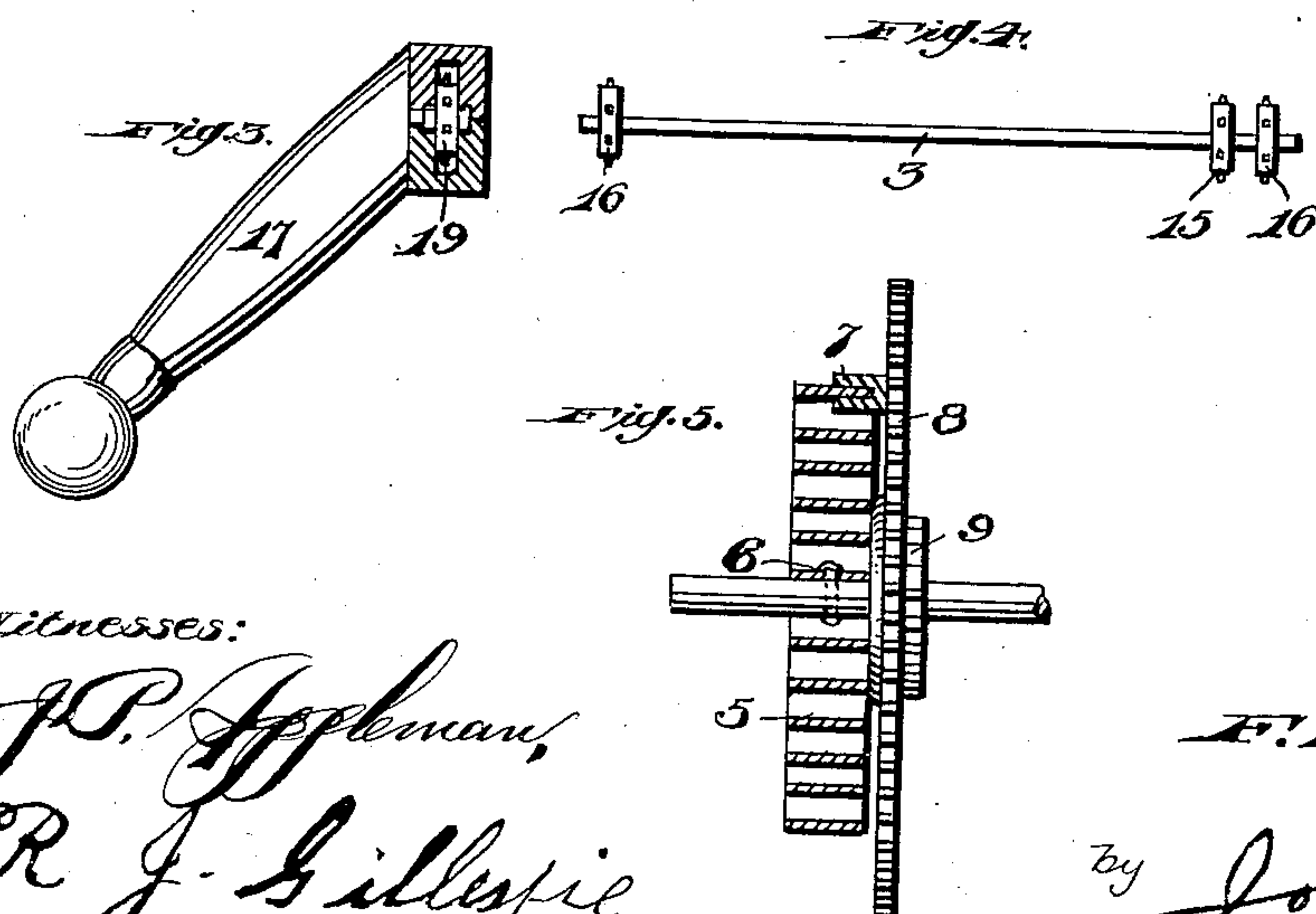
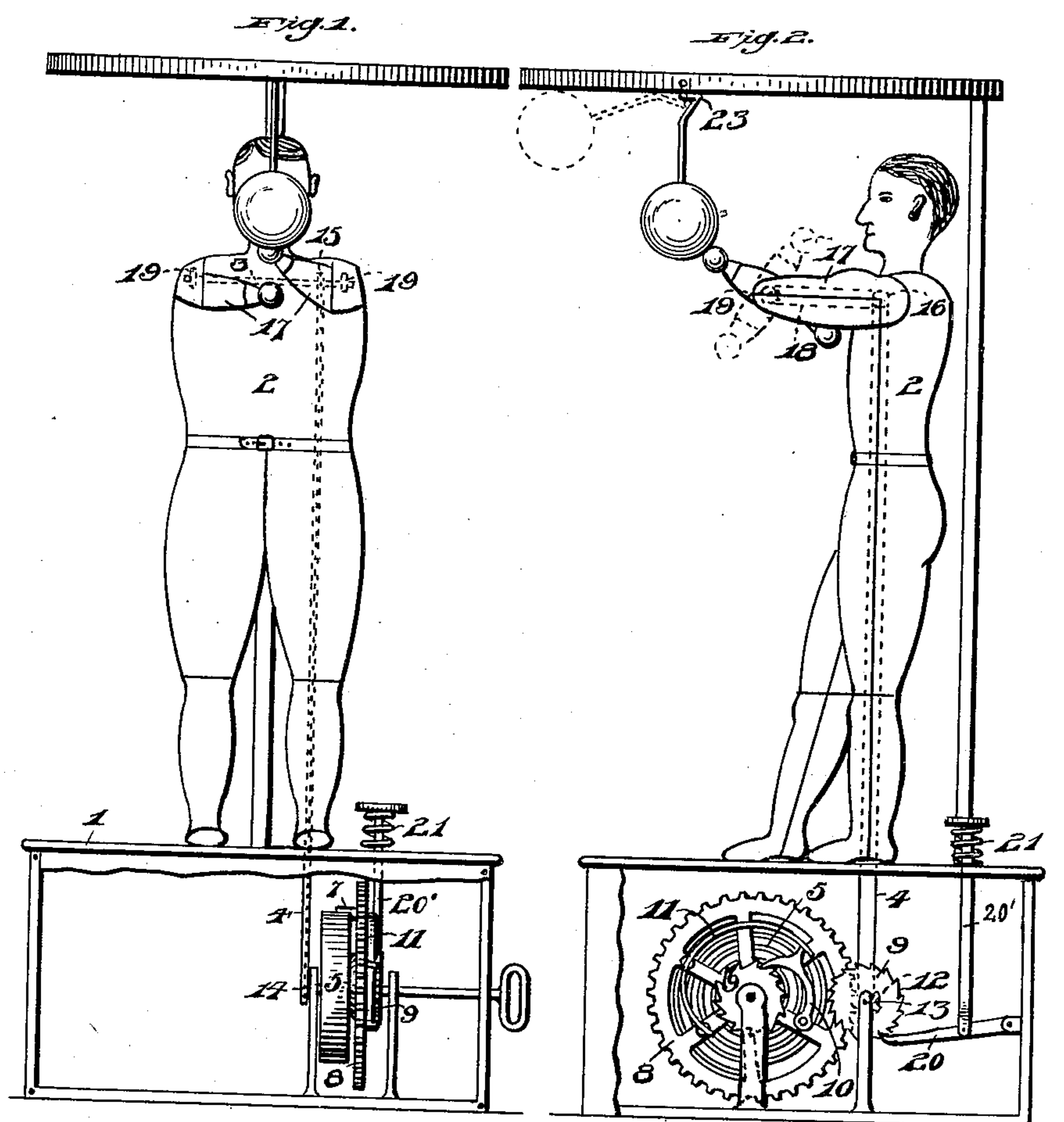


No. 742,504.

PATENTED OCT. 27, 1903.

F. L. SHAFFER.  
BAG PUNCHING TOY.  
APPLICATION FILED MAR. 2, 1903.

NO MODEL.



Witnesses:

J. P. Appleman,  
R. J. Gillespie

Inventor  
F. L. Shaffer

by John Roland  
Atty.

# UNITED STATES PATENT OFFICE.

FRANK L. SHAFFER, OF ALLEGHENY, PENNSYLVANIA.

## BAG-PUNCHING TOY.

SPECIFICATION forming part of Letters Patent No. 742,504, dated October 27, 1903.

Application filed March 2, 1903. Serial No. 145,630. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK L. SHAFFER, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bag-Punching Toys, of which the following is a specification.

My invention relates to a mechanical toy, the object of which is to construct a device that will impersonate a person punching an exercising-bag.

The invention consists of having suitable mechanism for carrying into effect the desired movements, thereby conveying to the spectator the action of arms and position of bag after being hit.

A further object of the invention is to produce a device of the character described which will prove amusing and comparatively inexpensive to manufacture.

Briefly described, the invention comprises an oblong box in which is arranged the operating mechanism. This also serves as a platform on which is mounted the image. The circular ceiling from which the bag is suspended is supported by an upright standard. The spring-actuating means is controlled by a spring-pressed pawl, and by releasing it from ratchet puts the device in motion.

To clearly describe my invention, reference will be had to the accompanying drawings, wherein I have shown a form of device by means of which the invention may be carried into effect, and in describing the invention in detail I will employ like numerals of reference throughout the various views of the drawings, in which—

Figure 1 is a front elevation of my mechanical apparatus with the side broken away to show the operating means. Fig. 2 is a side elevation also with the side broken away and showing the movements of arms and bag in dotted lines. Fig. 3 is a view of one of the arms, partly in section, showing sprocket-wheel. Fig. 4 is a view of shaft, showing

sprockets for operating arms. Fig. 5 is an end view of operating means, showing spring in section.

In describing my invention, 1 is the platform, and arranged therein is the power mechanism, which I will describe later on.

The image 2 is made in two sections, as I find this form of construction preferable in the mounting of shaft 3 and of adjusting endless belt or sprocket-chain 4. One end of spring 5 is riveted to shaft 6, and the other end is held between a pronged projection 7, which is mounted on side of gear-wheel 8, which is loose upon shaft 3. The ratchet-wheel 9 is keyed upon shaft, and a pawl 10 is kept in engagement by a spring 11, mounted on side of gear-wheel 8. By such construction the main gear-wheel 8 will not revolve when spring is wound. Meshing with gear-wheel 8 is a small gear-wheel 12, and mounted on end of shaft 13 is a sprocket-wheel 14. This communicates power to shaft 3 by means of sprocket-wheel 15. Arranged on both ends of shaft 3 are sprocket-wheels 16 of the same diameter, that communicate motion to arms 17 by an endless chain 18, passing over sprocket-wheels 19.

When it is desired to put device in operation, you release the pawl 20 from ratchet 9 by pressing down rod 20'. This allows the free movement of all parts, as before described, and will appear as shown in dotted lines of Fig. 2, and by releasing pressure upon rod the tension-spring 21 will draw pawl in engagement with teeth of ratchet, thereby stopping the mechanism.

The bag or ball is made of rubber, so it will rebound quickly, and the hanger by which it is supported is bent, as at 23, to form a stop, so as to prevent the same from going too far back.

I do not care to limit myself to the exact details of construction and operation set forth in the specification, and that I may make changes in the same without departing from the spirit of my invention.



Having described my invention, what I wish to secure by Letters Patent is—

1. In combination, a figure, rotatable arms on the figure, means for rotating the arms, a  
5 ball suspended in the path of travel of the arms and means for limiting the rearward movement of the ball.

2. In combination, a base, a figure, a motor, rotatable arms on the figure, means whereby  
10 the motor rotates the arms, a bag, an arm

pivotaly suspending the bag and means for limiting the backward swing of the arm.

In testimony whereof I affix my signature, in the presence of two witnesses, this 28th day of February, 1903.

FRANK L. SHAFFER.

Witnesses:

JOHN NOLAND,  
J. P. APPLEMAN.