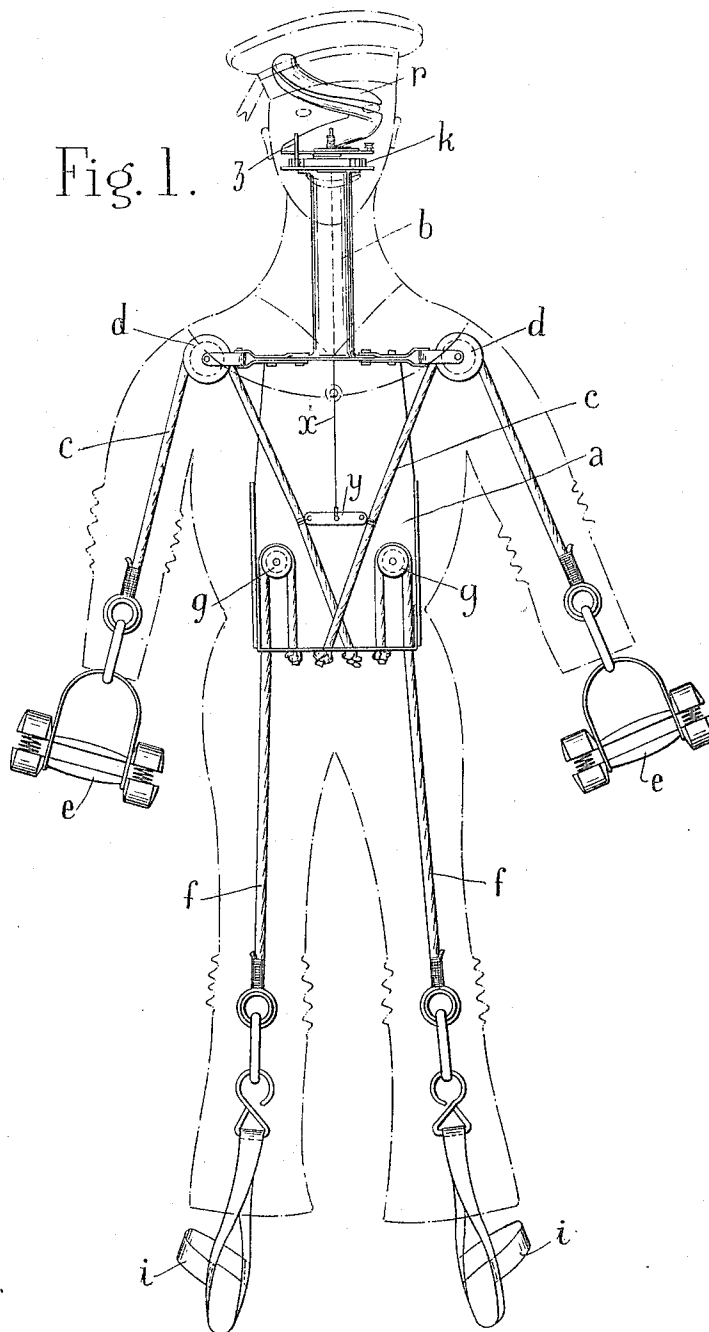


E. SANDOW.
 COMBINED TOY AND PHYSICAL CULTURE APPARATUS.
 APPLICATION FILED OCT. 28, 1913.

1,123,570.

Patented Jan. 5, 1915.

3 SHEETS-SHEET 1.



WITNESSES.
 L. H. Cadan.
 G. C. Denny

INVENTOR.
 Eugen Sandow
 by Foster Freeman Watson & Co.
 Attys

E. SANDOW.
 COMBINED TOY AND PHYSICAL CULTURE APPARATUS.
 APPLICATION FILED OCT. 28, 1913.

1,123,570.

Patented Jan. 5, 1915.

3 SHEETS-SHEET 2.

Fig. 2.

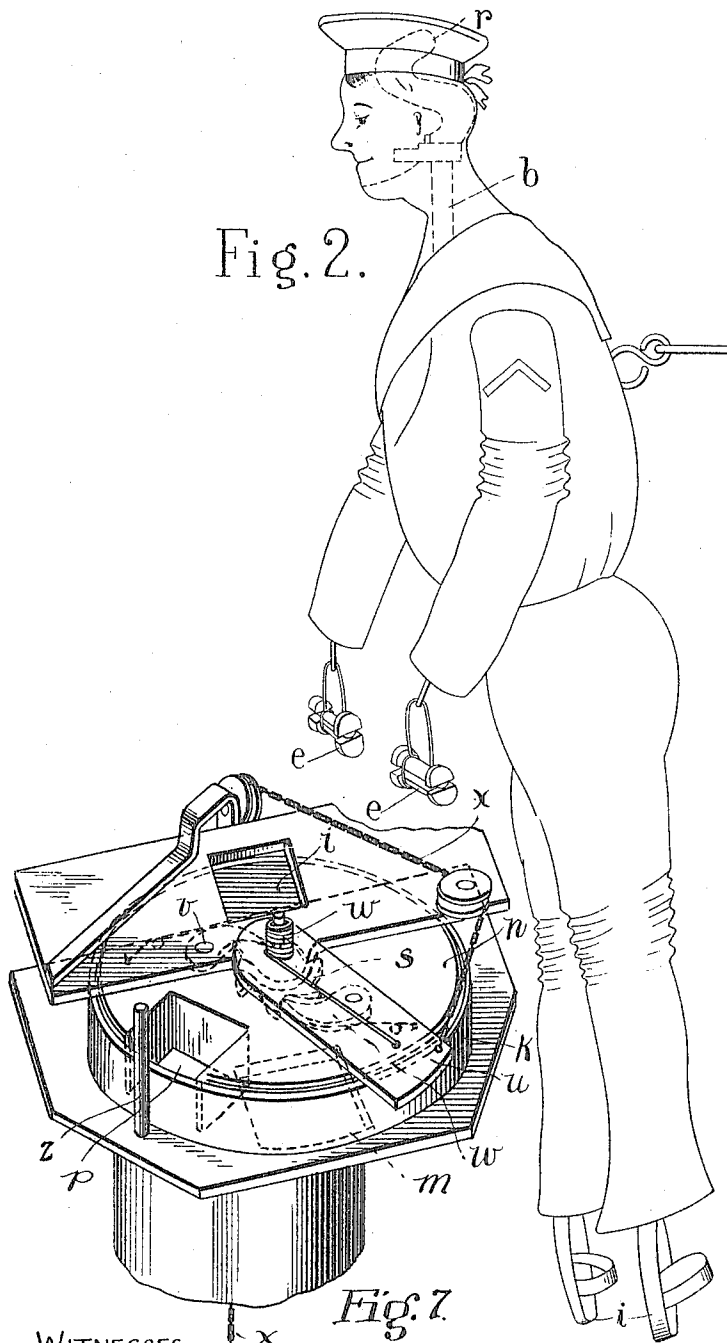


Fig. 7.

WITNESSES.

L. H. Cadwall.
 C. C. Denny

INVENTOR.

Eugen Sandow
 by Foster, Fullman, Watson & Co.
 Attys

UNITED STATES PATENT OFFICE.

EUGEN SANDOW, OF LONDON, ENGLAND.

COMBINED TOY AND PHYSICAL-CULTURE APPARATUS.

1,123,570.

Specification of Letters Patent.

Patented Jan. 5, 1915.

Application filed October 28, 1913. Serial No. 797,883.

To all whom it may concern:

Be it known that I, EUGEN SANDOW, a subject of His Majesty the King of Great Britain, and a resident of London, England, have invented a new and useful Combined Toy and Physical-Culture*Apparatus, of which the following is a specification.

This invention relates to an improved combined toy and physical culture apparatus, the object being to provide a toy for children (for example those between the ages of 1 and 7 years), which will require some physical effort to play with, or with which some physical effort may be exerted, so that the child may unconsciously be provided with a means for developing and maintaining its physical perfection and health.

According to the invention the toy takes the form of a doll or figure of suitable dimensions having loosely arranged arms and legs with which are combined in the body portion a suitable part of one of the known wall elastic or like exercising devices, for example, the portion of same which may comprise two elastic or like cords, metal spring devices, or the like, each having a handle at one end and a stirrup at the other.

In the present instance a leg and an arm are interposed in each cord or the like, the handle being formed by or at the hand, and the stirrup being attached to the foot. Each cord or like portion passing through the body may if desired travel around a separate pulley or the like to form a point on which a pull can be exerted.

By placing the feet in the stirrups and stretching or pulling out the arms and legs various known body exercises may be performed.

The hands of the doll or figure may for appearance, and to provide a convenient handle for grasping, be made to carry a dumbbell which to provide wrist and arm exercise may be of the known split spring expanded type, or the wrists may be similarly split, expanded by springs and suitably covered if they are to be the points grasped.

It may be desirable to provide the child with some further incentive to use the toy and in such case a delivery box for sweets may be arranged in same with means for discharging or delivering a sweet at the mouth of the doll or figure after a certain

number of movements of the cords have taken place.

In the accompanying drawings which illustrate one example of construction in accordance with this invention:—Figure 1 is a front view of a doll constructed in accordance with this invention. Fig. 2 is a side view thereof. Figs. 3 and 4 are side elevation and plan respectively of the sweet or other article delivering mechanism. Fig. 5 is a perspective view of the body portion, Fig. 6 is an enlarged view of the head of a figure illustrating the means by which articles may be removed from the figure, and Fig. 7 is a perspective view of the parts shown in Fig. 3 with the chute removed.

In the drawings, the operative or working parts of the toy comprise a body part *a* of box formation furnished at its upper end with a tubular extension *b*. The ends of two elastic or like cords *c*, which may be termed the upper extensible members, are passed into the interior of the body through an opening provided in the sides thereof, the inner ends are secured to the body in any convenient manner such as by being passed through the bottom and knotted as shown. Each of the cords *c*, external to the body *a* passes over a pulley *d*, arranged one at either side of the body, and through the arms of the doll terminating in a grip dumbbell, or other form of handle *e*. The pulleys are preferably arranged so as to be free to move horizontally.

A further pair of cords *f*, which may be termed the lower extensible members, are passed into the interior of the body part *a* and are secured to such body in a similar manner to the upper extensible members *c*.

A pair of pulleys *g* are provided within the body *a* over which the cords *f* are adapted to pass. The lower or free ends of the cords *f* are furnished with stirrups or grips *i* for the purpose hereafter described.

As above stated the toy may be furnished with means for delivering a sweet or other article after a predetermined number of movements of the extensible members have taken place, and the means illustrated in Figs. 3 to 7, which means may be contained within the head of the doll, comprises a horizontally arranged casing *k*, arranged on the upper end of the part *b*, such casing being furnished with apertures *l* and *m* in the upper and lower faces respectively, a

drum or like part n fixed to a spindle o is rotatably mounted within the casing k a segment or part of such drum being removed to furnish a space p which preferably corresponds in size to the apertures l, m , in the casing.

A chute or receptacle r for the sweets or other articles, is situated above the casing k its lower end communicating with the aperture l in the casing. The spindle o is provided with a ratchet wheel or the like s , the teeth of which are adapted to be engaged by a pawl t pivoted on an arm u , loosely pivoted on the spindle o , a further pawl v pivoted to the casing being provided for preventing the free rotation of the drum n . The pivoted arm u is caused to move in the direction of the arrow (Fig. 4) under the influence of a spring w loosely supported on the spindle o . The outer end of the arm u is connected to the upper extensible cords c by means of a chain or the like x and a cross bar y secured to the extensible cords c , (Fig. 1).

In use, the feet are placed in the stirrups i , the doll being if desired free or attached by means of a hook to a wall or other part, as shown in Fig. 2, the hands grip the handles e and any of the movements usually made with such exercising apparatus may be made. When the upper extensible cords c are extended the cross bar y is raised and this removes the tension on the chain x and permits the spring w to move the arm u in the direction indicated until it is brought up against the stop z . After a predetermined number of movements the space p in the drum is brought into coincidence with the aperture l in the casing and a sweet or other article is free to drop from the chute r into the space p . After a further predetermined number of movements the space p is brought into coincidence with the aperture m through which the sweet or other article passes into a receptacle, for example into a pocket formed in the mouth of the doll, from which it may be removed through a conveniently placed aperture, or a part or whole of the lower jaw r^* may be hinged to the head at r' and kept normally closed by a spring r^2 as shown in Fig. 6.

It will be obvious that many other forms of physical exercises may be combined with a doll or figure to present the same advantages as those present in the form previously described.

Or in the separated arrangement of extensible members the lower members may be caused to operate the delivery mechanism in place of the upper.

If desired the doll or figure may be provided with one set of extensible members only, either the upper or lower members, or a single extensible member only may be provided.

What I claim is:—

1. The combination with a doll or figure, of a physical culture apparatus comprising extensible devices forming limbs for said doll or figure.

2. The combination with a doll or figure, of a physical culture apparatus, a part of such apparatus being extended outside the body portion to form limbs for the doll or figure.

3. The combination with a doll or figure, of an elastic cord contained within said doll or figure and grips carried at the ends adapted to form a physical culture apparatus.

4. The combination with a doll or figure of a plurality of elastic cords contained within said doll or figure, and grips carried at the ends of each cord adapted to form a physical culture apparatus.

5. The combination with a doll or figure, of a plurality of elastic cords contained within said doll or figure, a plurality of hand grips, and a plurality of stirrups adapted to form a physical culture apparatus.

6. The combination with a doll or figure, of a physical culture apparatus supported by the doll and comprising relatively movable members, means within the doll for supporting an article, and means for discharging the article from said doll after a predetermined number of movements of said apparatus have taken place.

7. The combination with a doll or figure, of a physical culture apparatus supported by the figure and comprising relatively movable members, means carried by the figure for supporting a plurality of articles, and mechanism for causing an article to be discharged from said support after a predetermined number of movements of the physical culture apparatus have taken place.

8. The combination with a doll or figure, of a physical culture apparatus supported by the figure and comprising relatively movable members, a receptacle for containing sweets, and mechanism for causing one of such sweets to be discharged from the receptacle after a predetermined number of movements of the physical culture apparatus have taken place.

9. The combination with a doll or figure, of extensible members, and a casing to which such members are attached, contained within the body of the doll or figure, adapted to form a physical culture apparatus.

10. The combination with a doll or figure, of extensible members, a casing to which such members are attached within the body of the doll or figure, delivery mechanism in the head of the doll or figure, means for supporting such delivery mechanism upon said casing, and means connecting the extensible members to said delivery mechanism where-

by a sweet or other article is discharged from said delivery mechanism after a predetermined number of movements of the extensible members have taken place.

- 5 11. The combination with a doll or figure of extensible exercising members, a casing, a chute for the sweets or articles carried by said casing, a recessed drum in said casing, means operable by said extensible exercising
10 members for rotating said drum with a step

by step movement, and a receptacle into which the sweet or other article is discharged.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EUGEN SANDOW.

Witnesses:

WILLIAM GEORGE HUNT,
FRANCES L. E. WELLS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."