July 29, 1930. J. P. HORN 1,771,960

INSECTICIDE CONTAINER

Filed April 13, 1928

Fig. 1.

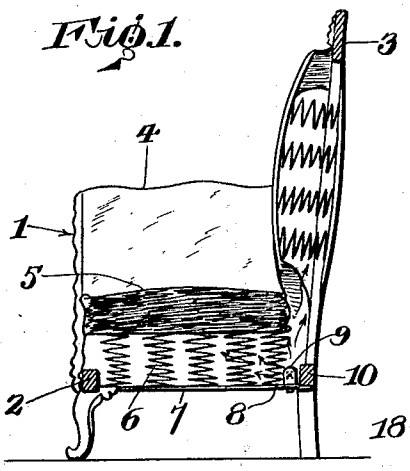


Fig. 2.

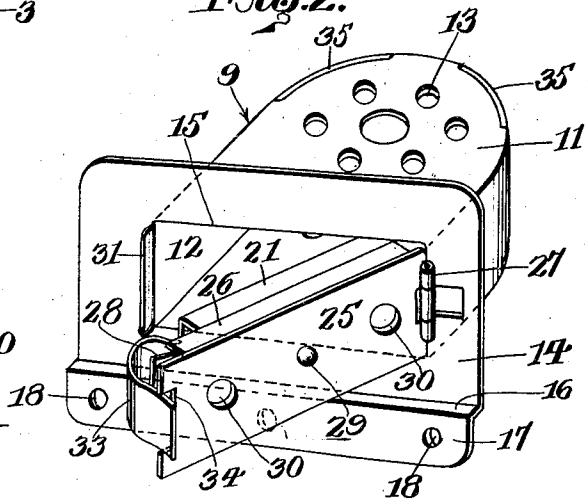


Fig. 3.

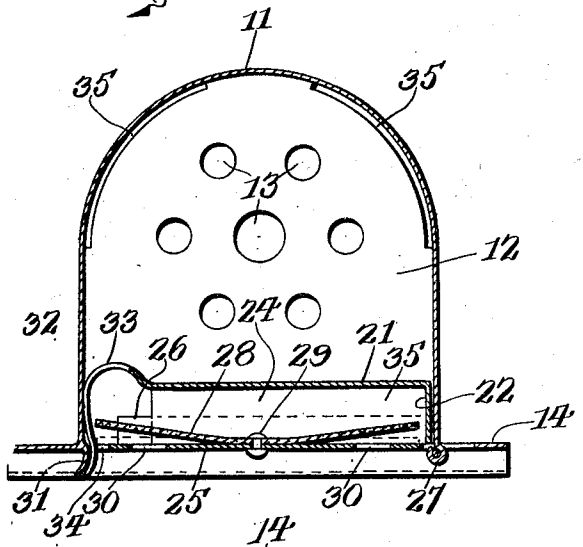
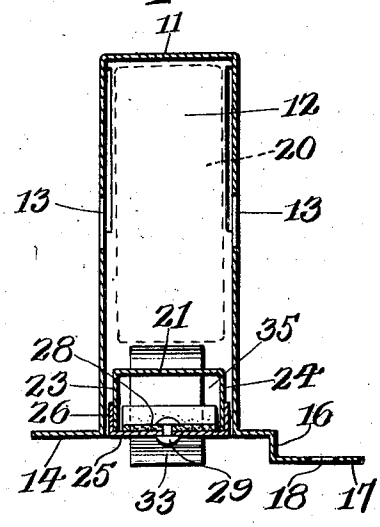


Fig. 4.



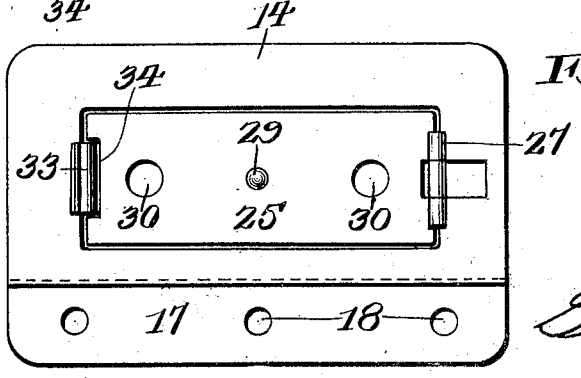


Fig. 5.

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UNITED STATES PATENT OFFICE

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INSECTICIDE CONTAINER

Application filed April 13, 1928. Serial No. 269,750.

This invention relates to an attachment for furniture of the upholstered type, but more particularly to an insecticide container designed primarily as a vermin repelling means for use in connection with upholstered furniture, but it is to be understood that an insecticide container, in accordance with this invention, may be employed for any purpose for which it is found applicable, and the primary object of the invention is to provide means, in a manner as hereinafter set forth, whereby an insecticide or vermin repellent may be housed within the article of furniture in such a way as to be obscured from view and not to interfere with any of the operative parts of the furniture, and yet which will permit of fumes passing therefrom throughout the article of furniture so as to repel vermin to prevent their lodging upon or gaining access to the interior of the article.

A further object of the invention is to provide, in a manner as hereinafter set forth, an insecticide container constructed and arranged whereby air currents are caused to pass therethrough on the compression and reaction of the seat of a chair or other resiliently supported part of an article of furniture, thereby carrying the emanations from the insecticide substance into contact with the upholstering material when one occupies the seat and rises therefrom.

A further object of the invention is to provide, in a manner as hereinafter set forth, an insecticide container for the purpose referred to, constructed and arranged to permit of conveniently positioning the insecticide therein when desired.

Further objects of the invention are to provide, in a manner as hereinafter set forth, an insecticide container for the purpose referred to which is simple in its construction and arrangement, strong, durable, compact, thoroughly efficient in its use, conveniently installed and removed when desired, readily assembled, permitting of convenient access thereto for positioning the insecticide therein, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:—

Figure 1 is a sectional elevation of an upholstered chair showing the adaptation therewith of an insecticide container in accordance with this invention.

Figure 2 is a perspective view of the container when in open position.

Figure 3 is a horizontal section view of the container when closed.

Figure 4 is a vertical sectional view of the container when closed and further illustrating in dotted lines a body of insecticide positioned within the container.

Figure 5 is an inverted plan of the container.

The disinfectant or insecticide container, may be installed in any form of upholstered furniture, but by way of example is illustrated as applied to the rear bar of the frame work of the conventional arm chair of the upholstered type.

Referring to the drawings the chair is generally indicated at 1, and includes a seat frame 2, a back 3, and arms 4, only one of which is shown. The upholstered seat portion is indicated generally at 5 and is supported by springs 6. A closure 7 is secured to the bottom of the seat frame 2 and is formed with an opening 8 for the passage of the container, to be hereinafter referred to.

As illustrated by way of example, the container which is generally referred to by the reference character 9 is secured to the rear bar 10 of the seat frame 2. The container 9 is arranged adjacent the forward face of the bar 10 and is connected to the lower edge of the latter, or rather coupled with such lower edge.

The container consists of a semi-oval shaped body portion 11 providing a chamber 12. Each side of the body portion 11 is formed with a series of openings 13. The body portion 11 is open at its bottom and is formed integral with a rectangular plate 14 which is provided with a rectangular opening 15 having its edge flush with the inner faces of the walls of the body portion 11.

Extended from one side of the plate 14 is an angle-shaped flange comprising a vertically disposed leg 16 and a horizontally disposed leg 17. The leg 16 extends vertically from the inner side of the leg 17 and the upper end of the leg 16 merges into one side of the plate 14. The leg 17 is formed with openings 18, and is adapted to be positioned against the lower edge of the rear bar 9 of the frame 2. Holdfast devices, not shown, are employed for extension through the openings 18 in the leg 17 to engage in the bar 9 whereby the container is fixedly secured or anchored to said bar 9. When the leg 17 is secured to the bar 9 the body portion 11 is positioned above the closure 7 and arranged forwardly of the bar 9. See Figure 1.

The body of insecticide, illustrated in dotted lines in Figure 4 and designated by the reference character 20 is mounted upon a hollow, valved, hinged support which constitutes a closure for the open bottom of the body portion 11. The support is substantially of rectangular contour and includes an inner and an outer section. The inner section is of inverted U-shape and closed at one end. The inner section includes a flat rectangular top member 21, a vertically disposed end member 22 and a pair of vertical side members 23, 24, standing on the lower side edges thereof. The outer section includes a flat rectangular bottom member or plate 25 formed with a pair of vertically disposed side flanges 26 which are arranged against the outer faces of the side members 23, 24. The bottom member 25 is hinged at one end, as at 27 to the plate 14. The outer section further includes a flexible valve 28 positioned on and connected at its center, as at 29 to the bottom member 25, the latter being provided with spaced openings 30 controlled by the valve 28.

The side members 23, 24 are positioned on the bottom member 25 and the valve 28 is arranged between said side members and has one end positioned in proximity to the end member 22 and has its other end projecting beyond the open end of the upper section. The top, end and side members are integral with each other and of less length than the bottom member 25 and the latter is of slightly less length than the length of the slot 15. The body of insecticide 20 is positioned upon the top member 21. The openings 30 form air intakes for the chamber 12.

Depending from the plate 14 at one end of the slot 15 is a curved abutment 31, which coacts, in connection with an end wall 32 of the body portion 11 and with a resilient latch 33 to detachably secure the support in position to close the open end of the body portion 11 and for supporting the body of insecticide within the chamber 12. The resilient latch 33 is extended from one end of the top member 21 of the support and is of curvilinear form and of a length to project from the bottom member 25. See Figure 5. That end of the bottom member 25 opposite the end provided with the hinge connection 27, is cut away at 34 to provide a clearance for the latch 33.

The body portion 11 of the container, at each side thereof is formed with a pair of spaced elongated slots 35 to provide vent openings. The slots 35 are positioned at the upper ends of the sides of the body portion 11.

The openings in each side of the body portion 11 are arranged in spaced relation and one of the openings is disposed centrally with respect to the other openings in each side and said central opening is of greater diameter than the other of the openings. See Figures 2 and 3. The openings 30 in the bottom member 25 provide air intakes and when the valve 26 is shifted to open position with respect to said openings, air can enter the chamber 12 and contact with the insecticide and pass from the chamber 12 through the openings 11 and slots 35 and will travel in the article of furniture in a manner as indicated by the arrows, Figure 1.

The hinged support, which also constitutes the closure for the open bottom of the body portion 11, can be conveniently shifted from closure position when it is desired to place a body of insecticide within the chamber 12. The latch 33 retains the support in the position shown in Figure 3 and it cannot be shifted from such position, until the latch 33 is moved clear of the end 32 and abutment 31.

Although the container is illustrated as positioned at the rear of the chair and connected to the rail 9, yet it is to be understood that the container can be secured to any of the rails of the frame 2 or if the closure 7 is rigid it can be secured thereto.

That part of said support providing the top, side and end members is removable from the bottom member and is retained in position on the latter by the flanges 26 and latch 33. As the support is provided with but one end

member, one end of the support is open whereby the air entering through the openings 30 will pass out of the support through end 35 into the chamber 12. The flexible valve 28 is seated against the bottom member 25 when the chair is occupied, due to the pressure created in the chair, and when occupant of the chair rises from the seat the suction created within the chair will raise the opposite end portions of the valve 28 from closure position with respect to openings 30 whereby a current of air passing through the chamber 15 will contact with the insecticide, take up a portion thereof and pass from the body portion 11 into the chair and act as an expellent for the vermin.

It is thought the many advantages of an insecticide container, in accordance with this invention and for the purpose set forth can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which fall within the scope of the invention as claimed.

What I claim is:

1. In an insecticide container attachment for furniture, a plate provided with a rectangular opening, a semi-oval shaped body portion of rectangular contour in sectional plan and having a closed top, an open bottom, imperforate end walls and a pair of side walls each formed with a series of openings and a pair of oppositely disposed, spaced arcuate slots at the upper end thereof, said slots being spaced from said openings, the side and end walls of said body portion being integral with and having the inner faces thereof flush with the edges of said rectangular opening of said plate, a curved abutment integral with the plate, extending from one end edge of said rectangular opening and adapted to coact with a resilient latch of a hinged closure for said open bottom, said plate further having a part thereof providing a barrel depending from the other end edge of said rectangular opening to receive the pivot of said hinged closure.

2. The combination with a plate having a rectangular opening, an upstanding, open bottom insecticide container integral at its lower end with said plate and having the inner face thereof flush with the edges of said opening, said container having its body perforated, an abutment integral with said plate and depending from one of the end edges of said opening, and said plate having a part thereof providing a barrel depending from the other end edge of said opening, of a hollow, valved combined insecticide support and closure element for extension into the container to close the open bottom of the latter, said element including a closed end, an open end, a top and a bottom, the valve of said element being arranged therein, the bottom of said element being apertured, means for hinging the end of said element to said barrel, and a resilient latch extended outwardly from the open end of said element at the top thereof, through said opening and coacting with said abutment to detachably secure said element within the container to close the open bottom of the latter.

In testimony whereof, I affix my signature hereto.

JOHN P. HORN.