United States Patent

[11] 3,634,678

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[21] Appl. No. **55,446**
[22] Filed **July 16, 1970**
[45] Patented **Jan. 11, 1972**
[73] Assignee **Marvin Glass & Associates**

[54] **DESIGN ACTIVITY SET**
13 Claims, 4 Drawing Figs.

[52] **U.S. Cl.** ..... **240/10 P,** 46/16, 161/30
[51] **Int. Cl.** **F21v 17/00,** F21v 33/00
[50] **Field of Search** ..... 240/10 P, 10 T; 46/16; 47/41.12; 161/31, 30

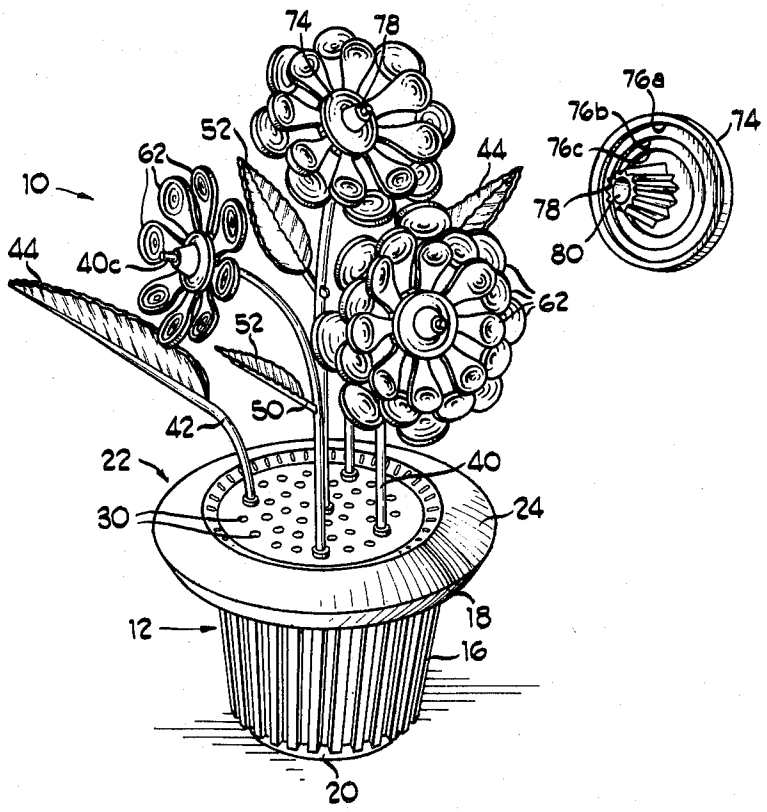
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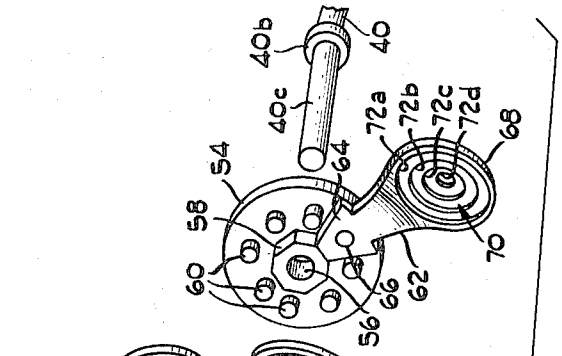
ABSTRACT: A design activity hobby set of a flower-arranging-type characterized by the provision of a base having a light source therein with stem-receiving apertures in the closed top of the base and translucent rodlike stem tubes for reception in the apertures with at least some of the stem tubes terminating in a petal-receiving end for assembling plural translucent plastic petal components thereon for creating individual simulated flower arrangement designs to be illuminated by the light from the light source in the base being transmitted upwardly through the translucent rodlike stems.



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SHEET 1 OF 2



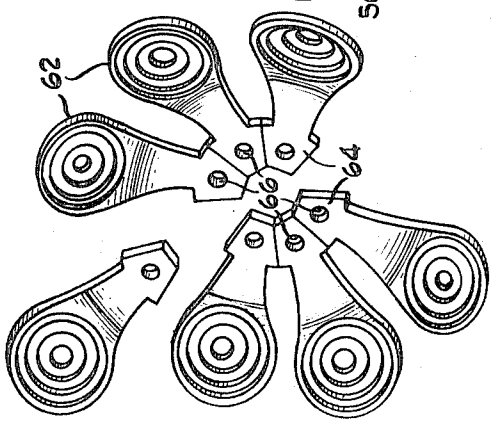


Fig 3

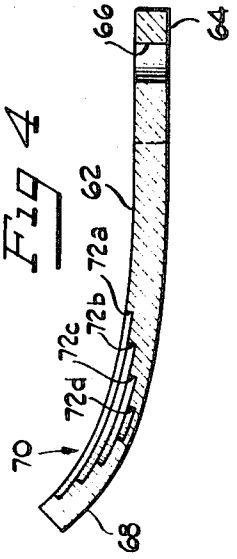


Fig 4

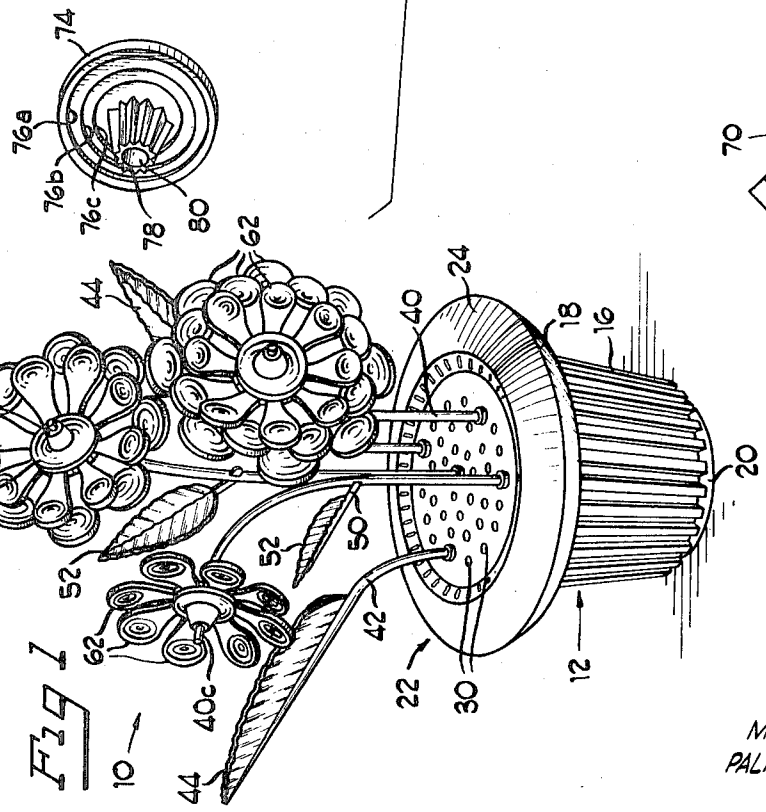
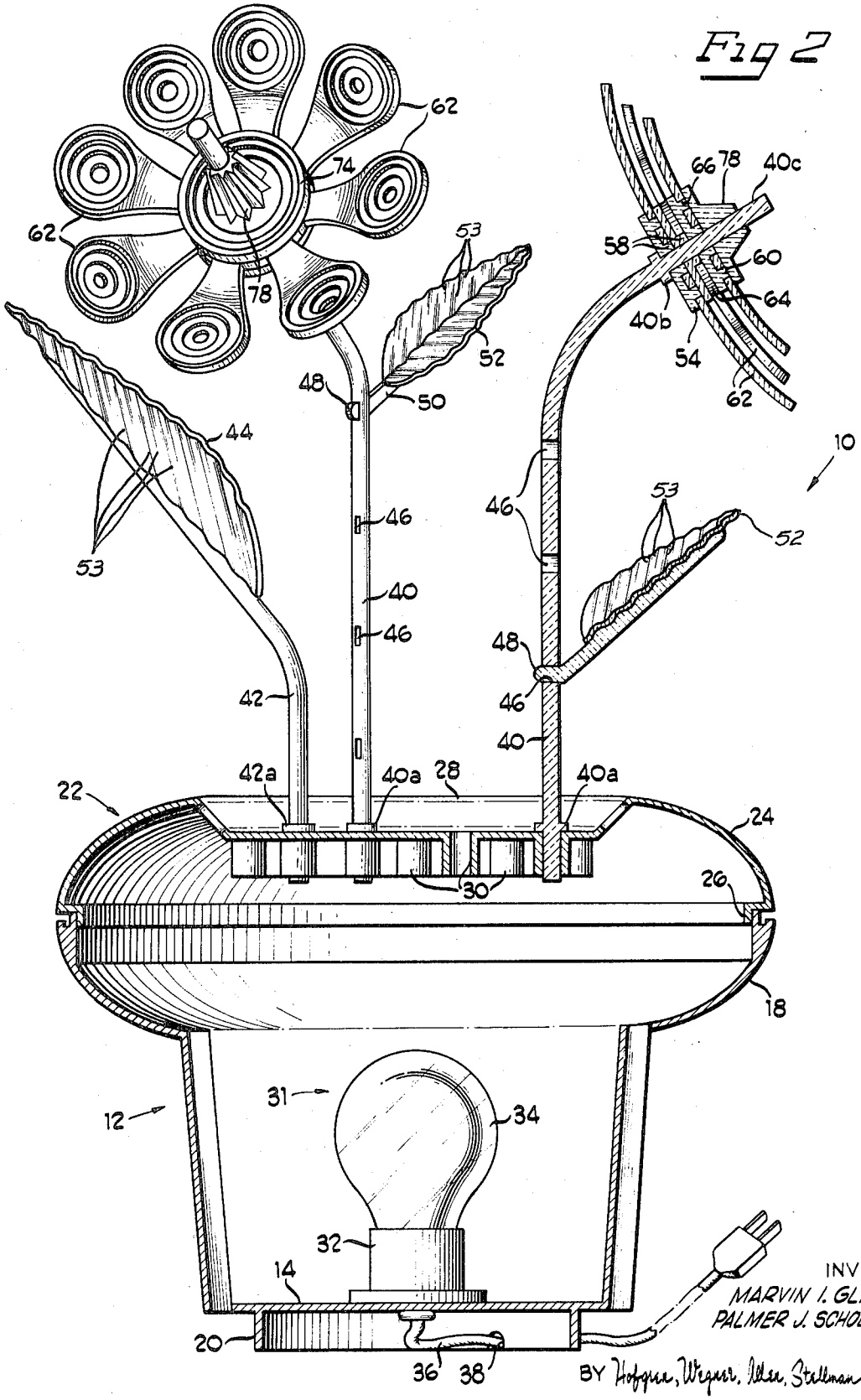


Fig 1

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Fig 2



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DESIGN ACTIVITY SET

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to design activity sets and, more particularly, to a design activity set of a simulated flower arrangement type wherein light is transmitted through simulated flower stems.

2. Brief Description of the Prior Art

Recently there have been developments in providing toys or sets of the type wherein tubular or rodlike components are assembled together on a base which rests on top of a light source so that light may be transmitted through the assembled tubular or rodlike components. Generally speaking, such developments have been in the form of construction-type or geometric design type toys. The advantage of toys of this type is that they stimulate interest in the process of assembling the components together and further stimulate continued interest and attention following assembly as the light is transmitted through the tubular elements. This concept of assembling such components and subsequently enjoying the resultant design and illumination thereof has been well received and considered worthy of further development and application in the toy and design activity hobby art.

The art of flower arranging has been well known and practiced perhaps for centuries. It is enjoyed by persons of diverse age groups and interests. Shortcomings of participating in this hobby are that cut flowers soon wither and, therefore, must be disposed of and dried flowers are extremely fragile and sometimes easily disintegrate.

This invention is directed towards meeting the need and desire in the design activity art of providing a simulated flower-arranging apparatus utilizing the concept of assembly of light-transmitting tubular elements and other components resulting in a structure which is attractive in appearance and capable of a limitless number of rearrangements.

SUMMARY OF THE INVENTION

This invention is directed, in brief, to the provision of a simulated floral arrangement design activity device.

The best mode currently contemplated for carrying out the invention includes an enclosed base having a light source therein and a perforate top for receiving rodlike stem members. At least some of the stem members terminate in simulated blossom receiving ends including a petal-receiving disc for receiving a plurality of individual simulated flower petals, each of which is provided with a light-transmitting design at the end thereof so that light from the light source may be transmitted through the stems and through the petals and appear at the design area on the tips of the petals with the arrangement of the pedals being capable of taking a limitless number of forms.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the design activity device of this invention;

FIG. 2 is a vertical section view of the device shown in FIG. 1;

FIG. 3 is an exploded view of a petal assembly component of the design activity device of this invention; and

FIG. 4 is a section view through a petal of the design activity toy of this invention.

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

BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENT

The design activity device or set **10** of this invention includes a base **12** which generally simulates a flowerpot in configuration, including a bottom **14** and generally circular upstanding sidewalls **16**, which may be vertically fluted for enhancing the appearance thereof. Sidewalls **16** terminate in an outwardly and upwardly curved annular rim **18**. An annular flange **20** depends from the bottom **14** for supporting the base.

Base **12** further includes a cover **22** which has a downwardly and outwardly curved annular rim **24** generally complementary to rim **18** and which terminates in an inset depending flange **26** for snugly fitting inside the open end of the curved rim **18** to assemble the cover **22** to the base **12**. Cover **22** also includes a centrally recessed top **28** having a plurality of stem-receiving apertures **30** therein. Preferably, the base and cover are opaque.

A source of light **31** is provided in the interior of base **12** and includes a generally centrally located receptacle **32** and light bulb **34**. The conventional outlet cord **36** extends through an opening **38** in flange **20** for connection to an outlet to supply power to light bulb **34**.

Flower stems **40** and leaf stems **42** are provided with the flower and leaf stems having radial enlargements **40***a* and **42***a*, respectively, near the bottom ends thereof, for limiting the insertion of the stems into the flower-receiving apertures **30** in top **28**. Leaf stems **42** are preferably shorter and have a bend medially thereof and support a simulated leaf **44** at the outer end. Flower stems **40** are provided with a second radial enlargement **40***b* in the bent upper end thereof leaving a flower assembly stub **40***c* extending forwardly thereof. Both of stems **40** and **42** are preferably rodlike, plastic structures with the leaf stem preferably being green and the flower stems preferably being clear.

The flower stems **40** are provided with a plurality of vertically spaced leaf receiving through slots **46** for receiving the tab portion **48** of a spine **50** which supports a leaf **52** thereon so that flower leaves may be assembled along the length of flower stems **40** according to individual desire.

Each of leaves **44** and **52** has a generally ruffled surface and includes roughened striations **53** which simulate veins of the leaves. The roughened striations concentrate transmitted light by affording a refractive surface for light transmitted by stems **40** and **42**.

An assembly disc **54** is also provided, having a through opening **56** surrounded by a hub **58** which is preferably octagonal in peripheral configuration, although the peripheral configuration could take other forms, such as circular or hexagonal or the like. A plurality of pins or stubs **60** project outwardly from the same face of the disc **54** as the hub **58** and are spaced radially about the hub for assembling the petals **62** to the disc **54**. The inner end **64** of petals **62** which is here shown as being generally trapezoidal in configuration, is provided with a through opening **66** for receiving the pins **60**. Thus, as the several petals **62** are positioned about the disc **64**, the trapezoidal configuration tapering outwardly from the extreme inner end permits the side-by-side, generally circularly oriented array as seen in FIG. 3.

The outer end **68** of the petal **62** is enlarged and preferably slightly upwardly curved, as seen in FIG. 4, and has a petal design area **70** therein. The petal **62** is also preferably formed of a translucent colored plastic and the design area **70** is created by the concentrically arranged, stepped, consecutively reduced recesses **72***a*, **72***b*, **72***c* and **72***d* formed therein. Each of these recesses provides an annular light-transmitting edge for light which is transmitted upwardly through the stems **40**, the plastic disc **54** and the petals **62** to the design area **70**. In particular, the edges defined by recesses **72***a*–**72***d* are preferably roughened to create a refractive surface of many tiny prisms which refracts light at many different angles and concentrates light in these areas.

A buttonlike petal holder 74 is also provided and may similarly include consecutively reduced stepped recesses 76*a*, 76*b* and 76*c* and a central fluted frustoconical hub 78 having an aperture 80 therein for impalement upon the portion 40*c* of stem 40. It is to be noted that portion 40*c* of stem 40 has a length which is considerably longer than the hub 78 of holder 74 and it is intended that several petals 62, some of groups of reduced dimension, would be provided so that the petal designs created could include superimposed layers of petals as best seen in FIGS. 1 and 2. It is further contemplated that the flower petals could be made of different colors also to further enhance the wide variety of possible arrangements with the device 10 of this invention.

In use, one may orient the leaf stems 42 with the leaves 44 thereon in any desired number and arrangement and subsequently orient the desired number of flower stems 40 also in the apertures 30 of the base 12. Following this, the flower stem leaves 52 may be assembled as desired by means of tabs 48 extending through slots 46. Then, the petal arrangements themselves may be designed, assembling the several petals 62 on the disc 54 which, in turn, is assembled on the portion 40*c* of each stem 40, in either single or multiple layers of petals. Following this, the cord 36 may be connected to an outlet to illuminate bulb 34. Light will be transmitted through the stems 42 and 40 to illuminate the leaves 44 and leaves 52 and to illuminate the petals 62, including the surfaces 72*a* through 72*d* comprising the design area 70. The holder 74 will also be illuminated, both in its recessed edges 76*a*, 76*b* and 76*c*, as well as along the fluting of the hub 78. In addition, light will extend through those apertures 30 in which no stems are assembled to provide a combination of transmitted and reflected light for the flower assembly. Thus, it can be seen that there is an infinite number of varieties of arrangements that the user may attempt to create to give a desired pleasing effect and that rearrangement may be made a limitless number of times due to the substantial durability of the components for the purpose of the device 10.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, as some modifications may be obvious to those skilled in the art.

We claim:

1. A design activity set comprising: a simulated flowerpot-like base, a source of light in the interior of the base, and a cover for the base including light-transmitting stem-mounting means on the cover; a plurality of translucent simulated flower stems, each including one end having a stem-mounting portion for association with the cover stem mounting means to mount the stems to the cover, each flower stem having a second upper end for receiving an easily rearranged simulated petal assembly thereon; the simulated petal assembly including a plurality of individual light-transmitting simulated petals having defined light-refracting portions and also having an inner and an outer end; a petal-mounting member, with each of the petals and petal-mounting member having cooperative surfaces for assembling a plurality of petals to the mounting member, and the mounting member further having stem-mounting surfaces thereon for assembly of the mounting member to the said other end of the stem.

2. The design activity set of claim 1 wherein the simulated flower stems have leaf-receiving apertures thereon and wherein flower stem leaves are provided with each of the flower stem leaves having tab portions for insertion into the flower stem apertures and further having light-refracting simulated vein portions thereon.

3. The design activity set of claim 1 wherein the light-refracting portion of each of the simulated petals is located near the outer end thereof.

4. The design activity set of claim 1 further including a petal assembly retaining member having an aperture therethrough for impalement on the said other end of the stem to retain the petal assembly thereon.

5. The design activity set of claim 1 further including a plurality of leaf stems having one end with a mounting means for connection to the stem-mounting means of the cover and having another end with a simulated leaf thereon.

6. The design activity set of claim 1 wherein the inner end of each of said petals is substantially circular segmental in configuration for side-by-side radially outwardly extending orientation of the several petals on the petal-mounting member.

7. The design activity set of claim 3 wherein the design area on the outer end of each of the petals comprises a plurality of surface interruptions thereon affording refraction of the light over a concentrated area to thereby concentrate the light being transmitted throughout the stem and petal.

8. The design activity set of claim 6 wherein the petal mounting member is disclike in configuration, having a central aperture and a hub surrounding the aperture against which the inner ends of the petals may abut.

9. The design activity set of claim 8 wherein the petal-mounting member further includes circumferentially disposed stubs spaced radially from the hub and wherein the inner ends of the petals have apertures therein for impalement of the mounting member stubs.

10. The design activity set of claim 9 further including a petal assembly retaining member having an apertured therethrough for impalement on the said other end of the stem to retain the petal assembly thereon.

11. The design activity set of claim 10 wherein the cover stem mounting means comprises a plurality of apertures in the cover.

12. The design activity set of claim 11 wherein the flower stems are formed of translucent plastic rods.

13. The design activity set of claim 12 wherein the simulated flower stems have leaf-receiving apertures thereon and wherein flower stem leaves are provided with each of the flower stem leaves having tab portions for insertion into the flower stem apertures.

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