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[54] **PUPPET STAGE**
6 Claims, 2 Drawing Figs.

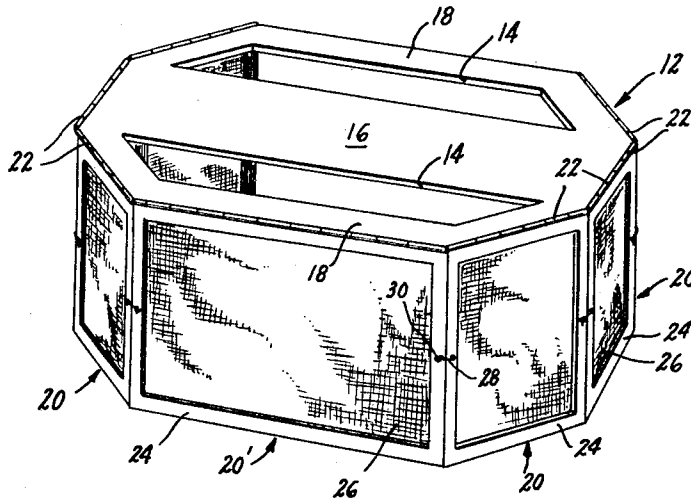
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 9, 1; 46/1(I), 13, 18, 21, 19, 11, 154; 206/45.11,
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 41(D); 312/258, 259, 140.2; 40/126(A)

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ABSTRACT: A puppet stage comprises a platform having a relatively large aperture therethrough and a multiplicity of support members hingedly joined to the platform at spaced locations on the periphery thereof. The support members are movable between a position parallel to the plane of the platform to a position generally perpendicular thereto, and they are securable in the perpendicular position to support the platform above them.



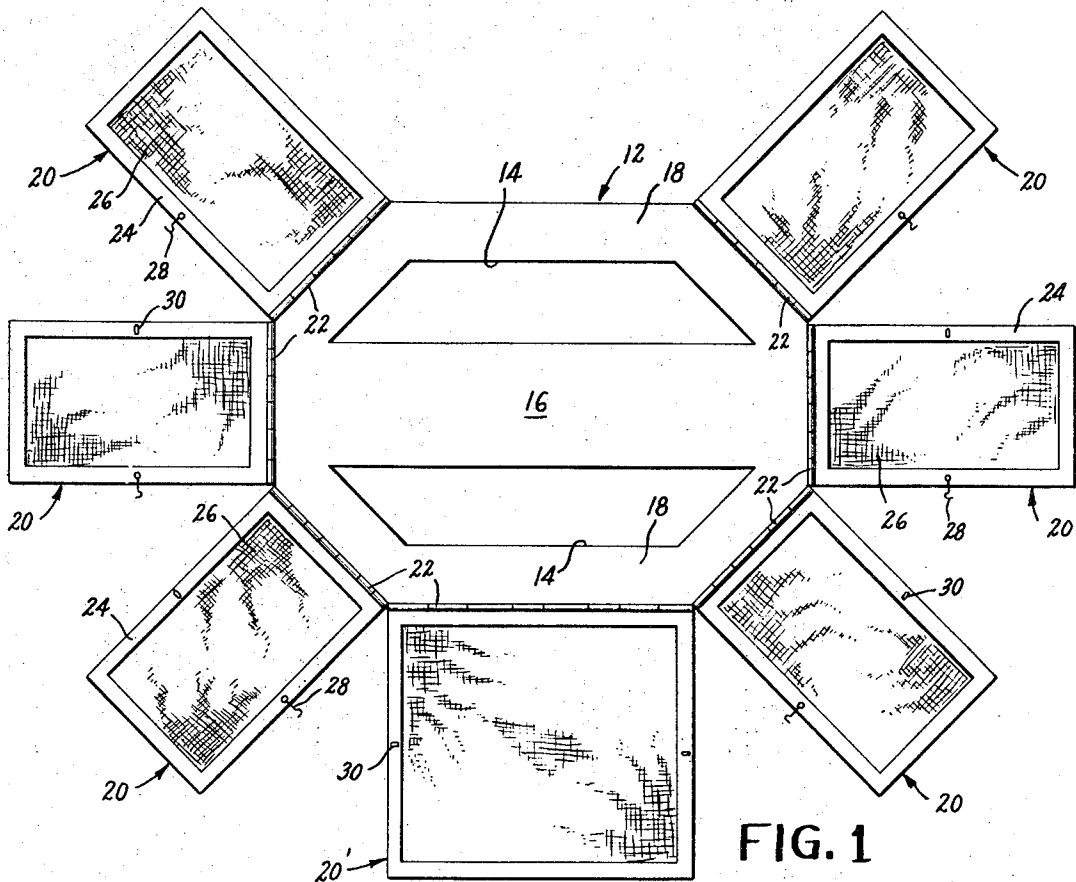


FIG. 1

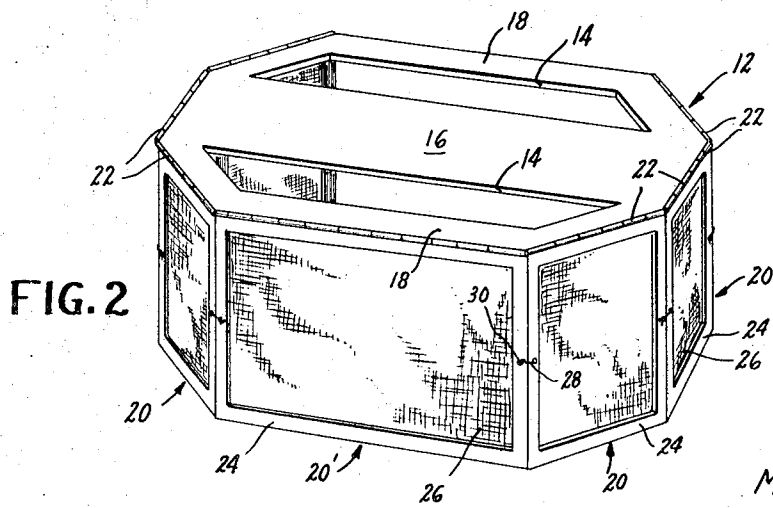


FIG. 2

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PUPPET STAGE

BACKGROUND OF THE INVENTION

Puppet stage structures are known in the art and are available in a variety of designs and configurations. However, in order to provide the levels of strength and stability ordinarily desirable in such structures, the prior art stages are often quite heavy and cumbersome and hence inconvenient to store when not in use. Moreover, they are generally not portable or are movable from place to place only with considerable difficulty and inconvenience.

On the other hand, display-type assemblies are available which are lightweight, very portable and readily stored, but these devices are normally of such light construction that the assembled structures tend to be quite flimsy and lacking in the strength necessary for extended use. In addition, the prior art structures are frequently expensive as a result of both material and production costs, and their design often makes use inconvenient or uncomfortable for the operating personnel.

Accordingly, it is an object of the present invention to provide a puppet stage which is readily portable and which nevertheless provides adequate structural strength to permit facile and long lasting use.

It is also an object to provide such a stage which is lightweight and collapsible to a relatively small size and which is relatively inexpensive to manufacture.

A further object is to provide a stage which allows ready entry and exit to the area under the platform and which permits personnel to operate the puppets with relative comfort and ease.

SUMMARY OF THE INVENTION

It has now been found that the foregoing and related objects can be readily obtained in a puppet stage which comprises a platform having a relatively large aperture therethrough and a plurality of support members hingedly joined to said platform at spaced locations about the periphery thereof. The support members are movable between positions parallel to the plane of said platform to a position generally perpendicular thereto, and they are securable in the perpendicular position to support the platform thereabove when seated upon a generally horizontal surface.

In the preferred embodiments of the invention, the platform has a polygonal peripheral configuration, and at least two support members are panels of rectangular peripheral configuration disposed at adjacent sides of the polygon and having widths approximately equal to the length of the sides of the polygon to which they are hingedly joined. The stage desirably has support members disposed about most of its periphery to provide an enclosure, but two are spaced apart to provide an opening to the area beneath the platform. The support members are preferably hinged to the platform so that they can be folded to a position directly beneath it and they are most desirably dimensioned so that a relatively flat structure is provided when the stage is collapsed.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a plan view of a puppet stage embodying the present invention with the support members in unfolded position and lying in the plane of the platform; and

FIG. 2 is a perspective view of the stage in erected position for use, with the support members secured in positions generally perpendicular to the platform.

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENT

Turning now in detail to the drawing, a puppet stage embodying the invention is comprised of a platform, generally designated by the numeral 12, and a multiplicity of support members, generally designated by numerals 20 and 20', joined thereto about the periphery thereof by hinges 22. The plat-

form 12 has a generally octagonal configuration with two parallel faces of elongated dimension relative to the other faces, which are essentially equal in length. A pair of elongated apertures 14 extend in the platform 12 parallel to the elongated faces, providing a median strip 16 therebetween and a wide border 18 about the periphery of the platform 12.

Support members 20, 20' extend from points about the entire periphery of the platform 12, except for the face at the rear thereof, which is left vacant to provide a passageway to the area under the platform 12 when the stage is set up. Support member 20' is of somewhat greater width than that of support members 20 in order to equal the length of the elongated face of the octagonal platform 12, and variations may occur among the members 20.

As shown, the support members 20, 20' are comprised of a peripheral frame 24 providing the structural strength therefor with an insert 26 of a suitable material received therein, such as the fabric which is illustrated. Hooks 28 and eyes 30 are cooperatively mounted on adjacent support members 20, 20' so that these members can be secured to one another in abutting relationship by interengagement of the hooks and eyes. This relationship is illustrated in FIG. 2, in which the stage is depicted in erected position with the support members 20, 20' supporting the platform 12. The passageway which results from the omission of a support member at the rear elongated face of the octagon is visible in this figure, and it is also apparent that this area is not visible from the front and sides of the structure.

Although the illustrated puppet stage has a generally octagonal configuration, the shape of the platform may vary considerably and yet remain within the scope of the present invention. A polygon having more or less than eight sides may be entirely suitable, but generally platforms having 4 to 10 sides are preferred. The usable area for operation afforded by a three-sided stage tends to be disproportionately small, so normally a minimum of four sides is preferable. On the other hand, structures with more than about 10 sides become unduly complex without providing concomitant benefit so that the number of sides will generally not exceed 10.

The sides of the polygon (if such a configuration is used) need not be of equal dimension and, as a practical matter, a structure having at least one elongated face and a wide cooperating support member, such as that illustrated, may be most desirable. Nevertheless, there is also some value in minimizing the number of members of different dimensions in order to facilitate production and increase the economy of manufacture; both of these factors may influence the designs ultimately used for the stage.

Although a curvilinear configuration may be employed for the platform, generally a polygonal or modified polygonal configuration is preferred. A curvilinear configuration tends to cause difficulty in adapting support members if there is to be no overhang, particularly when it is desired to provide a base which is essentially free of gaps between adjacent support members secured in supporting position, so as to conceal the puppet operators.

Although the design of the support members hingedly joined to the platform may also vary considerably, it is most convenient and beneficial to utilize support members of rectangular configuration. These members should be of such a width that upon securing them in a position perpendicular to the platform adjacent support members abut against one another with a minimum amount of space therebetween. Not only does this afford the optimum in structural support, but it has the additional advantage of blocking the interior of the stage from the view of spectators, enhancing the effectiveness of the production by avoiding distraction of the audience. When the platform is polygonal, the desired relationship of the rectangular support members is obtained when the width thereof corresponds to the length of the side of the polygon to which each is joined. It will be obvious to those skilled in the art that the specific size and shape of the support members will depend primarily upon the configuration of the platform.

The length of the support members is quite significant, since the distance that the platform is supported above the floor or other horizontal support surface will depend upon this dimension. To allow maximum comfort and mobility of the personnel operating the puppets beneath the stage, the length of the support members will normally be such as will permit the operators to stand upright under the platform; this will require that the dimensions of the stage be tailored somewhat to the characteristics of the people who are expected to use it. In this regard, the devices of the invention could be provided in three different sizes designed to accommodate average size men, women and children. Alternatively, a single platform furnished with a number of sets of interchangeable support members would allow variation in a more economical manner. As an additional possibility, the support members may be adjustable in length by use of telescoping portions or the like, making it possible to raise and lower the platform to accommodate operators of any size. It will be appreciated that it is not necessary that the stage be designed for operation with the personnel in a standing position, and the support members may be shortened if the operators are to be seated or in a crouched position during operation of the puppets.

The support members and platform may be constructed in any suitable manner and out of any material which provides the necessary level of structural strength. They need not all have the same type of construction, and in many cases it will be desirable to construct the platform from a material or in a manner which is different from that used for the support members. The type of construction and materials used, however, should be chosen so that the puppet stage is as light as possible in order to achieve the maximum degree of portability and convenience. The various members may comprise peripheral frames with a covering or insert of a relatively light weight, and preferably opaque, material such as paper, cardboard, fabrics, and the like, and provision may be made for the substitution of a variety of decorative inserts if desired. The frames may be constructed of suitably dimensioned wooden boards or lengths of tubular metal, a particularly suitable metal for this use being aluminum.

Since a frame and panel insert type of construction will normally result in thick sections, unitary panels of a relatively rigid and sturdy structural material may be advantageous in providing stages which fold as compactly as possible. Suitable materials for this type of construction include aluminum, fiberboard, synthetic plastics, and similar materials exhibiting desirable strength-to-weight ratios. Synthetic plastics are readily fabricated, such as by molding or extruding, and a unitary member may be provided by molding, cutting or stamping the platform and support members from a single sheet of plastic or in a single molding operation. In such a structure, the orientability of polypropylene or the polyallomers conveniently provides the hinge action necessary at the junctures of the platform and support members. The plastics may also be filled with various materials, if desired, to opacify or strengthen them, or to enhance the economy of the product.

The type of hinge utilized to join the support members with the platform is relatively unimportant so long as it allows the support member to be moved between a position parallel to the plane of the platform to a position generally perpendicular thereto. Although in FIG. 1 of the drawing the assembly is shown with the support members extending outwardly from the periphery of the platform in the plane thereof for purposes of clarity of illustration, it is not essential that the hinges be designed to allow that degree of movement. The hinges must be constructed and mounted so that the support members can extend in overlying relationship with the platform and parallel to the plane thereof, and so that the support members are also capable of movement to a position perpendicular to the platform.

Most desirably, the hinges are capable of pivoting through an angle limited to 90° since the resistance to further pivotal movement will enhance the stability provided by the support members in the perpendicular position. The hinges illustrated

are of the "piano hinge" type, but it is not necessary to have a single hinge extending along the entire length of the joint and a series of smaller hinges may be substituted for each of the large hinges. The hinges may also be of a type which is readily disassembled since it may be desirable to facilitate separation of the support members from the platform and to allow substitution of support members of a different length.

As has been indicated, it is necessary that the support members be securable in a position perpendicular to the plane of the platform. The cooperating hooks and eyes illustrated in the drawing are economical, effective means for this purpose, although other types of devices for locking adjacent support members together may be used. Moreover, the means used may be of a more permanent nature rather than readily disengageable, and screws, bolts or the like may be used as a means of more permanently securing the support members in the perpendicular support position. Adjacent support members need not be secured together in order to maintain the support position, and, for example, right angular or diagonal braces behind the individual support members designed to support them against the platform without undue obstruction thereunder, may be a suitable alternative.

From the standpoint of obstructing view into the interior of the puppet stage, it is best to provide such members about the entire periphery of the stage, but such an arrangement is possible only if one of the support members can be displaced or is otherwise designed to allow access to the area under the platform. More conveniently, a space is provided at the rear of the stage, such as by spacing two support members apart as illustrated, and providing such an opening at the rear of the stage is generally satisfactory since the spectators normally observe only the front and sides thereof.

The number and design of the apertures in the platform are subject to wide variation, and will depend principally upon the shape of each platform. The two apertures provided in the platform of the illustrated stage are well suited to an elongated polygonal configuration since they permit the puppets to be operated with a great deal of freedom of movement and yet provide sufficient surface area for scenery, props and the like. However, there may be provided additional apertures or slots in the median strip or by providing additional holes in the wide peripheral border. The aperture design which is most appropriate in each case will be apparent to those skilled in the art, but an optimum balance should be sought to provide sufficient freedom of movement of the puppets, adequate voice projection, enough surface area for scenery, props, etc. and sufficient structural strength. It should be appreciated that further modification of the platform is also possible and, for example, the platform may itself consist of two or more sections which are hingedly joined together, to further enhance the compactness of the folded structure.

It will be apparent that the stage of the present invention is readily portable and at the same time provides a structure of adequate strength for its intended purpose. Due to its relatively lightweight and its ability to be collapsed to a relatively small size, the stage is particularly convenient to use and inexpensive and simple to manufacture. Access to the area under the platform is readily achieved and personnel operating the puppets can do so in relative comfort. The stage may be augmented with auxiliary structures, such as props, scenery, backdrops, and the like, and it may be provided with suitable hardware, etc., when needed for attaching or supporting this type of equipment.

I claim:

1. A self-supporting collapsible puppet stage comprising: a platform having a relatively large aperture dimensioned and configured to permit free movement of the hand of an operator therethrough to render a major portion of the upper surface of said platform accessible to the operator from a position thereunder; a plurality of relatively rigid support members that are substantially equal in length and are hingedly joined at their upper ends about the periphery and adjacent the edge of said platform; and means disengageably securing said support

members in a position generally perpendicular to said platform, said support members having free lower ends resting upon a generally horizontal surface to support said platform thereabove in a generally horizontal plane and, upon disengagement of said securing means, being freely pivotable about their points of joinder to said platform to positions generally parallel thereto, to render said stage collapsible, said platform and support members being dimensioned and configured to enable the operator to position himself entirely within the area cooperatively defined thereby, with said support members when in said perpendicular position cooperating to tend to conceal the operator from the view of persons located at a fixed lateral position relative to said stage.

2. The stage of claim 1 wherein said platform has a

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polygonal peripheral configuration.

3. The stage of claim 2 wherein the peripheral configuration of said platform is generally octagonal.

4. The stage of claim 2 wherein said support members are of rectangular peripheral configuration.

5. The stage of claim 1 wherein a plurality of said support members are joined to said platform in adjacent positions and wherein at least two of said members are spaced apart to provide an opening to the area beneath said platform when said members are secured in said perpendicular positions.

6. The stage of claim 1 wherein said platform and support members are integrally formed of synthetic plastic material providing an integral hinge therebetween.