

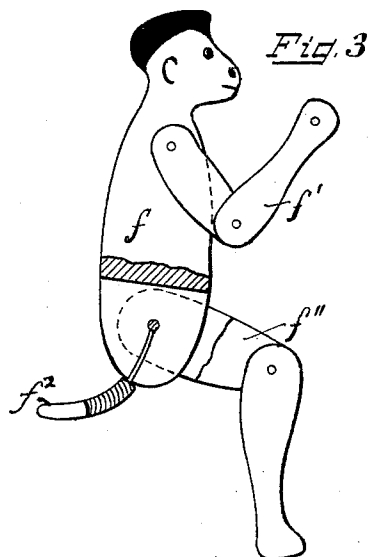
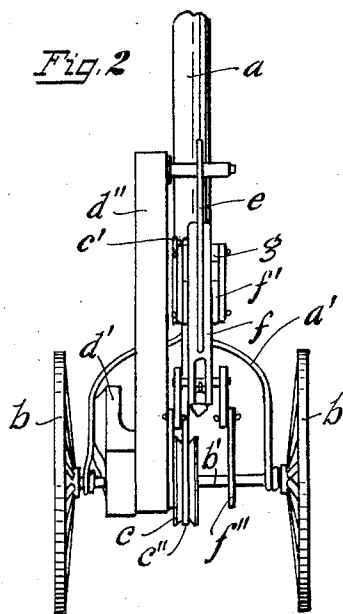
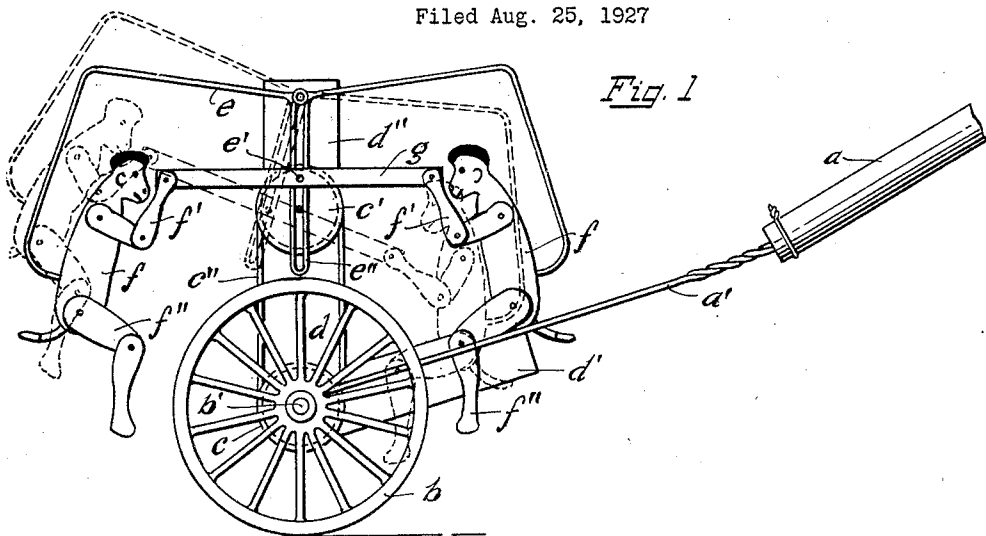
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F. J. HARBST

MECHANICAL TOY

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UNITED STATES PATENT OFFICE.

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MECHANICAL TOY.

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My invention relates to improvements in mechanical toy, and has for its object the provision of a simple and inexpensive toy affording a considerable variety of change and movement, and one not likely to be broken or disorganized.

The toy of my invention primarily consists of two rocking figures, such as the two jointed monkeys herein shown, holding between their hands a bar to which reciprocating movement is imparted as the figures are rocked up and down. Preferably this toy is mounted upon a pair of wheels provided with a handle, in order to transmit motion to the figures and afford the child both exercise and diversion in playing with said toy.

In structure, said toy may be made from articulated and otherwise movably connected metal parts or stampings, or of lighter and possibly more durable construction, substituting wood or fiber for some of said parts, as further indicated herein.

The details of such construction and its mode of operation and use may best be explained in connection with the accompanying drawings, wherein:

Figure 1 is a view of a toy appliance in side elevation incorporating the features of my invention.

Fig. 2 is a view thereof in front elevation; both of said figures illustrating the lower section only of the handle, and,

Fig. 3 is an enlarged detail, partly in section, showing one of the articulated figures for said toy.

Throughout the figures of the drawings I have employed the same character of reference to indicate similar parts.

The handle *a*, shown at the right, Fig. 1, may be of any desired length to permit the child to push the toy about on the paired wheels *b*, by means of the yoke or fork *a'*.

The axle *b'* rotates with the wheels *b* and mounts a pulley wheel *c* which is adapted to transmit motion to the operative portions of the toy. These are mounted upon a substantially L-shaped frame *d* connected to one side of the fork *a'*, comprising the lower arm *d'* and the upright *d''*.

A second pulley wheel *c'*, connected with the first pulley wheel *c* by means of a driving band or belt *e''*, and having a protruding wrist-pin *e'*, serves to impart motion to the figures of the toy.

These figures are connected at opposite

ends of the T-shaped member *e*, having a loop *e''* through which said wrist-pin *e'* protrudes, and interiorly of which it is adapted to slide and impart a rocking motion to the supporting member *e* and to the attached figures, as the toy is rolled upon its wheels *b*.

Two figures *f* of any desired character, but provided with articulated limbs *f'* and *f''*, preferably, are attached at the ends of the oscillated supporting member *e*. Between the upper articulated limbs, or the lower arms and hands of said figures, as shown, there is provided a pivoted bar *g* centrally connected with said wrist-pin *e'*.

It will be seen that with the parts constructed and connected as herein shown and described, not only will the figures *f* be given a rocking motion with each rotation of the wheels and connected pulley wheels, but, in addition, the bar *g* imparts a back and forth or sawing motion to the arms of the moving figures *f*. The limbs *f''*, balanced by the weighted tail *f²*, have an independent rocking motion.

The intermediate position of the moving parts is shown in full lines, Fig. 1, while the extreme downward position of the right hand figure and uppermost position of the left hand figure, with their actuating and actuated parts, are shown in dotted lines. The rocking motion of the figures causes the articulated limbs to move, and this effect may be added to by providing an elastic band *e''* intermediately of the pulley wheels for irregularly rotating the actuating wheel *c* and its connected parts.

A comparison of these positions of the toy, Fig. 1, shows that the upper limbs, or arms of these figures are positively and independently moved by the bar *g*, and impart a motion simulating a sawing action which adds marked interest and amusement for the child playing with the toy.

Durable figures and limbs therefor may be shaped from fiber, wood, or cheaper and lighter parts may be stamped from metal, but these, and other details, including the class of articulated figures, and the specific actuating means, are not limited to the precise showing and description herein.

A preferred feature, but unessential to the instant improvement, is the provision of a balancing or weighted tail member *f²*, shown in Fig. 3, which causes the articulated mem-

ber or members *f''* to extend at an angle and rock in a lifelike manner. It will be understood, moreover, that the figures may be attached in any desired manner, preferably in opposing relation, upon or along or terminally of the rocking member *e*.

Having now described a toy appliance embodying my invention or improvement, I claim as new and desire to secure by Letters Patent, the following:

1. In an appliance of the class described, the combination with an upright, its pivot part and a centrally pivoted supporting member, of movable objects mounted to be oscillated thereby, a transverse bar movably connected with said objects, and an actuating crank-device operatively connected with said supporting member and said bar, whereby motion is imparted to the objects, independently of said supporting member, substantially as set forth.

2. In an appliance of the class described, the combination with an upright, its pivot part and a centrally pivoted T-shaped supporting member, of movable objects mounted thereon, a transverse bar movably connected with said objects, an actuating wheel operatively connected centrally with said T-shaped member and intermediately with said bar to impart motion to said objects, independently of said supporting member, and means for

rotating the actuating wheel, substantially as set forth.

3. In an appliance of the class described, the combination with an upright, its pivot part and a centrally pivoted T-shaped supporting member, of figures terminally mounted thereon in opposing relation and having articulated limbs, a transverse bar connected with said articulated limbs, an actuating wheel operatively connected with said T-shaped member and said bar, supporting wheels for the appliance, and driving means connecting the same with the actuating wheel, substantially as set forth.

4. In an appliance of the class described, the combination with a standard and its centrally pivoted T-shaped supporting member mounted to oscillate thereon, of a loop depending intermediately thereof, figures terminally mounted upon said member in opposing relation and having articulated limbs, a transverse bar connected with opposing articulated limbs, an actuating crank-wheel operatively connected with said loop and bar, supporting wheels for the appliance, and driving means connecting the same with the actuating wheel, substantially as set forth.

In testimony whereof I do now affix my signature.

FREDERICK J. HARBST.