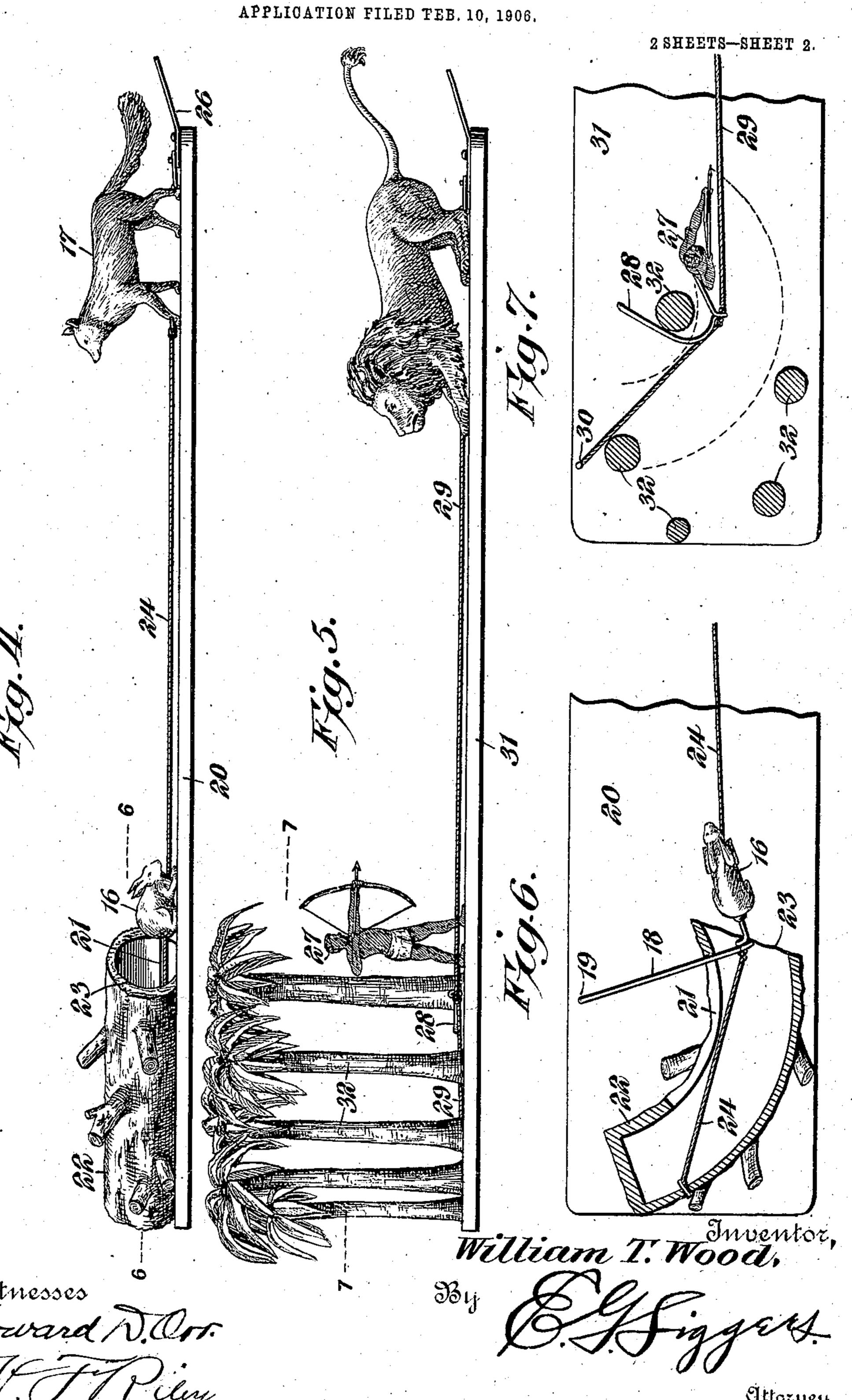
W. T. WOOD.
TOY.

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W. T. WOOD. TOY.



## UNITED STATES PATENT OFFICE.

## WILLIAM THOMAS WOOD, OF NASHVILLE, TENNESSEE.

## TOY.

No. 847,715.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed February 10, 1906. Serial No. 300,484.

To all whom it may concern:

Be it known that I, William Thomas Wood, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented a new and useful Toy, of which the following is a specification.

The invention relates to improvements in

toys.

The object of the present invention is to improve the construction of toys and to provide a simple and comparatively inexpensive one which will be amusing and at the same time instructive.

A further object of the invention is to provide a toy of this character adapted to furnish lessons in natural history by represent-

ing traits of animals.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings Figure 1 is the second seco

In the drawings, Figure 1 is a perspective view of a toy constructed in accordance with this invention and showing a cat watching a mouse. Fig. 2 is a plan view partly in section, the toy being tripped. Fig. 3 is a detail sectional view on the line 3 3 of Fig. 2 and illustrating the manner of pivoting the oscillatory arm. Fig. 4 is an elevation of another form of the invention, showing a fox and a rabbit. Fig. 5 is a similar view showing a lion and a hunter. Fig. 6 is a detail horizontal sectional view taken substantially on the line 6 6 of Fig. 4. Fig. 7 is a similar view taken substantially on the line 7 7 of Fig. 5.

Like numerals of reference designate corresponding parts in all the figures of the draw-

ings.

1 designates a base consisting, preferably, 5° of a light board having rounded end edges, as shown, and supporting at one end a cylindrical box or casing 2; but the base may be varied in configuration without affecting the operation of the toy.

The box or casing 2 is designed to present the appearance of a cheese-box, and it is pro-

vided at the front side with an aperture 3 of substantially semicircular shape and provided with irregular edges, as shown, in order to have the appearance of having been 60 gnawed by a mouse. The opening 3 provides a passage or entrance-opening for a figure 4, which in the present embodiment of the invention represents a mouse. The mouse 4, which moves inwardly and outwardly 65 through the opening 3, is suitably secured to the outer end of an oscillatory arm 5, which is pivoted at its inner end 6 to the base at a point within, the box or casing 2 and which when swung outwardly is adapted to pro- 70 ject through the opening 3 and carry the mouse to a point exterior of the box or casing 2. The inner end 6 of the oscillatory arm 5 is bent downward at right angles to form a pivot which pierces the base and which is 75 suitably bent against the lower face thereof,

as clearly shown in Fig. 3, to prevent displacement of the pivot.

The oscillatory arm, which may be constructed of any suitable material, is prefer- 80 ably made of wire, which is coiled adjacent to its outer end to provide an eye 7, through which passes an elastic connection 8, which is secured to the arm at an intermediate point, preferably by tying it to the eye 7. The elas- 85 tic connection, which forms a spring, is preferably made of ordinary rubber elastic; but it will be apparent that the same result may be effected by means of a metallic spring. One end of the flexible elastic or extensible connec-90 tion is fixed at 9 to the base at a point within the casing adjacent to the rear wall thereof, as clearly shown in Fig. 2 of the drawings. The free or outer end of the flexible connection is suitably secured to an outer figure 10, which 95 is in the form of a cat and which is also provided at the back with a ring 11, that is adapted to be engaged by setting and tripping mechanism, hereinafter described.

When the toy is set, as illustrated in Fig.1 100 of the drawings, it presents the picture of a cat watching a mouse close to a cheese-box, and when the toy is tripped the cat springs toward the mouse, which retreats quickly within the cheese-box, beyond the reach of the cat. The single continuous elastic connection 8 actuates both of the figures. The oscillatory arm which is connected at an intermediate point with the elastic connection positively moves the inner figure in the are 110 of a circle and carries the same out of the prescribed course of the elastic connection, which

causes the cat to spring in a straight line to-

ward the aperture of the cheese-box.

The setting and tripping mechanism comprises a pin or projection 12 for engaging the 5 ring 11, and a lever 13 extends longitudinally. of the base at the front or outer end thereof and is fulcrumed at an intermediate point by means of a suitable fastening device 14, which pierces the lever and which is embedded in ro the base. The projection 12 extends upward from the base adjacent to the front or outer end thereof, and the inner arm of the lever 13 is provided with a slot 15, through which the projection extends and which is 15 adapted to enable the lever to be oscillated sufficiently to lift the ring 11 out of engagement with the projection 12. The outer arm of the lever projects beyond the base and is arranged at a slight angle to the inner arm, 20 being inclined outwardly and upwardly, when the said inner arm is in a horizontal position, as illustrated in Fig. 1 of the drawings. The fastening device 14 is sufficiently loose to permit the tripping-lever to swing the ring 11 25 out of engagement with the projection 12.

The toy is set by drawing the figure of the cat outwardly to the front or outer end of the base and then placing the ring on the inner arm of the tripping-lever and in engagement 30 with the projection 12. The toy is sprung by depressing the outer arm of the lever, which movement swings the inner arm upward, and thereby lifts the ring off the projec-

tion 12.

fore described.

The invention is adapted to furnish lessons in natural history by illustrating traits of various animals. In Fig. 4 of the drawings the inner figure 16 presents the appearance of a rabbit and the outer figure is in the form of a 40 fox. The rabbit 16 is carried by one end of an oscillatory arm 18, which is pivoted at 19 to a base 20 and which operates in a slot 21 of a casing 22. The casing 22, which is open at the front end 23, presents the appearance 45 of an old log, into which the rabbit is carried by the oscillatory arm. It may, however, present any other desired appearance, as will be readily understood. The fox and the rabbit are actuated by an elastic connection 50 24, arranged in the same manner as that heretofore described. A setting and tripping device 26 is provided for operating the toy and is constructed in the same manner as that be-

In Figs. 5 and 6 of the drawings is illustrated another embodiment of the invention, a hunter and lion being shown. The figure 27 of the hunter is carried by an oscillatory arm 28, which is attached at an intermedi-60 ate point to a flexible connection 29. The

rear end 30 of the elastic connection is fixed to a base 31, which is provided at its rear end with a plurality of palm-trees 32 to represent a jungle, from which the hunter emerges in 65 setting the toy and toward which the lion

springs when the toy is tripped. The figure of the hunter is carried backwardly into the jungle simultaneously with the spring of the lion. The inner and outer figures of the toy may be in various other forms for represent- 7° ing different animals, and the retreat or place of concealment for the inner figure may be in various forms, and it operates as a stop for the outer figure.

It will be seen that the toy is exceedingly 75 simple and inexpensive in construction and that while it is amusing it is also instructive in that it is adapted to furnish lessons in natural history by representing or illustrat-

ing the traits of various animals.

It will be seen that in the three forms shown a place of shelter or refuge is provided for the inner figure to receive the same and exclude the outer figure. In Figs. 1, 2, and 3 it is in the form of a box. In Figs. 4 and 6 85 it presents the appearance of a hollow log. In Figs. 5 and 7 it is in the form of a clump of trees. It may assume other forms and still effect the same result of receiving the innre figure and excluding the outer figure.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A toy comprising a base, an elastic connection fixed at one end thereto, an inner 95 figure connected to the elastic connection at an intermediate point, and an outer figure secured to the free end of the elastic connection.

2. A toy comprising a base, an elastic con- 100 nection fixed at one end, an inner figure actuated by the elastic cornection and connected with the same at a point between the ends thereof, and an outer figure also actuated by the elastic connection and secured to 105 the free end thereof.

3. A toy comprising a base, an elastic connection fixed at one end, an inner figure actuated by the elastic connection and connected with the same at a point between the 110 ends thereof, an outer figure also actuated by the elastic connection and secured to the free end thereof, and means for setting and trip-

ping the outer figure.

4. A toy comprising a support, an elastic 115 connection fixed at one end, an inner figure actuated by the elastic connection, means for connecting the inner figure with the elastic connection at an intermediate point and for positively moving the said figure out of the 120 prescribed course of the elastic connection, and an outer figure secured to the outer end of the elastic connection and actuated by the same.

5. A toy comprising a support, an oscilla- 125 tory arm, an inner figure carried by the same, an elastic connection fixed at one end and secured at an intermediate point to the oscillatory arm, and an outer figure attached to the free end of the elastic connection.

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6. A toy comprising a support, an elastic connection fixed at one end, an inner figure connected with the elastic connection at an intermediate point, an outer figure secured 5 to the free end of the elastic connection, and a stop against which the outer figure abuts and into which the inner figure is carried.

7. A toy having a support, and an elastic connection provided with a tripping device comprising a ring actuated by the elastic connection, a fixed projection arranged to receive the ring, and a lever having an arm for disengaging the ring from the projection.

8. A toy comprising a base, an elastic con-15 nection fixed at one end, inner and outer figures actuated by the elastic connection, a stop against which the outer figure abuts, and means connected with the inner figure for moving the same in a prescribed course 20 into and out of the said stop.

9. A toy comprising a support, an elastic connection, a plurality of figures connected with the elastic connection at different points on the same, said elastic connection 25 serving as the means for actuating the said figures, and means for setting and tripping

the figures.

10. A toy comprising a base, an elastic connection, a plurality of figures located at 30 different points along the said connection and actuated by the same, setting and tripping mechanism arranged at one end of the base, and a stop located at the opposite end of the base.

11. In a toy, the inner figure, means for mounting the same so as to swing in the arc of a circle, means for automatically swinging the inner figure in one direction, the outer figure, and elastic means for connecting the 40 outer figure with the inner figure to permit

the inner figure to recede.

12. In a toy, the inner figure, means for mounting the same so as to move back and forth and causing the backward movement to be effected automatically, the outer figure, and an elastic cord for connecting the outer figure with the inner figure in spaced relation thereto.

13. In a toy, the box or casing, the inner 50 figure arranged normally within the box or casing, means for mounting the inner figure

so as to move back and forth, within and without the box or casing, and causing the backward movement to be automatically effected, the outer figure, and elastic means 55 for connecting the outer figure with the inner

figure in spaced relation thereto.

14. In a toy, the inner figure, means for mounting the same so as to move back and forth and causing the backward movement 60 to be effected automatically, the outer figure, and elastic means connecting the outer figure with the inner figure in spaced relation thereto.

15. In a toy, the inner figure, means for 65 mounting the same so as to move back and forth and causing the backward movement to be effected automatically, the outer figure, means for directly connecting the inner and outer figures together in spaced relation, and 7c means for receiving the inner figure and excluding the outer figure when the inner figure moves backward.

16. In a toy, the combination of the inner figure, means for mounting the same so as to 75 move back and forth and cause the backward movement to be effected automatically, the outer figure, spring-actuated means for connecting the inner and outer figures in spaced relation, means for receiving the in- 80 ner figure and excluding the outer figure when the said inner figure moves backward, and setting and tripping mechanism for the outer figure.

17. A toy comprising a casing having an 85 entrance-opening, an inner figure, a horizontally-movable member connected with the inner figure and arranged to move the same backward and forward through the said entrance-opening in a prescribed course, an 90 outer figure, a flexible connection between the inner and outer figures, and an elastic connection for automatically moving the said member backward.

In testimony that I claim the foregoing as 95 my own I have hereto affixed my signature

in the presence of two witnesses.

## WILLIAM THOMAS WOOD.

 $\mathbf{Witnesses}:$ 

R. L. Douglass, R. E. TURBEVILLE.