

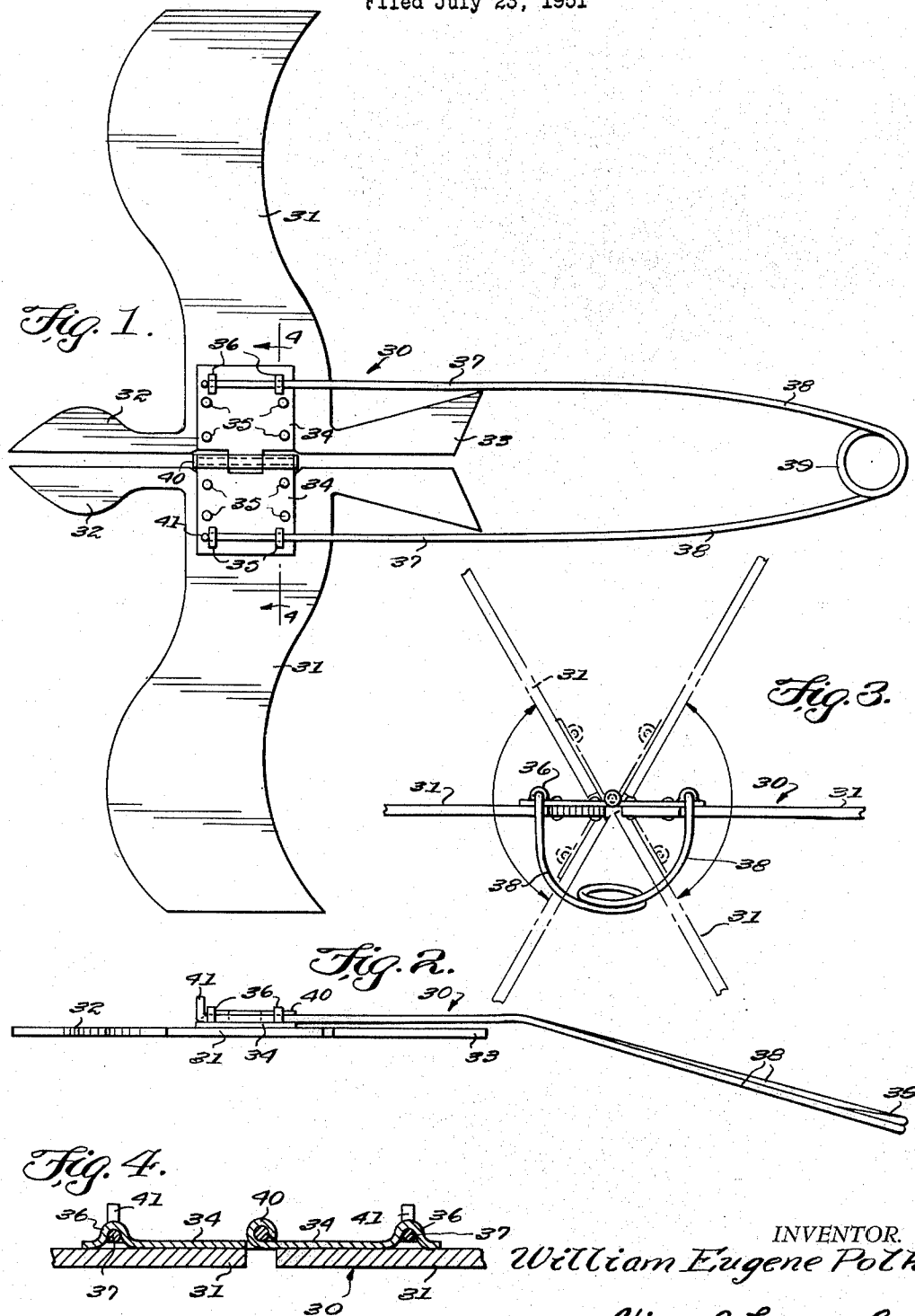
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FLAPPING WING TOY

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FLAPPING WING TOY

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1 Claim. (Cl. 46—124)

This invention relates to a toy, and more particularly to a manually operable mechanical toy.

The object of the invention is to provide a toy which is adapted to be manually manipulated by a child or other person which, when operated, will simulate a live bird, butterfly, bat or other living creature.

Another object of the invention is to provide a toy which includes wing sections that are oscillated by manual pressure on spring arms, the wing sections returning to their normal positions upon release of pressure on the spring arms.

Another object of the invention is to provide a manually operable toy which in one form comprises wing members or sections that are pivotally connected together, the inner portions of the wing members being shaped to simulate the body of a bird, there being spring arms connected to the wing members, whereby upon application of manual pressure to the spring arms, the wings will be caused to move to thereby simulate a bird in flight.

Still another object of the invention is to provide a toy which can be operated by grasping the handle of the toy and then swinging the toy up and down with a rhythmic motion, so that the wings will be set into a flight-like motion or caused to oscillate and this in turn will cause the handle extension to move back and forth as a mechanical force is set up, so that the toy can be operated with a minimum of effort, and whereby additional entertainment will be derived from the toy.

A still further object of the invention is to provide a toy which may be constructed in various forms and of various materials, the toy being realistic in appearance and fascinating to use, the toy being provided with a spring member that insures that the wings will quickly return to their normal position, the toy of the present invention being extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is a top plan view of the toy constructed in accordance with the present invention and shaped to simulate a bird;

Figure 2 is a side elevational view of the toy of Figure 1;

Figure 3 is an end elevational view of the toy of Figure 1;

Figure 4 is a sectional view taken on the line 4—4 of Figure 1.

Referring in detail to Figures 1 through 4 of the drawings, the numeral 30 designates a toy which is shaped to simulate a bird. The toy 30 includes a pair of wings 31 which are mounted for swinging movement toward and away from each other, as shown in Figure 3. Extending from each of the wings 31 is a head portion 32

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and a tail or body portion 33, and these parts cooperate to provide the representation of a live bird.

A means is provided for causing swinging movement of the wings 31, so that the wings will be made to flap or oscillate, whereby the flight of a bird will be simulated. This means comprises a pair of plates 34 which may be fabricated of any suitable material, and one of the plates 34 is secured to each of the wings 31 in any suitable manner, as for example, by rivets 35. Each of the plates 34 is provided with a plurality of lugs or eyelets 36, and an operating mechanism including a pair of spring arms 37 is provided.

The pair of plates 34 are pivotally or hingedly connected together by means of a pin or bolt 40, and the ends of the arms 37 extend through the eyelets 36, whereby the arms 37 will be securely connected to the plates 34. The rear portion of each of the arms 37 is offset, as at 38, Figure 2, and the offset portion 38 provides handles whereby the mechanism can be operated. The free ends of the arms 38 are interconnected together by a spring loop 39. The ends of the arms 37 may be bent transversely, as at 41, so as to insure that the arms 37 do not accidentally work loose from the eyelets 36.

When there is no manual pressure being applied to the handle portions 38 of the arms 37, the wings 31 will be normally in the position shown in Figure 3. Then, when the handles 38 are gripped tightly or squeezed together, the wings 31 will be closed or swung in one direction toward each other, as shown in Figure 3, so that the wings will move from the solid line position shown in Figure 3 to the broken line position. Next, when the manual pressure on the handle portions 38 is released, the wings 31 will snap open quickly, due to the spring pressure of the arms 37 and spring loop 39. The inertia of the wings 31 carries the wings past the wide open position and slightly to the other closed position, and by again gripping the handle portions 38 at the proper time, the wings 31 will be forced to close in the downward position or direction. Thus, by alternately gripping and releasing the handles 38 at the proper time or intervals, the wings 31 will travel through an arc of almost 180° each, said swinging movement being limited only by the maximum swing permitted by the hinge construction. This will provide a realistic appearance of a flying bird.

Furthermore, the shape of the wings may be varied and so may be the weight of the wings. Thus, normally, the outer portions of the wings are equal or balanced in weight with the inner portions of the wings and body, but if desired, one portion of the wings may be made heavier if it is desired to limit the arc of wing rotation.

As an optional method of operating the toy, as for example, the form of the invention shown in Figure 1, the handles 38 may be gripped and the toy can be swung up and down with a rhythmic motion. This will cause the wings 31 to be set into a flight-like motion, whereby the handles 38 will also be caused to move back and forth by the mechanical forces set up. This feature makes the toy additionally valuable and it takes very little effort to operate it, and provide an additional source of entertainment.

From the foregoing, it is apparent that a toy has been provided which is extremely simple and inexpensive to manufacture. The toy is very realistic in appearance, and will simulate birds or other creatures in flight or motion. The toy is fascinating and can be easily carried in a person's hand and operated by a simple motion to thereby provide amusement not obtainable with many toys now available. Also, the wings can rotate as much as 180°, and the spring tension provides that the wings will quickly return to thereby cause the wings to appear more realistic. However, spring pressure will

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still be relied upon for the return stroke. The speed of the wing flapping can be varied as desired, and the weight of the wing sections and body portions can be balanced to give different degrees of arc through which the wings will travel. Also, the body portion will give the appearance of rising and falling as the wings are operated.

What is claimed is:

In a toy simulating a bird, a pair of wings mounted for movement toward and away from each other, a head and tail portion extending from each of said wings, the inner edges of said wings being straight and being spaced from each other, a plate secured to each of said wings contiguous to the inner edges thereof, each of said plates being provided with a plurality of aligned eyelets, said eyelets being struck-out from said plates, one of said pair of plates being provided with a pair of spaced sleeves, the other of said plates having a cylindrical portion interposed between said pair of sleeves, said cylindrical portion and sleeves being positioned in the space between said wings, a hinge pin connecting said cylindrical portion to said sleeves, and an operating mechanism com-

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prising a pair of arms of springy material each having one end connected to said eyelets, the other ends of said arms converging together and being shaped to provide a handle, and a spring loop integrally connecting the other ends of said arms together, the rear portion of said arms being arranged angularly and offset from the front of said arms, the ends of said arms remote from said spring loop being arranged transversely with respect to the major portion of said arms to provide limit stops for abutting the eyelets on the front of said wings.

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