

Oct. 28, 1952

F. E. UELTSCHI

2,615,282

MECHANICALLY ACTUATED MARIONETTE CONTROL MECHANISM

Filed Sept. 16, 1949

2 SHEETS—SHEET 1

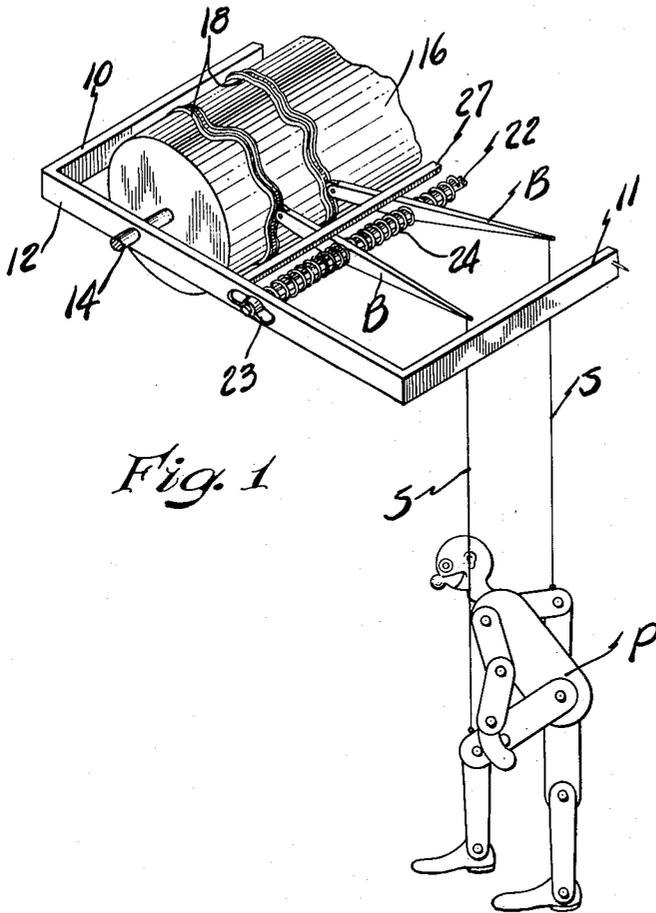


Fig. 1

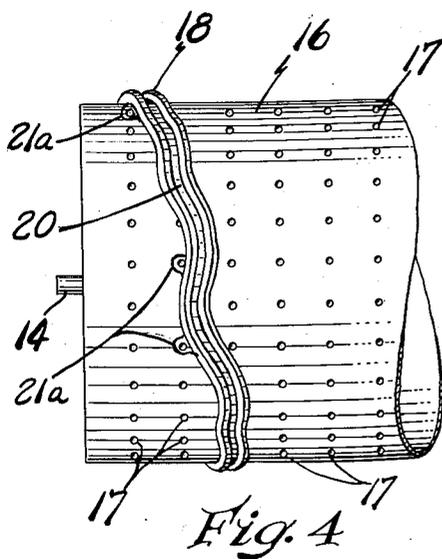


Fig. 4

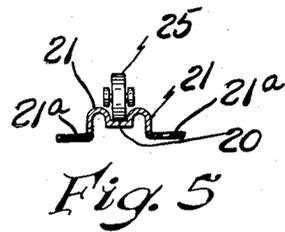


Fig. 5

INVENTOR.
Frank E. Ueltschi
 BY Frank C. Harman
 ATTORNEY

Oct. 28, 1952

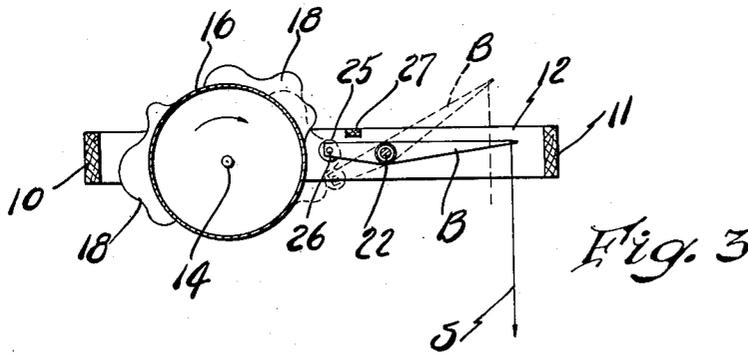
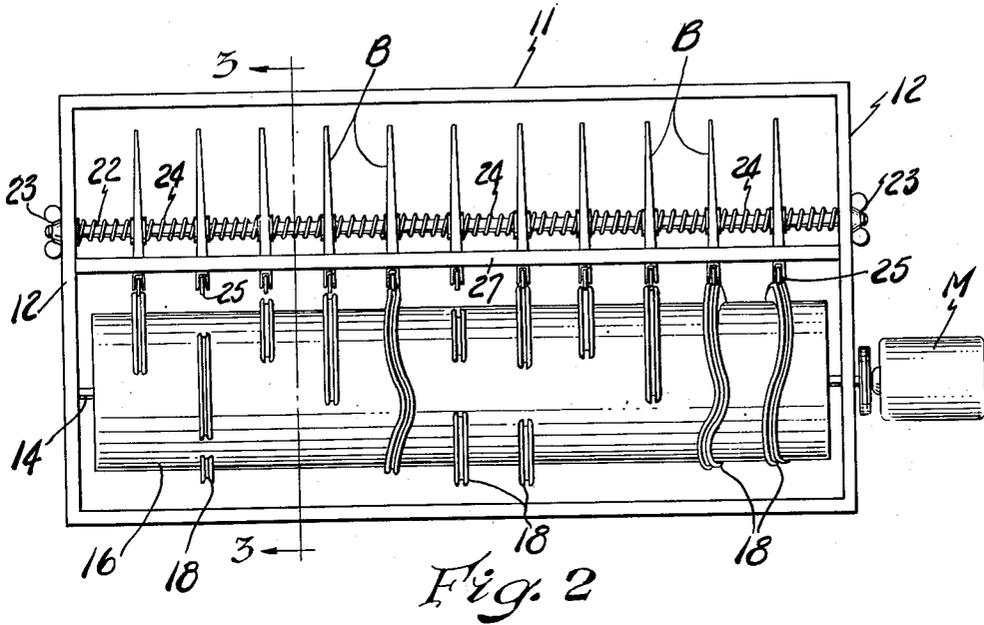
F. E. UELTSCHI

2,615,282

MECHANICALLY ACTUATED MARIONETTE CONTROL MECHANISM

Filed Sept. 16, 1949

2 SHEETS—SHEET 2



INVENTOR.
Frank E. Ueltschi.
BY
Frank C. Harman.
ATTORNEY

UNITED STATES PATENT OFFICE

2,615,282

MECHANICALLY ACTUATED MARIONETTE CONTROL MECHANISM

Frank E. Ueltschi, Saginaw, Mich.

Application September 16, 1949, Serial No. 116,105

3 Claims. (Cl. 46-126)

1

One of the prime objects of my invention is to provide a mechanically actuated marionette-control mechanism for employment in window advertising and displays, and by means of which marionettes may be actuated and controlled from a continuously operated power source.

A further object of my invention is to provide a device of the type described, which is flexible to the extent that the predetermined actions of the marionette are easily varied and adjusted, and provide a design in which the marionettes can be easily interchanged and new puppets substituted, providing a wide degree of versatility and a device which is readily adapted to almost any form of display advertising.

A still further object of my invention is to provide a device in which the actions of the puppets or marionettes are natural and life-like, and are varied so as not to be repetitive and monotonous.

A further object still is to provide a mechanically actuated marionette control of the type described, which while eliminating the formerly necessary complicated and expensive lever mechanisms of previous devices, is adapted to be driven by a single power means.

Still a further object is to design a device of simple design which can be easily and quickly adjusted and which can be economically manufactured and assembled.

Further objects and advantages of my invention will become apparent as the specification proceeds, it being understood that the invention is not limited to the specific embodiment shown, but that various changes in the form, size, shape and arrangement of parts may be made without departing from the spirit of the invention, or the scope of the appended claims.

In the drawings:

Fig. 1 is a fragmentary, perspective view of the control mechanism with the puppet connected thereto.

Fig. 2 is a top, plan view of the control mechanism with the puppets omitted.

Fig. 3 is a transverse-sectional view taken on the line 3-3 of Fig. 2, the broken lines illustrating the rocking movement of the action bars.

Fig. 4 is an enlarged, fragmentary view of the action cylinder.

Fig. 5 is an enlarged, transverse-sectional view through a section of the adjustable track.

Referring now more particularly to the accompanying drawings in which I have shown one embodiment of my invention, the letter F indicates a preferably fabricated frame structure including side members 10 and 11 connected to-

2

gether by means of end frame members 12 having built-in-bearing means (not shown) located in the frame and in which is journaled a shaft 14.

The shaft 14 is drivingly connected to a variable speed electric motor M and a suitable speed reducing means (not shown) is interposed between said shaft and motor to provide the desired R. P. M.

An action cylinder 16 is mounted on the shaft 14 and a plurality of equidistant holes 17 are provided in said cylinder (see Fig. 4 of the drawings), for affixing the action strips or tracks 18 to the face thereof, flat headed screws (not shown) being used for this purpose.

These action strips or tracks 18 are formed in sections and are formed of relatively soft sheet metal or material that can be readily bent and shaped, the cross-sectional shape being substantially as shown in Fig. 5 of the drawings, the strips being mounted and secured in end-to-end relation to form a track completely or partially encircling said cylinder, the center section being grooved as at 20 and the wings 21 being rolled as shown with spaced-apart laterally projecting flanges 21^a formed on the lower ends of the wings.

A longitudinally disposed, non-rotatable shaft 22 is mounted in the frame F adjacent the cylinder 16 and parallel thereto, and a wing-nut retaining means 23 is provided on the ends thereof for securing it in position.

Action bars B are loosely and rockably mounted on the shaft 22 at a point intermediate their length, and springs 24 are interposed between said bars for holding them in spaced relation, a roller 25 being journaled on a pin 26 provided in the one end of the action bar for travel in said groove.

Strings S are attached to the outer free ends of the action bars B, and puppets P are secured to the lower ends of the strings. A bar stop 27 is mounted transversely above the inner ends of the action bars, and is secured to the end frame members 12 for limiting upward swing of the inner ends of said bars. I wish to direct particular attention to the fact that the action bars are loosely mounted on the shaft 22 and have limited swiveling movement thereon so that the rollers 25 freely roll in the groove 20 and follow the track regardless of the bends, rises etc.

In practice, the device operates in the following manner. When the track has been arranged and secured on the cylinder so that the desired movement or action is produced, the motor M is energized, the rollers 25 riding in the grooves 20, the shape, alignment and spacing of the track from

3

the face of the cylinder imparting any desired horizontal, vertical or transverse movement or combination thereof to the action bars B, which in turn determine the movements of the marionettes or puppets P.

The bar stop 27 limits the upward vertical movement of the inner end of the action bars B, thus the weighted marionettes or puppets are prevented from falling below a predetermined level.

When it is desired to provide different movement or action, the tracks 18 can be removed and bent to the necessary shape, or new sections can be bolted in position.

From the foregoing description, it will be obvious that I have perfected a very simple, attractive display device for the purpose described, which can be adjusted to provide any desired motion or action.

What I claim is:

1. A mechanically driven action control for marionettes comprising a frame, a driven shaft journaled on said frame, a cylinder mounted on said driven shaft, undulating track sections mounted on said cylinder, a stationary shaft mounted in said frame substantially parallel to said driven shaft, action bars pivotally mounted interjacent their ends to swivel on said stationary shaft and engageable at one end with said track sections, resilient means interposed between said

4

action bars for yieldably holding the bars in horizontal spaced relation, a marionette suspended from the free ends of the action bars, and means for limiting the upward swing of the track-engaging ends of said bars.

2. The combination defined in claim 1 in which said means for limiting the upward swing of the track-engaging ends of said action bars comprises a positive bar stop positioned in said frame over the track-engaging ends of said action bars.

3. The combination set forth in claim 1 in which said tracks are readily bendable and said cylinder is perforated, flanges provided on said tracks and means positioned in said flanges for adjustably mounting said tracks in said perforations.

FRANK E. UELTSCHI.

REFERENCES CITED

20 The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
25 1,332,545	De Filippis -----	Mar. 2, 1920
1,732,197	Tadakuma -----	Oct. 15, 1929
1,856,832	Halvorson -----	May 3, 1932
2,368,805	Clark -----	Feb. 6, 1945
2,457,281	Shannon -----	Dec. 28, 1948
30 2,466,214	Deaton -----	Apr. 5, 1949