of the poisonous substance from said second region to said first-mentioned region, said casing comprising a lower casing part and an upper casing part of which said opposed walls are respectively portions, said labyrinth-forming sheet material means and one of said casing parts having interfitting means, thereby to hold said sheet material means in its labyrinthean configuration, and means for securing said two casing parts together with the wall of said other casing part juxtaposed to the wall of the companion casing part and in abutting relation to said sheet material means.

6. A device of the character described comprising a closed casing having therein two spaced regions which have a wall of said casing as a floor common to both regions, in one of which is contained a poisonous substance and in a casing wall of the other of which is means forming an entrance for roaches or the like and spaced means upstanding from said floor-wall forming a passageway therealong connecting said two regions for the passage of a roach or the like along said floor-wall for entry into said region containing the poisonous substance, said spaced means comprising a plurality of elements arranged at successive angularities along said passageway to provide successive connected angularly disposed passageway portions operating by their relative angularities to resist flow or movement of portions of the poisonous substance from said region containing the latter to the region containing said entrance means.

7. A device of the character described comprising a closed casing having therein two separated regions which have a wall of said casing as a floor common to both regions, in one of which is contained a poisonous substance and in a casing wall of the other of which is means forming an entrance for roaches or the like and manually operable means normally forming a closure for said entrance and capable of being opened when the device is put to use, and means intervening said two regions and coacting with the walls of the casing forming indirect channel means having said floor-wall substantially as its bottom and along which a roach may pass from one region to the other and having a configuration to provide deflectors for deflecting flow or movement of poisonous substance away from entry into the region having said entrance means.

8. A device of the character described comprising a closed casing having therein two separated regions which have a wall of said casing as a floor common to both regions, in one of which is contained a poisonous substance and in a casing wall of the other of which is means forming an entrance for roaches or the like and manually operable means normally forming a closure for said entrance and capable of being opened when the device is put to use, and means intervening said two regions and coacting with the walls of the casing forming indirect channel means having said floor-wall substantially as its bottom and along which a roach may pass from one region to the other and having a configuration to provide one or more pocket-like compartments for catching therein such of the poisonous substance as flows or moves out of its aforesaid region.

9. A device of the character described comprising a closed casing having top and bottom walls and opposed side and end walls and having

a plurality of elements extending between the top and bottom walls and forming within the casing and between said top and bottom walls a plurality of compartments in one of which is contained a poisonous substance, there being means forming an entry opening in a wall of the casing leading into another of said compartments, said elements including elements forming connecting passageway means along which a roach or the like, entering through said entry opening, may pass from one compartment to said compartment containing the poisonous substance, said last-mentioned elements having configurations to give the passageway means successive portions making angles to each other, thereby to resist flow or movement of poisonous substance from the compartment of the latter to the other compartment.

10. A device as claimed in claim 9 in which said elements form a single passageway means between the two compartments and also have configurations to form auxiliary pocket-like compartments to catch poisonous material therein.

11. A device as claimed in claim 9 in which said elements provide a plurality of passageway means connecting said two compartments and have configurations to provide auxiliary pocket-like compartments for catching poisonous substance moving in the general direction toward the compartment having said entry opening.

12. A device of the character described comprising a casing having partition-like means therein for dividing its interior into at least two compartments which have a common floor-wall and in one of which is contained a poisonous substance and in a wall of the other of which is an entry opening for the admission of roaches or the like, said partition means having a passage therethrough for roaches travelling along said common floor-wall from one compartment to the other and means coacting with the walls of said casing and forming a plurality of pocket-like compartments for catching poisonous substance shifting or moving along said floor-wall in a direction toward the passage in said partition means, whereby poisonous substance caught in said pocket-like compartments is prevented from shifting along said floor-wall to said passage, at least certain of said pocket-like compartments facing in a direction toward said compartment containing the poisonous substance, whereby the pocket-like compartment, upon reverse flow or movement of poisonous substance caught in it, may discharge along said floor-wall in a direction toward the compartment containing the poisonous substance.

13. A device of the character described comprising a closed casing having top and bottom walls and opposed side and end walls and having a plurality of elements extending between the top and bottom walls and forming within the casing a plurality of compartments in one of which is contained a poisonous substance, there being means forming an entry opening in a wall of the casing leading into another of said compartments, said elements including elements forming connecting passageway means along which a roach or the like, entering through said entry opening, may pass from one compartment to said compartment containing the poisonous substance, said last-mentioned elements having configurations to give the passageway means successive portions making angles to each other, thereby to resist flow or movement of poisonous substance from the compartment of the latter to the other compartment, and barrier means partially obstructing said passageway means to block free flow or movement of the substance along the bottom wall in the general direction from the compartment containing the poisonous substance toward the other compartment, said barrier means being insufficient in dimensions to obstruct passage of a roach or the like.

14. A device of the character described comprising a casing having partition-like means therein for dividing its interior into at least two compartments in one of which is contained a poisonous substance and in a wall of the other of which is an entry opening for the admission of roaches or the like, said partition means having means forming an elongated passage from one compartment to the other with a wall of said casing forming the bottom of said passage along which flow or movement of poisonous substance can take place, and means upstanding from said wall for stopping flow or movement thereof in a direction along said passage toward that compartment that has said entry opening therein.

15. A device as claimed in claim 14 in which said means forming a passage comprises an aperture in said partition-like means and in which said last-mentioned means comprises a portion of said apertured partition-like means.

16. A device as claimed in claim 14 in which said last-mentioned means comprises also a part that overlies said wall and forms with said upstanding means a pocket-like recess for entrapping flowing or moving substance.

17. A device of the character described comprising a casing having means forming an entrance for a roach or the like and having upstanding from the bottom wall thereof and coacting with the lateral walls of said casing a plurality of sheet-like members arranged in spaced relation to each other and to said lateral walls and angularly to each other and to the latter to provide at least one labyrinthean passageway along said bottom wall and extending from the region of said casing adjacent said entrance-forming means to a region within said casing spaced from said entrance-forming means, there being in said second region a poisonous substance that is trapped therein by the angularities of said sheet-like members against flow from said second region to said first region, said passage being substantially unobstructed for movement therealong of roaches or the like in either direction.

18. A device of the character described comprising a casing having a bottom wall and having two interior regions, there being an entrance opening in a wall of said casing for entry of a roach or the like into one of said regions, a poisonous substance in the other of said regions, and spaced means upstanding from said bottom wall forming a passageway along the latter from one of said regions to the other, said spaced means providing a plurality of connected passageway portions which make angles with each other to entrap poisonous material tending to move along the passageway in a direction from said second region toward said first region and being substantially unobstructed for passage therealong in either direction of roaches or the like.

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