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Paulson

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[54] **SIMULATED BEAM LIGHT FIXTURE**

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[51] **Int. Cl.**..... **F21v 21/02**

[58] **Field of Search**..... 240/2 R, 2 B, 2 BV, 4, 240/6, 10 R, 73 R, 78 R, 78 CF, 51.11 R, 9 R

[56] **References Cited**

UNITED STATES PATENTS

2,090,239	8/1937	Strang	240/6 X
2,986,627	5/1961	Marriett	240/73 R X
3,328,572	6/1967	Picha	240/78 R X
3,389,246	6/1968	Shemitz	240/73 R X
3,456,100	7/1969	Green	240/2 B

FOREIGN PATENTS OR APPLICATIONS

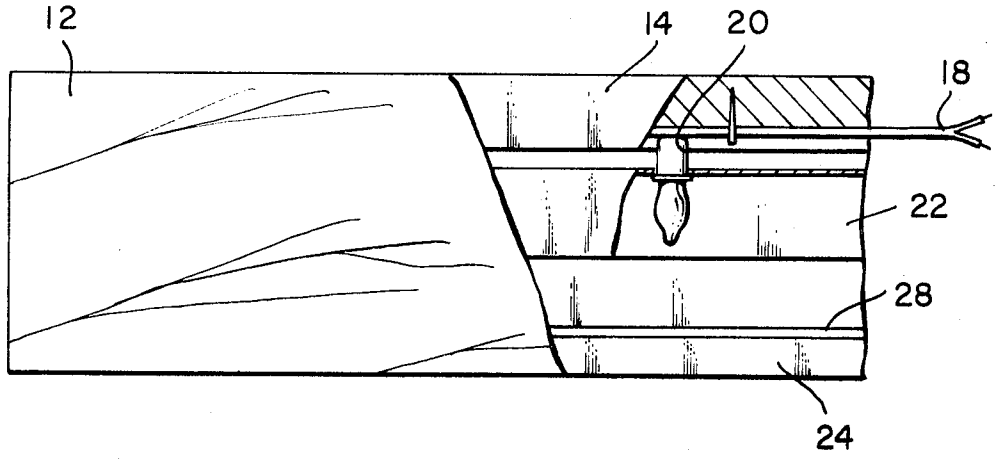
464,590	7/1951	Italy	240/10 R

Primary Examiner—Joseph F. Peters, Jr.

[57] **ABSTRACT**

A simulated beam light fixture having all of the outward appearances of a wooden beam for mounting in a room as a beam. A pair of parallel spaced-apart decorative wood panels is held in a spaced-apart relationship by an internal bracket. A plurality of light fixtures are mounted preferably on both sides of said bracket for directing light in both an upward and downward direction from between the panels. Removable lenses are adapted to be located between opposing panels on both the upper and lower edges. The outside faces of the panels are preferably sandblasted to enhance the appearance of the wood grain. Different colored lenses are available depending on the moods of the user.

6 Claims, 9 Drawing Figures



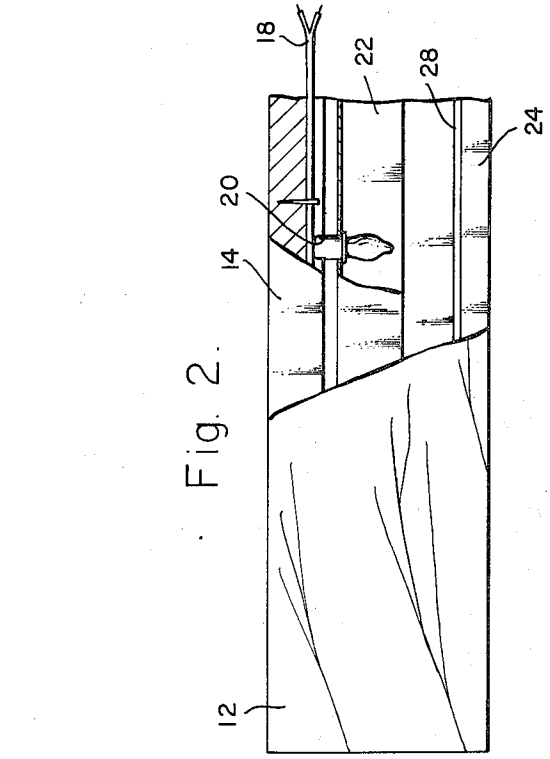


Fig. 2.

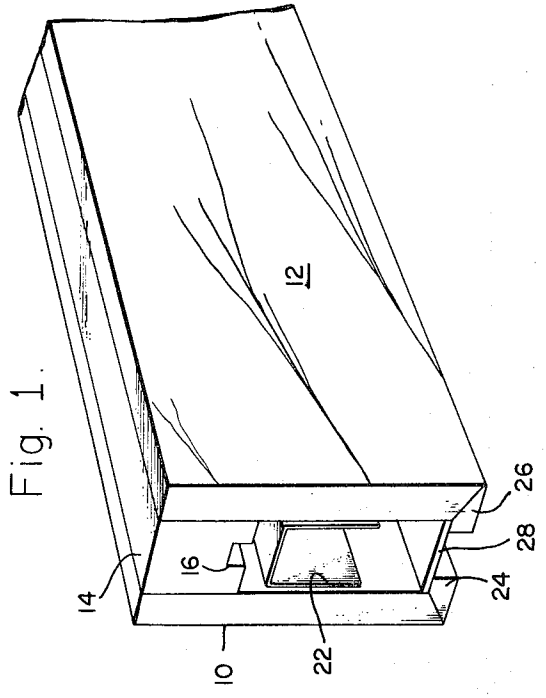


Fig. 3.

Fig. 1.

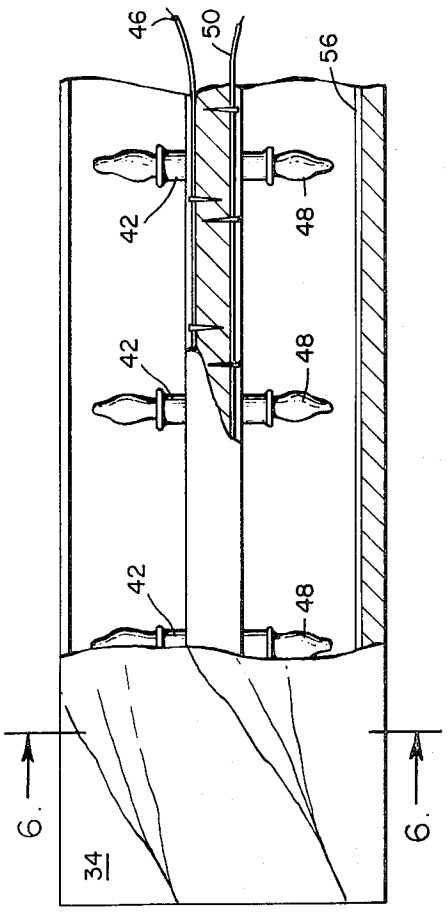


Fig. 5.

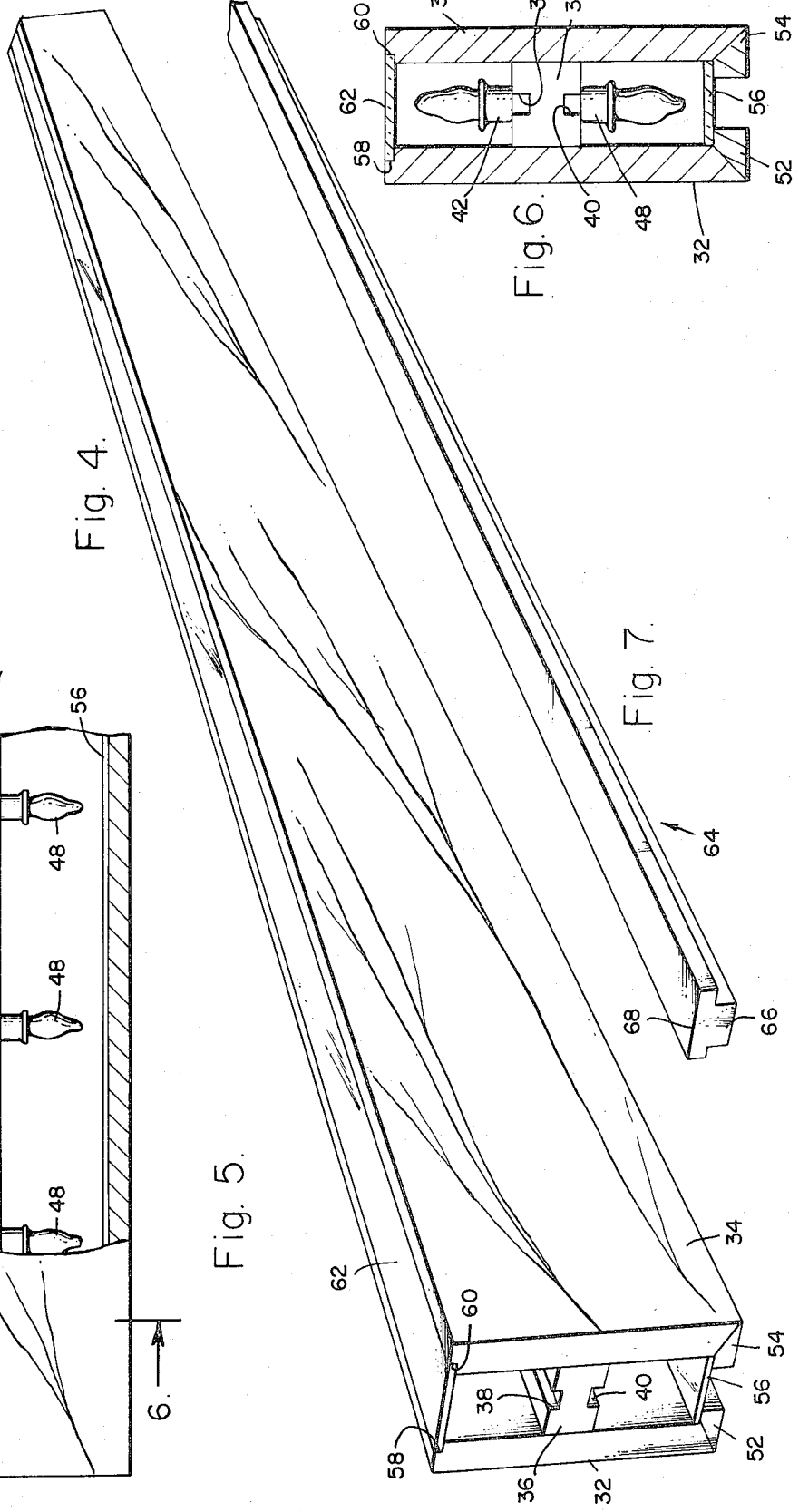


Fig. 7.

Fig. 6.

Fig. 4.

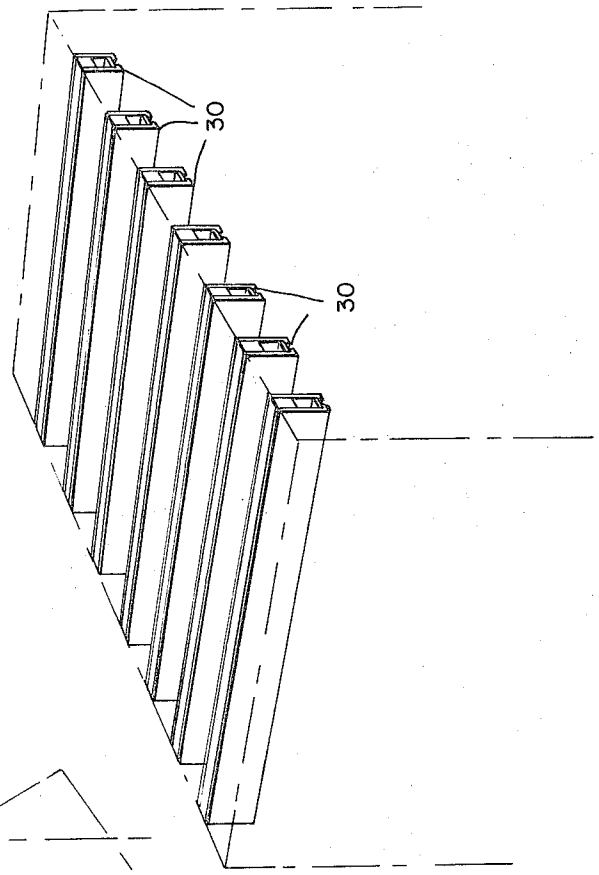


Fig. 9.

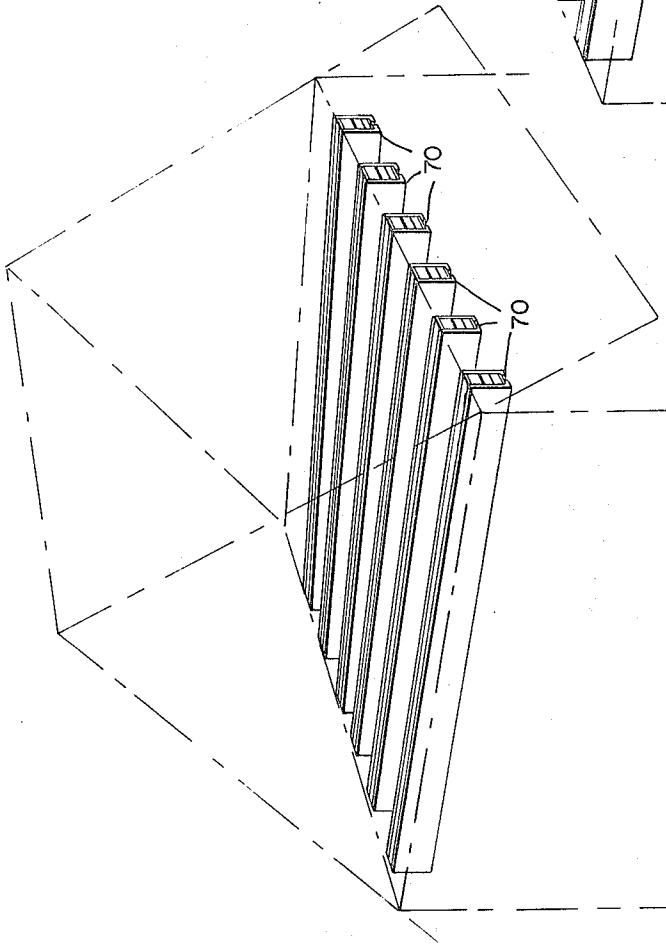


Fig. 8.

SIMULATED BEAM LIGHT FIXTURE

This invention relates primarily to a simulated beam light fixture having all of the outward appearances of a wooden hand hued beam and more specifically to a simulated beam in the form of a light fixture capable of providing decorative and lighting effects in a room.

This invention describes a simulated beam structure capable of being added to a given room in order to provide decorative highlights without altering the physical structure of the room itself.

Open beam ceilings have always been considered aesthetically desirable and today there is an appreciation for the natural beauty resulting from the use of materials such as wood in its original condition. Unfortunately a wooden beam of approximately 4 inches × 8 inches × 14 feet is not only a sizeable structural member from a standpoint of weight and mass but also is a very expensive item when considering building and decorating a room.

According to the present invention, a simulated wooden beam can be constructed from a pair of boards having a length, for example, 14 feet long, 8 inches wide and ½ inch thick. The boards are held in a spaced-apart parallel relationship by means of an internal bracket attached to the inside surfaces of each board. A plurality of light fixtures are attached to the interior bracket and arranged to direct light from between the parallel board members.

In one embodiment the simulated beam is attached and hung directly from the ceiling of the room with the plurality of light fixtures located below the bracket for directing light in a downward direction into the room. The natural grain effect of the wood panels is preferably enhanced by sandblasting the outside surfaces of the wood panel, thereby creating a more rugged natural effect. Any removable lens having a color determined by the user may be placed in the lowermost portion of the simulated beam in order to achieve different and selected decorative effects.

A second embodiment of the simulated beam light fixture comprises a pair of opposed parallel panels held in a spaced-apart relationship by means of a centrally located bracket having a first pair of light fixtures located above the bracket and a second pair of light fixtures located below the bracket.

The simulated beam is adapted to be located in a room substantially below the natural ceiling and preferably in a room having a peaked or other kind of shaped ceiling. The simulated beam is mounted so as to generate a light source in both an upward direction and in a downward direction, thereby providing decorative effects against the natural ceiling as well as the remaining interior portions of the room.

Separate removable transparent colored lenses may be located over a simulated beam and below the simulated beam in order to achieve different colorings for both the interior of the room and the ceiling illumination.

Further objects and advantages of the present invention will be made more apparent by referring now to the accompanying drawings wherein:

FIG. 1 illustrates a first embodiment of the simulated beam light fixture;

FIG. 2 illustrates a partial cross-section of the beam illustrated in FIG. 1;

FIG. 3 illustrates an end view of the beam illustrated in FIG. 1;

FIG. 4 is a perspective view of a second embodiment of the simulated beam light fixture;

FIG. 5 is a partial cross-section of the embodiment illustrated in FIG. 4;

FIG. 6 is a cross-sectional view of FIG. 5 taken along lines 6—6; and

FIG. 7 is a perspective view illustrating a removable insert for enhancing the illusion of the simulated beam.

Referring now to FIGS. 1, 2 and 3, there is shown a perspective view of a first embodiment of the simulated beam light fixture consisting of panels 10 and 12 held in a spaced-apart parallel relationship by means of a bracket 14.

In the preferred embodiment, panels 10 and 12 are board members in which the outside surfaces are sandblasted in order to enhance the grain effect of the individual boards. The dimensions of the individual beam will be a function of the dimensions of the selected boards 10 and 12. For example, a board having a width of 8 inches, a thickness of ½ inch and a length of 14 feet in combination with a bracket 14 that is 2 inches square will produce a finished beam having a length of 14 feet, a width of 8 inches and a thickness of approximately 3 inches. The actual finished dimension will therefore be a function of the thickness of the individual panels used and the size of bracket 14.

In the preferred embodiment bracket 14 consists of a substantially square piece of lumber approximately 2 inches × 2 inches that is fixedly attached to panels 10 and 12 in order to maintain the spaced-apart parallel relationship between the panels. Bracket 14 contains a single channel 16 at one end for accepting electrical wires 18 inter-connecting the plurality of light fixtures that are located between the panels 10 and 12 and attached to the bracket 14.

The individual light fixtures 20 are preferably of the miniature size used for ornamentation and decorative effects. Heat generated by the light fixtures 20 is effectively dispersed and removed by means of a light heat shield 22 having a length approximating that of each of the panels 10 and 12 and having a U shaped cross-section for attachment intermediate the individual light fixtures 20 and the bracket 14. It will be recognized by those skilled in the art that the light heat shield 22 can also be used to enhance the lighting effect from within the beam as well as dispersing any accumulated heat.

The lowermost portion between panels 10 and 12 is restricted by means of shoulder members 24 and 26 each attached to panels 10 and 12 respectively. In one embodiment individual panels 10 and 12 were constructed of a single board having a width which included the width of shoulder member 24 or 26. The shoulder portion defined by the shoulder members 24 and 26 was then achieved by milling away that porton of the individual panels 10 and 12 a sufficient amount to result in a shoulder portion. In the preferred embodiment it was found more economically desirable to use a smaller width panel 10 or 12 and bevel one edge at substantially 45° and to attach a shoulder member 26 having a similar beveled edge to mate with the bevel edge on the individual panel.

In this fashion it is now possible to utilize a thinner board with a resultant savings in cost and then attach

by glue, nails or otherwise, a shoulder member without altering the effect of the simulated beam to the viewer. With the simulated beam in position, the viewer in looking at the lowermost portion will still observe shoulder members **24** and **26** from a point directly below the beam and also observe the side panels **10** and **12** from a point on either side of the beam with the only observable point of contact being aligned at the edge of the bevel between the individual shoulder member and associated panel.

A filter member having a width substantially equal to the width of the bracket **14** and a length substantially equal to the length of the individual panels **10** and **12** is located between the inside surfaces of panels **10** and **12** and is adapted to rest upon and be supported by the shoulder members **24** and **26.** The filter member **28** may be constructed of colored plastic in order to diffuse and color the light emanating from the individual light fixtures **20.** The individual filter member **28** may be removed and replaced with a different color but similar lens at the discretion of the user and depending upon the decorative effect desired.

FIG. 9 illustrates a plurality of the simulated beam light fixtures **30** attached to the ceiling of a given room. The manner of hanging the individual simulated beams **30** is not considered part of this invention but will depend upon the kind of ceiling and construction of the individual room. The installation of the individual simulated beams will provide a highly decorative effect because of the accented wood grain located on each of the side panels of the beam, making the individual beams appear to be naturally hand hued. The light fixtures located within each of the simulated beams allow the decorator to select different colored bulbs in combination with different electrical intensity controllers to vary the intensity of the lights within the beams. In this fashion different colors with different intensities are available to the user by means of suitable switches and controls depending only upon the needs and desires of the user.

Referring now to FIGS. **4, 5** and **6,** there is shown another embodiment of the simulated beam light fixture having the capability of directing light in two directions rather than in only one direction as illustrated by the first embodiment in FIGS. **1, 2** and **3.**

Referring now to FIGS. **4, 5** and **6,** there is shown a simulated beam light fixture consisting of a pair of opposed panels **32** and **34** held and maintained in a parallel relationship by means of a bracket **36.** Bracket **36** is substantially square in cross-section and may have a dimension of either **2, 3** or **4** inches depending upon the overall size of the finished beam assembly.

Bracket **36** has a length approximating that of each of the panels **32** and **34** and is located centrally between opposite ends of the width of each of the panels. A pair of channels **38** and **40** is located at opposite ends of the bracket **36** and extends longitudinally for the complete length of the bracket. A first plurality of light fixtures **42** is mounted to the upper side of bracket **36** with the associated wires **46** located within channel **38.** A second plurality of light fixtures **48** are attached to the underside of bracket **36** with the associated wires **50** located within channel **40.**

The bottommost portion between panels **32** and **34** is restricted by means of shoulder members **52** and **54** constructed in a similar fashion as described in connection with members **24** and **26.** A filter member **56** is located between panels **32** and **34** and is adapted to rest upon the shoulder members **52** and **54.**

The upper portion between panels **32** and **34** each include a cut-out portion defining opposed shoulder porions **58** and **60** for accepting a filter **62.** The lens **62** extends the length of the individual panels **32** and **34** and may be constructed of different colors depending on the decorative effects desired by the user. In this fashion the light emanating from the lowermost plurality of light fixtures **48** will be affected by only filter **56** whereas the light emanating from the upper plurality of light fixtures **42** will be affected only by the filter **62.**

Referring now to FIG. **7** there is shown a wedge portion **64** having a cross-section in the general form of a T. The width of the lower portion **66** is substantially the width between opposing shoulder members **52** and **54** whereas the width of the upper portion **68** represents the width between the interior side panels **32** and **34.**

The wedge **64** is preferably constructed of the same wood material as the side panels **32** and **34** and is used in place of the lens **56** in order to provide a finished simulated beam structure that has all the appearances of a hand hued beam.

Referring now to FIG. **8,** there is shown a typical installation for the second embodiment of the simulated beam light fixture illustrated in connection with FIGS. **4, 5** and **6.** The light emanating from both the upper portion and the lower portion of the individual beams **70** may be separately controlled both as to intensity and selectivity. The light emanating from the upper portion will illuminate and cast highlights and create other decorative effects in an upward direction and against the natural ceiling of the room, be it peaked or salt box shape or other configuration. The light emanating in a downward direction will be used to create decorative effects within the room in a similar fashion as illustrated in connection with FIG. **9.**

The wiring for controlling the intensity and the selection of individual lights in the simulated beam **70** is certainly within the state-of-the-art and can be accomplished at the whim and desire of the user and decorator. Additional mechanical control can be achieved by changing and replacing the individual lenses located in both the upper and lower sections of the simulated beam, thereby giving the user and decorator complete flexibility of using either of the two simulated beam light fixtures.

I claim:

1. A simulated beam light fixture comprising;

a pair of identical parallel spaced-apart decorative panels consisting of standard wood board members having an enhanced wood grain surface,

each board member containing a shoulder member for restricting the width between opposed panels,

each of said panels being substantially straight and having a length and a width in which said length is substantially greater than said width,

a bracket located between and in direct contact along the length of said panels for holding said panels in said spaced-apart relationship, and

a plurality of light fixtures located between said panels and fixedly attached to said bracket for directing light from between said panels.

2. A simulated beam light fixture according to claim 1 in which a first portion of said light fixtures are located above said bracket and a second portion of said light fixtures are located below said bracket.

3. A simulated beam light fixture according to claim 1 which includes a removable insert having a pair of shoulders for mating with said shoulders on said panels, and a width substantially filling the space between opposed panels when in said mating position.

4. A simulated beam light fixture according to claim 3 in which said insert is constructed of the same material as said panels.

5. A simulated beam light fixture according to claim 1 which includes a removable filter resting on said shoulder members for filtering light from said light fixtures.

6. A simulated beam light fixture according to claim 5 in which said filter has a width substantially equal to the distance between opposed panels and a length substantially equal to the length of said panels.

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