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PARADE SIMULATING TOY

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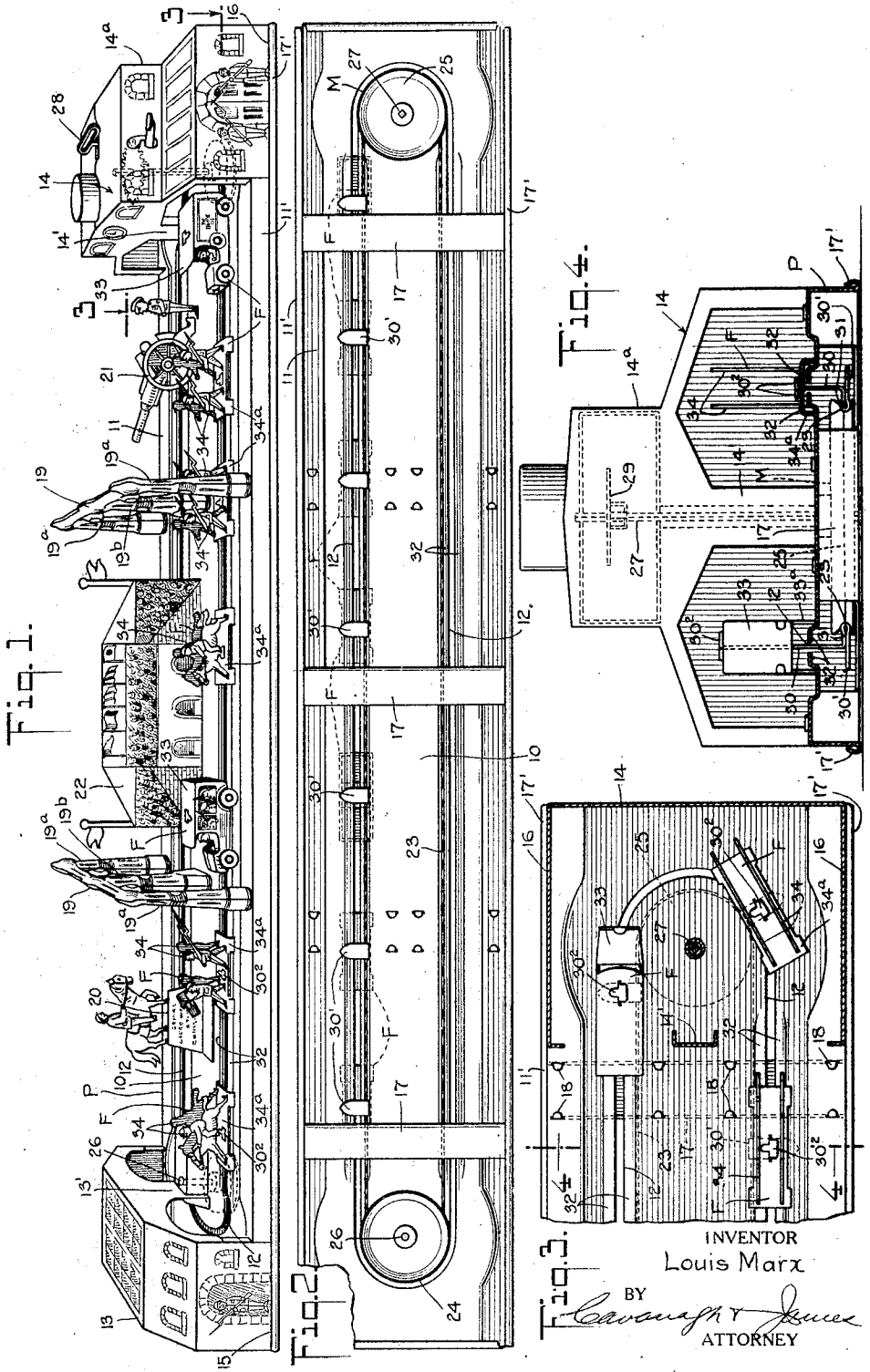


Fig. 1.

Fig. 2.

Fig. 4.

Fig. 3.

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PARADE-SIMULATING TOY.

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This invention relates to a toy, and relates more particularly to a mechanically operated toy designed to represent the movement of objects in mass formation; and has special reference to the provision of a mechanically operated toy constructed to simulate an extended line of movement of troops in a very realistic manner.

The prime object of the invention centers about the provision of a mechanically operated toy constructed and designed to represent the march or movement of an elongated line of objects or figures, the simulated objects or figures being caused to move in an elongated loop orbit in a manner so as to attractively create the impression of the lifelike or natural movement of the objects simulated or represented.

Other prime objects of the invention relate to the provision of a mechanically operated toy of the character referred to embodying a construction in which the operating mechanism for the moving figures is substantially completely concealed from view of the observer; the further provision of a toy constructed to simulate a substantially long line of movement of figures arranged in mass formation in which the toy figures are operated from a single motive source preferably forming part of the toy and also concealed from view; the still further provision of a toy of this character in which the means for effecting the propulsion of the toy figures in their orbit is not only concealed from view but protectively housed or encased by the supporting toy parts; and the still further provision of a toy constructed to simulate a parading or like action which is designed for simple operation and long or durable use.

To the accomplishment of the foregoing and such other objects as will hereinafter appear, my invention consists in the elements and their relation one to the other, as hereinafter more particularly described and sought to be defined in the claims, reference being had to the accompanying drawings which show the preferred embodiment of my invention, and in which:

Fig. 1 is a perspective view of the toy showing a preferred embodiment thereof,

Fig. 2 is a bottom plan view thereof,

Fig. 3 is a fragmentary top plan view thereof shown on a somewhat enlarged scale and with parts broken away, and

Fig. 4 is a view taken in cross section in the plane of the line 4—4, Fig. 3 showing the construction on a somewhat further enlarged scale.

Referring now more in detail to the drawings which show one of the embodiments of my present invention depicting the movement of a long line of marching troops, the invention is shown to comprise an elongated platform generally designated as P having its opposite sides designed or adapted for the movement of the troop formation in opposite directions, a plurality of toy figures combinedly designated as F grouped together to produce a mass formation, the said figures, in the embodiment of the invention shown, representing a line of troops on parade. The figures F are arranged on the platform for movement thereon in an elongated loop-shaped orbit, a motor generally designated as M forming part of the toy, effecting the propulsion of said figures F in said orbit.

The platform P may be made to simulate a parading ground or a city thoroughfare, the said platform comprising an inner section 10 and an outer section 11 surrounding the inner section, both being preferably made of sheet metal shaped to provide a support for the toy parts, the outer section 11 being provided at its opposite sides with a depending or skirt portion 11′ for raisedly supporting the platform and for concealing the operating mechnism which is arranged beneath said platform, as will be described hereinafter. The inner and outer sections 10 and 11 of said platform P are spaced from each other to provide or define a continuous slot 12 in the form of an extended loop running lengthwise of the platform, and the said loop slot provides the loop-shaped path or orbit for the movement of the figures F.

The platform P further includes at least one and preferably two terminal structures or housings 13 and 14 respectively which are arranged to overlie the ends of the loop orbit or slot 12, these terminal structures or housings being designed and arranged so that the figures F may be made to move into and appear to come from the terminal structures, thus breaking or relieving the effect of continuity of the endless line of movement. The terminal housings 13 and 14 are also preferably made of sheet material, having their side walls affixed marginally as at 15 and 16 to the inturned or beaded edges 17′ of the platform skirt portions 11′, said housings further including medial sections 13′ and 14′ respectively, which are fixed to the inner section 10

of the platform to aid in supporting the latter on the outer section 11 of the platform. Other means for supporting the platform section 10 on the outer section 11 may comprise a plurality of braces 17, 17 arranged beneath the platform P and secured to the sections thereof by the mating tongue and slots collectively designated as 18.

For ornamenting the platform to aid in more realistically representing a parade ground or city thoroughfare and for supplementing the supporting of the inner section on the outer section of the platform, there is provided a plurality of archway structures, 19, 19 arranged intermediate the terminal housings 13 and 14, each of said archway structures including outer posts 19^a, 19^a fixed to the outer platform section 11, and an inner post 19^b, 19^b fixed to the inner platform section 10. Preferably also, the platform is provided with a plurality of fixed figures such as an equestrian statue 20, a gun carriage 21 and a representation of a grandstand 22, all of which figures may be made of sheet material suitably shaped and ornamented to harmonize with the scene depicted.

The motor mechanism M for operating the figures F comprises an endless cable 23 arranged beneath the platform P and concealed thereby, said cable being trained over a plurality of sheaves or pulleys 24 and 25, the pulley 24 being journaled in a shaft 26 supported by the platform section 10, and the pulley 25 being fixed to a shaft 27 extending upwardly into the terminal housing 14. The sheaves or pulleys 24 and 25 are also arranged beneath and concealed by the platform P, motion being imparted thereto by means of a motor housed in the top casing section 14^a of the terminal structure 14, which motor is preferably of any conventional spring type (not shown) provided with a winding key 28 and having gearing meshing with a drive gear 29 fixed to the shaft 27.

The figures F, grouped in close formation to depict the extended line of troop movement shown, are separately connected to the endless cable 23 to be propelled by the movement of said cable by means of devices 30, 30 fixed at one end as at 31 to spaced parts of said cable, as clearly shown in Figs. 2 to 4 of the drawings, and fixed at the other end to the figures F, said devices 30 extending upwardly through the endless loop slot 12. The slot 12 and the connecting devices 30 cooperate to guide the movement of the figures F in a constrained and definite orbit, the provision of the endless slot permitting said figures F to be connected to a substantially fully concealed motor mechanism.

In the preferred construction each of the connecting devices 30 is designed so as to connect the figures to the cable in a manner to prevent accidental removal of the figures from the platform and so as to cause the cable to impart a translational movement only to the figures. To accomplish this, each of the connecting devices 30 is provided with a bottom portion 30′ folded to grip the cable 23 and with a vertical upwardly extending portion which loosely extends through a part of the figure and is held thereon by bending parts of the device 30 in opposite directions, as shown at 30^2. By means of this construction, the device 30 may move ascendingly or descendingly relative to the figure so that the figure may always rest upon the platform and be given only a translational movement thereon, this facilitating not only the movement of the figures, but the non-binding movement of the motor elements connected thereto. It will be further seen that with this construction a figure may be readily removed and replaced by another whenever desired, this being accomplished by merely upturning the top tongue portions 30^2 and removing the figure from the connecting device for replacement by another.

Each of the figures F is arranged for movement directly over and in registry with the orbital slot 12, and each of said figures preferably spans the inner and outer sections 10 and 11 of the platform. By means of this arrangement, the figures F are capable of movement in the loop orbit 12 with the least possible derangement; and these figures, as well as the platform P, may further be constructed so that the figures are guided for movement in the orbit against lateral displacement. This I accomplish by raising parts of the platform on opposite sides of the slot to provide a guide means and by suitably constructing the figures so as to be guided against lateral displacement by such means. More specifically, this guide means consists of the raised portions 32, 32 on opposite sides of the slot 12 extending substantially the length of the platform but terminating short of the end sections of the loop slot 12, as most clearly shown in Fig. 3 of the drawings, the elimination of these raised portions at the ends of the loop movement being preferred to permit ease of movement of the figures F in rounding the circular portions of the loop, as clearly shown in Fig. 3 of the drawings. Each of the figures F is provided with means which are guided by the raised platform portions 32, such means differing with the design of the figures. Some of the figures F may comprise simulated vehicles such as 33, 33, and other of the figures may comprise simulated soldiers 34, 34 on foot or horseback. All of these figures are preferably made of sheet material; and in the vehicle figures the simulated wheels 33^a may comprise the means which is guided by the raised platform portions, as shown in Fig. 4 of the drawings, while in the soldier figures the platform section 34^a thereof may comprise the means which is correspondingly guided by the raised platform

sections, as clearly shown, for example, in Figs. 1 and 4 of the drawings.

With this construction it will be seen that upon energization of the motor M by means of the winding element 28, all of the figures F may be set in motion to represent a long line of a parade, this being accomplished by the endless cable neatly concealed by the platform P, the moving figures being connected to such concealed cable in a manner to effect the guiding propulsion of said figures in a fixed orbit. It will be further seen that all of the moving elements are compactly organized, particularly for a toy of comparatively large dimensions, and all of the moving figures are operated from a single energy source also concealed in a terminal structure or housing of the toy. It will be further seen, particularly in connection with Fig. 1 of the drawings, that the invention permits a highly attractive and amusing simulation of a movement of a long line of action such as a body of troops.

While I have shown and described my invention in the preferred form, it will be apparent that many changes and modifications may be made in the structure disclosed without departing from the spirit of the invention, defined in the following claims.

I claim:

1. In a toy of the class described, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of toy figures grouped together in a mass formation and movable on said platform in a continuous path or orbit defined by said loop, said figures being movable over and in registry with said slot and spanning the said inner and outer sections; and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, means extending through said loop slot connecting the figures to said cable, and means for moving said cable.

2. In a toy of the class described, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of separate toy figures grouped together in a long line and in mass formation and movable on said platform in a continuous path or orbit defined by said loop, said figures being movable over and in registry with said slot and spanning the said inner and outer sections; and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, means extending through said loop slot connecting the figures to said cable, and means for moving said cable.

3. In a toy of the class described for simulating a big parade, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of toy figures simulating an extended line of troop movement, said toy figures being grouped together in mass formation and movable on said platform in a continuous path or orbit defined by said loop, said figures being movable over and in registry with said slot and spanning the said inner and outer sections; and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, means extending through said loop slot connecting the figures to said cable, and means for moving said cable.

4. In a toy of the class described for simulating a big parade, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of toy figures simulating an extended line of troop movement, said figures being grouped together in a mass formation and movable on said platform in a continuous path or orbit defined by said loop; and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, means extending through said loop slot connecting the figures to said cable, and means for moving said cable.

5. In a toy of the class described, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of toy figures movable on said platform in a continuous path or orbit defined by said loop, said figures being movable over and in registry with said slot, portions of said platform adjacent said slot embodying a means for guiding the movement of said figures against lateral displacement, and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, means extending through said loop slot connecting the figures to said cable, and means for moving said cable.

6. In a toy of the class described, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of toy figures grouped together in an extended line in mass formation and movable on said platform in a continuous path or orbit defined by said loop, a terminal structure at at least one end of said platform, said figures being movable over and in registry with said slot, and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, means extending through said loop slot connecting the toy figures to said cable, a shaft supported at each end of the platform, a pulley on each shaft arranged beneath the platform, the said cable being trained over said pulleys, and a motor supported in a terminal structure and operatively connected to one of said shafts.

7. In a toy of the class described simulating a big parade, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of toy figures simulating an extended line of troop movement, said toy figures being grouped together in mass formation and movable on said platform in a continuous path or orbit defined by said loop, a terminal structure at at least one end of said platform, said figures being movable over and in registry with said slot and spanning the said inner and outer sections, and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, means extending through said loop slot connecting the toy figures to said cable, a shaft supported at each end of the platform, a pulley on each shaft arranged beneath the platform, the said cable being trained over said pulleys, and a motor supported in a terminal structure and operatively connected to one of said shafts.

8. In a toy of the class described, an elongated platform comprising an inner section and an outer section surrounding the inner section, said sections being spaced apart to provide therebetween a continuous slot in the form of an extended loop running lengthwise of the platform, a plurality of toy figures grouped together in a mass formation and movable on said platform in a continuous path or orbit defined by said loop, said figures being movable over and in registry with said slot and spanning the said inner and outer sections; and mechanism for effecting the propulsion of the toy figures in said loop path or orbit, said mechanism including an endless cable supported below said platform and concealed thereby, devices extending upwardly through said loop slot loosely connecting the figures to said cable, and means for moving said cable, parts of said platform on opposite sides of said slot being raised to provide a guide means for the movement of said figures.

Signed at New York in the county of New York and State of New York this 28th day of February, A. D. 1928.

LOUIS MARX.