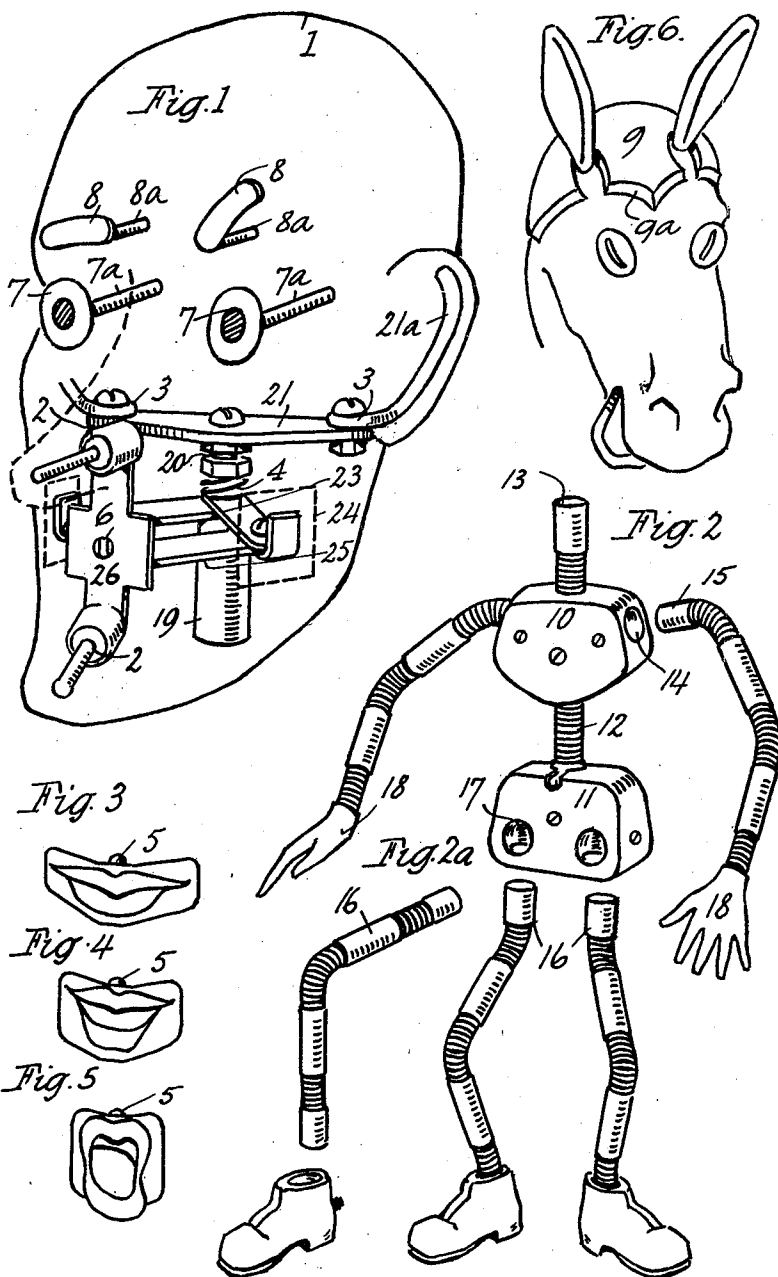


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PRODUCTION OF ANIMATED CINEMATOGRAPHIC CARTOONS
AND PUPPET FOR USE THEREFOR
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PRODUCTION OF ANIMATED CINEMATOGRAPHIC CARTOONS AND PUPPET FOR USE THEREFOR

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4 Claims. (Cl. 46—135)

This invention relates to animated cinematographic cartoons and more particularly to the manufacture of puppets of human figures, animals of natural or grotesque design and so on for use in the production of such cartoons, its object being to provide figures of this nature which will permit of ease and speed in assembly and the replacement or interchange of parts.

In its essential characteristics, the invention consists in constructing such puppets or other figures on a unit system of separate parts which can be assembled together as required. Thus, for instance, the head, trunk, arms, hands, legs and feet would each form a separate unit.

The invention is shown solely by way of simple example in the accompanying drawing in which:

Figure 1 shows the mechanism for a head; Fig. 2 shows the assembly of the trunk and one arm attached thereto, the other arm and the legs being shown ready for connection to the trunk; Fig. 2a shows another view of the leg components; Figs. 3, 4 and 5 show various positions for the mouth; Fig. 6 shows a detail applied to an animal's head.

In the drawing:

The head 1 is advantageously a cast but may be otherwise formed of a plastic material housing a simple mechanical framework consisting essentially of spring-pressed ball and socket joints 2 or again hinge-jointed members 3 or the equivalent thereof under the influence of spring tension or weights 4 which serve to hold the flexible or plastic material of the head 1 in any desired position which it may have been manipulated into by pressure of the fingers from without to give the desired facial contortion. For instance this framework may keep the angle of the nose or chin in any desired position until further manipulated by the fingers, as will be seen in Fig. 1.

The contortions of the mouth are not necessarily obtained by internal support but are preferably obtained by a number of thin metal shapes such as shown at Figs. 3, 4 and 5, each formed to give full modelling of this member in various positions and attached to the face of the puppet or figure by a simple stud-type or press-button fastening 5 behind each of the mouth plates, a hole such as 6 being formed on the face of the puppet to receive the stud in the position normally occupied by the mouth and which might be a spring clip. The use of such mouth plates in succession, gives an effect of animation to this member to a much greater extent than is possible by internally arranged control means in the case of a puppet representing a human being

and the result is more amusing than the existing manner of interchanging the lower head sections to obtain this animation. By the use of thin plates as herein described preferably in conjunction with a plastic type of head with internal control as described, extensive alterations in the form of the mouth can easily be made while the plastic material permits the form of the lower face to suitably follow any configuration.

The eyeballs 7 are mounted hingedly or as shown by means of ball and socket joints to the ends of rods 7a which in turn slide into holes behind the eye sockets whereby the eyeballs can be pulled forward from the head to a varying extent.

The eyebrows 8 and moustache, if used, can form an integral part of the head but preferably are attached to pin-like projections 8a serving as a pivot, to facilitate movement of these parts.

In the case of some caricatured animals it may be desirable to effect alterations to the position of the eyebrows by providing a close fitting cap 9 (Fig. 6) with the outline 9a of the brows on its lower front edge which can be moved freely over the scalp.

The trunk of these puppets or figures (Fig. 2) consists of two blocks 10, 11 of material such as aluminium or other suitable lightweight material connected by a metal or other vertebra 12, preferably of soft metal, which passes through the upper block 10 to form a neck 13 at the top. Holes 14 in the sides of the upper block 10 permit of the insertion of rods or the like 15 to form arms while the lower or pelvic block 11, is drilled to permit of leg rods 16 or members entering from below when puppet is required for standing, walking, running and so on, and at the front in the holes 17 when puppet is to assume a seated or like attitude. This provides simplicity of construction and stability when the figure is in a standing or like position. The actual action of a puppet "becoming seated" can, if required, be obtained by judicious cutting of the film.

The arms 15 and legs 16 are constructed of light weight tubing or rodding of metal or other suitable more or less rigid material with soft metal connections of rod or tube or obviously vice versa by using a metal sleeve or sleeves over flexible or soft tubing or rodding, except at the joints as for example, at shoulders, elbows, wrists, below the pelvic block, at knees, and even at the ankles, if desired as shown in Figs. 2 and 2a, to get strength and flexibility where required. These members are constructed as units and are attached to, or for instance fitted into drilled

sockets in the trunk blocks, hands and feet, by a simple plug type fitting such as a thimble or ferrule fitted over the end of the flexible rods or tubes so that they can be easily replaced between sequences or separate camera shots, if wear of the joints has made this necessary. This is a definite practical advantage over a puppet having a framework more or less permanently incorporated in its construction.

The hands 18 are modelled to suit the character of the puppet and are advantageously cast in lead or other suitable pliable material being finally coated with a film of composition to give same a flesh-like appearance similar to the head, the lead cast giving adequate mobility.

The feet are likewise modelled to suit the character and cast in lead or other suitable material appropriately finished.

A series of arms or legs can naturally be made in different forms for attachment to save altering a single pair to obtain an effect of animation.

The internal mechanism in the head may, in a typical and simple form of construction consist of a tubular member 19 adapted to engage over the neck 13 having at its other end a stem or the like 20 carrying a transverse arm 21 to which is pivoted at 3 extensions 21a to maintain in position the ear portions of the head 1.

A compression spring 4 can be mounted on the stem 20 and the stem 20 may further have an arm or arms, so shaped, or fitted with a plate 24 to maintain the cheek portion of the head 1 in position.

In addition the stem 20 may have a forwardly projecting arm (or arms) 25 provided with a front member 26 in which is provided the hole 6 for the reception of the stud 5 of the mouthpiece. This member 25 may have spring pressed sockets 2 for holding the nose and chin portion of the head 1.

I claim:

1. A puppet figure for use in the production of cinematographic cartoons comprising a thorax block member and a pelvic block member, reinforced flexible and detachable members engaged in said block members and having stiff metal

sheaths to serve as bearings on which such flexible members can oscillate to assume different positions for varying the contour of the puppet figure, one flexible member engaged in said thorax block member to receive a tubular socket for the head of the puppet and means carried by said tubular socket for supporting the ears, mouth and chin.

2. A puppet figure for use in the production of cinematographic cartoons comprising a thorax block member and a pelvic block member, reinforced flexible and detachable members engaging in said block members and having stiff metal sheaths to serve as bearings on which such flexible members can oscillate to assume different positions for varying the contour of the puppet figure, one flexible member engaged in the thorax block, a tubular socket for the head of the puppet mounted on the last mentioned flexible member, a stem carried by said tubular member, a compression spring and a transverse member mounted on said stem, and a pivotal extension at each end of the transverse member for the ears of the puppet.

3. In a puppet figure as claimed in claim 2, a short vertical reinforced flexible and detachable member secured to the thorax block to receive a tubular socket for the puppet head, lateral arms on said tubular socket reaching respectively to the cheeks and chin, a compression spring and a transverse member mounted on the stem, and a pivotal extension at each end of the transverse member for the ears of the puppet.

4. In a puppet figure as claimed in claim 2, a short vertical reinforced flexible and detachable member secured to the thorax block to receive a tubular socket for the puppet head, lateral arms on said tubular socket reaching respectively to the cheeks and chin, spring pressed ball and socket joints on said lateral arms to receive a detachable mouth, a compression spring and a transverse member mounted on said stem, and a pivotal extension at each end of the transverse member for the ears of the puppet.

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