

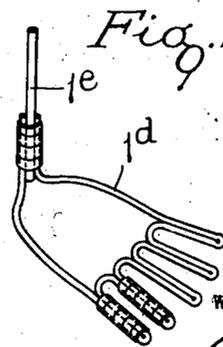
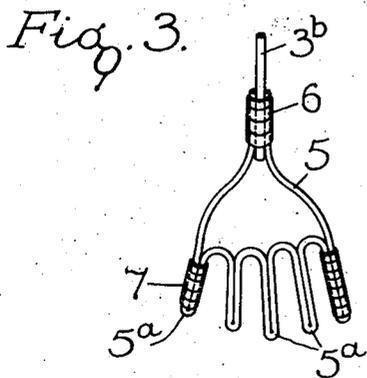
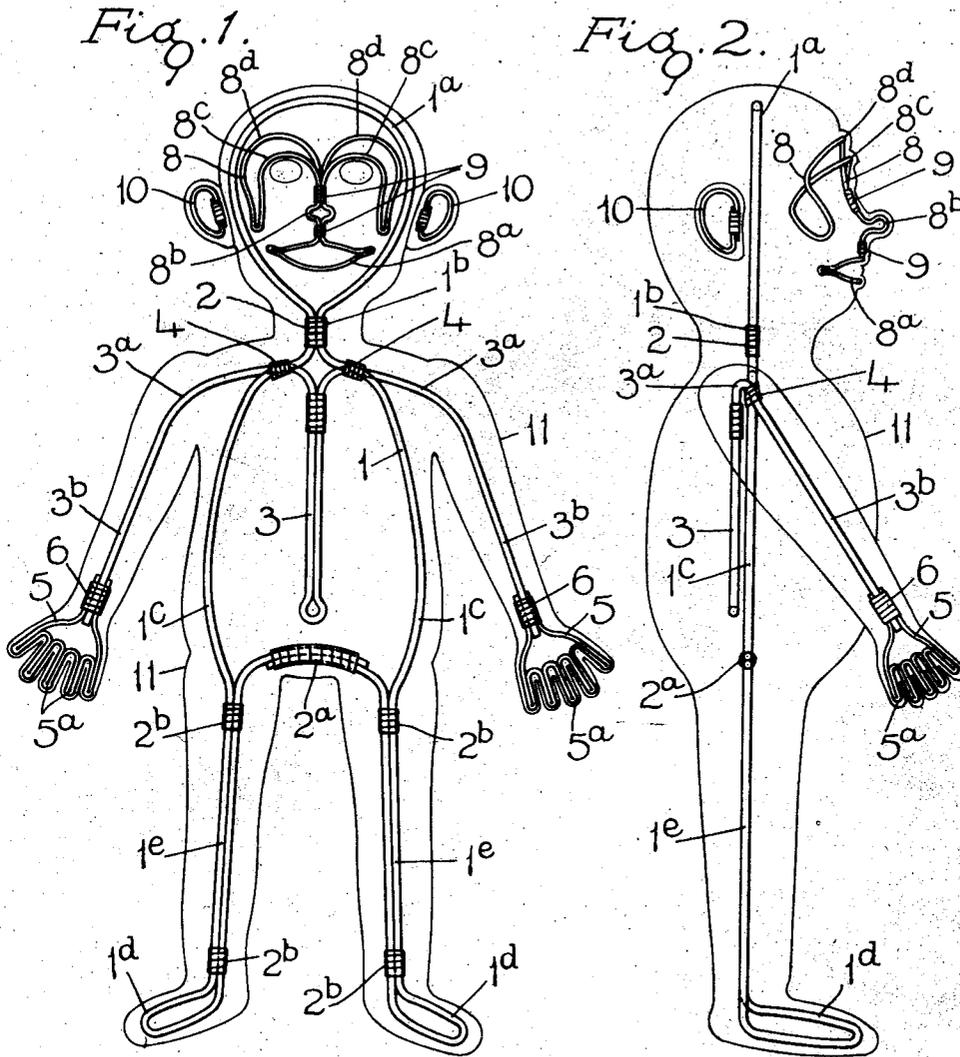
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DEFORMABLE FIGURE EMPLOYABLE FOR PRODUCTION OF ANIMATED CARTOON FILMS

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DEFORMABLE FIGURE EMPLOYABLE FOR PRODUCTION OF ANIMATED CARTOON FILMS

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This invention relates to the production of cinematograph films of the animated cartoon kind. In the production of such films it is usual to prepare the subject to be photographed from a great number of drawings, each a little different to the other, so that by making a film of each of the drawings successively, an animated cartoon is produced. This entails a tremendous amount of work and time, as a very large number of separate drawings have to be made.

The object of this invention is to produce an animated cartoon film without the necessity of preparing a number of drawings, and whereby a better effect is obtained.

According to this invention, the process of producing the animated cartoon film consists in employing a subject such as a doll, puppet, toy animal or the like constructed so that parts can be moved to various positions, the parts being moved between each exposure or batch of exposures, so that in the finished film, the effect of animation is obtained.

The doll, puppet, toy animal or the like is preferably constructed from lead or other soft metal wire or strip of suitable thickness as the foundation of the device, the wire or strip being encased in a suitable padding or wrapping, and the whole enclosed in a covering shaped to the form of the device to be constructed.

The foundation of lead or other soft metal wire or strip may be made up to suit the form of the device intended to be constructed, and such wire may be employed for use with the ears, nose and mouth of the device.

The invention will be clearly understood from the following description aided by the accompanying drawing which illustrates one example of a doll or puppet for use in producing an animated cartoon film, and in which, Figure 1 is a front view, and Figure 2 a side view showing an outline of a doll or puppet with wire foundations. Figure 3 is a detail view of wire foundation of the hand as shown at Figures 1 and 2, and Figure 4 is a detail view showing a wire foundation of a foot for an animal or the like.

According to the example shown on the drawing, the puppet is built up on a foundation of lengths of lead wire or strip bent or curved to the required shapes for the puppet to be produced.

One length 1 is employed for the head, body, legs and feet, such length is curved at about midway of its length to form the foundation 1^a for the head, the lengths being fastened together by wrapping a piece of tape 2 around same to form the neck 1^b. The two portions of the length are

then curved outwards from each other and then towards each other to form the body portion 1^c, the two portions then being straight for a distance and each bent at an angle to form a loop 1^d for the feet, and bent back to lie against the straight portions forming the foundation 1^e for the legs, the ends of the length being finally curved so as to overlap each other, at the lower part of the body, and are secured together by a wrapping of tape 2^a around same. The portions 1^e of the length forming the legs 1^e are also secured together by wrappings of tape 2^b.

A second length of lead wire or strip is employed bent on itself at about mid-distance to form the back or spine 3, the ends being curved outwards and downwards to form the shoulders 3^a and arms 3^b, the shoulder portion 3^a being secured to the top of the body portion 1^c of the other length by wrappings of tape 4.

The foundation of each hand consists of a length of lead wire or strip 5 bent upon itself to form the foundation for the fingers and thumb 5^a, the two ends of the length being secured to the end of the arm portion 3^b by positioning the ends of the length 5 next to the end of the arm portion 3^b and securing by a wrapping of tape 6. Preferably the doubled over portions forming the fingers and thumb 5^a are also each wrapped with a piece of tape 7.

In the case of say a monkey, instead of the loop 1^d, the feet could be formed separately similar to the hands and connected to the legs 1^e by tape.

A third length of lead wire or strip 8 is employed for the features of the puppet, such length being bent or curved to form the mouth 8^a, nose 8^b, eye-lids 8^c and eye-brows 8^d, the constricted or contacting parts being secured by wrappings of tape 9.

Other lengths of lead wire or strip 10 suitably shaped may be employed for the ears.

Each wire or strip is encased in a suitable padding or wrapping (not shown), and the whole enclosed in a covering 11 of suitable flexible material, such as a textile material shaped and ornamented to form the puppet to be constructed.

By the employment of lead wire or strip as the foundation of the device, the body, legs, arms, features, and other parts of the device may be bent to any desired shape or contour, the alterations being effected by pressure of the fingers of a person without fear of the wire breaking. The wrapping of tape on the fingers enabling the fingers to be curved without a sharp bend which might damage the wire or strip, also employing

tape for connecting the parts together enables the parts to be continually moved without coming apart as would be the case if the wire or strip are twisted together, and overcomes any movement tending to untwist the wire or strip.

Tape which may be ordinary electrician's insulating tape may be wrapped around all the lengths of the foundation instead of only parts.

The features of the puppet may be changed by bending the foundation for the features, for instance, one or both eye-lash portions 8^c can be bent downwards stretching the fabric 10 under the eyebrow portions 8^d so as to give the appearance of closed or partly closed eyelids, or the eyebrow portions 8^d can be more sharply curved upwards, likewise the other parts of the foundation can be bent or curved to vary the expression as desired.

The covering 11 is preferably stitched to the foundation at the feature portions, so that the covering is caused to move with the foundation when adjusted to various expressions.

For other dolls or puppets, the foundation would be suitably shaped to conform to the shape of the doll or puppet required, and with animals a further length of lead wire or strip would be incorporated for the tail.

The background for the film may be drawn on sheets of paper, and non-movable articles such as houses, trees, etc. may be either drawn or models can be employed, the device is altered by bending a part for each successive exposure, for instance, if the device illustrated is to be shown walking, the legs 1^e would be moved a short distance for each exposure, so that a length of film

would give the effect of the puppet walking, and by slightly bending other parts of the foundation between each exposure, various effects can be obtained.

By this invention, an animated cartoon film is produced in a simple, quick and comparatively cheap manner as compared with animated cartoon films produced from a very large number of separate drawings.

What I do claim as my invention and desire to secure by Letters Patent is:—

1. A doll, puppet, toy animal or the like for use in producing an animated cartoon film, comprising a skeleton foundation of soft wire or the like for the body and limbs, other soft wire or the like for the foundation of facial features of the head, a suitable padding for the skeleton foundation and a covering shaped to the desired form of the device to be constructed and enclosing the whole, whereby in addition to adjustment of the body and limbs, changes in facial expression can be manually obtained.

2. In a device of the character described, a flexible body, a head on said body, a flexible foundation forming manually adjustable facial features for said head, said foundation comprising soft wire or the like bent to roughly simulate said facial features, and a covering for said foundation.

3. In the device set forth in claim 2, said foundation comprising a single strip of wire bent upon itself a plurality of times to produce mouth, nose, and eyelids.

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