May 24, 1966 A. M. ZALKIND 3,252,242

EXERCISE AND COORDINATION TOY

Filed June 14, 1963

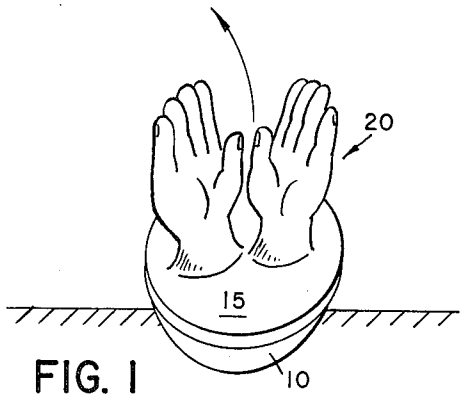



FIG. 1

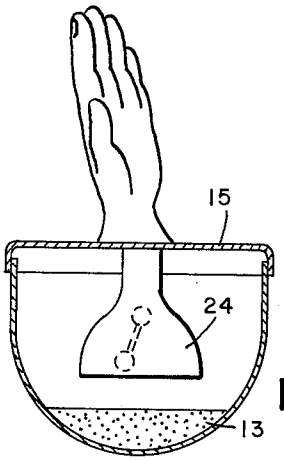



FIG. 2

FIG. 3

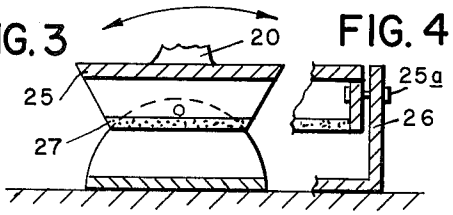



FIG. 4

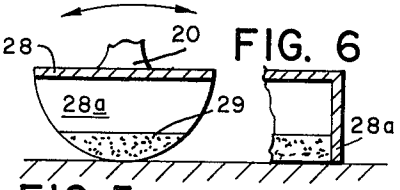



FIG. 6

FIG. 5

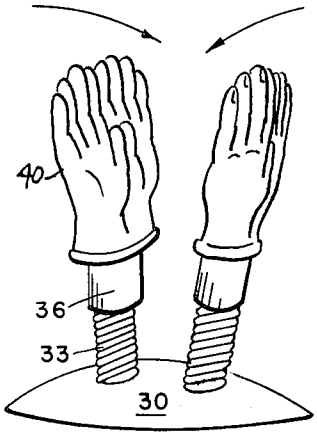



FIG. 7

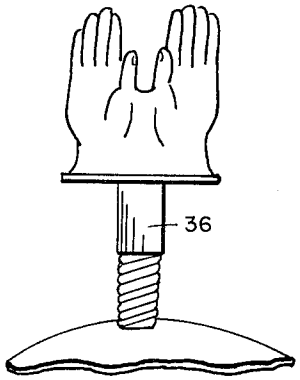



FIG. 8

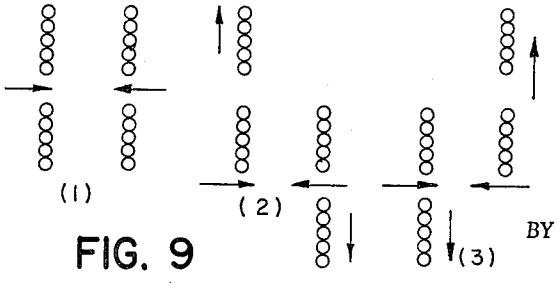



FIG. 9

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# EXERCISE AND COORDINATION TOY

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This invention relates to toys for small children and more particularly to a toy with which a child can amuse himself while at the same time develop coordination and acquire muscle training.

It is an object of the invention to provide an action type toy having considerable play value and with which a child can play by himself and achieve a sense of satisfaction.

It is another object of the invention to provide a toy which a child can manipulate by synchronizing his muscular effort with the movement of the toy.

It is a still further object of the invention to provide a toy which requires movement on the part of the child coordinated with the movement of the toy.

It is an even further object of the invention to provide a toy whereby a child is afforded physical exercise while playing therewith.

Briefly, the concept of the toy comprises the provision of either one or two pairs of hands of semi-soft plastic which a child either plays pat-a-cake with or which he can cause to play pat-a-cake. Thus, one form of the invention comprises a pair of hands on a rockable mount, the hands being disposed palm outward in position for playing pat-a-cake and juxtaposed side by side. The rockable mount is provided with suitable ballast so that it is self-righting. The hands may be approximately the size of a toddler's hands of the age of two or three, although adult size hands could be used. Accordingly, a small child is first taught to play pat-a-cake and is then given the toy with which to play. By virtue of the stable equilibrium provided, in one form of the invention, the toy rocks back and forth each time it is struck and the play is thus repetitive. In another form of the invention, two pairs of hands are mounted on springs, each pair facing each other and provided with grip sleeves. A child may grasp the sleeve to actuate each pair of hands and so manipulate them as to cause the hands to play pat-a-cake. Thus, the hands may be moved to and fro, or sidewise, in true pat-a-cake fashion by virtue of the resilient mounts.

A detailed description of the invention now follows in conjunction with the appended drawing in which:

FIG. 1 is a perspective of one form of the invention wherein a pair of hands is mounted on a base having stable equilibrium;

FIG. 2 is a section through FIG. 1 showing the to and fro action of which the toy is capable;

FIGS. 3 and 4 are, respectively, a fragmentary section through another form of the invention and a fragmentary elevation;

FIGS. 5 and 6 are views like FIGS. 3 and 4 for a further modification;

FIG. 7 is a perspective of a form of the invention utilizing two pairs of spring-mounted hands;

FIG. 8 is a front view of a pair of hands of the form of the invention shown in FIG. 7 to a smaller scale; and

FIG. 9 illustrates diagrammatically the motions of pat-a-cake play.

Referring now to FIGS. 1 and 2, the form of the invention illustrated comprises a bowl-like base **10** having a ballast weight **13** of any suitable material therein in order to give the base stable equilibrium in a well understood manner. The base is provided with a cover **15** which may be permanently cemented thereto and which



is provided with a pair of hands **20** which may be integrally molded thereto or molded separately and cemented, or otherwise fastened thereto. Suspended within the base, by suitable fastening to the cover may be a bell **24**.

It is contemplated that the entire toy will be made of a suitable, semi-soft plastic, such as polyethylene, or the like. However, it will be understood that any suitable mode of construction and choice of materials is within the range of the designer.

In operation of the toy, a child would strike the hands with his own hands in a pat-a-cake play action and thus cause the toy to rock back and forth. The child would have to synchronize his own hands' motions with those of the natural period of rocking of the toy. The size and weight of the base would, of course, determine the period, assuming that the weight of the molded hands were comparatively small, as would normally be expected, considering the use of the ballast. As the toy rocks, the bell would ring or tinkle.

Referring to FIGS. 3 and 4, a different base arrangement is illustrated wherein the hands **20** are carried on a platform **25** pivoted (on both sides) as at **25***a* to a base bracket **26**, the platform having suspended therebelow a slab of suitably heavy material **27** so as to provide stable equilibrium as the hands rock to and fro in the direction of the double-headed arrow. Such construction is simple and can consist of a platform integrally molded in the shape of a U and the base bracket can be manufactured in the same way.

FIGS. 5 and 6 illustrate another arrangement wherein the base is merely a U-shaped bracket **28** having round bottom sides **28***a* with a round bottom ballast weight **29** fastened between the sides.

The ballast weights of FIGS. 3–6 may be of any material, such as dense wood provided it is sufficiently heavier than the plastic superstructure, or metal rods may be used, or a clay-filled plastic tube, etc., etc.

Referring now to the form of the invention shown in FIGS. 7 and 8, a wood base **30** is provided in which are mounted a pair of springs **33**, for example, closed coil springs of sufficiently light gauge so that a child could cause them to flex by gripping each of the plastic tubular gripping sleeves **36** in a hand and moving his wrists toward and away from each other, or rotating his hands, so as to cause the pair of plastic hands **40** carried on respective sleeves to clap against each other. The springs may be socketed in the base and in the sleeves, and the sleeves and hands may be integrally plastic molded.

Referring to FIG. 9, the three positions **1**, **2** and **3** for playing pat-a-cake are demonstrated and the arrows indicate the motion of the hands in each position. Thus, in position **1** the two pairs of hands are in register and are clapped directly against each other. In a position **2** the child has pushed one pair of hands away and pulled the other toward himself, all by flexing the springs, and then he claps the two registering hands. In position **3** the opposite directional movements of position **2** is noted, in that the child has now reversed the positions of the pairs of hands with respect to himself, wherein the remaining hands of each pair, being in register, are now clapped together. The action is thus repetitive, going back to position **1**.

Obviously, many variations of the concept are possible, including the use of just one hand instead of a pair of hands, for clapping against each other, particularly in the form of the invention shown in FIGS. 7 and 8.

For example, the pairs of hands and the integral grip sleeves can be rotatively mounted on the respective springs so that they can be twisted with respect to each other.

As another example, each pair of hands could be mounted on a universal joint instead of a spring.

Such joints come in various forms; e.g., a ball joint could be used so that the pairs of hands could be twisted relative to each other, or a restraining type of joint could be used so that the pairs can be rocked only towards or away from each other, and in their own planes.

Accordingly, I do not seek to be limited to the precise illustrations herein given, except as set forth in the appended claims.

I claim:

**1.** An exercise and coordination toy for children, comprising a support means, simulated hand means carried by said support means, and having palm surfaces exposed to be struck and being manually movable to and fro from an initial position, said hand means comprising a pair of hands with palms facing in the same direction.

**2.** A toy as set forth in claim **1**, said hand means comprising separately movable hand elements which can be struck against each other.

**3.** A toy as set forth in claim **1**, said hand means comprising a pair of integral hands.

**4.** An exercise and coordination toy as set forth in claim **1**, including a second pair of hands with palms facing the palms of the first pair of hands and mounting means for mounting at least one of said pairs of hands so as to be manually manipulatable to strike the palms of the other pair of hands.

**5.** An exercise and coordination toy as set forth in claim **4**, each pair of hands being integral.

**6.** A toy as set forth in claim **4**, said mounting means being manually flexible.

**7.** A toy as set forth in claim **4**, each pair of hands being integral and said mounting means being manually flexible.

**8.** A toy as set forth in claim **4**, each pair of hands being integral and having respective flexible mounting means comprising a manual gripping element.

**9.** An exercise and coordination toy for children, comprising a support means, simulated hand means carried by said support means, and having palm surfaces exposed to be struck and being manually movable to and fro from an initial position, said hand means comprising a pair of hands with palms facing in the same direction, said support means comprising an element on which said pair of hands is rockably carried.

**10.** An exercise and coordination toy for children, comprising a support means, simulated hand means carried by said support means, and having palm surfaces exposed to be struck and being manually movable to and fro from an initial position, said hand means comprising a pair of hands integrally connected and disposed with palms facing in the same direction, said support means comprising a rockable mount having a weight whereby said hands may rock upon being struck, said weight effecting stable equilibrium of said hands.

**11.** An exercise and coordination toy for children, comprising a support means, simulated hand means carried by said support means, and having palm surfaces exposed to be struck and being manually movable to and fro from an initial position, said simulated hand means comprising a pair of integral hands disposed with palms facing in the same direction, said support means comprising a bowl-like element on which said hands are mounted and further comprising a weight for maintaining stable equilibrium of said hands.

**12.** An exercise and coordination toy for children, comprising a support means, simulated hand means carried by said support means, and having palm surfaces exposed to be struck and being manually movable to and fro from an initial position, said hand means comprising a pair of hands, said support means comprising a weighted rocker base, said hands being disposed with palms facing in the same direction so as to be struck, wherein striking effects a rocking motion thereof with return to an initial position effected by said weighted base.

**13.** In a toy as set forth in claim **12**, said weighted base comprising a bracket member having lower rounded supports edges to effect a rocker mount for said hands.

**14.** In a toy as set forth in claim **12**, said weighted base comprising a pair of bracket elements, one bracket effecting a base for the toy, the other bracket being pivoted thereto and carrying a weight below the pivotal axis, said hands being carried on said other bracket.


**References Cited by the Examiner**

UNITED STATES PATENTS

| | | | |
|---|---|---|---|
| 2,282,056 | 5/1942 | Hoeflich | 46—175 |
| 2,931,135 | 4/1960 | Zalkind | 46—191 X |

FOREIGN PATENTS

| | | |
|---|---|---|
| 645,396 | 6/1928 | France. |
| 544,646 | 8/1956 | Italy. |



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