

April 7, 1931.

H. F. CROWELL

1,799,735

BOXING TOY

Filed Aug. 16, 1930

5 Sheets-Sheet 1

Fig. 1.

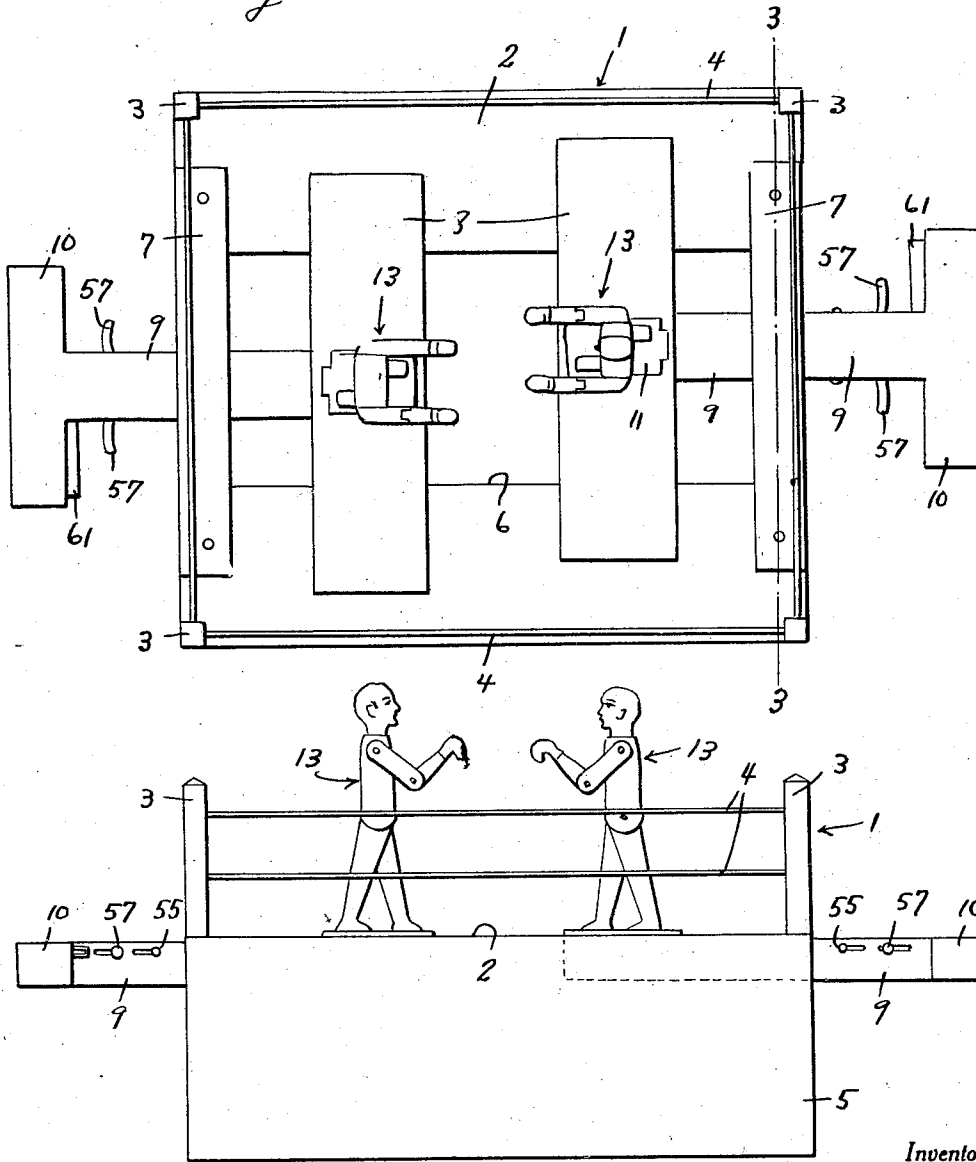


Fig. 2

Harold F. Crowell

By *Clarence A. O'Brien*  
Attorney

April 7, 1931.

H. F. CROWELL

1,799,735

BOXING TOY

Filed Aug. 16, 1930

5 Sheets-Sheet 2

Fig. 3.

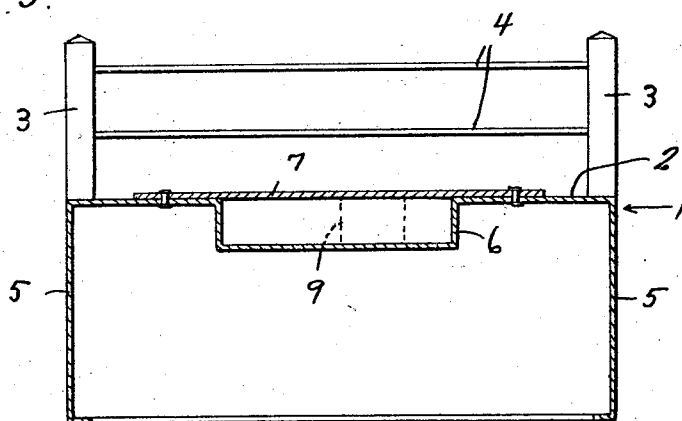
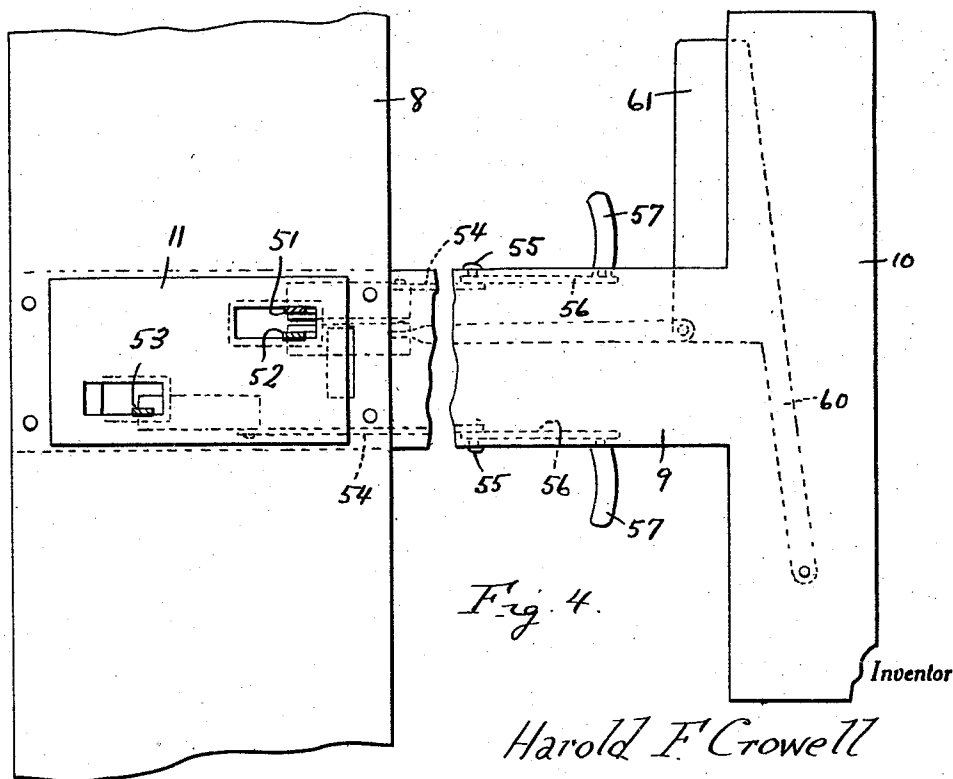


Fig. 4.

Inventor

Harold F. Crowell

By *Clarence A. O'Brien*  
Attorney

April 7, 1931.

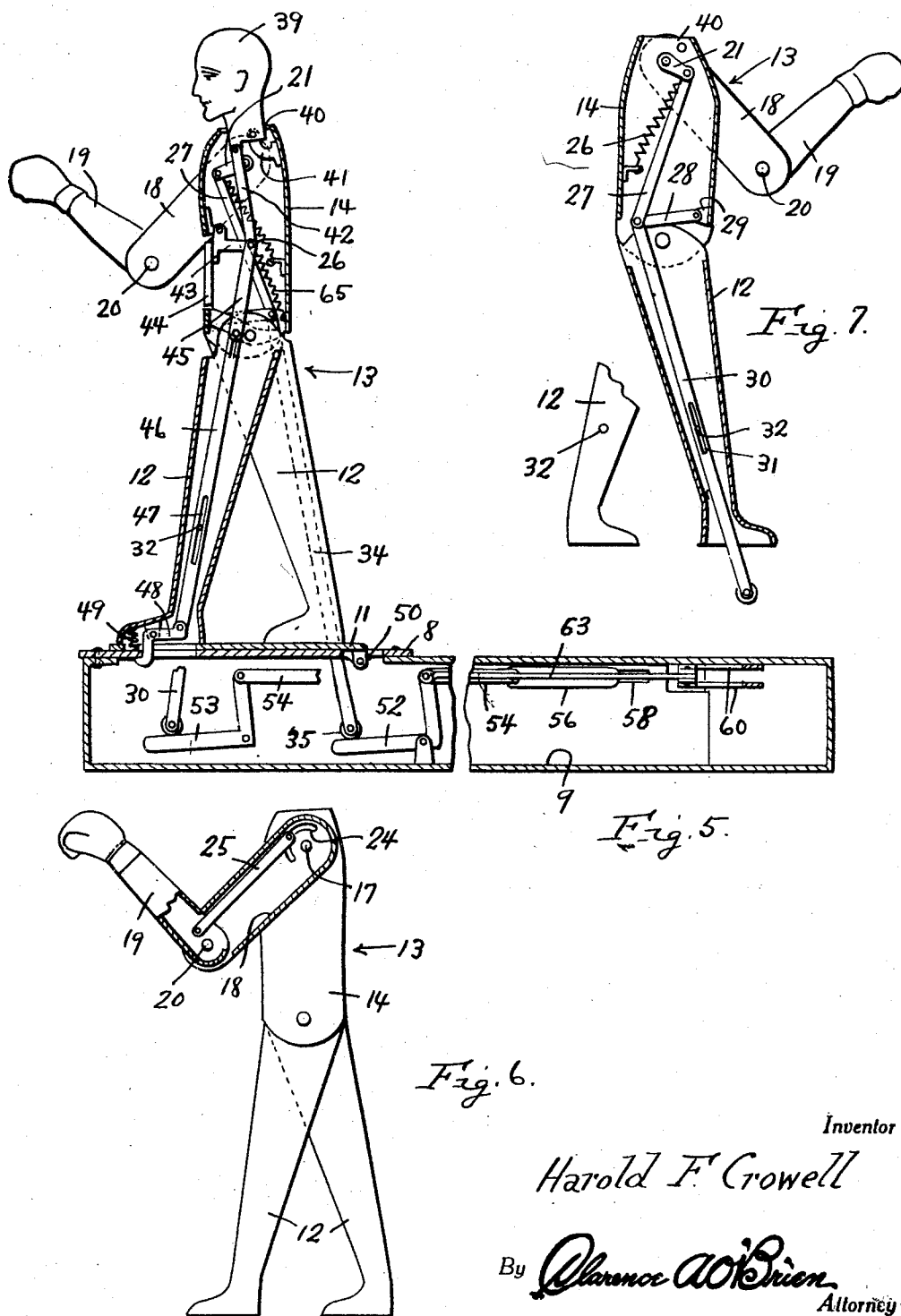
H. F. CROWELL

1,799,735

BOXING TOY

Filed Aug. 16, 1930

5 Sheets-Sheet 3



Inventor

Harold F. Crowell

By

Clarence A. O'Brien

Attorney

April 7, 1931.

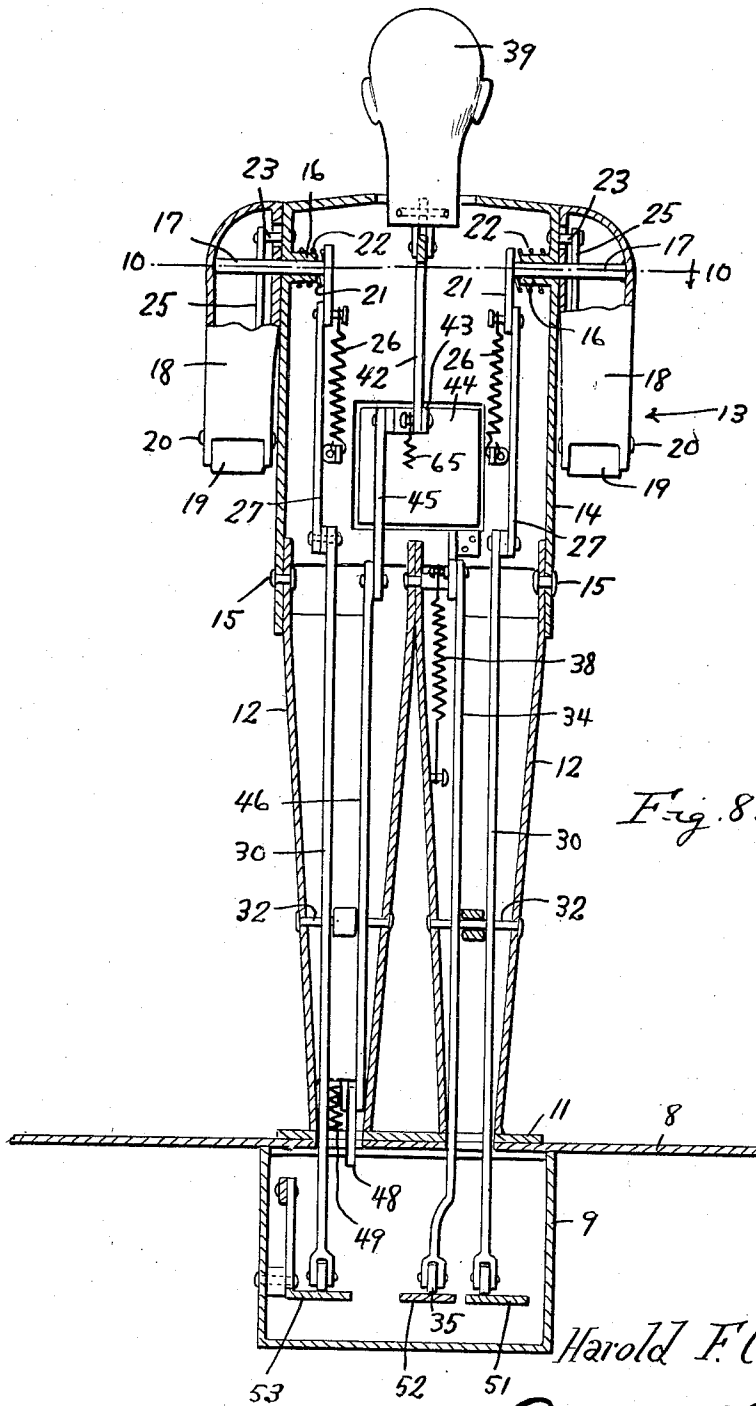
H. F. CROWELL

1,799,735

BOXING TOY

Filed Aug. 16, 1930

5 Sheets-Sheet 4



Inventor

Harold F. Crowell

By

Clarence A. O'Brien

Attorney

April 7, 1931.

H. F. CROWELL

1,799,735

BOXING TOY

Filed Aug. 16, 1930

5 Sheets-Sheet 5

Fig. 9.

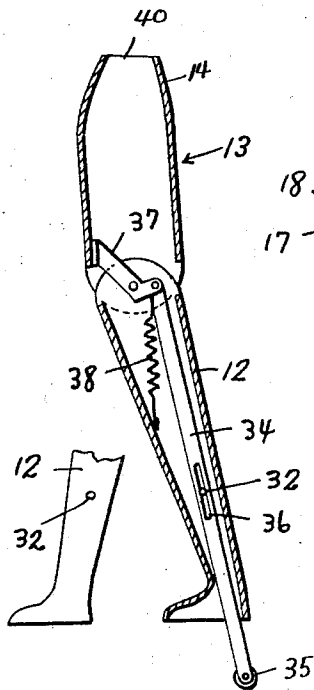


Fig. 10.

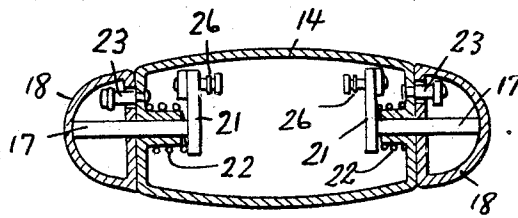
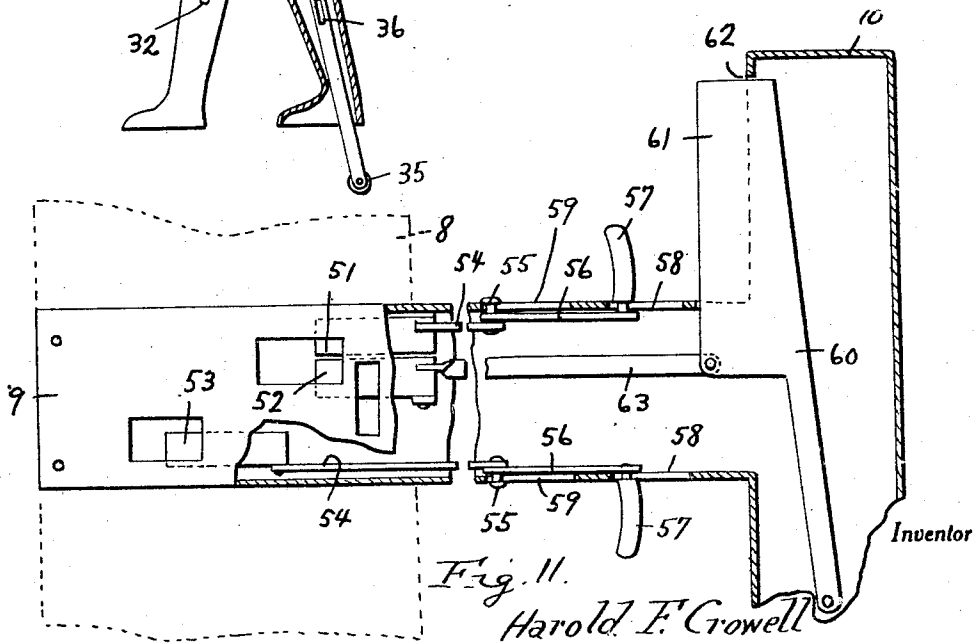


Fig. 11.

Harold F. Crowell

By *Clarence A. O'Brien*  
Attorney

## UNITED STATES PATENT OFFICE

HAROLD FRANKLEN CROWELL, OF SAUGUS, MASSACHUSETTS

## BOXING TOY

Application filed August 16, 1930. Serial No. 475,789.

This invention relates to a boxing toy, and has for its primary object to provide, in the manner as hereinafter set forth a toy of this character, embodying a novel construction and arrangement of parts, whereby a contest may be held between two operators of the toy, thus providing considerable amusement for said operators and others, the toy further being of a construction to require considerable skill on the part of the operators for winning a contest.

Another important object of the invention is to provide a boxing toy of the aforementioned character embodying a pair of manually operable shiftable figures which are adapted to be manipulated in a manner to strike each other, said figures being normally and releasably retained in an upright position on a supporting platform, and including means operable when struck by the other of the figures for causing same to assume a horizontal position.

Other objects of the invention are to provide a figure toy of the character set forth, which will be simple in construction, strong, durable, efficient in use and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention may become apparent from a study of the following specification, taken in connection with the accompanying drawings, wherein like characters of reference designate corresponding parts throughout the several views, wherein:

Figure 1 is a view in top plan of a figure toy constructed in accordance with this invention.

Figure 2 is a view in side elevation thereof.

Figure 3 is a vertical cross sectional view, taken substantially on the line 3—3 of Figure 1.

Figure 4 is a fragmentary view, showing in top plan the operating mechanism of one of the figures.

Figure 5 is a fragmentary view, in vertical longitudinal section showing one of the figures and a portion of the operating mechanism therefor.

Figure 6 is a detail view principally in

side elevation and partly in section of one of the figures.

Figure 7 is a vertical sectional view through one of the figures taken substantially on the line 7—7 of Figure 8.

Figure 8 is a vertical cross sectional view, taken through one of the figures.

Figure 9 is a fragmentary view in vertical section through another portion of one of the figures.

Figure 10 is a horizontal sectional view, taken substantially on the line 10—10 of Figure 8, looking in the direction indicated by the arrow.

Figure 11 is a fragmentary view, principally in horizontal section of the operating mechanism for one of the figures.

Referring to the drawings in detail, it will be seen that the reference numeral 1 designates generally a miniature prize ring having the platform 2 upon which the corner posts 3 are mounted for supporting the ropes 4. The platform 2 and the supporting walls 5 therefor are preferably stamped or otherwise formed from metal and said platform is further provided with a longitudinally extending channel 6 extending centrally from one end thereof to the other and in spaced relation to the longitudinal sides of the platform. At its opposite ends the channel 6 is bridged by the bars 7. A pair of plates 8 also bridge the channel 6 and have their opposite ends shiftable disposed for rest on the platform 2 on opposite sides of the channel. Each of the plates 8 is rigidly mounted on one end portion of the polygonal housings 9, which extend outwardly from opposite ends of the ring 1 beneath the bars 7, and have formed on their outer ends the handle portions 10. The handle portions 10 are also hollow and of polygonal cross section and communicate with the interior of the respective housings 9.

Hingedly mounted on each of the plates 8 is a base 11 upon each of which are rigidly mounted the hollow leg portions 12 of a pair of figure toys which are designated generally by the reference numeral 13.

The bases 11 and the plates 8 are provided with registering openings whereby communi-

cation between the hollow legs and the housing 9 is had.

Each of the figures 13 further includes a body portion 14, hingedly mounted for vertical swinging movement as at 15, on the upper ends of the legs 12. Each of the body portions 14 has formed in its opposite side portions adjacent its upper ends, the bearings 16, in which the shafts 17 are journaled. Fixed on each of the shafts 17 is an arm 18, which includes a swingable end portion 19 hingedly connected thereto as at 20. A crank 21 is fixed on the inner end of each of the shafts 17 and coil springs 22 encircle the bearings 16, and are engaged with the cranks 21, in a manner to yieldingly urge the shafts 17 inwardly and frictionally engage the arms 18 with the opposite sides of the body portions 14 for preventing idle swinging movement or rattling of the arms.

Pins 23 project outwardly from the opposite sides of each of the figures 13 into the arms 18 on said figures, through the arcuate slots 24 (see Figure 6), which are provided for this purpose. Links 25 are pivotally connected at one end to the pins 23 and at their opposite ends to the lower arm portions 19, in a manner to cause said lower portions 19 to swing toward a position in parallelism with the upper portions of the arms when said upper portions are swung upwardly on the body portion 14 of the figures. When the upper portions of the arms 18 are swung downwardly the links 25 will cause the lower portions 19 of the arms 18 to swing upwardly relative to said upper portions.

The coil spring 26 has one end anchored to the free end of each of the cranks 21 and its opposite end anchored to the body portion 14 in a manner to yieldingly urge the shafts 17 and the arms 18 downwardly or to retracted position. It may be well to here state that the opposite sides of the body portions 14 of the figures 13 are substantially flat as best seen in Figure 10 of the drawings.

As best seen in Figure 7 of the drawings, each of the cranks 21 also has pivotally connected to its free end a bar 27, said bars 27 extending downwardly through the body portions 14 and having their lower ends pivotally connected to the links 28, which, in turn, are pivotally mounted on the brackets 29, provided therefor in the body portions 14. Elongated bars 30 have their upper ends pivotally connected with the lower ends of the escapement bars 27 and said bars 30 extend downwardly through the legs 12 of the figures 13. Each of the bars 30 is provided with a longitudinally extending slot 31 for slidably supporting the lower end portions of the said bars 30 in spaced relation to the walls of the respective legs, through the medium of the pins 32, mounted transversely in the legs 12 and extending slidably through the slots. Each of the bars 30 projects downwardly

through the registering openings in the bases 11 and the plates 8 into the housings 9 and have journaled on their lower ends the rollers 33.

Referring now to Figure 9 of the drawings, it will be seen that another bar 34 is operable in one of the legs 12 of each of the figures 13, and has journaled on its lower end the roller 35. The bars 34 also extend downwardly through the registering openings in the bases 11 and the plates 8, into the housings 9. Each of the bars 34 is also provided with a longitudinally extending slot 36 in an intermediate portion through which the transverse pins 32 in those particular legs of each figure extend. The upper end of each of the bars 34 is pivotally connected to one end of the levers 37, provided in each of the figures 13. Each of the levers 37 has its other end operatively connected with the respective body portions 13 of the figures 14 for causing said body portions to swing forwardly or rearwardly when the bars 34 are actuated. Springs 38 are operatively connected at one end with each of the levers 37 and have their opposite ends anchored in the legs 12 for normally maintaining the body portions 14 in a substantially upright position when the figures 13 are in operative position.

Each of the figures 13 further includes a head 39 having a neck portion operable through openings 40 provided therefor in the upper end portion of each of the bodies 14, said heads 39 being pivotally mounted for forward and rearward swinging movement on the supporting brackets 41. In each of the figures 13 a link 42 has one end pivotally connected to the neck portion of the head 39 and its other end pivotally connected to a bracket 43 which is of angular form and pivotally supported on the front wall of the body portion 14, in the manner illustrated to advantage in Figure 5 of the drawings. The bracket 43 constitutes a hinge for supporting the swingable plate 44. The plate 44 is exposed through an opening provided therefor in the front wall of the body portion 14 of the figure. Also operatively connected at one end to the bracket or hinge 43 is a link 45 having its other end pivotally connected to the bar 46, extending downwardly through one of the legs 12. It may be well to here state that the bar 34 extends through one of the legs 12 and the bar 46 extends through the other of the legs of each figure. The bar 46 is provided with a longitudinal slot 47, in which is operable the pin 32 in that leg. At its lower end the bar 46 is pivotally connected to an angular keeper 48, mounted for swinging movement on a bracket provided therefor in the foot portion of the leg. The keeper 48 has its hooked end engageable beneath the plate 8, in a manner to re-

leasably secure the free end of the base 11, on the said plate 8. The keeper 48 is operable in the registering openings provided in the base 11 and plate 8, through the medium of which communication is established between the leg in which the keeper is mounted and the interior of the housing 9. A coil spring 49 is disposed in the foot portion of the leg in which the keeper 48 is mounted and has one end engaged with said foot portion and its opposite end engaged with the plate 8, in a manner to yieldingly urge the foot portion and the base 11 to which said foot portion is rigidly secured upwardly and rearwardly on the hinge connection 50. The spring 49 is, of course, maintained under compression when the base space 11 is anchored to the plate 8 by the keeper 48.

A plurality of bell crank levers 51, 52, and 53 are pivotally mounted for swinging movement in a vertical plane in each of the housings 9. One end portion of the bell crank levers 51 and 53, is operatively engaged with the rollers on the lower ends of the arm operating bars 30 and the bell crank lever 52 has one end portion operatively engaged with the roller on the lower end of the body operating bar 34.

Links 54 have one end pivotally connected to the opposite ends of the bell crank levers 51 and 53, and the opposite ends of the links 54 are pivotally connected by the headed pins 55, to one end of the slidable bars 56 having fixed on their free ends the operating handles 57 which are operable in the slots 58 provided therefor longitudinally in the opposite side walls of the housing 9. The headed pins 55 are slidably engaged in the longitudinal slots 59 which are also provided in the opposite vertical side walls of the housing 9.

A lever 60 is pivotally mounted for operation in the handle portion 10 of each of the housings 9, said lever 60 including a widened handle portion 61, which is substantially U-shaped in cross section and which is adapted to project outwardly through the slot 62 provided therefor in one wall of the handle portion 10, and an adjacent portion of the housing 9. A link 63 has one end pivotally connected to the lever 60 and its opposite end pivotally connected to the end of the bell crank lever 52 which is free of the roller on the body operating bar 34. The two figures which are shiftably mounted on the ring 1 and the operating mechanism for said figures are identical in construction and operation and a detailed description of one will therefore suffice for both.

In use, the handle portions 10 are grasped and the housings 9 are moved longitudinally and laterally as desired in the channel 6. The operator of each figure attempts to maneuver his figure to enable him to deliver a blow to the opposing figure and the operator

of said opposing figure, of course, attempts to frustrate this move and deliver a blow with his own figure. Either of the arms of the figures 13 is projected to extended position for delivering a blow by pulling rearwardly on the handles 57 in a manner to rock the bell crank levers 51 and 53 for rocking the shafts 17 through the medium of the bars 30, the links 28, the bars 27, and the cranks 21. As before stated, the arms 18 and the operating mechanism therefor, are returned to inoperative or retracted position by the coil springs 26. When either one or both of the arms 18 are projected forwardly in delivering a blow, the operator substantially simultaneously may actuate the lever 61, in a manner to rock the bell crank 52 through the medium of the link 63 and actuates the bar 34, in a manner to swing the body portions 14 forwardly.

If one of the figures delivers a blow to the head 39 of the opposing figure, said head is caused to swing rearwardly on the supporting brackets 41 by the blow and the keeper 48 will be moved to inoperative position out of engagement with the plate 8, by the bars 46, the link 45, the hinge 43 and the link 42.

The coil spring 49 will then cause the figure and the base 11 upon which the figure is rigidly mounted to swing rearwardly and downwardly, it being only necessary for the coil spring to move the figure off balance from which point this figure will fall by gravity, as will be apparent. Should one of the figures 13 deliver a blow to the plate 44, hingedly mounted on the body portion 14 of the opposing figure, said plate 44 will be swung inwardly, in a manner to actuate the hinge 43, and disengage the keeper 48 through the medium of the link 45 and the bar 46, and the figure which has been struck will, in this manner, be also caused to assume a horizontal position. It will thus be seen that the operator of the figure which has delivered the blow to the opposing figure is the winner of the contest.

It will be noted that the legs of each of the figures are disposed with the left leg forwardly of the right leg, which is the usual boxing posture and by this arrangement, the keeper 48 for each of the figures will be disposed adjacent the forward or free end of the supporting bases 11 upon which the figures are mounted.

A coil spring 65 has one end anchored to the body portion 14 of each of the figures and its opposite end connected with the hinged member 43, in a manner to return the head 39 and the plate 43 to normal position after the same has been struck and also to yieldably retain the keeper 48 in operative position, through the medium of the bar 46.

When the figures have been struck and swing rearwardly and downwardly, the bars 30 and 46 swing upwardly through the regis-

tering openings provided therefor in the base 11 and the plate 8, as will be apparent.

It is believed that the many advantages of a boxing toy constructed in accordance with this invention will be readily understood and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of construction may be had which will fall within the scope of the invention as claimed.

What is claimed is:

1. A boxing toy of the character described comprising an elevated platform having a longitudinal channel therein extending from one end of said platform to the other end of said platform, a pair of bars extending transversely over the end portions of the channel and mounted for rest on the platform on opposite sides of the channel, a laterally and longitudinally shiftable supporting member extending into the channel from each end thereof beneath the bars, a plate rigidly mounted transversely on the inner ends of the supporting members and extending over the platform on opposite sides of the channel, an operating handle on the outer end of each of the supporting members, and a figure mounted on each of the plates.

2. A boxing toy of the character described comprising an elevated platform having a longitudinal channel therein extending from one end of said platform to the other end of said platform, a pair of bars extending transversely over the end portions of the channel and mounted for rest on the platform on opposite sides of the channel, a laterally and longitudinally shiftable supporting member extending into the channel from each end thereof beneath the bars, a plate rigidly mounted transversely on the inner ends of each of the supporting members and extending over the platform on opposite sides of the channel, an operating handle on the outer end of each of the supporting members, a figure mounted on each of the plates, each of said figures comprising a pair of legs, a body portion pivotally connected for swinging movement in a vertical plane to the legs, arms pivotally mounted for swinging movement on opposite sides of the body portion, and means for selectively actuating the arms.

3. A boxing toy of the character described comprising an elevated platform having a longitudinal channel therein extending from one end of said platform to the other end of said platform, a pair of bars extending transversely over the end portions of the channel and mounted for rest on the platform on opposite sides of the channel, a laterally and longitudinally shiftable supporting member extending into the channel from each end thereof beneath the bars, a plate rigidly mounted transversely on the inner ends of each of the supporting members, and extending over the platform on opposite sides of

the channel, an operating handle on the outer end of each of the supporting members, a figure mounted on each of the plates, each of said figures comprising a pair of legs, a body portion pivotally connected for swinging movement in a vertical plane to the legs, arms pivotally mounted for swinging movement on opposite sides of the body portion, means for selectively actuating the arms, said actuating means comprising a plurality of bell crank levers operatively mounted in the respective supporting members, means operatively connecting the bell crank levers with the arms, a pair of handles mounted for sliding movement on the supporting members, and links connecting the handles with the bell crank levers.

4. A boxing toy of the character described comprising a platform, figure supporting members mounted shiftable on the platform, a base pivotally mounted for swinging movement on each of the supporting members, a figure mounted on each of the pivoted bases for swinging movement therewith, each of said figures comprising a pair of supporting legs rigidly secured to the bases, a body portion pivotally mounted for swinging movement on the legs, resilient means for yieldingly urging each of the pivoted bases in one direction and away from the supporting members, a keeper mounted on each of the figures for releasably retaining the bases in position on the supporting members against the tension of the resilient means, a plate hinged mounted for swinging movement on the body portion of each figure, means for operatively connecting the plates with the keeper in a manner to shift said keeper to an inoperative position upon swinging movement of the plate in one direction, each of said body portions further including a pivoted head portion mounted for swinging movement on the body portion, and means for operatively connecting the head portions to the keeper for disengaging said keeper when the head is swung in one direction, arms hinged mounted for swinging movement on the sides of each of the body portions of the figures, manually operable means for selectively actuating the arms, and manually operable means for swinging the body portions on the legs.

In testimony whereof I affix my signature.  
HAROLD FRANKLEN CROWELL.