United States Patent

Biecker

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[54] **PUPPET THEATER**

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[52] **U.S. Cl.** .....**46/13,** 46/119, 273/85 B

[51] **Int. Cl.** **A63h 33/00**

[58] **Field of Search** .....46/13, 126, 119; 272/9, 12, 272/17, 21, 22, 31, 11; 40/106.3, 106.31, 106.41; 273/85 B

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[57] **ABSTRACT**

A puppet theater having a stage on which dolls and other figures are movable. The dolls are each frictionaly mounted in upstanding relation on a circular base which is slidable on the stage. A continuous cable is reeved around each doll base and pulleys rotatably mounted adjacent the lateral sides of the stage. The pulleys are rotated and used to move the cable and manipulate each attached base and doll on the stage.

19 Claims, 3 Drawing Figures

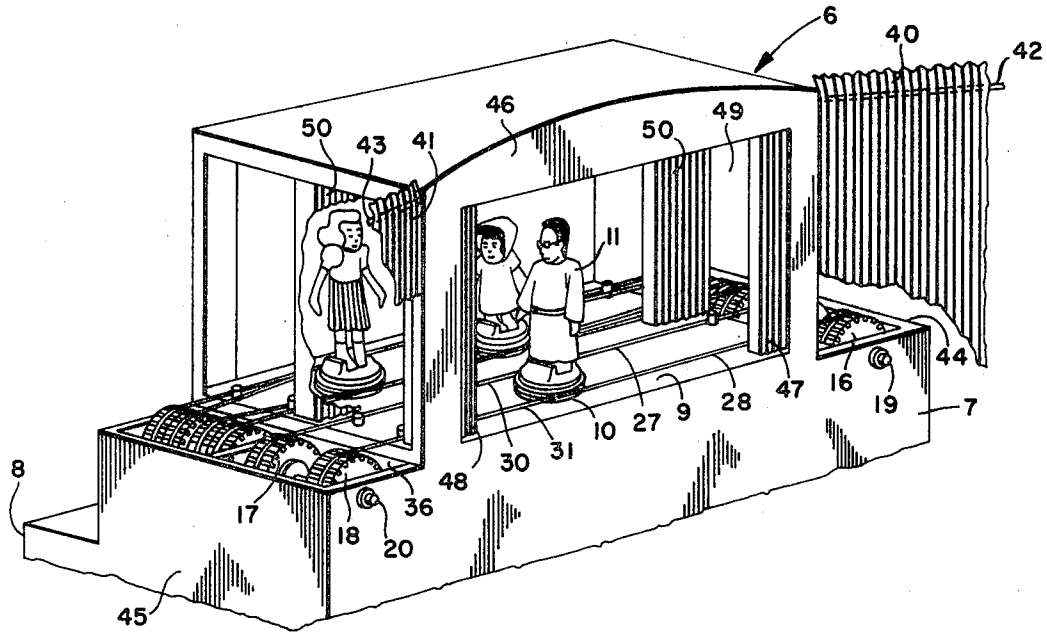
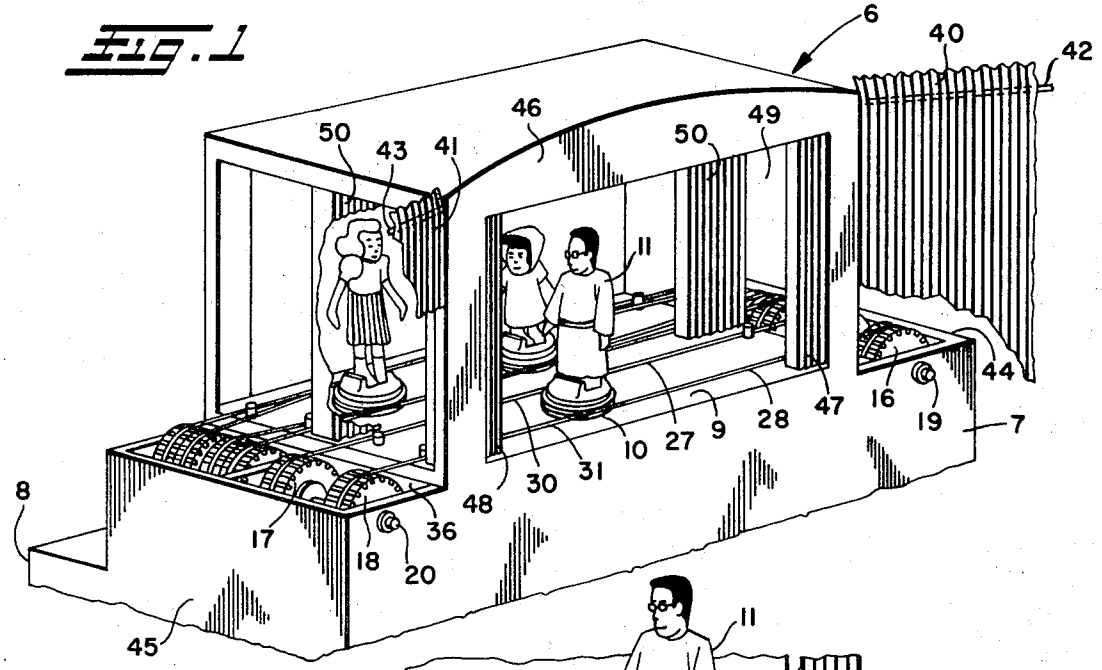


Fig. 1



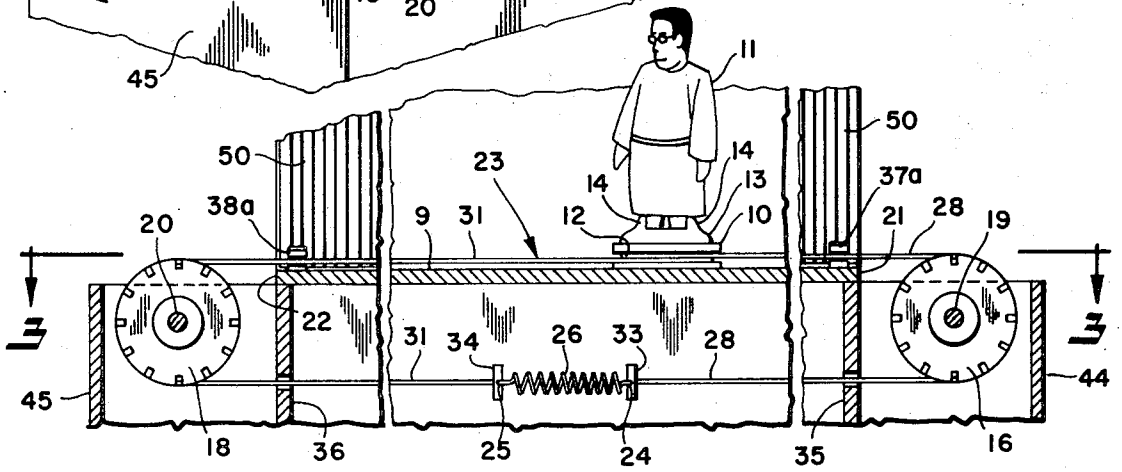


Fig. 2

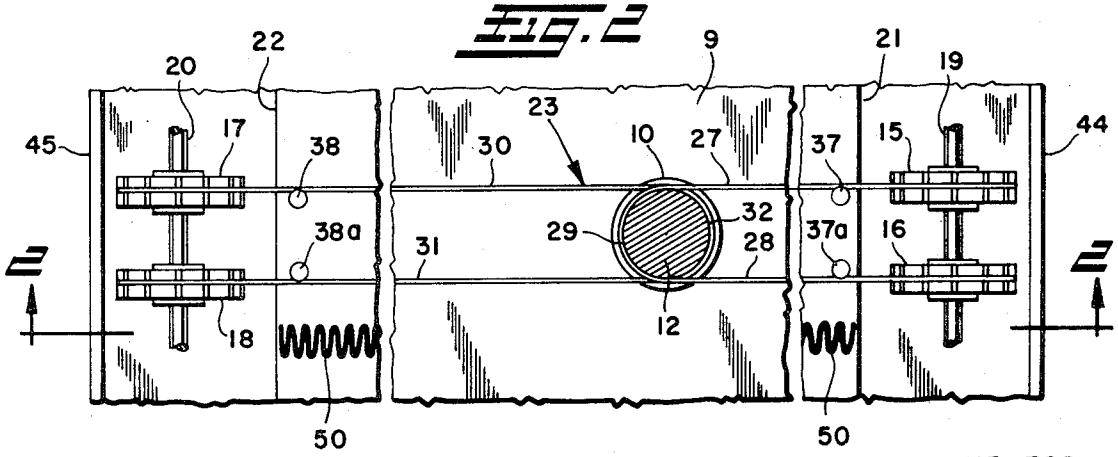


Fig. 3

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PUPPET THEATER

BACKGROUND OF INVENTION

The invention is particularly well suited for use as an educational aid for teaching, especially children in the lower grades of elementary school. Children of this age are extremely active and oftentimes novel and unique methods must be employed to gain and hold their attention. A method which has proven successful, is the art of play-acting, that is, providing a play-like atmosphere in which children can enact their lessons. Puppets are used to advantage in such situations, since they do not involve the students directly and provide all pupils and especially the more introverted children an excellent opportunity to project their feelings toward an audience.

The two types of puppets most commonly used, are dolls or figures which are suspended from wires that are manipulated to operate or move the figures. The second type is the hand puppet, which is worn something like a glove, the fingers being moved to manipulate the puppet. Younger and smaller children find it difficult to operate these types of puppets. The invention is directed to providing a puppet, which is easily manipulated and operated by children.

Briefly stated, the invention is in a puppet theater having a stage for slidably supporting a base which holds a conventionally designed doll in upstanding relation on the stage. A continuous cable is reeved around the base and pulleys or wheels rotatably mounted adjacent the lateral sides of the stage. The pulleys are rotated to move the cables and manipulate the base and doll on the stage.

DESCRIPTION OF THE DRAWING

The following description of the invention will be better understood by having reference to the annexed drawing, wherein:

FIG. 1 is a perspective view of a puppet theater made in accordance with the invention.

FIG. 2 is a view of the puppet theater from the line 2—2 of FIG. 3; and

FIG. 3 is a view of the puppet theater from the line 3—3 of FIG. 2.

DESCRIPTION OF THE INVENTION

Referring more particularly to the drawing, there is shown a puppet theater, generally indicated at **6**. The puppet theater **6** comprises a portable base cabinet **7**, which is mounted on casters. A set of drawers is provided in the rear **8** of the base cabinet **7** for storing extra dolls, pulleys, cables, and other devices used in the operation of the puppet theater **6**. A partially enclosed stage **9** is mounted on the base cabinet **7**. The stage **9** is, preferably, solid and flat, and lies in a horizontal plane.

A base **10** for supporting a doll or other figure, e.g. small plastic doll **11**, is slidable on the stage **9**. The doll base **10** is composed of any suitable material such as plastic, and includes a circular disk portion **12** and a stand **13** for holding the doll **11** in upstanding relation on the doll base **10** and stage **9**. The doll stand **13** has a pair of projecting lugs **14** for frictionally engaging and maintaining the feet of the doll **11** firmly on the doll stand **13**.

Two sets of pulleys **15** and **16**, and **17** and **18** are separ-ately mounted for rotation on a pair of shafts **19** and **20** secured in parallel relation adjacent opposing lateral sides **21** and **22**, for operating each doll **11** of the stage **9**. The pulleys **15-18**, preferably, rotate in parallel vertical planes, which are normal to the horizontal plane of the stage **9**.

A continuous cable **23** is specially reeved around the base **10** and pulleys **15–18**. The cable **23** has a couple of free ends **24** and **25**, which are joined beneath the stage **9** by a coil spring **26**. The coil spring **26** acts to tension the cable **23**, keeping it taut and in operating engaged relation against the doll base **10** and pulleys **15–18**. The continuous cable **23** can be of any suitable material, e.g. thin gauge piano wire.

The continuous cable **23**, when viewed from above the stage **9** (FIG. 3), comprises a first pair of cable segments **27** and **28**, which are reeved around a circular side **29** of the base disc **12**. The cable segments **27** and **28** extend from the doll base **10** in parallel relation towards the adjacent pair of pulleys **15** and **16**. A second pair of cable segments **30** and **31** are similarly wrapped around an opposing circular side **32** of the base disc **12**, and extend in parallel relation from the doll base **10** in an opposing direction towards the other pair of pulleys **17** and **18**. the cable segments **27** and **30** are continuous beneath the stage **9**, whereas the cable segments **28** and **31** are joined below the stage **9** by the coil spring **26**.

A set of washers **33** and **34** are provided adjacent the coil spring **26** for engaging stationary abutments **35** and **36** to keep the doll **11** from moving beyond the lateral edges or sides **21** and **22** of the stage **9**. Depending on the size or depth of the stage **9**, any number of dolls **11** can be mounted and manipulated on the stage **9**, each doll requiring a similar cable and pulley arrangement.

Two pairs of operating pulleys can be mounted within the pulleys **15-18** for manipulating or moving another doll in generally axially aligned relation with the doll **11**. Such an arrangement restricts movement of the dolls, but in some instances it is more realistic if the dolls meet at the center of the stage **9**, especially when a simulated conversation is carried on between the dolls. Two sets of guides **37** and **37*a***, and **38** and **38*a*** are used to maintain the various cable segments in divided, parallel relation as they extent towards, and wrap around the four pairs of pulleys necessary for operating two dolls in aligned relation. The guides keep the cables from slipping off the pulleys as they are rotated.

The doll **11** is moved on the stage **9** by operating or rotating the pulleys **15–18** to manipulate or move the cable segments **27**, **28**, **30** and **31** extending from the doll base **10**. For example, the doll **11** is moved laterally across the stage **9** towards the one side **21** by rotating either the first pair of pulleys **15** and **16**, or the second pair of pulleys **17** and **18**, in unison and in a clockwise direction. The cable segments **27** and **28**, and **30** and **31** are correspondingly moved in unison towards the side **21**, the cable segments **27** and **28** shortening and the cable segments **30** and **31** lengthening similar amounts relative to the side **21**.

The doll **11** is moved towards the opposing lateral side **22** of the stage **9**, by rotating either the first pair of pulleys **15** and **16**, or the second pair of pulleys **17** and

18 in unison and in a counterclockwise direction. The cable segments 27 and 28, and 30 and 31 are correspondingly moved away from the side 21 and towards the opposing side 22. The cable segments 27 and 28 are lengthened and the cable segments 30 and 31 shortened relative to the side 21 and conversely relative to the opposing side 22.

The doll 11 is rotated in place about a vertical axis by rotating either the first pair of pulleys 15 and 16, or the second pair of pulleys 17 and 18 in unison, but in opposite directions depending on which direction of rotation is desired. The cable segments 27 and 28, and 30 and 31 are correspondingly moved in unison and opposing directions, the axially aligned, opposing cable segments 27 and 30, and 28 and 31 being moved in similar directions.

The doll 11 is simultaneously rotated about its vertical axis and moved towards the opposing lateral sides 21 and 22 of the stage 9 by operating any one of the pulleys 15, 16, 17 and 18 singly, depending on what movement and rotation is desired. For example, the doll 11 will rotate counterclockwise about its vertical axis and move towards the lateral side 21 of the stage 9, when either of the opposing, aligned pulleys 16 or 18 is rotated in a clockwise direction. Thus, the cable segment 28 is pulled in and the opposing, aligned cable segment 31 played out relative to the side 21.

The doll 11 can be manipulated through all of the aforementioned movements in either direction across the stage 9 by operating either pair of pulleys 15 and 16, or 17 and 18. A single operator at either side of the stage can operate a doll 11. THus, the dolls can be made to walk, run, turn, etc. on the stage 9. Moreover, the resiliency of the coil spring 26 can be utilized to add motions simulating skipping, hopping, etc. It is not difficult for smaller children to operate or rotate the pulleys, which is the only requirement for manipulating the cables and attached dolls. This method of maneuvering the dolls on the stage is exceedingly simple when compared to the other methods for operating more complex puppets, such as those previously mentioned. Moreover, this method or system employs regular dolls which are not specifically designed as puppets and whose only function is as a puppet.

A pair of draperies 40 and 41, hanging from a set of curtain rods 42 and 43, are provided for hiding or covering the children standing at either side 44 and 45 of the base cabinet 7, and moving the dolls on stage. The curtain rods 42 and 43 are rotatably mounted for folding the draperies 40 and 41 against the upstanding frame 46 enclosing the stage 9, forming a more compact unit suitable for storage when not in use.

A pair of draw curtains, 47 and 48 are used to open and close the opening 49 of the stage 9. A number of smaller side curtains 50 are placed adjacent the lateral sides 21 and 22 of the stage 9 to hide or cover the dolls as they move off stage or to the sides where they are out of view from the audience. The puppet theater 6 can be provided with house lights and a dimmer switch for controlling the house lights. Other stage affects such as a center spot light can be employed for focusing on a doll acting as an announcer.

Thus, there has been described a new and novel type of puppet theater using small conventionally designed plastic dolls which are manipulated on stage by a unique pulley and cable arrangement. Other props such as toy baby carriages, motorcycles, cars, etc. can also be used by attaching the prop to the doll base 10, or to the outstretched hands of the dolls.

I claim:

1. A puppet theater comprising:

a. a stage having at least one lateral side;

b. a base slidable on the stage for supporting a doll or other figure in upstanding relation on the stage;

c. a pair of pulleys, operable by hand, mounted adjacent the lateral side for rotation about axes which are in fixed relation to the stage; and

d. means coupling the base and pair of pulleys together such that the base can be, alternatively, rotated about an axis normal to the plane of the stage, moved across the stage in a direction towards and away from the lateral side, and simultaneously rotated and moved across the stage, all in response to corresponding rotation of the pulleys, said means including a cable comprising, a first pair of cable segments extending from the base and at least partially reeved around the pair of pulleys, and a second pair of cable segments extending from the base in opposed relation to the first pair of cable segments.

2. The theater of claim 1, wherein the coupling means includes:

e. means for changing the direction of the second pair of cable segments adjacent another lateral side which is opposite said at least one lateral side; and

f. means for joining the pairs of cable segments in parallel relation beneath the plane of the stage in reference to a doll or other figure standing above the plane of the stage.

3. The theater of claim 2, which includes:

g. a circular base portion around which each pair of cable segments are at least partially reeved; and

h. means for maintaining the cable segments in compressed relation against the circular base portion which they contact.

4. The theater of claim 3, which includes:

i. a second lateral side of the stage in opposed relation to said at least one lateral side; and

j. a second pair of pulleys mounted for rotation about axes which are in fixed relation adjacent said second lateral side, the axes about which each of said pulleys rotate, being parallel to the plane of the stage and normal to the direction in which the base moves across the stage.

5. The theater of claim 4, wherein the means (h) for maintaining the cable segments in compressed relation against the base portion includes:

k. a coil spring joining adjacent ends of a pair of cable segments beneath the plane of the stage.

6. A puppet theater comprising:

a. a stage having a pair of opposing sides;

b. a set of pulleys mounted adjacent each of the pair of opposing sides of the stage, for rotation about parallel axes;

c. a base slidable on the stage for supporting a doll or other figure in upstanding relation on the stage, said base having a circular portion; and

d. two pairs of cable segments reeved at least partially around opposing circular sides of the circular

base portion and extending from the base in opposing axial, parallel directions, said cable segments reeved at least partially around the pulleys and joined together in parallel relation beneath the stage.

7. The theater of claim 6, which includes:

e. means for tensioning the cable segments and maintaining them against the circular base portion.

8. The theater of claim 7, wherein the cables are piano wire.

9. A puppet theater comprising:

a. a stage having a pair of opposing sides;

b. a base for supporting a doll or other figure in upstanding relation on the stage;

c. a pair of pulleys rotatably mounted adjacent each side of the stage, the pulleys being operable, by hand, and causing movement of the base and mounted for rotation about parallel axes which are normal to the direction of movement of the base across the stage and parallel to the plane of the stage;

d. a cable reeved at least partially around the pulleys and base, the cable including a pair of cable segments extending from the base towards each pair of pulleys and being at least partially reeved around the pulleys; and

e. means for joining the pairs of cable segments beneath the plane of the stage in reference to a doll extending above the plane of the stage, such that the base can be, alternately, moved across the stage towards each of the opposing sides, rotated about an axis normal to the plane of the stage, and simultaneously rotated and moved across the stage in response to corresponding rotation of the pulleys.

10. The theater of claim 9, which includes:

ee. a base having a circular portion around which the cable segments are at least partially reeved; and

f. means for biasing the cable segments against the circular base portion such that the cable segments frictionally engage said portion and cause movement of the base in response to corresponding movement of the cable segments.

11. The theater of claim 10, wherein the biasing means (f) includes a coil spring joining adjacent ends of aligned cable segments beneath the stage.

12. The theater of claim 11, wherein the base includes means for frictionally engaging and holding a doll or other figure in upstanding relation on the base.

13. The theater of claim 12, which includes:

g. a plurality of similar bases slidable on the stage;

h. a pair of pulleys disposed at each side of the stage for manipulating each base; and

i. a cable reeved around each base and associated pulleys for translating movement of the pulleys into corresponding movement of the bases on the stage.

14. A puppet theater comprising:

a. a stage having at least one lateral side;

b. a base for supporting a doll in upstanding relation on the stage, the base having a circular portion;

c. a first pair of cable segments extending from the base towards the lateral side of the stage, the cable segments being joined together and reeved at least partially around the circular portion of the base;

d. a second pair of cable segments extending from the base in opposed relation to the first pair of cable segments, the second pair of cable segments also being joined together and reeved at least partially around the circular portion of the base;

e. means for maintaining the cable segments in compressive, frictional engagement with the circular portion of the base; and

f. means adjacent the lateral side for manipulating the first pair of cable segments to alternately cause movement of the base towards and away from the lateral side of the stage, rotation of the base about an axis normal to the plane of the stage, and simultaneous rotation of the base about said axis and movement of the base relative to the lateral side.

15. The theater of claim 14, wherein the means (f) includes:

g. a first pair of pulleys around which the first pair of cable segments are at least partially reeved; and

h. means for mounting the pulleys for rotation about axes which are 1) normal to the direction in which the base moves towards and away from the lateral side, 2) parallel to the plane of the stage; and 3) in fixed relation adjacent the lateral side of the stage.

16. The theater of claim 15, which includes:

i. a second lateral side of the stage opposite said at least one lateral side; and

j. means adjacent the second lateral side of the stage for reversing the direction of the second pair of cable segments.

17. The theater of claim 16, wherein the cable segments extend from the base in parallel relation and are parallel beneath the plane of the stage in reference to a doll extending above the plane of the stage.

18. The theater of claim 17, which includes a spring joining a pair of adjacent cable ends in aligned relation.

19. The theater of claim 18, wherein the cables are wire.

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