

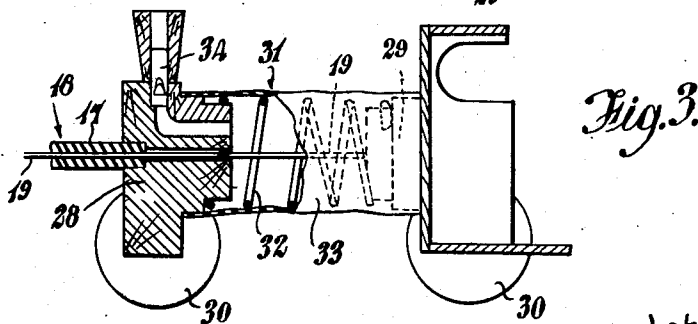
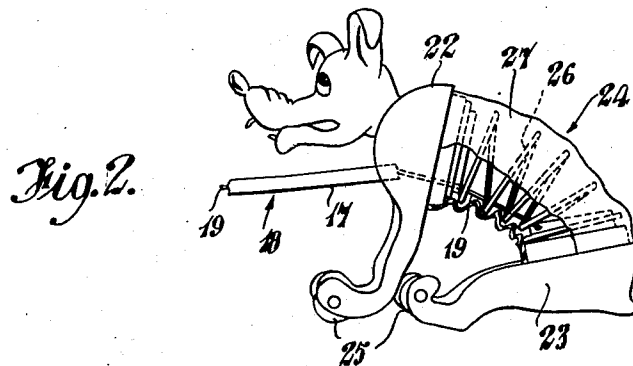
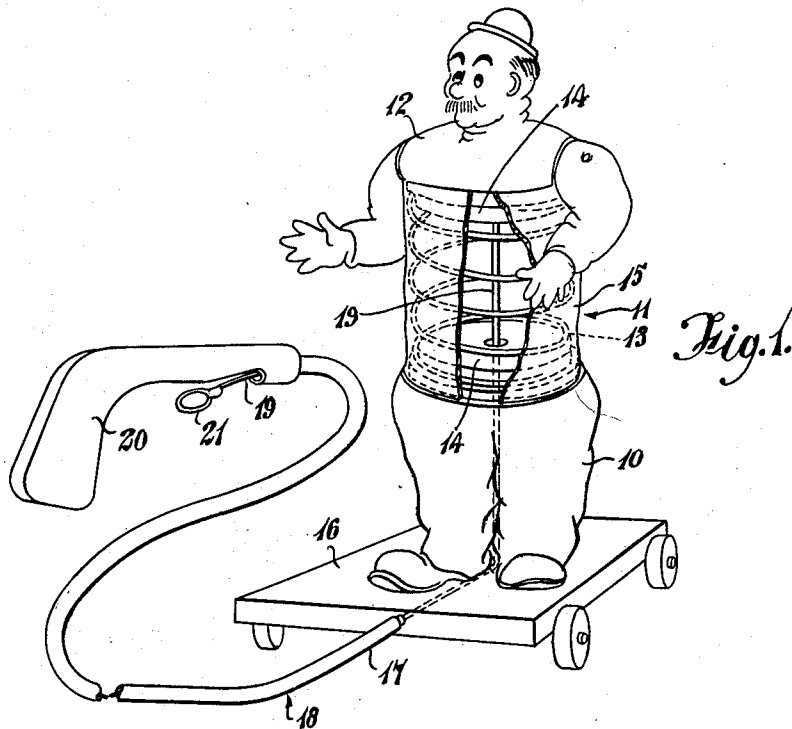
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TOY LOCOMOTIVE

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TOY LOCOMOTIVE

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This invention provides a toy or amusement device in which a toy figure or object is constructed with rigid end parts connected by an intermediate body part which is expansible and contractible and is normally maintained in expanded or contracted condition by spring or like means, control means being provided for effecting relative movement of the end parts against the action of the spring or like means so as to contract or expand (as the case may be) the intermediate part. According to a feature of the invention, the intermediate part is constructed as a bellows, and according to a further feature of the invention, such bellows may be adapted, under the control of said control means, to operate a sound-producing device concealed within the toy figure or object.

According to a further feature of the invention, the toy figure or object preferably is mounted on wheels or is otherwise adapted to be hauled or pushed along the ground or some other supporting surface, and is provided with a lead or handle for hauling or pushing it and also with a control member such as a rod, wire, cord or the like which extends from the lead or handle and is attached to one of the end parts of the toy figure or object for effecting the relative movement of the two end parts. Such a toy may be provided with a lead comprising a Bowden cable or similar device having a sheath within which extends a wire, cord or the like control member, the sheath and inner control member being respectively connected directly or indirectly to the two end parts of the toy figure or object, so that relative longitudinal movement applied to the sheath and inner member of the lead causes relative movement of the two end parts for actuating the intermediate body part of the toy figure or object.

In constructing toys according to the invention, the two end parts may be connected by a coil spring of diameter suitable to form the intermediate body part, the ends of the spring bearing against suitable abutment surfaces on the end parts respectively, and each end part may be provided with a boss which projects from its abutment surface and fits into the end of the spring, so as to serve for locating the spring and for attaching it to the end part, a flexible or telescopic cover being fitted over the spring and secured at its ends to the end parts around their bosses. For operating a sound-producing device in the toy, the spring is covered with an airtight bellows.

In the case of a toy figure in which the end

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parts have the head and limbs of the figure, these members may be rigid with their respective end parts; or alternatively, one or more of these members may be articulated to the respective end part and arranged to be moved relatively thereto by the contraction and expansion of the intermediate body part. Such an articulated member may, for example, be held against a socket or seating on the body part by means of a wire, cord or other suitable device connecting the member to the intermediate body part or its spring means so that, for example, the connecting wire or the like is alternately tensioned and slackened or otherwise actuated by the movement of the intermediate body part or its spring means so as to move the member pivotally, e. g., up and down. Thus, for example, the figure may be provided with a head and legs separately articulated to their end parts and all connected, singly and/or in groups of two or more members together, to the spring means.

The invention is susceptible of numerous constructional forms. Some embodiments of the invention are illustrated in the accompanying drawing, in which

Fig. 1 shows one embodiment in perspective;

Fig. 2 is a side view of a second embodiment, shown in actuated position; and

Fig. 3 is a longitudinal section of a third embodiment.

The toy figure shown in Fig. 1 represents a mock human figure and is constructed with a rigid lower end part 10 having or representing the legs and feet of the figure, on which is mounted a collapsible body part 11 which is surmounted by a rigid end part 12 representing the head and shoulders and equipped with movable arms 12a.

The collapsible part 11 is formed by a coil spring 13 which connects the two end parts 10 and 12 together, the ends of the spring bearing against suitable abutment faces on the end parts 10 and 12 respectively and each of those end parts being provided with a boss 14 which projects from its abutment face and fits into the end of the spring 13 so as to serve for locating and attaching the spring and end parts together, a flexible or telescopic tubular cover 15, e. g., of fabric, being fitted over the spring and secured at its ends to the end parts 10 and 12 around their bosses 14. The figure is shown as being fixed by its lower end part 10 in a substantially erect position on a wheeled platform or carriage 16 to which is attached the outer sheath 17 of a lead 18 as above mentioned, the

inner member 19 of which extends through the carriage 16 and figure and is attached to the upper end part 12 of the figure. The outer end of the lead 18 is terminated by a suitable handle 20 attached to the sheath 17, and the corresponding end of the inner control member 19 is attached to a suitable element, shown as a ring 21, providing a fingerhold or trigger which may readily be engaged and pulled by a finger of a hand gripping the handle 20. Such a pull on the inner member 19 relatively to the sheath 17 of the lead will pull the upper end part 12 of the figure downwards and so compress its body part 11 against the action of the spring 13 which normally holds the body part extended. The body part may be made as a bellows for operating a suitable sound-producing device, e. g. of the conventional reed type, concealed in the figure, for instance, in the upper end part 12 in the vicinity of the mouth, or representation thereof, of the figure. For operating such a sound-producing device, the cover 15 of the body part 11 is made reasonably airtight.

The second embodiment of the invention as shown in Fig. 2 represents a mock figure of a quadruped animal such as a dog and is constructed with rigid end parts 22 and 23 representing the fore and hind quarters respectively, which are connected by an intermediate collapsible body part 24, the legs or feet of the figure being fitted individually with wheels or rollers 25. The collapsible body part 24 is similarly formed as in the embodiment of Fig. 1, by a coil spring 26 enclosed by a flexible cover 27, which are secured to the end parts 22 and 23 similarly as described with reference to Fig. 1. The outer sheath 17 of the tubular lead 18 is fixed to the fore part 22, and the inner control member 19 of the lead extends through the fore part 22 and body part 24 of the figure and is attached to the hind part 23 so that a pull on the inner member 19 relatively to the sheath 17 of the lead 18, by means of the handle 20 and ring 21 of the lead, draws the hindquarters part 23 of the figure towards its forequarters part 22. The toy may be constructed so that this action causes the hind part to sink, as shown in Fig. 2, thus simulating the animal sitting down on its haunches. In this embodiment, as in the case of Fig. 1, the body part 24 may be constructed as an air bellows for operating a suitable sound-producing device provided in the figure, for instance, in the vicinity of its mouth. Instead of fitting the legs of such a figure individually with wheels 25, the figure may be mounted on a wheeled platform or carriage, the fore legs being fixed to the carriage and the hind legs being free to slide on it.

In another embodiment as shown in Fig. 3, a figure representing a toy locomotive is constructed with two rigid end parts 28 and 29 each mounted on a pair of wheels 30, the part 28 representing the front end and funnel of the locomotive and the other part 29 the cab, these parts being connected by an intermediate collapsible part 31 representing the boiler. Similarly as in the embodiment of Figs. 1 and 2, the part 31 is formed by a coil spring 32 enclosed by a flexible cover 33 and similarly secured to the end parts 28 and 29. In this case, the part 31 is preferably

constructed as an air bellows, with the cover 33 reasonably airtight, and a whistle 34 is suitably arranged, for instance, in the funnel of the front part, as shown, so as to be blown upon the bellows "boiler" being collapsed by operation of the inner control member 19 of the tubular lead 18. For this purpose, the outer sheath 17 of the lead is fixed to the front part 28 and the inner control member 19 extends through the parts 28 and 31 of the toy and is attached to the rear or cab part 29.

I claim:

1. A wheeled pull-along toy representing a locomotive having a longitudinally extending boiler, the toy comprising a front part representing the front end of the boiler, a pair of running wheels rotatably attached to said front part, a rear part separate from said front part representing a driver's cab, a further pair of running wheels rotatably attached to said rear part, a cylindrical longitudinally collapsible bellows interposed between said front and rear parts to represent a substantially cylindrical further portion of the boiler, one end of said bellows being attached to said front part to form a continuation of said front end of the boiler and the other end of said bellows being attached to said rear part to represent the boiler connection to said driver's cab, whereby said bellows forms a removable connection between said front and rear parts, spring means in said bellows for normally maintaining it in its substantially cylindrical extended position, a flexible sheath attached to the said front part, a flexible core positioned within said sheath for longitudinal movement therein, one end of said core extending from said attached end of the sheath and being connected to the rear part of the toy, and manually operable actuating means for exerting a pull at the free end of said core relative to said sheath to longitudinally contract said bellows against the action of said spring means, thereby reducing the distance between said front and rear wheels.

2. A toy as claimed in claim 1, further comprising a whistle in pneumatic communication with the interior of said bellows, whereby movement of said bellows to vary the distance between said front and rear wheels causes the whistle to be sounded.

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