

(No Model.)

W. A. HOFFMANN.  
TOY.

No. 572,166.

Patented Dec. 1, 1896.

FIG:1.

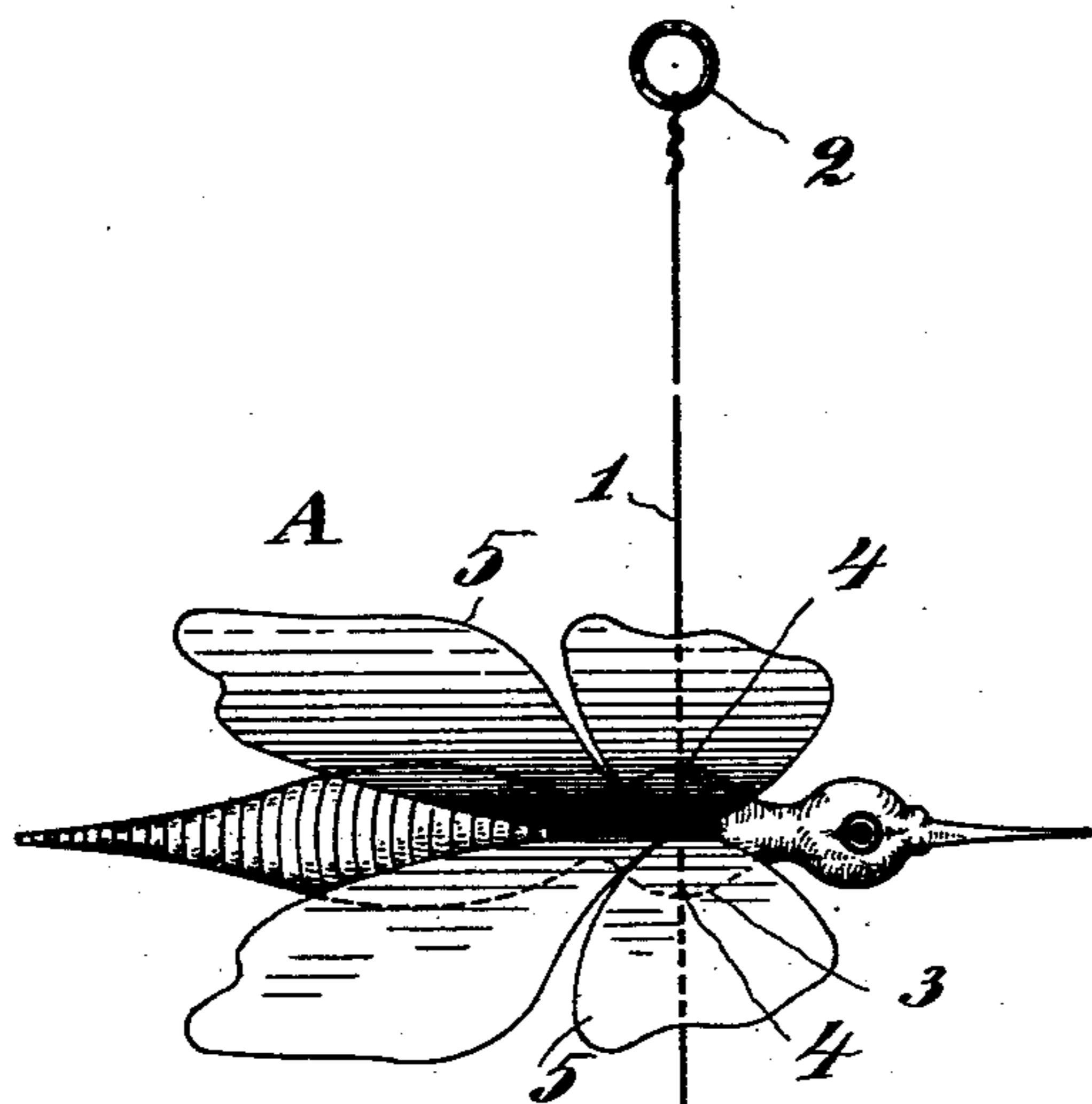
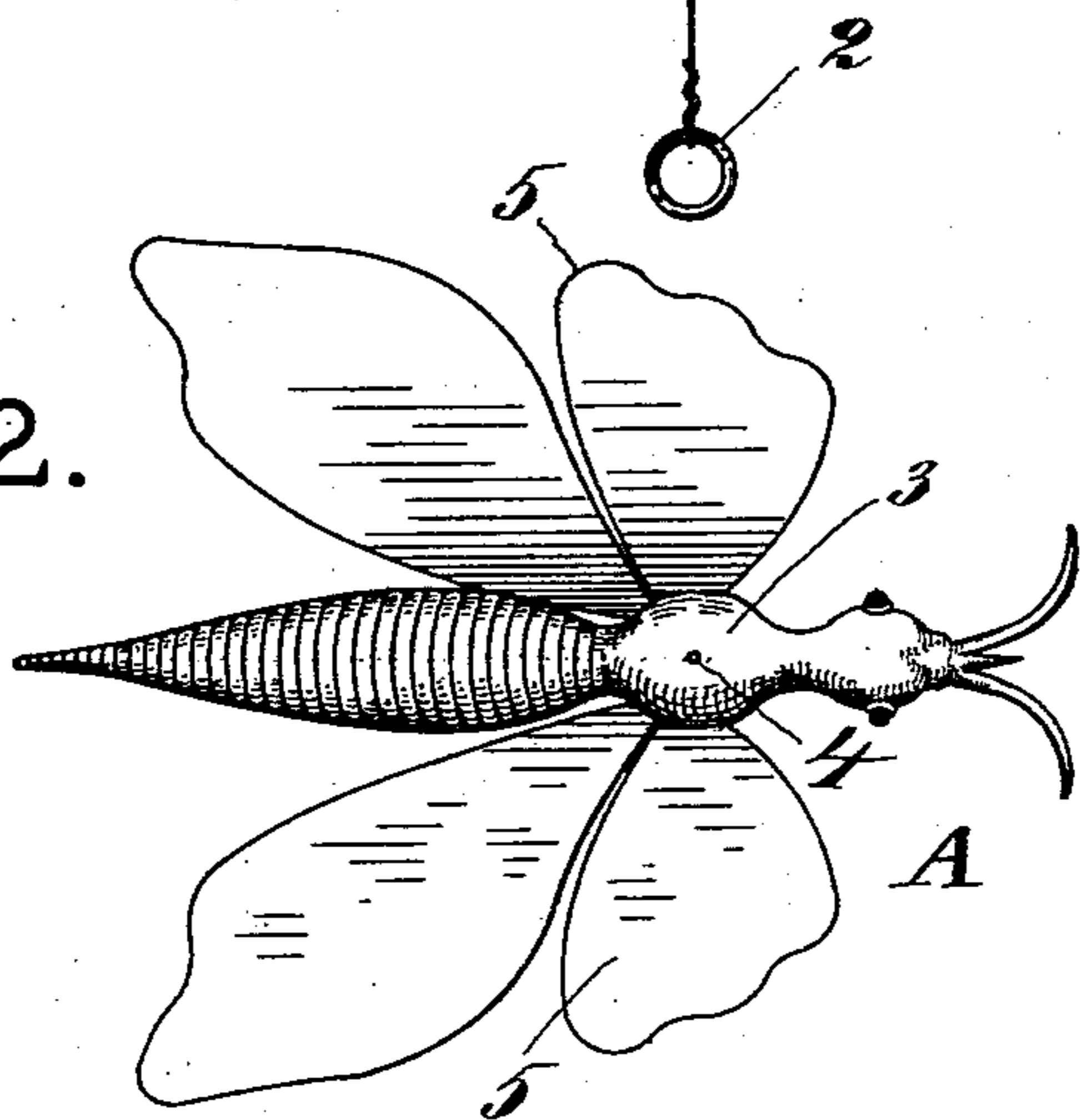


FIG:2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## TOY.

SPECIFICATION forming part of Letters Patent No. 572,166, dated December 1, 1896.

Application filed February 5, 1896. Serial No. 578,099. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. HOFFMANN, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Toys, of which the following is a specification.

This invention relates to the class of mechanical toys wherein a device simulating an insect, as a butterfly, moth, or the like, is made to move in a lifelike manner; and the object is to produce a simple, inexpensive, and effective toy which may be operated by stretching a fine wire between the hands and which may be packed in a small compass when not in use.

The accompanying drawings illustrate embodiments of the invention.

In the drawings, Figure 1 represents the device in side elevation, and Fig. 2 represents it as seen in plan.

1 is a fine wire, which may be in practice about two feet long, so as to be grasped and held strained or taut between the two hands of the operator; but the precise length of the wire is not important. At its respective ends the wire is furnished, by preference, with end pieces adapted to be grasped between the thumb and finger, and preferably these will be smooth rings 2 2, around which the respective ends of the wire will be loosely looped, so that the rings may slip freely therein.

A represents the insect as a whole. The body of this insect, consisting of the head, thorax, and abdomen, will be made, by preference, of thin sheet metal, and most conveniently of two like stamped-up sections or halves, secured together by solder or other known means. The hollow thorax 3 (if the body be made of sheet material) will have in its upper and lower walls small, coinciding, smooth holes at 4 just large enough for the wire 1 to play through, and the insect will be threaded on this wire, as clearly shown. The body of the insect is provided with wings 5 5, preferably double, or in pairs, as shown, and made from some thin, light, and rather tough material, such as aluminium, brass, &c. The wings are fixed to the body, and when the

wire is strained taut and held in a vertical position, each ring 2 being grasped between the thumb and finger of one hand, the insect A will move slowly down along the wire with a peculiar and lifelike tremulous motion, imparting to the projecting wings the same motion as the body, but much increased or exaggerated, owing to their length and flexibility. This movement is due to the alternate slipping and clamping of the body on the wire, produced by the combined action of gravity and the leverage of the longer and heavier part of the body producing a side draft. The wings retard the descent, and by moving the wire a little out of the vertical, from side to side, and also varying the tension slightly, it is easy to produce very lifelike movements of the insect.

When the insect shall have descended to the lower end of the wire, the hands may be reversed—still keeping the wire taut—so as to again bring the insect to the upper end of the wire. In order to enable this to be done and still preserve the lifelike appearance of the insect, the latter will be made substantially alike or symmetrical on both sides or faces, either of which may be considered its back.

As the rings 2 are free to turn in the loops on the ends of the wire the operator simply grasps the rings tightly in reversing the wire or turning it with its other end up. In packing up the toy the wire may be coiled up loosely about the insect.

Having thus described my invention, I claim—

1. As an article of manufacture, a toy comprising a single fine wire provided with suitable end pieces for holding and straining it between the hands, and a device A, simulating a winged insect having a small hole extending transversely through its body nearest to one end thereof through which the wire is threaded, said hole fitting the wire snugly but not tightly, whereby the binding of the margins of the holes on the upright wire causes the wings of the descending insect to vibrate, substantially as set forth.

2. As an article of manufacture, a device A,

simulating a reversible insect and furnished  
with thin, light double wings at each side, a  
hollow body and a hole through the body to  
receive a fine wire, of the single, fine wire  
5 threaded through said hole, and fitting the  
same closely, substantially as set forth.

In witness whereof I have hereunto signed

my name in the presence of two subscribing  
witnesses.

WILLIAM A. HOFFMANN.

Witnesses:

HENRY CONNETT,  
PETER A. ROSS.