

No. 704,090.

Patented July 8, 1902.

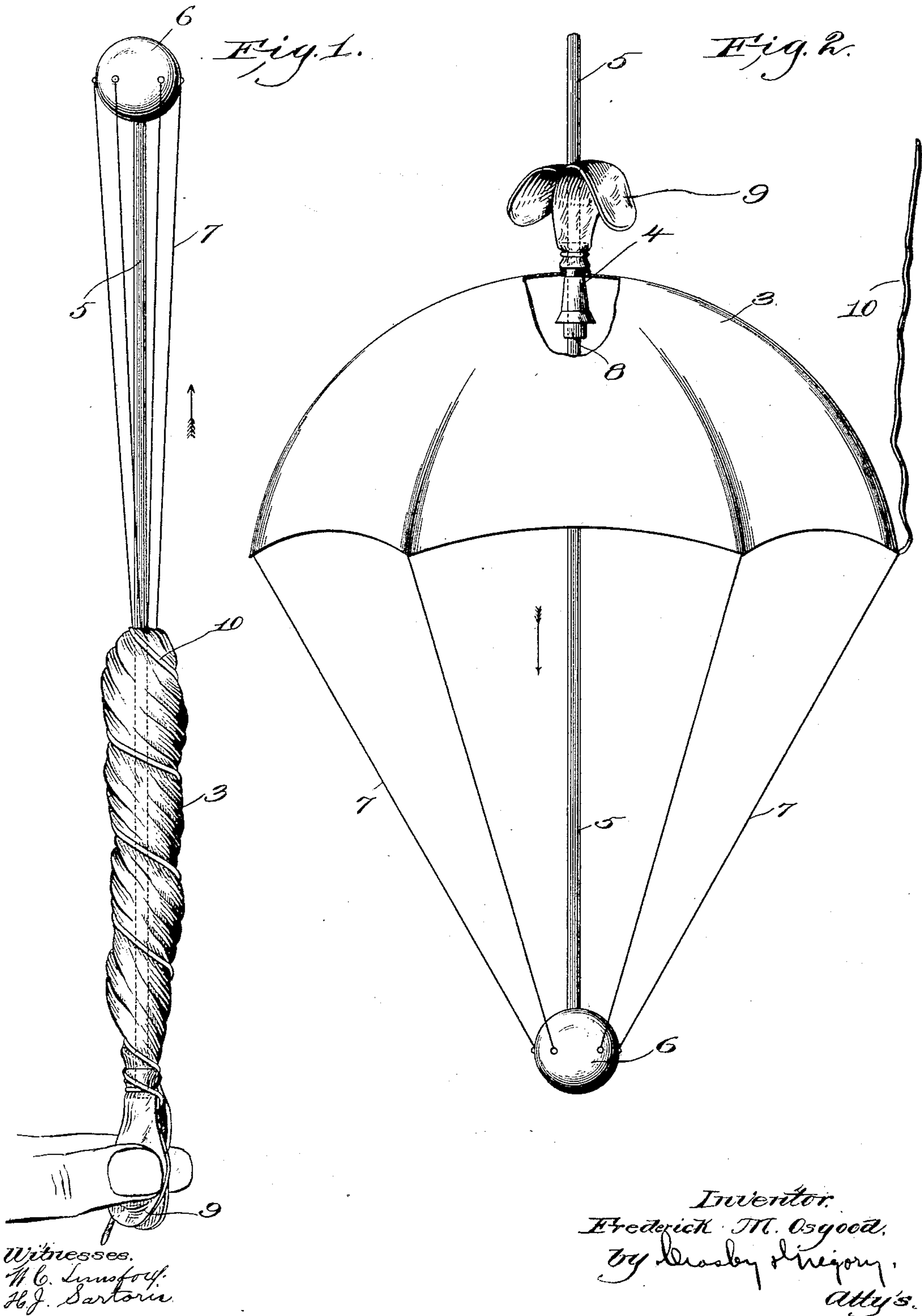
F. M. OSGOOD.

AERIAL TOY.

(Application filed Jan. 29, 1902.)

(No Model.)

2 Sheets—Sheet 1.



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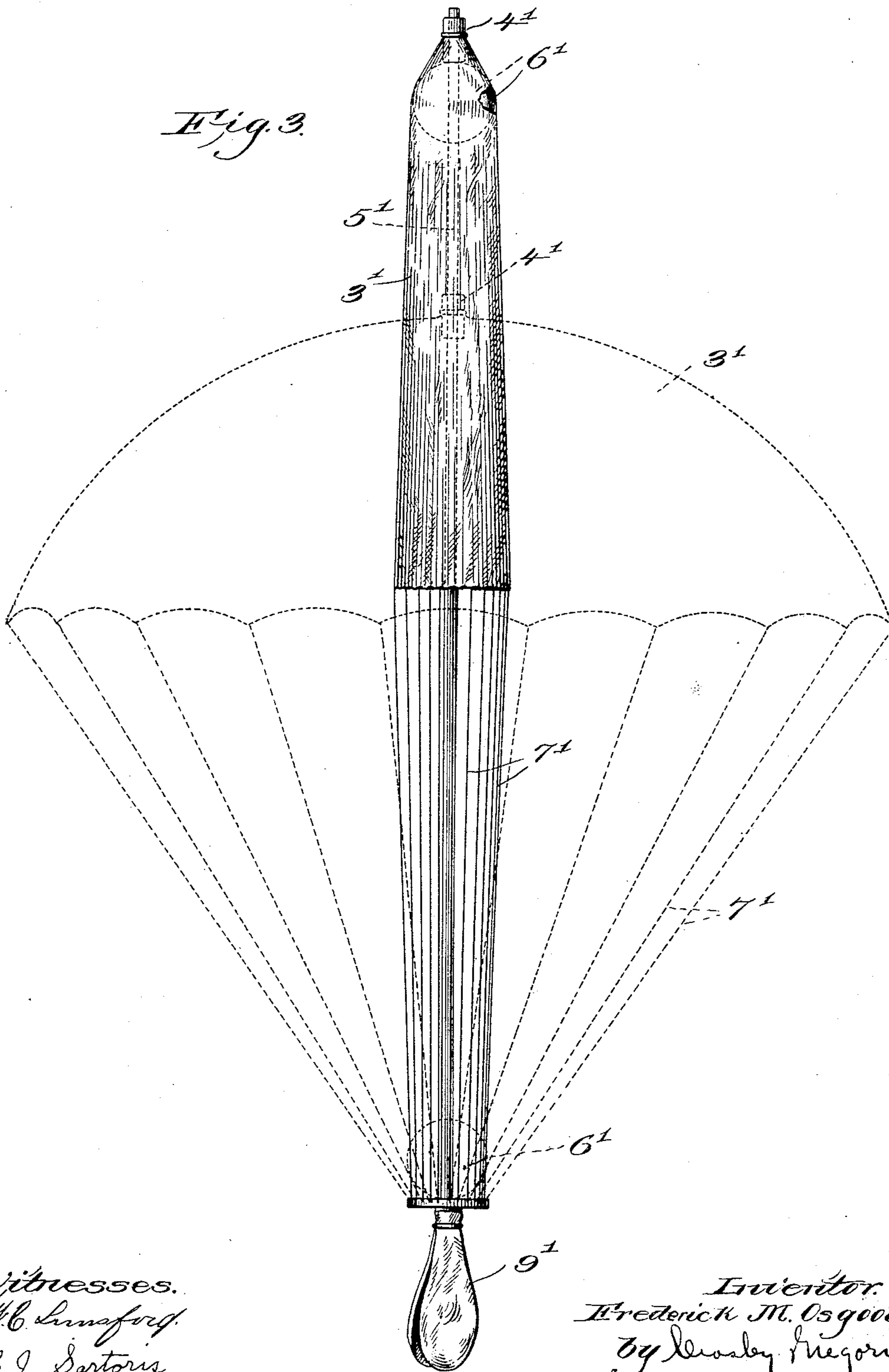
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2 Sheets—Sheet 2.



UNITED STATES PATENT OFFICE.

FREDERICK M. OSGOOD, OF MANCHESTER, NEW HAMPSHIRE.

AERIAL TOY.

SPECIFICATION forming part of Letters Patent No. 704,090, dated July 8, 1902.

Application filed January 29, 1902. Serial No. 91,667. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK M. OSGOOD, a citizen of the United States, residing at Manchester, in the county of Hillsboro and State of New Hampshire, have invented an Improvement in Aerial Toys, of which the following description, in connection with the accompanying drawings, is a specification, like figures on the drawings representing like parts.

This invention relates to a novel aerial toy having a resemblance to a parachute; and it comprises an expansible body, which when expanded has an umbrella shape and serves to retard the movement of the toy through the air, and a stick upon which the umbrella-like member is supported. The body or umbrella-like member has an eye in its central portion, through which the stick is adapted to slide, and the outer edge of the said umbrella-like member is connected by flexible connections with a fixed portion of or point on the stick. With this construction when the umbrella-like member is furled or folded the central portion thereof slides outward toward one end of the stick, while when the said member is expanded it slides inward from the end of the stick, a suitable stop being provided on the stick, limiting its inward movement. The stick is suitably weighted, and in operation the umbrella-like member will be folded or furled and the toy thrown into the air. As the toy begins its descent the expansible member fills or becomes inflated with air, the device assuming the shape then of a parachute and floating gently to the ground.

In the drawings, Figure 1 is a view of one form of my invention, showing the expansible body furled and ready to be thrown into the air. Fig. 2 shows the device expanded and in the position it assumes when descending, and Fig. 3 shows a modification.

The expansible member or umbrella-like body is designated by 3, and it may be made of any suitable material which will form a resistance to the passage of the toy through the air when said member is expanded. I prefer, however, to use some fibrous material for the body and to construct the body with a substantially continuous surface. The central portion of said body has an eye 4 therein,

through which slides the stick 5, which may be either of wood or metal, as most desired, and the outer edge of said expansible member has connected thereto a series of flexible connections 7, which are in turn fixedly connected to the stick. With this construction it will be seen that when the umbrella-like member 3 is folded or furled, as shown in Fig. 1, the eye 4 thereof moves toward the end of the stick, while when the said member is expanded, as shown in Fig. 2, the eye slides upon the stick toward the central portion thereof.

8 designates a suitable stop on the stick, which serves to limit the sliding movement of the eye away from the end of the stick.

I provide a suitable ballast-weight to hold the toy in its vertical position during its descent, and in the form of my invention illustrated in Figs. 1 and 2 such ballast-weight is shown at 6 and is made fast to one end of the stick.

In the operation of the device the body will be furled by drawing the eye 4 toward the end of the stick and into the position shown in Fig. 1, and when in this position the operator will hold the device by means of suitable tabs 9, which are shown as secured to the eye 4, and will throw or project the toy into the air, the weight leading and being in advance, the said toy during its ascent assuming the position shown in Fig. 1. When it begins to descend, the device will turn over into the position shown in Fig. 2 and the expansible member 3 will become inflated, thus converting the device into a parachute, the eye 4 moving away from the end of the stick as the body 3 expands.

It is desirable that the body be held folded while it is ascending, and consequently in Figs. 1 and 2 I have shown a cord 10, which is preferably elastic, attached to the outside edge of the cover 3.

Before projecting the toy upward the cord will be wrapped about the furled cover 3, as shown in Fig. 1, and the end thereof may, if desired, be held between the tabs 9. During the upward flight of the device the cord will gradually unwind, so that by the time the device begins to descend the umbrella-shape cover or body is free to expand.

In Fig. 3 I have shown a slightly-modified

form of my invention. This modification, however, has the expansible body 3' provided at its central portion with an eye 4', through which slides the stick 5', as in the modification shown in Figs. 1 and 2. The outer edge of the expansible member 3' is also connected to a fixed part of the stick by means of the flexible connections 7'. In this embodiment of my invention, however, the ballast-weight 6' is slidably mounted upon the stick and the tabs 9' are preferably secured to the lower end of said stick. In throwing the device illustrated in Fig. 3 upward the ballast-weight 6' is carried by centrifugal force toward the outer end of the stick 5', the said weight in its movement toward the end of the stick engaging and carrying with it the eye 4, thus causing the body 3' to become folded or furled, as shown in full lines, Fig. 3. When, however, the device begins to descend, the weight slides down the stick 5' into the position shown in dotted lines, and the expansible member 3' will become inflated and expand, as will be obvious, the weight in such position serving as a ballast-weight. It will be seen that with the form of invention illustrated in this figure the weight 6' acts as the means to hold the cover folded or furled during the upward flight, and it is therefore not necessary to employ the elastic cord 10.

I desire to add that various changes may be made in the details of the construction of my invention without departing from the spirit thereof as expressed in the appended claims.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an aerial toy, a stick, an expansible member carried by said stick and free to slide thereon, said member when expanded operating to retard the movement of the toy through the air, and means connecting said member to a fixed point on the stick, the construction being such that as the member is expanded it has a sliding movement on the stick.

2. In an aerial toy, a stick, an expansible umbrella-like member of flexible material slidably mounted on said stick, and flexible members connecting the outer edge of said

umbrella-like member to a fixed point on the stick.

3. In a toy, a stick, an umbrella-like member of flexible material having an eye in its central portion through which the stick is free to move, and flexible connections between the outer edge of said member and a fixed point on the stick.

4. In a toy, a stick, an umbrella-like member having an eye in its central portion through which the stick is free to slide, connections between the outer edge of said member and a fixed portion of the stick, and means to hold the expansible member furled during its ascent, said member, when expanded, operating to retard the movement of the toy through the air.

5. A stick, a coacting balance-weight, an expansible umbrella-like member slidably mounted on said stick, flexible members fixed to the stick and connected to said expansible member, and means to maintain said expansible member folded as the stick is started in motion, said member automatically opening as the stick begins to descend and when open operating to retard the movement of the device through the air.

6. In a toy, an expansible umbrella-like member of flexible material, a stick extended loosely through said member whereby said member can move relatively to the stick, a directing-weight carried by the stick, and connections between said member and a fixed point on the stick, the construction being such that as the member is expanded it slides upon the stick.

7. In an aerial toy, an expansible, umbrella-like member of fibrous material, a stick passing freely therethrough, and capable of a movement independent of the umbrella-like member, and flexible connections between the outer edge of the umbrella-like member and a fixed point on the stick.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK M. OSGOOD.

Witnesses:

GEO. W. GREGORY,
MARGARET A. DUNN.