J. T. BOUFFORD.

TOY.

APPLICATION FILED SEPT. 19, 1916.

1,266,765.

Patented May 21, 1918.

5 SHEETS—SHEET 1.

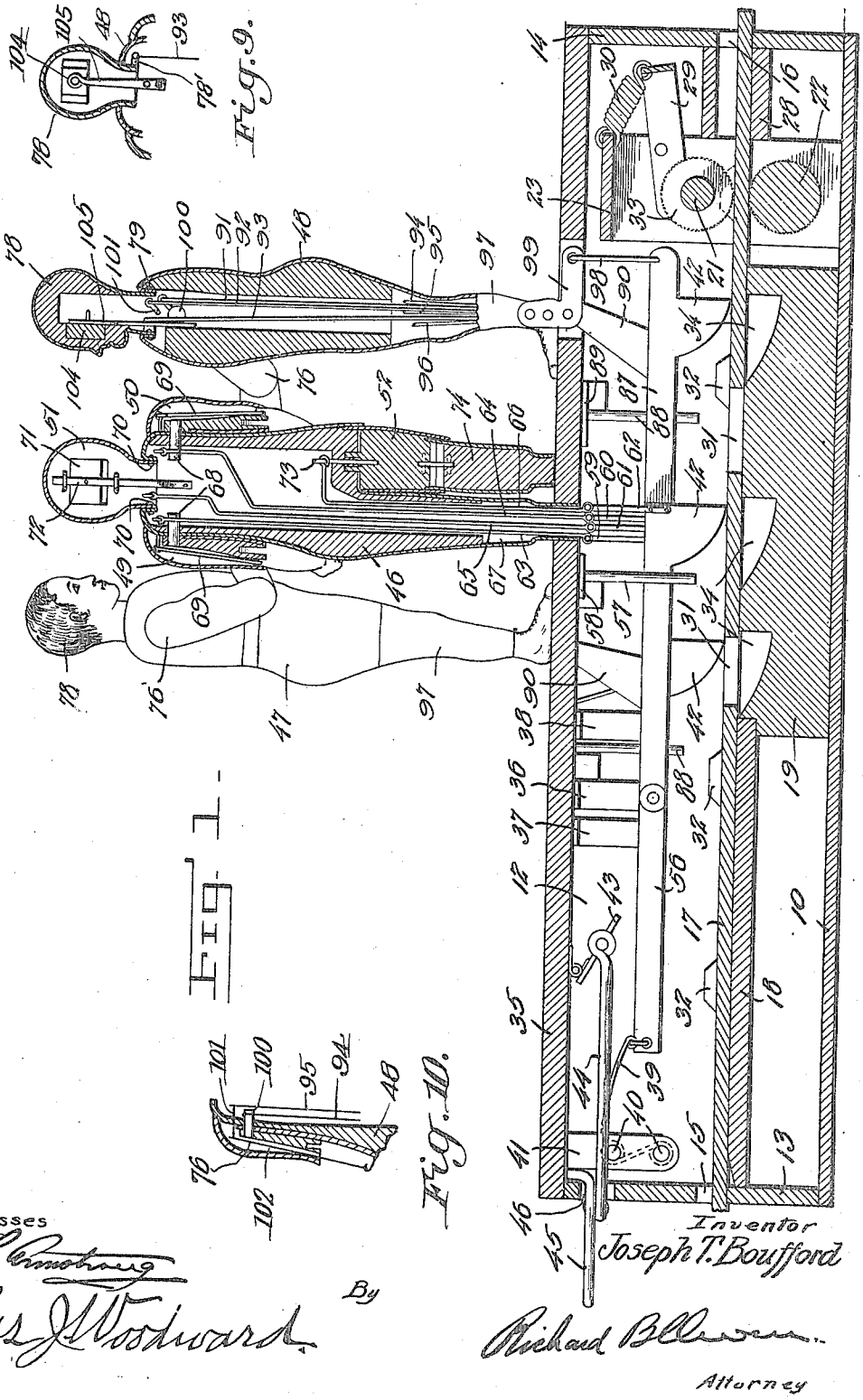


Fig. 9.

Fig. 10.

Witnesses

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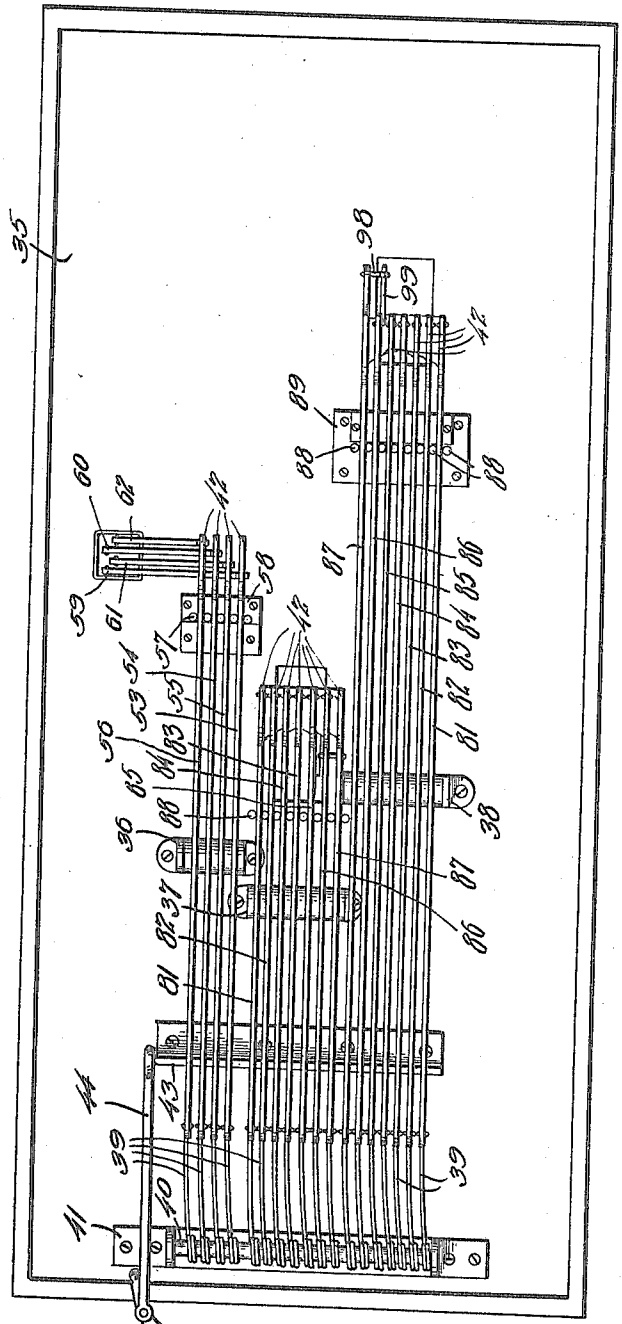
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5 SHEETS—SHEET 2.

Fig. 2.



Witnesses

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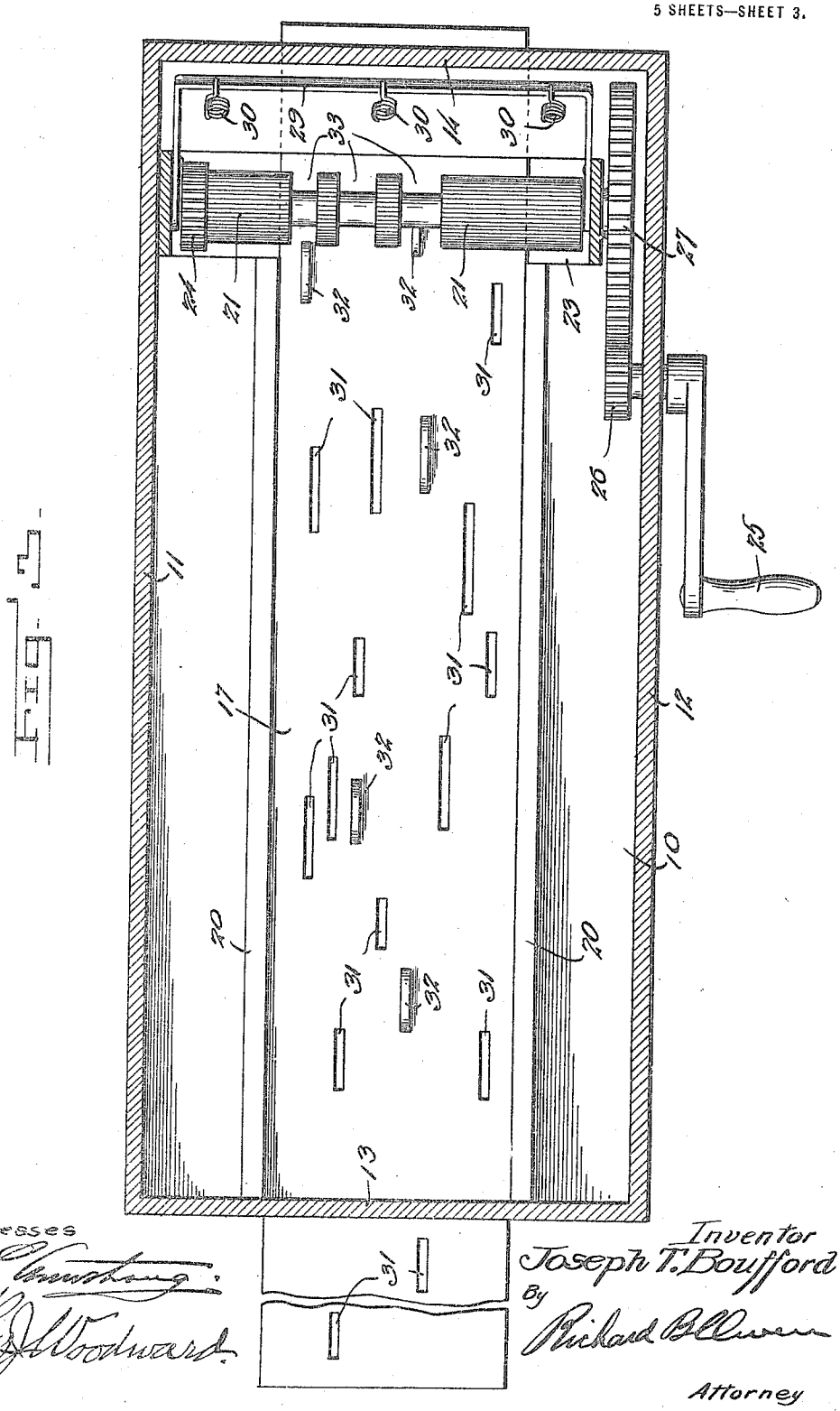
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5 SHEETS—SHEET 3.



Witnesses

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5 SHEETS—SHEET 4.

Fig. 4.

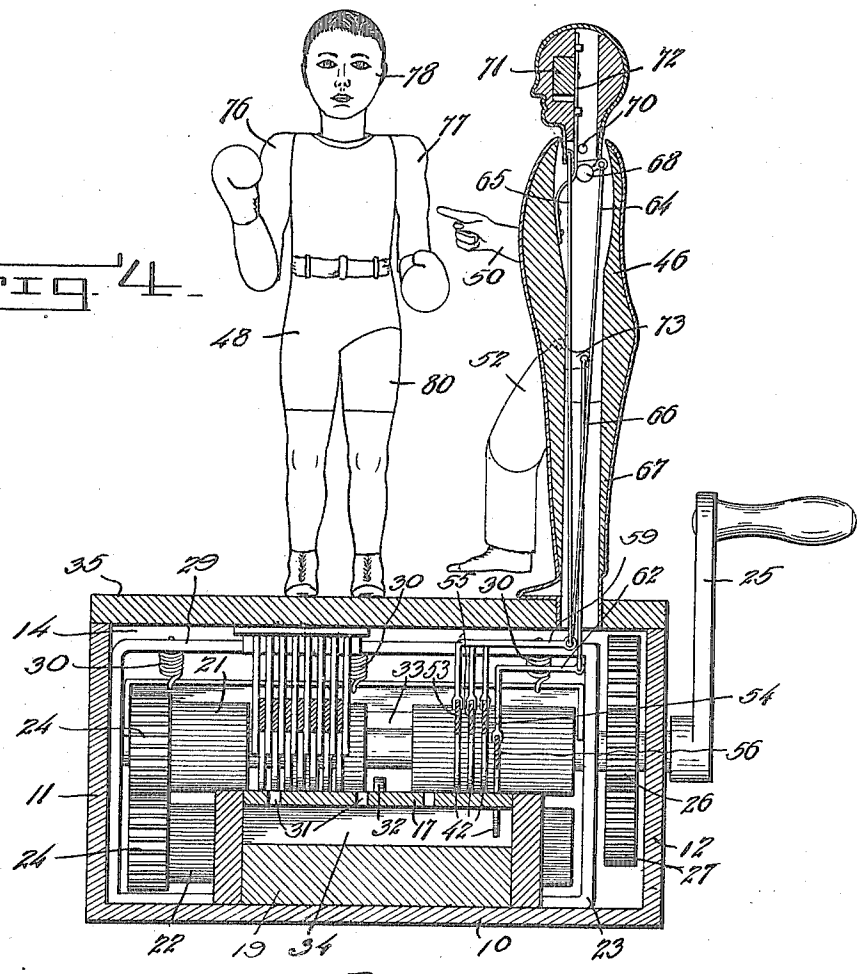
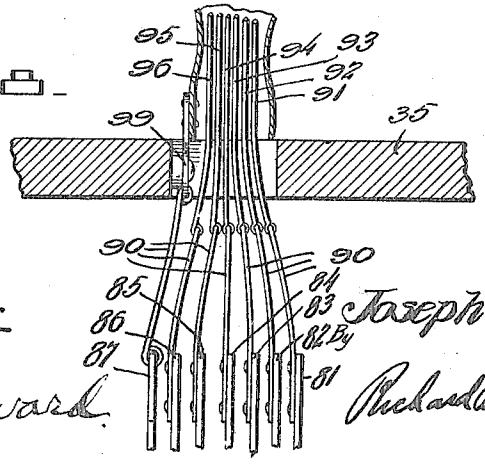


Fig. 6.



Witnesses.

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5 SHEETS—SHEET 5.

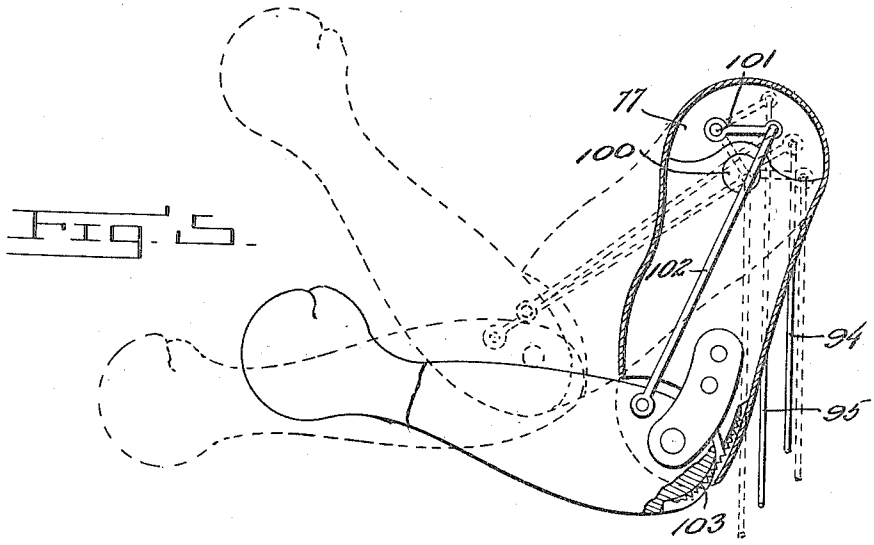


Fig. 5.

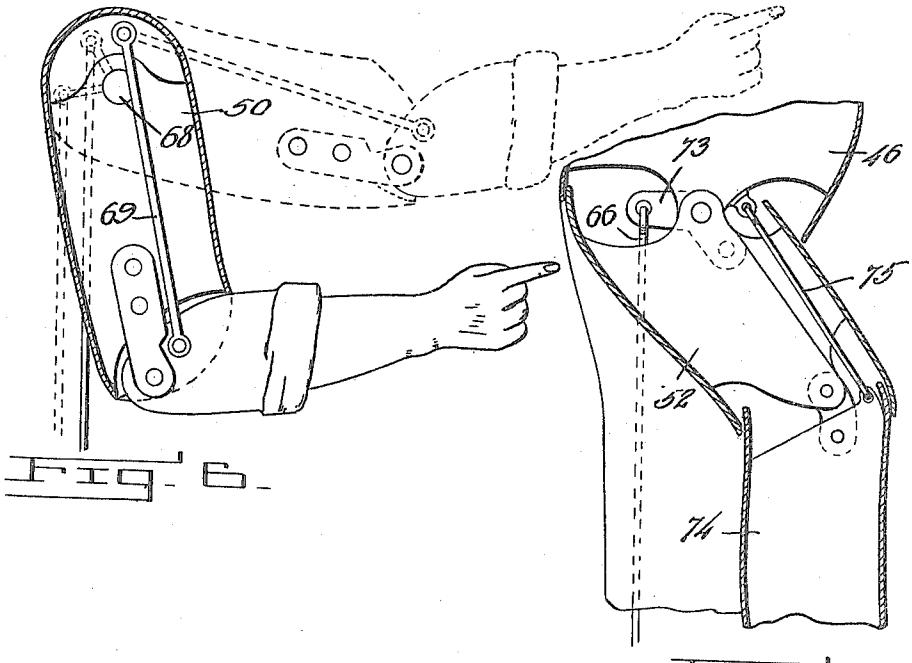


Fig. 6.

Fig. 7.

Witnesses

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UNITED STATES PATENT OFFICE.

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TOY.

1,266,765. Specification of Letters Patent. Patented May 21, 1918.

Application filed September 19, 1916. Serial No. 121,079.

To all whom it may concern:

Be it known that I, JOSEPH T. BOUFFORD, a subject of the King of Great Britain, residing at Linwood, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Toys, of which the following is a specification.

This invention relates to an improved toy and includes figures representing two boxers and a referee, the figures being mounted upon the cover of a housing and having movable heads, arms, and legs connected by wires with actuating bars connected with the inner face of the cover and engaging a ribbon moved through the housing.

Another object of the invention is to so construct and mount the figures, that the movement thereof may be controlled by properly placing slots in the ribbon and by properly placing lugs upon the ribbon thus moving the actuating bars as the ribbon passes through the housing.

Another object of the invention is to provide improved locking means for the cover, the locking means being connected with a device for moving the actuating bars out of engagement with the ribbon thus permitting the locking means to perform the two functions.

This invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a longitudinal sectional view through the improved toy.

Fig. 2 is a plan view looking at the inner face of the cover and disclosing the mounting of the actuating bars or levers.

Fig. 3 is a transverse sectional view through the housing disclosing the ribbon and actuating means therefor in plan.

Fig. 4 is a vertical transverse sectional view through the toy.

Fig. 5 is a view showing the arm of one of the fighters, partially in elevation and partially in section, the arm being indicated in adjusted position by dotted lines.

Fig. 6 is a view of the referee's arm, partially in elevation and partially in section, this arm being also indicated by dotted lines in an adjusted position.

Fig. 7 is a view showing the manner of constructing the movable legs of the referee.

Fig. 8 is a fragmentary sectional view taken through the leg of one of the boxers.

Fig. 9 is a fragmentary sectional view through the head and upper body portion of one of the fighters showing the manner of imparting side movement to the head.

Fig. 10 is a fragmentary sectional view through the body portion of one of the fighters showing the manner of mounting the arms.

The housing 10 is provided with side walls 11 and 12 and end walls 13 and 14, the end walls being provided with slots 15 and 16 forming the inlet and outlet respectively for the ribbon 17. This ribbon 17 passes over the platform 18 and across the block 19 which is positioned between the guiding strips 20 and will then pass between the rollers 21 and 22 which rollers are rotatably mounted in the frame 23. Gears 24 are formed upon these feeding rollers and it will thus be seen that when the crank handle 25 is turned and rotary motion transmitted to the rollers 21 through the medium of the intermeshing gears 26 and 27, the roller 22 will also be rotated thus feeding the ribbon between the rollers and across the supporting plates 28 to the outlet 16 through which it will pass. A yoke 29 is pivotally connected with the frame 23 and has its arms extending to engage the upper roller so that by means of the springs 30 this yoke may serve to hold the upper roller in tight engagement with the belt passing between the rollers. This belt or ribbon 17 is provided with slots 31 and with abutment lugs 32, the object of which will be hereinafter brought out and in order to permit this belt to pass between the rollers, it is necessary to provide cut-outs 33 in the upper roller 21 as shown in Figs. 3 and 4. It should be noted that these slots or openings 31 pass across pockets 34 formed in the block 19 thus permitting access to the pockets through the slots of the belt.

The cover 35 serves as a platform and represents the prize ring and carries brackets 36, 37 and 38. The brackets serve as means for pivotally mounting the actuating bars for the two fighters and the referee. The actuating bars extend rearwardly beyond the brackets and are engaged by the springs 39 which springs are carried by the rods 40 of the frame 41 and serve to draw upwardly thus yieldably holding the free end portions or fingers 42 of the actuating bars in engagement with the ribbon or belt 17. A shifting or locking plate 43 is hingedly connected with the cover 35 and is engaged by a draw bar 44 leading from the latch lever 45 con-

nected with the cover and fitting into the pocket 46 formed in the end wall 13 and having a bayonet-slot construction. When the latching lever 45 is in the position shown in Fig. 1, the plate 43 will be raised and the spring will swing the actuating bars thus moving the free ends thereof into engagement with the ribbon but when swung to the position shown in Fig. 2, the latching lever will be moved to a position to permit the cover to be raised and will further swing the plate 43 into engagement with the actuating bars and raise the bars out of engagement with the ribbon. When in this position, the ribbon can be inserted and passed beneath the free ends of these bars and into engagement with the feeding rollers. As soon as the ribbon is in place, the latching lever will be returned to the position shown in Fig. 1. Therefore this latching lever not only serves as an actuating lever for the plate 43 but also serves as means for releasably locking the cover.

The referee 46 is mounted upon the platform or cover 35 intermediate the boxers 47 and 48 and is provided with movable arms and head and one movable leg, the arms being indicated by the numerals 49 and 50 and the head and movable leg being indicated by the numerals 51 and 52. The bars 53, 54, 55 and 56 are pivotally mounted by means of the brackets 36 and are guided in their vertical movement by the guiding pins 57 extending from the plate 58 secured to the inner face of the platform and these actuating bars are connected with the rods 59, 60, 61, and 62 which in their turn are connected with the wires 63, 64, 65, 66 leading through the stationary leg 67 of the referee. The wires 63 and 64 are connected with the pivot pins 68 of the arms 49 and 50 and therefore when the fingers 42 of the actuating bars for these arms drop into the slot, the arms will be swung upwardly or if the lugs 32 pass beneath these fingers 42, the arms will be swung downwardly past the normal position. These arms which are rigid upon the pivot-pin 68 are hinged at the elbow as shown in Fig. 6 and there have been provided wires 69 which are connected with the body above the pivot pin 68 and with the forearm thereby causing the forearms to swing at the elbow when the arms are moved through rotation of the pivot pin. The head 51 is pivoted at the side as shown at 70 in Figs. 1 and 4 and is engaged by the wire 65 so that when the actuating bar 55 is moved the head will be moved back and forth. At the same time, the block 71 which carries the eyes and is carried by the spring 72, will receive movement as though the referee were looking up and down. The movable leg of the referee is provided with a hinge bracket 73 which is connected with the wire 66 and has its lower portion 74 hinged at the knee and engaged by a wire 75 leading from the body as shown in Fig. 7 so that when the actuating bar of this leg moves, to swing the leg at the hip, the lower portion of the leg will be given the proper movement to cause the foot to stamp upon the ground or platform.

The two fighters are constructed alike and therefore a description of the construction of fighter 48 will serve as a description of both fighters. This fighter 48 is shown in section in Fig. 1 and the construction of the arm of the fighter is shown in Fig. 5. This fighter is provided with movable arms 76 and 77, a head 78 having the neck pivotally mounted as shown at 79 to permit the head to move sidewise as if dodging a blow and a leg 80 which is pivotally mounted at the hip and provided with a hinge bracket similar to the hinge bracket 73. The actuating bars 81 to 87 are pivotally mounted and guided by the guiding fingers 88 of the plates 89 and are provided with upstanding arms 90 connected with the actuating wires of the figures representing the boxers. The wires 91 to 96 extend through the stationary leg 97 of the boxer. The wire 98 leading from the actuating bar 87 is connected with the hinge bracket 99 and it will thus be seen that when this bar 87 moves downwardly the figure will be swung rearwardly to a reclining position thus indicating that the boxer has been knocked down. The arms 76 and 77 are actuated by the wires 91, 92, 94 and 95, these arms being pivotally mounted by means of pins 100 with which the wires 91 and 94 are connected as shown in Figs. 1 and 5. As the actuating bars move downwardly to draw upon these wires, the arms will be swung thus moving the arms upwardly. The wires 92 and 95 are connected with the rocker shafts 101 which are mounted in the shoulders and connected with the fore arms by means of the draw bars or wires 102. Therefore if the openings in the ribbon are properly placed, the arm may be caused to swing upwardly and the fore arm bent to strike outwardly to give a different type of blow from that which would be delivered if there was only provided an opening to cause the arm to swing upwardly by the wire connected with the pin 100. Therefore the arms may be moved to strike either at the face or at the body and further may be caused to swing upwardly and then outwardly. A spring 103 is provided so that the fore arm will be yieldably held in a set position and the return of the arm to the normal position assisted. The wire 93 is connected with the arms 78′ extending from the head so that the head may be caused to move sidewise as if dodging a blow and the block 104 which carries the eyes is slidably mounted for movement of the head transversely, and engaged by a

wire 105 thus causing this block to move transversely of the head when the head is swung sidewise. Therefore the fighters will appear to keep their eyes upon each other when the heads are swung sidewise. The movable leg is hinged at the hip but not at the knee although it may be hinged at the knee if so desired and is connected with the wire 96 thus permitting the leg to move when one fighter is supposed to kick the other.

When this toy is in use, a ribbon which has previously been prepared with the openings and lugs is inserted in the inlet opening 15 and passed beneath the fingers 42 of the actuating bars and engaged by the feeding rollers so that when the rollers are rotated, this ribbon will be fed across the plate 28 and out through the outlet opening 16. Of course, before the ribbon is inserted, the latch lever 45 has been moved to depress the plate 43 and swing the actuating bars upwardly. After the ribbon is in place, the latch lever is returned to the locking position thus releasing the actuating bars from the plates 43. The handle will now be turned to rotate the rollers and as the ribbon passes through the housing, the fingers 42 of these actuating bars will drop into the slots or engage the lugs thus giving motion to the arms, legs and heads of the figures. These figures will go through the motions of a boxing contest until one figure is knocked down and counted out by the referee.

It will thus be seen that there has been provided means by which a very good representation of a prize fight may be given.

What is claimed is:—

1. A toy comprising a platform, figures upon said platform having movable arms, heads and legs, actuating bars pivotally connected with the platform and yieldably held in a set position, draw rods connecting the free ends of said actuating bars with the movable arms, heads, and legs of said figures, a record for controlling movement of said bars, a movably mounted locking strip, and means to draw the locking strip into engagement with the actuating bars for releasably holding the bars against movement in one direction and out of engagement with said record.

2. A toy comprising a platform, figures movably connected with said platform and having movable elements, actuating means for said figures including actuating bars pivotally connected with said platform, a record for controlling movement of the actuating bars engaged thereby, a locking strip pivotally connected with the platform, and a lever connected with the locking strip to move the strip into engagement with the actuating bars to releasably hold the actuating bars out of engagement with said record.

3. A toy comprising a housing, a cover for said housing, figures upon said cover having arms movable at the shoulders and elbows, wires pivoted at the shoulders and connected with the forearms, and means for swinging the arms from the shoulders including pins pivotally mounting the arms at the shoulders and actuating bars pivotally connected with said cover and connected with the pivot pins, and means for controlling movement of said bars.

4. A toy comprising a platform, figures upon said platform having pivotally mounted heads, and movable arms and legs, eye carrying blocks slidably mounted in the heads, rods carried by the bodies of the figures and engaging the blocks whereby movement of the heads will change the relation between the eyes and the eye sockets in the head, actuating bars carried by said platform, wires leading from the actuating bars to the heads, arms and legs, and means for controlling the movement of said actuating bars.

5. A toy comprising a housing, a cover for said housing, movable figures connected with said cover, actuating means for said figures connected with said cover, means for releasably locking said actuating means against movement including a locking strip pivotally mounted and an actuating lever pivotally connected with the cover and connected with the strip to move the strip into and out of operative engagement with the actuating means, said lever serving as a latch for engaging said housing to hold the cover in a closed position when the locking strip is in operative position, and controlling means for the actuating means in said housing.

In testimony whereof I affix my signature in presence of two witnesses.

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