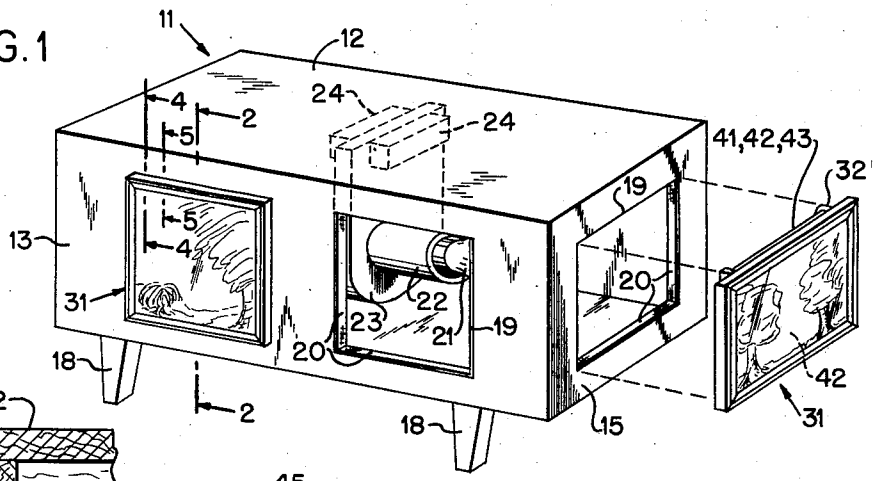
Sept. 29, 1959 R. J. COOKE 2,906,047

COMBINATION NIGHT LAMP AND TRANSPARENCY ILLUMINATOR

Filed April 14, 1958

FIG. 1



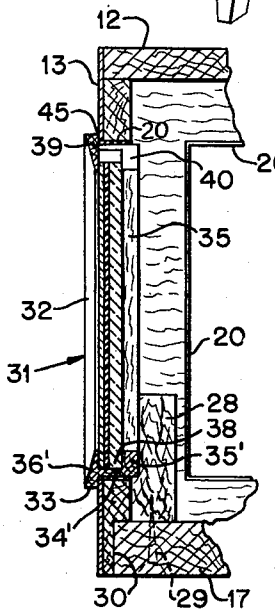


FIG. 2

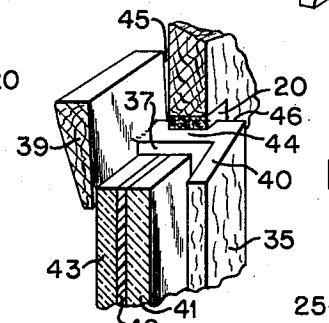


FIG. 4

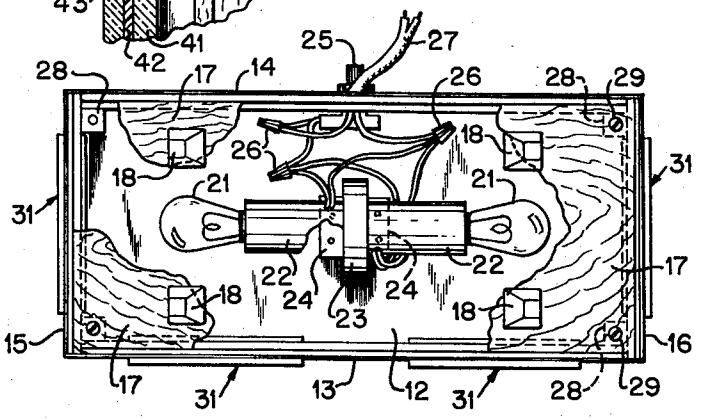


FIG. 3

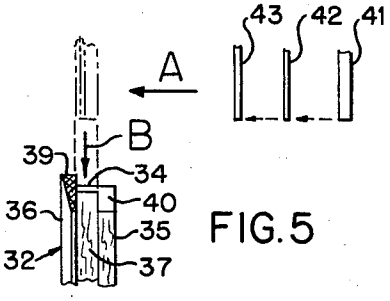


FIG. 5

INVENTOR.
ROBERT JAMES COOKE
BY Nathan M. Bristin

ATTORNEY

United States Patent Office 2,906,047 Patented Sept. 29, 1959

2,906,047

COMBINATION NIGHT LAMP AND TRANSPARENCY ILLUMINATOR

Robert James Cooke, Bayside, N.Y.

Application April 14, 1958, Serial No. 728,125

1 Claim. (Cl. 40—63)

This invention relates to a combination night lamp and photographic transparency viewer, and more particularly to a decorative illuminated article of furniture, suitable for use in a home, for providing a pleasing and non-glaring source of minimum light, while at the same time decoratively displaying photographic color transparencies therein.

There are many places in a home where a source of minimum but pleasing light is desirable. Such places may be, for example, in a nursery to provide sufficient light for a sleeping child. By means of the device of this invention, such light may be provided from photographs of scenes, objects, or people which may be favorites of the child, and thus help to put him in a happy frame of mind at bedtime. The device, according to the invention, is of such construction that a child of even very tender years may, without the use of tools, readily learn to remove and insert the photographic transparencies himself, and thus exchange the scenes illuminated in the device for new ones from time to time.

Another common place in the home where a source of minimum but pleasing light is useful is in darkened rooms wherein television is being viewed. Authorities recommend, for prevention of eye-strain and for safety purposes, an auxiliary source of light in the room, other than the television screen. The device according to the invention provides such an auxiliary source of light, preferably while resting on top of the television cabinet, without producing glare, while at the same time being a decorative article of furniture and conversation piece by showing easily exchanged groups of photographic transparencies portraying any desired subject. For example, as a child grows older, successive portraits of the child taken at various periods or in various moods may be simultaneously displayed in the device to illustrate his growth, and the portraits may then be easily changed again at a later date. Likewise, scenes or views photographed on recent vacations or hunting trips may be optionally inserted in the device and easily changed from time to time as new photographic subjects become of current interest. To help decorate a room in accordance with changes of season, photographic transparencies of snow scenes, blossoms, summer beaches, autumn forests, and the like, may be easily and readily interchanged in the device, at will.

Other useful applications of the device as a decorative and illuminated article of table-top furniture may be in various locations, such as in a sick room, in an otherwise dark hallway, vestibule, and the like.

It is therefore an object of the invention to provide an article of furniture for giving off a minimum amount of non-glaring light in a pleasing fashion.

It is another object of the invention to provide a device for displaying and illuminating standard-sized photographic transparencies in an easily exchangeable and interchangeable manner.

Still another object of the invention is to provide a device for uniformly diffusing light through photographic

transparencies and with circulation of air thereacross so as to prevent the formation of areas of concentrated light or "hot" spots therein, thus producing an extremely natural appearance of the photographic image on the transparency and also providing sufficient circulation of air to prevent heat damage to the transparency.

A further object of the invention is to provide a device for decoratively displaying photographic transparencies in which the procedure in replacing and exchanging the transparencies in the device may be readily performed without tools by a person of very limited mechanical knowledge or skill, such as a housewife or child.

Another object of the invention is to provide a device for illuminating photographic transparencies which device can be readily disassembled for exchange of transparencies or exchange of light bulbs without disturbing any wiring contacts or wiring circuits, thus resulting in an extremely safe device, free from danger of electric shock.

Still another object of the invention is to provide maximum safety in an illuminating device for photographic transparencies by controlling the relationship between the size of opening for the transparency and the relative position and distance to the light socket, to provide substantially foolproof prevention against the placing of a finger into the light socket, for example while changing light bulbs, or by a child.

These and other objects are achieved, according to a preferred embodiment of the invention, by a closed box having a plurality of panels, and in which a source of light is suspended in a predetermined relationship to felt-lined openings in the panels. Frictionally retained in these openings, in a manner for easy removal in a perpendicular direction from the panels, are a plurality of frames. Slidably and removably retained in grooves in each of the frames are a frontal transparent cover, a rear opalescent translucent cover, and a replaceable photographic transparency positioned between the front and rear covers.

Other objects and many of the attendant advantages and features of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings, wherein:

Fig. 1 is a perspective view of a combination night lamp and transparency viewer according to the invention, with one of the front frames and side frames removed to illustrate the interior of the box and the relative positions of a frame and panel opening;

Fig. 2 is a cross-section taken along line 2—2 of Fig. 1;

Fig. 3 is a bottom view of the device of Fig. 1, with the bottom panel partially cut away;

Fig. 4 is an enlarged fragmentary perspective view, partly cut away and partly in section, of a corner detail of the frame and panel opening, looking from the interior of the box, the section being taken substantially along line 4—4 of Fig. 1; and

Fig. 5 is a diagrammatic sectional view, taken along line 5—5 of Fig. 1, and illustrating the method of assembly of the transparency and covers into the frame.

Referring now to the drawings, wherein like reference characters designate like or corresponding parts throughout the several views, there is shown a box or enclosure **11** having a top **12**, a front panel **13**, a rear panel **14**, and side panels **15**, **16**. Box **11** is preferably made of wood or plastic, and is smoothly finished as a piece of furniture on its outer surface to give a pleasing appearance, such as by staining and varnishing. The bottom of enclosure or box **11** is covered over by a removable bottom panel **17**, which is fastened at the four corners thereof by means of screws **29**, engaging blocks **28** which are cemented or otherwise fastened into the inner corners

between the front, side and rear panels. Four legs **18** are fastened to the bottom panel **17** and form supporting means for the enclosure **11**.

Located within at least the front and side panels **13**, **15**, **16**, are one or more openings **19**, each of which is lined around its inner periphery with a strip of resilient and preferably opaque material to provide a frictional resilient retaining means **20** for insertion and retention of a frame **31**. Although a strip of felt is preferred as the resilient retaining means **20**, other suitable materials are cloth, sponge rubber, foam rubber, or even one or more leaf springs (not illustrated). The purpose of the resilient material **20** is to provide a soft retaining frictional force to maintain the frame **31** within the periphery of opening **19**, and without excessive leakage of light therethrough. If frame **31** has an outer front peripheral lip sufficiently overlapping opening **19** so that it shuts off any light leakage, for example at **45** (Figs. 2 and 4), the resilient material **20** may cover only a portion or intermittent portions of the entire periphery of opening **19**.

Within the enclosure or box **11** is located one or more sources of light **21**, which are preferably miniature electric light bulbs in candelabra-type light sockets **22**. Sockets **22** are securely fastened to a supporting member **23** which is suspended from the inner surface of top panel **12** and braced laterally by means of two fastening blocks **24**. An on-off switch located in one of the panels, such as in rear panel **14**, controls the current from a power source (not shown) through lead wire **27** to the sockets **22** and thus to the light bulbs **21**. Connection caps **26** are preferably used in assembly of the wiring to minimize the danger of exposed contacts, but any other connection means which securely covers all exposed wiring in a fireproof manner is also suitable. The bottom panel **17** preferably fits into a recess **30** within the side and end panels and thus braces them, while being itself, as well as its fastenings **28**, **29**, hidden from view except when viewed from underneath, thus resulting in a pleasing and decorative finished appearance, while still maintaining sturdiness with an ease and safety of disassembly for replacement of light bulbs, etc.

Frame **31** comprises a pair of side rib members **32**, a bottom rib member **33**, and a top rib member **39**, all joined at their respective corners, preferably in mitered joints. The two side rib members **32** and the bottom rib member **33** are similar in cross-section. The side rib members **32** each have a side wall flange **34** and a rear flange **35**, and the bottom rib members have a bottom wall flange **34'** and a rear flange **35'**. Each of the side rib members **32** and top rib members **39** have a front facing flange **36**, and bottom rib members **33** have a front facing flange **36'**, all of the front facing flanges **36** and **36'** forming the front outer peripheral face of the frame **31**, bevelled on its forward face and flat on its rear face. A U-shaped inwardly open groove is thus defined around three-quarters of the inner periphery of frame **31**, being formed as groove **37** at the sides by the flat rear face of front flange **36**, side wall flange **34** and rear flange **35**; and at the bottom of the periphery, as groove **38**, it is formed by bottom flange **34'** joining bottom rear flange **35'** and front flange **36'**. The upper or top rib member **39** is free from side or rear flanges and thus provides free access to the U-shaped recess **37** from above when the frame **31** is outside of the box **11**.

As may best be seen in Fig. 4, the upper edges of rear flange **35** and side flange **34** are preferably sloped inwardly and downwardly at **40** and **44**, respectively, to prevent sharp corners and to provide a passage for ventilation or air circulation through the upper portion of opening **19**. A small amount of air can thus circulate through a passage defined at the sides by sloping sides **40** and **44**, defined at the bottom by the top surfaces of transparency **42** and its covers **41** and **43**, and defined at the top by material **20** lining the opening **19**. A narrow space **45**, communicating with the just-defined passage and located between the front face of the panel **13**, **15**, or **16**, and the rear of top rib member **39** permits sufficient flow of air behind member **39** without excessive leakage of light. Sloping portions **40**, **44** of respective rear and side flanges **35** and **34** join and form an upper edge **46** which frictionally engages the upper strip of resilient lining **20**.

Within the grooves **37**, **38**, are positioned a frontal clear transparent glass cover **43** and a rear translucent glass cover **41**, and their thicknesses are predetermined in relationship to the grooves **37**, **38**, so that sufficient clearance is left for a photographic transparency **42** to be positioned between the front and rear covers **43**, **41**, and for the assembled three pieces **41**, **42**, **43**, to slide easily into and out of side grooves **37** and drop down into bottom groove **38**. For the front cover glass **43**, I prefer to use a thin clear transparent glass, for example $\frac{1}{32}$'' or less in thickness, and although transparent plastic may also be used, it has the disadvantage of being suceptible to being easily scratched, and therefore might tend to adversely affect the natural appearance of the colored or other transparency to be displayed. For the rear glass **41**, I prefer to use an opalescent glass, such as that known as "White Opal" or "Milk Glass," for maximum diffusion of light before it passes through the transparency. The opalescent glass **41** is preferably thicker than that of the front cover glass **43**, so as to help diffuse the light, to prevent heat from the light bulb **21** from adversely affecting the emulsion of the transparency, and to form a proper and firm backing for the transparency. I prefer not to use ordinary types of ground glass as a substitute for the opalescent rear cover glass **44**, since the diffusion of light therethrough is not sufficient to eliminate localized concentration of light or "hot" spots in the immediate vicinity of the light source when viewed directly from in front of the frame **31**. However, translucent plastic or other materials which sufficiently diffuse the light through the transparency without causing bright, concentrated or localized spots of light or heat may also be used for rear cover "glass" **44**.

The ease with which transparencies **42** may be inserted into the frames **31** and the frames assembled into the enclosure **11** is illustrated in Figs. 5 and 1, respectively. The transparency **42** is "sandwiched" between rear cover glass **41** and front cover glass **43**, and then moved in the direction of arrow "A" until the combined "sandwich" is located immediately above frame **31**; it is then moved downward in the direction of arrow "B" to slide into the two side grooves **37** until the lowest portion of the "sandwich" rests within the bottom groove **38**. As is best seen in Fig. 4, a slight space will then remain between the top of the "sandwich" and a horizontal plane through the uppermost edges **46** of the side flanges **34**. The assembled frame **31**, with the transparency **42** and cover glasses **41**, **43**, is then inserted in a direction perpendicular to the respective panel into one of the openings **19** until the peripheral flange lips at the rear of front frame flanges **36** and **36'**, rest substantially flush against the respective panel wall **13**, **15**, or **16**. Removal of the frames **31** for exchange or replacement of the transparency **42** is the reverse of the above steps. It will be particularly noted that the frames **31** are inserted and removed in a direction substantially perpendicular to the respective panels because of the frictional resilient means **20** by which they are retained within panel openings **19**.

Placement of the light bulbs **21** with relationship to their nearest respective frame openings **19** in the front and end panels is determined so that the filament of the light bulb **21** is substantially centered perpendicularly with respect to the frame or frames **31** which it is to illuminate. This placement contributes to an even and efficient diffusion of the light to all transparencies equally, and consequently effects a more natural appearance in the transparencies. The sockets **22** are each preferably located far enough back from the openings **19** so that the

bulb **21** is removable through an opening **19**, but so that the fingers of a normal-sized hand cannot reach through opening **19** into the socket **22**. This arrangement is for added safety purposes. The size of openings **19** is dependent on the size of frames **31**, which in turn depends on the size of the transparencies to be used. Therefore, the distance which the socket **22** is located back of the respective panels will depend upon the size of transparency **42** to be used. I have found that for standard 2¼" x 2¼" transparencies placed in the end frame of panels **15** or **16**, a distance of approximately 3 inches from the front of the panel to the bulb end of the socket **22** provides the desired conditions of safety. It should be understood, however, that these dimensions are given merely by way of example and are not intended to restrict or limit the arrangement or size of any of the individual parts or of the combination, or the distance between them, other than as defined in the appended claim.

It should further be understood that the foregoing disclosure relates only to a preferred embodiment of the invention, and that it is intended to cover all changes and modifications of the examples of the invention chosen for the purposes of the disclosure which do not constitute departures from the spirit and scope of the invention as set forth in the appended claim.

Having thus described the invention, what is claimed and desired to be protected by Letters Patent of the United States is:

A combination night lamp and photographic transparency illuminator, comprising a plurality of panels defining an enclosure, a source of light within said enclosure, at least one of said panels having an opening therein, means forming a flat felt lining around at least a portion of the periphery of said opening, and a frame for said transparency, said frame comprising a pair of side rib members, a bottom rib member, and a top rib member, each of said rib members having a front flange forwardly bevelled and rearwardly flat, each of said side rib members having also side flanges and inwardly projecting mutually opposed rear flanges, said bottom rib member having a bottom flange and a rear flange, said side flanges of said side rib members and said bottom flange of said bottom rib member being joined to the respective forward flanges of said frame and spaced inwardly from the outer periphery of said front flanges, whereby an inwardly open U-shaped groove is defined by said side rib members and bottom rib member, said frame being of a shape and size removably positionable in said opening in a direction perpendicular to the respective panel forming said opening and frictionally retainable therein by said felt lining means.

References Cited in the file of this patent

UNITED STATES PATENTS

1,431,670	Klein	Oct. 10, 1922
2,336,548	Kimball	Dec. 14, 1943
2,553,160	Arps	May 15, 1951

FOREIGN PATENTS

395,464	France	Mar. 2, 1909