Feb. 4, 1930. J. F. McINTOSH 1,745,434

TOY

Filed Feb. 15, 1928

Fig. 1.

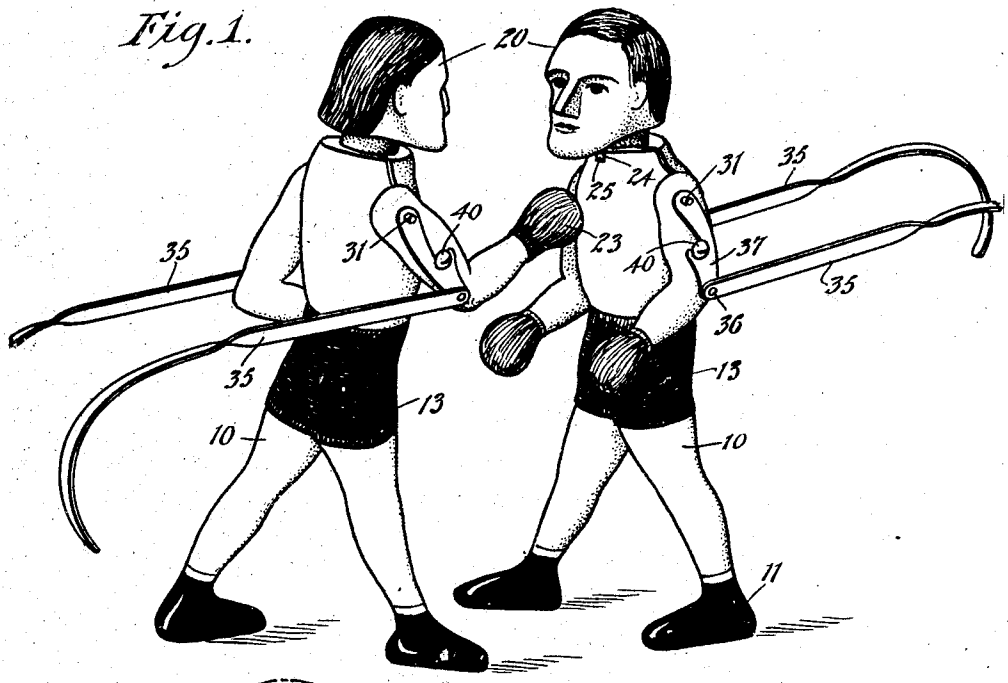


Fig. 2.

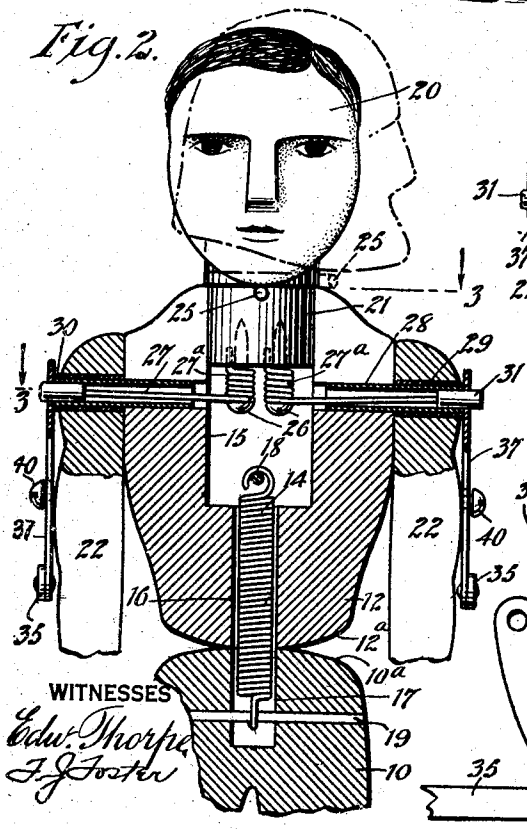


Fig. 3.

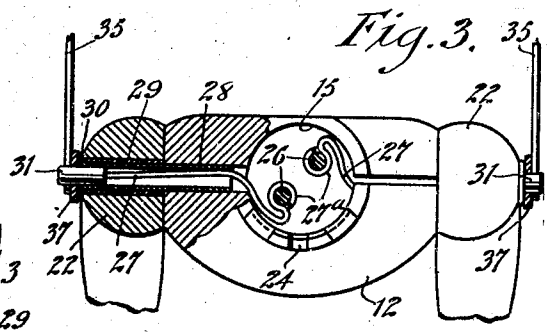


Fig. 4.

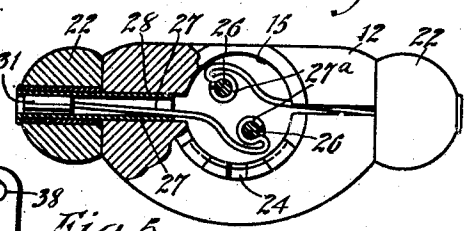
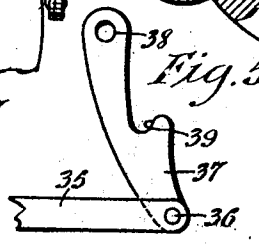


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE

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TOY

Application filed February 15, 1928. Serial No. 254,484.

The present invention is concerned with the provision of combat toys and may find an infinite variety of embodiments.

A toy constructed in accordance with the present invention is in the nature of a combat device equipped with an offensive member (preferably movable) and with a vulnerable target portion, which when struck, automatically acts to render the combat toy hors de combat (preferably by rendering the offensive member inoperative).

Preferably, the movable offensive members of the toys are detachably coupled to manipulating means adapted to be manually operated, and to be automatically disconnected from the offensive members when the target portion of a toy has been struck.

Preferably also, the target members are capable of being manually set or cocked, and in such position serve to render operative the connecting means between the offensive members and the manipulating devices. When the target portions are struck and knocked out of their set, or cocked position, such connecting devices are automatically released, and the combat toy rendered hors de combat.

It will be obvious that within the scope of the invention, various types of combat toys may be provided. I may for instance, provide figure toys, the arms of which are manually manipulable, so that a hand to hand conflict may be had by two persons operating two of the toys. With this form of the invention, the offensive members, to wit: the movable arms of the toys which may carry weapons if desired, may conveniently serve both as offense and defense members. That is to say, the arms may be used to block or parry blows as well as give them, and when skillfully manipulated, one of the combat members may effectively guard its own target portion, while assaulting the target portion of the other toy.

In this connection, devices simulating boxers are particularly amusing, and means is preferably provided for connecting the bodies of the toys to the legs thereof in such a manner that by proper manual operation, the bodies themselves may be swung relatively to the legs in any direction to simulate the weaving, bobbing and ducking of a boxer.

Instead of boxers the toys might represent fencers. One arm might carry a shield and the other a weapon. In addition to the various possible types of toys which engage in hand to hand conflict, I might use toys simulating fighting animals or toys simulating tanks, battleships, aeroplanes, or combat devices of any nature whatsoever; it being understood that in every instance the offensive portions of the toys will be preferably manually manipulated, and the toys will be rendered hors de combat when their target sections are properly struck.

It will be understood that two of the combat toys are preferably placed upon a table or other supporting surface in opposed relationship, and manually manipulated by two persons until such time as one or the other toys is put out of the fight by having its target member struck.

Objects of the invention are to provide toys of this nature which will be extremely realistic in appearance when operated; particularly to provide figure toys which will closely simulate the actions of human combatants.

Further objects are to provide toys of extremely simple, practical construction, which will be sufficiently rugged and durable to withstand the rough usage to which they are necessarily put. Other and further objects of the invention are to provide toys which are well suited to the requirements of economical manufacture and convenient manipulation.

This application is a continuation in part of my copending application Serial No. 185,699 filed April 22, 1927, allowed August 15, 1927.

With the above noted and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully set forth and pointed out in the claims. The invention will be more fully understood from the following description in connection with the accompanying drawings, wherein—

Fig. 1 is a perspective view showing two combat toys embodying the present invention in opposed operative position with the

arms of the toys connected to manipulating handles.

Fig. 2 is a fragmentary view mainly in longitudinal section through one of the toys showing the operative connections between the target member and the manipulating means, and also showing the flexible universal connection between the body and leg section.

Fig. 3 is a sectional plan view on the staggered line 3—3 of Fig. 2.

Fig. 4 is a similar view, but showing the position of the parts when the target member has been tripped.

Fig. 5 is a fragmentary elevational detail of one of the manipulating devices.

It is to be understood that in the drawings I have shown one preferred embodiment of the invention in which toy boxers serve as the combat members, and the arms of the boxers serve as both defensive and offensive devices. The target members in the present instances are the chins of the boxers, which, when struck and knocked upwardly, serve to automatically release and disconnect the arms of the boxers from the manipulating handles. It is to be understood however, that the drawings are illustrative of only one of many embodiments of the invention, that they are by no means to be interpreted in a limiting sense, and that various forms of combat devices embodying the invention will fall within the scope of the appended claims.

Each of the combat devices includes a leg section 10 preferably of unitary formation provided with relatively widely spaced feet portions 11 which are comparatively large and flat, so that the toys may stand alone, and are afforded ample support. If desired the bottoms of the feet 11 may be covered with felt or rubber, or equivalent material to prevent the toys from undue "walking" when in operation.

The juncture of the leg section with the body section 12 is preferably concealed within the completed toy by the use of trunks 13. The bottom of the body section and the top of the leg section however are both rounded as indicated at 12^a, 10^a in Fig. 2, and the two sections are connected by a coiled contractile spring 14 so that a substantial universal joint is had, permitting rolling movement of the body relatively to the legs in any direction. The upper end of the body is provided with a relatively deep capacious socket 15 communicating with the rounded bottom of the body through a bore 16, the latter registering with a pocket 17 in the top of the legs. Cross pins 18 and 19 extending through the socket 15 and pocket 17 serve as anchorages for the ends of the spring 14 which provides the non-positive universal connection between body and legs.

The head 20 of the toy is provided with a depending cylindrical neck portion 21 fitting within the socket 15, and adapted to be manually rotated within the socket to an extent and for a purpose which I shall later describe. The arms 22 of the toy are movably connected to the body, preferably universally connected thereto, although in the present instance I have shown the connection as simply a pivotal one. These arms at their extremities carry toy boxing gloves 23.

At the upper forward edge of the body there is provided a notch 24 adapted to receive a pin 25 on the neck 21, this notch and pin serving to retain the head of the toy with its integral target chin portion in properly set or cocked position. Mounted at opposite sides of the center of the neck and on the lower surface thereof are pins 26 encircled by the coiled inner ends of spring wire members 27. The free ends of such members are accommodated in sleeves 28 fixed within the body and projecting laterally therefrom to provide bearings for the arms 22. These arms are transversely bored and preferably equipped with wear sleeves 29 fitting on the sleeves 28, the latter having their ends flanged over as at 30 to prevent the arms from becoming disengaged from the body.

Trunnions 31 at the outer ends of the wire members 27 may be projected laterally as in Fig. 3 when the neck is rotated to one position, and retracted to the position of Fig. 4 when the neck is rotated to the opposite position. The coiled torsional springs 27^a defined by the coiled inner ends of the wire 27 normally tend to rotate the neck 21 and its integral head 20 to the position shown in Fig. 4, that is to say, with the trunnions 31 retracted. The head of the toy may be moved to its opposite or cocked position of Fig. 3 by grasping it and manually turning it against the action of the springs 26 to a point where the pin 25 drops into the notch 24. Such movement of the neck serves to project the trunnions as seen in Fig. 3, and the springs 26 hold the pin 25 firmly against the sides of its notch 24 so that only a sharp upward blow on the chin of the toy may serve to trip the pin 24 and restore the head to its dotted line position of Fig. 2 in which the trunnions are retracted.

Various forms of operating devices might be used for conveniently manually manipulating the arms of the two toys. I have shown operating devices consisting of hand levers 35 pivoted as at 36 to links 37. The free ends of the links 37 are apertured as at 38 for the reception of the trunnions 31, while the intermediate portions of the links 37 are notched as at 39 for engagement with headed screws or studs 40 projecting from the arms of the toy. The notched connection at 39 is not a tight one, so that when the trunnions 31 are retracted the arms of the toys will be immediately disconnected from the links 37.

In operation, the two toys are stood upon a table, the arms of the toys are connected to the links 37, and the associated manipulating levers 35 are grasped by the hands of two persons who are manipulating the toys. The links 37 can be connected of course only when the target member is set or cocked, that is to say, when the heads of the toys have been rotated to the position of Fig. 1, and the pins 25 dropped into the notches 24.

By skillful manipulation, it will be obvious that the arms of the toys may be moved not only to deliver blows, but to parry blows, that certain blows may be avoided by movement of the bodies 16, and that the action of the figure toys when skillfully manipulated will be extremely realistic and amusing.

Whenever one toy strikes the other forcibly on the chin, which constitutes the target, pin 25 will be knocked out of its notch 24, and the head of the toy will snap quickly to the dotted line position of Fig. 2, retracting the trunnions 31, disconnecting the links 37, and rendering the toy which has been struck hors de combat. The toy will fall either from the force of the blow which has tripped the target, or from the force of the next blow, since there will be no manual support for it.

Structurally the toys are subject to a wide range of variation. Any desired section of the body or head might constitute the target member. The toys might be fencers instead of boxers, and instead of using common offensive and defensive means, one arm of the toy might carry a defensive device such as a shield, while the other arm carries an offensive device such as a lance.

In fact, numerous changes and alterations might be made in the general form and arrangement of the parts described without departing from the invention. Hence I do not wish to limit myself to the details set forth, but shall consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

1. In a toy of the character described, a figure including a body, a head loose upon the body, and a pair of arms movably connected to the sides of the body, an arm manipulating unit, means for facilitating the attachment of the unit to the arm when the head is in one position, operative connections between said head and said means whereby the latter and said unit may be disconnected when the head is moved from said position, and means for maintaining the head in the first mentioned position until a blow is delivered thereagainst.

2. In a toy of the character described, a human simulating figure including a body, a head loose upon the upper end of the body and a pair of arms pivoted to the sides of the body, an arm manipulating unit, means for facilitating the rigid attachment of the unit to the arm when the head is in one position, operative connections between said head and said means whereby the latter and said unit may be disconnected when the head is moved from said position, and means for maintaining the head in the first mentioned position until a blow is delivered thereagainst.

3. In a toy of the character described, a figure including a body, a head loose upon the body, a pair of arms pivoted to the sides of the body, a finger controlled arm manipulating unit, means for facilitating the rigid attachment of the unit to the arm when the head is in one position, operative connections between said head and said means whereby the latter and said unit may be disconnected when the head is moved from said position, and means for maintaining the head in the first mentioned position until a blow is delivered thereagainst.

4. In a toy of the character described, a figure including a plurality of sections, a flexible connection between two of said sections, a head loose upon one of the sections, and a pair of arms pivoted to the sides of said head carrying section, an arm manipulating unit, means for facilitating the rigid attachment of the unit to the arms when the head is in one position, operative connections between said head and said means whereby the latter and said unit may be disconnected when the head is moved from said position, and means for maintaining the head in the first mentioned position until a blow is delivered thereagainst.

Signed at New York, in the county of New York, and State of New York, this 14th day of February A. D. 1928.

JOHN F. McINTOSH.