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WINDOW BOX AND HANGER THEREFOR

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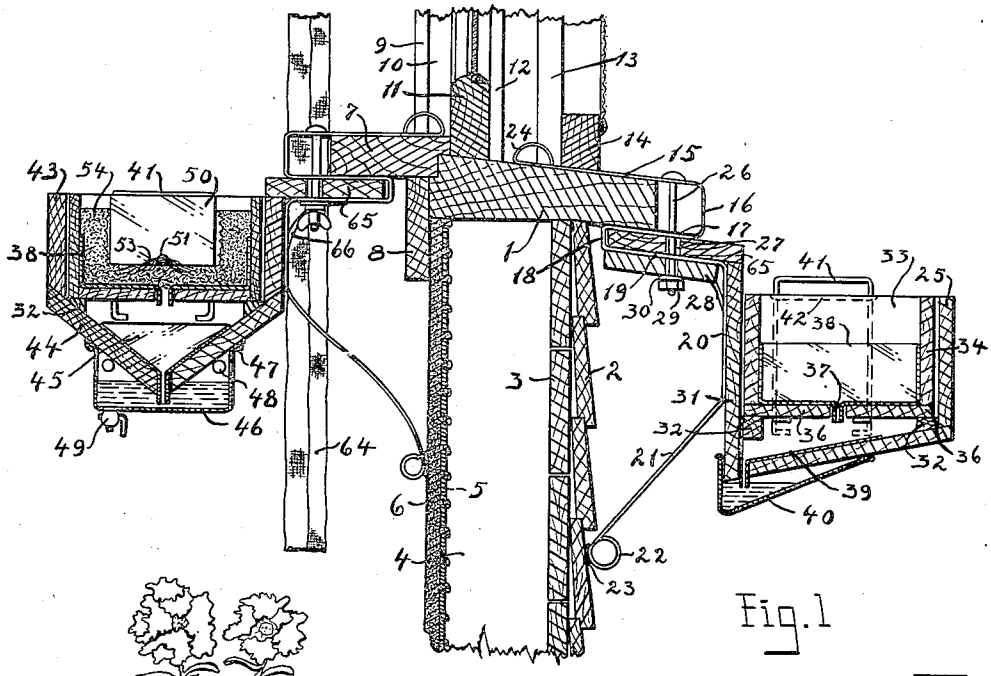


Fig. 1

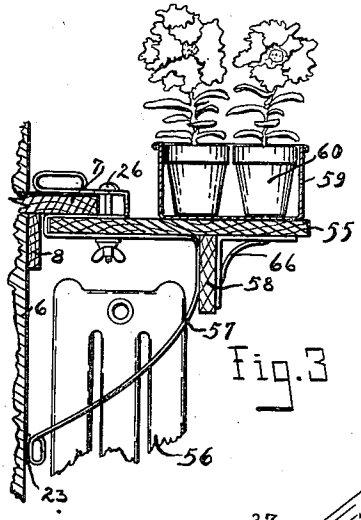


Fig. 3

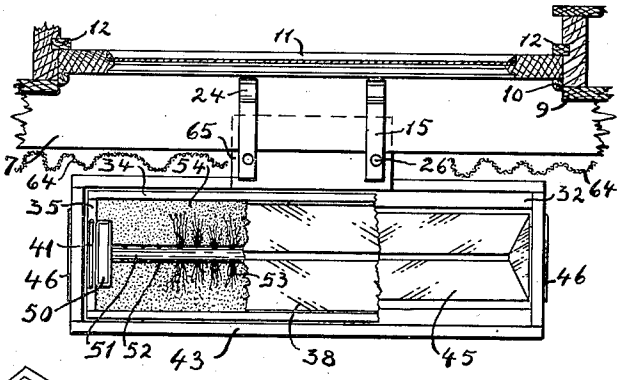


Fig. 2

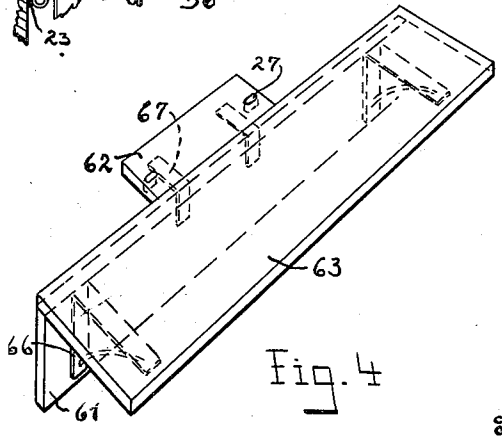


Fig. 4

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WINDOW BOX AND HANGER THEREFOR

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6 Claims. (Cl. 248—208)

This invention has for its primary object to provide simple, inexpensive, and efficient devices to permit the use, growth, and display of plants and flowers at the most advantageous places, conserving floor space, and enabling the material to be renewed or exchanged with a minimum of effort.

A further object of the invention is to provide a hanger for window boxes and shelves which can be fastened securely and firmly upon window sills, ledges, porch rails, and similar projecting members, without penetrating the wood, stone, or other materials of which such projections are made, and without defacing their surfaces, while the clamp portion of these hangers provides ready attachment for the original installation and equally ready detachment for removal or for transfer from one location to another, as from inside to outside or vice versa.

Another object of the invention is to provide a means for attaching the shelves or boxes to an inside window sill without interference with shades, drapes, curtains, or screens, and without preventing or rendering difficult the opening and closing of window sashes.

From the commercial side, the most important object is to furnish a form of support and container which will give adequate protection and drainage for removable inserts of an inexpensive type, which may be prepared at greenhouses or nurseries, held to the proper period of growth and development, and then sold by florists or others for use in homes, hospitals, hotels, apartments, offices, or elsewhere, either as an outright sale, or as a service in which inserts are changed daily, weekly, monthly, or at any desired times to keep the plants always fresh and attractive.

Other advantages of the invention will be evident to those familiar with the growth and display of plants and flowers, such as the possibility of early starting of annuals from seeds, the protection of late blooms from frosts, the ready removal and renewal of specimen plants without litter or disturbance to a living-room or to a sick-room, and many other features of convenience and economy which will become apparent as the description proceeds.

In the drawing accompanying this specification, several preferred embodiments of the invention are shown for the purpose of illustration, though it will be obvious that the invention does not consist in the exact details of construction depicted, and that many other adaptations of the devices may be made for special uses and locations without departing from the principles of the invention as claimed.

Figure 1 is a vertical sectional view through a window and the wall beneath it, showing in section two separate types of window boxes supported by the sills; Fig. 2 is a plan view, with parts in section and parts broken away, of the box shown at the left in Fig. 1; Fig. 3 is a vertical sectional view of a form of shelf and bracket or hanger used where a radiator is set beneath a window; and Fig. 4 is a perspective view of another form of shelf capable of general use.

In Fig. 1, a window sill or outside ledge 1 projects a short distance outward above weatherboarding 2 secured over sheathing 3 in the studding 4, upon the inside of which the laths 5 carry the usual plaster 6. The inside sill or stool 7 with its apron 8 forming a part of the inside casing are attached to the sill 1, above which are shown the vertical casing member 9, molding 10, sash rail 11, parting bead 12, outer casing member 13, and screen frame 14, all of the usual construction.

Upon the sill 1, lies one end portion 15 of a metallic hanger or bracket which extends outward beyond the outer edge of the sill for a short distance, where it is bent downward at 16 for about the thickness of the sill 1 and then inward at 17 substantially parallel with the lower surface of the projecting portion of the sill, to a point near the wall, where it is again bent downward at 18, then outward at 19, downward at 20, and inward-and-downward at 21, terminating in a stiffening coil 22 which bears against the wall or against an interposed cushion of rubber or other suitable material 23, to prevent scratching or marring the paint on the weatherboarding 2. A rounded terminal 24, stiffening the end of the bracket portion 15, lies between the sash rail 11 and the screen frame 14, the flat metallic strip lying beneath the screen frame so that usually it will not prevent the screen from being closed even without cutting a recess in the bottom rail of the screen.

The space between the hanger portions 17 and 19 is adapted to receive a shelf member 65 which acts as a supporting means for the window box 25. A bolt 26 passing through holes in the strip forming the hanger and through slots 27 in the shelf member, also passes through a washer-and-clamp strip 28 against which the nut 29 with its washer 30 presses to force the shelf member firmly into contact with the under side of the clamp portion 17, while the head of the bolt acts to draw the portion 15 of the hanger into close contact with the

top of the sill. The metal strip forming the hanger will, of course, be of sufficient strength to serve as a clamp, and it will be bent to the proper contour to cause it to press firmly on the surface of the sill when it is drawn into place by tightening the nut **29** on the bolt **26**. The vertical portion **20** of the hanger lies against the side of the inner member **31** of the box **25**, and the portion **21** acts as a brace to sustain the thrust exerted by the weight of the box and its contents toward the wall.

Because of the standardized sizes and dimensions used in building construction at any period, the metal straps used for the hangers can be made in a relatively limited number of different formations suited to the sills ordinarily found in the buildings of a community, and such further bending as may be necessary can easily be done at the place where the hanger is to be installed.

Within the box **25**, cleats **32** form supports for an insert **33** which may be of any suitable material, the form shown having wooden sides **34** and ends **35**, and wooden bottom strips **36** separated sufficiently to form a slot for flanges **37** projecting downward from the bottom of a metallic drainage casing **38** fitting the lower portion of the inside of the insert **33**. Any excess water not retained by the soil in the insert will drip from the flanges **37** into a drainage trough **39** set in the lower corner of the box **25** and will pass out of this trough into a detachable drain pan **40** held by any suitable fastening means (not shown) on the outside of the box. Water which may be caught by the drain pan **40** will usually evaporate without requiring any attention, and in winter, may be a desirable aid in humidifying the room in which the box may be used. If desired, water may be poured directly into the pan **40** solely for humidification either by first lifting out the insert, or by pouring water between the insert and the window box through the space which will usually be left, since the insert will be made small enough for easy insertion and removal without rubbing against the sides or ends of the box. A U-shaped piece of heavy wire **41** inserted through holes bored in the ends **35** of the insert with the ends bent sidewise to prevent withdrawal in use, serves as a simple handle for the insert, a groove **42** receiving the cross portion at the top to render it inconspicuous when lowered.

The box **25** is shown as having the outer side narrower than the inner side, the bottom sloping to bring the outlet of the drainage trough **39** at the inner lower corner of the box. The box **43**, shown in Figs. 1 and 2 as on the inside of the room, is made with the sides of the same width, but with the bottom strips **44** sloping toward the middle and with the drainage trough **45** set in the center instead of at one side. The drainage pan **46** is shown as secured in place with screws **47** and as provided with holes **48** for humidification through evaporation of water in the pan unless it is withdrawn through the faucet or petcock **49**.

The insert **33** for the box **43** may be identical in construction with that shown in box **25**, with the same drainage casing **38**. While the insert is shown as empty in box **25**, in box **43** it is shown as partly filled with soil ready for the planting, and it has an irrigation device comprising an end chamber **50** from which a tube **51** extends longitudinally of the insert, the tube having openings **52** through which wicks **53** may be drawn to extend outward in the lower portions of the soil **54**. The top of the chamber **50** will be set near the top of the insert to receive water which will run through the tube **51** and out along the wicks to moisten the soil from below.

The atmospheric conditions in the average heated room during the winter season are likely to approximate those in a desert, and the loss of water from plants and from the soil in which they grow is so rapid that plants usually quickly deteriorate. When soil dries in the usual porous flower pot, water poured on the surface is mostly absorbed by the pot from which it evaporates with substantially no benefit to the plant. Absorption of water is slow, and a great part is likely to run off or out through the bottom opening of the ordinary flower pot before the soil becmes moist where the roots can reach it. Further, with flower pots set in rows, it is difficult to pour water into the ones set behind others or to determine the amount that may have been supplied to any individual plant. With the irrigation device illustrated, water is directed into the moist interior of the soil where absorption will be most rapid, and the receptacle **50**, being at one end where it can easily be reached, affords a means for a sufficient supply of water and of liquid fertilizer for the needs of all the plants in the insert. The plants can of course be sprinkled and water can be poured on the surface in addition to that placed in the chamber **50**, and whatever excess is not retained by the soil will be free to drip out of the insert to be carried by the trough to the drain pan outside of the box, where it will help to provide at least a little greater local humidity around the plants in the box. The dealer selling the inserts can also supply the liquid fertilizer best suited to the plants of any specific grouping.

In Fig. 3, the shelf **55** is shown as used above a radiator **56**, the hanger **57** being formed to bring the vertical member **58** inside the room farther than the inside surface of the radiator, the lower brace portion of the hanger being narrow enough to pass between two coils. The shelf is shown as having a metal box **59** to receive and conceal flower pots **60**, or other suitable inserts individually removable and replaceable.

Another form of shelf is shown in Fig. 4, suitable for holding anything that can rest on a level surface, including vases or flower pots if desired. It is a general purpose shelf in which the vertical member **61** is closer to the wall than it could be if it were, like shelf **55**, for use above a radiator. The clamp receiving portion **62** is shorter than the shelf member **63** which may extend for the full width of a window, or more, while the portion **62** is centrally located to be clamped upon a window sill between curtains or drapes **64** which can hang on both sides of the member **62** and between the shelf **63** and the sill, just as they hang between the sill **7** and the inner side of the box **43** in Figs. 1 and 2. The shelf portion **65** of box **43** is shorter than the box and projects inward from the sill far enough to provide all necessary space for the curtains **64**.

The vertical members **58** and **61** are secured to the horizontal members **55** or **63** in any preferred manner, such as brackets **66** attached to each member to maintain their proper angular relation to each other, and brackets **67**, shown in Fig. 4 as simple L-shaped braces connecting vertical member **61** with the horizontal member **62**. The shelf portions **65** of the boxes **25** and **43** may be similarly braced as indicated at **66** in Fig. 1 below the shelf member **65**.

With a hanger such as described, a shelf or

box can be secured with little difficulty either inside or outside of any ordinary window without penetrating or marring the surfaces, pads or pieces of suitable material being interposed between the hangers and the places with which they may come in contact whenever needed.

The inserts **33** will be relatively light and they can be prepared wherever the desired plants are available, in many types of floral arrangement, shipped any distance as planted units, held for growth or flowering in the greenhouse of a grower or florist, and distributed like any other article of perishable merchandise ready to be set into the holder, such as a box **25** or **43**, which they may fill as a unit or as one of several such units, the sizes of boxes and inserts being made standard for convenience in replacing.

So far as the inventors are aware, no such service has hitherto been available, and the low cost, convenience, and cleanliness of the devices here described should make possible the widespread use of ornamental plants in places where they are not now used at all because of the lack of suitable facilities for their care and replacement.

We claim:

1. In combination, a window box and a hanger therefor, the hanger consisting of a strip of metal bent to form clamping jaws adapted to receive a sill, and also bent to receive a portion of the window box, and a clamp bolt engaging the hanger to force the clamping jaws toward each other and to force the said window box portion into engagement with the hanger to cause it to clamp upon the sill.

2. In combination, a window box and a hanger therefor, the said window box having a vertical portion and a horizontal portion, the said hanger comprising a metallic strip bent to receive a sill and also bent to receive the said horizontal portion of the window box and to bear against the vertical portion of the said box, a portion of the hanger being adapted for engagement with the wall beneath the sill.

3. As a means for supporting articles from a ledge projecting from a wall, a box having a horizontal member, a hanger consisting of a relatively flat strip bent in reverse curves to form upper, middle, and lower substantially parallel clamp portions, the space between the upper and middle portions receiving said ledge, the space between the middle and lower portions receiving the horizontal member of the box, and a bolt arranged to draw the upper and lower portions together, to clamp the upper and middle portions on the ledge and the lower and middle portions on the horizontal box member.

4. A device as in claim 3, in which the hanger has a portion in contact with the side of the box below the lower clamp portion and bent away from its point of contact with the box to form an inclined brace engaging the wall below the ledge.

5. As a means for supporting articles from a ledge projecting from a wall, a box having a horizontal member, a hanger comprising a relatively flat metal strip bent to engage the top and bottom surfaces of the ledge and to engage the top and bottom surfaces of the horizontal member of the box, and a clamping bolt engaging the hanger to clamp the hanger upon the ledge and to clamp the horizontal member in a fixed relation thereto.

6. A device as in claim 5, in which the horizontal member is held by the bolt in firm engagement with the lower surface of the portion of the hanger which engages the lower surface of the ledge.

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