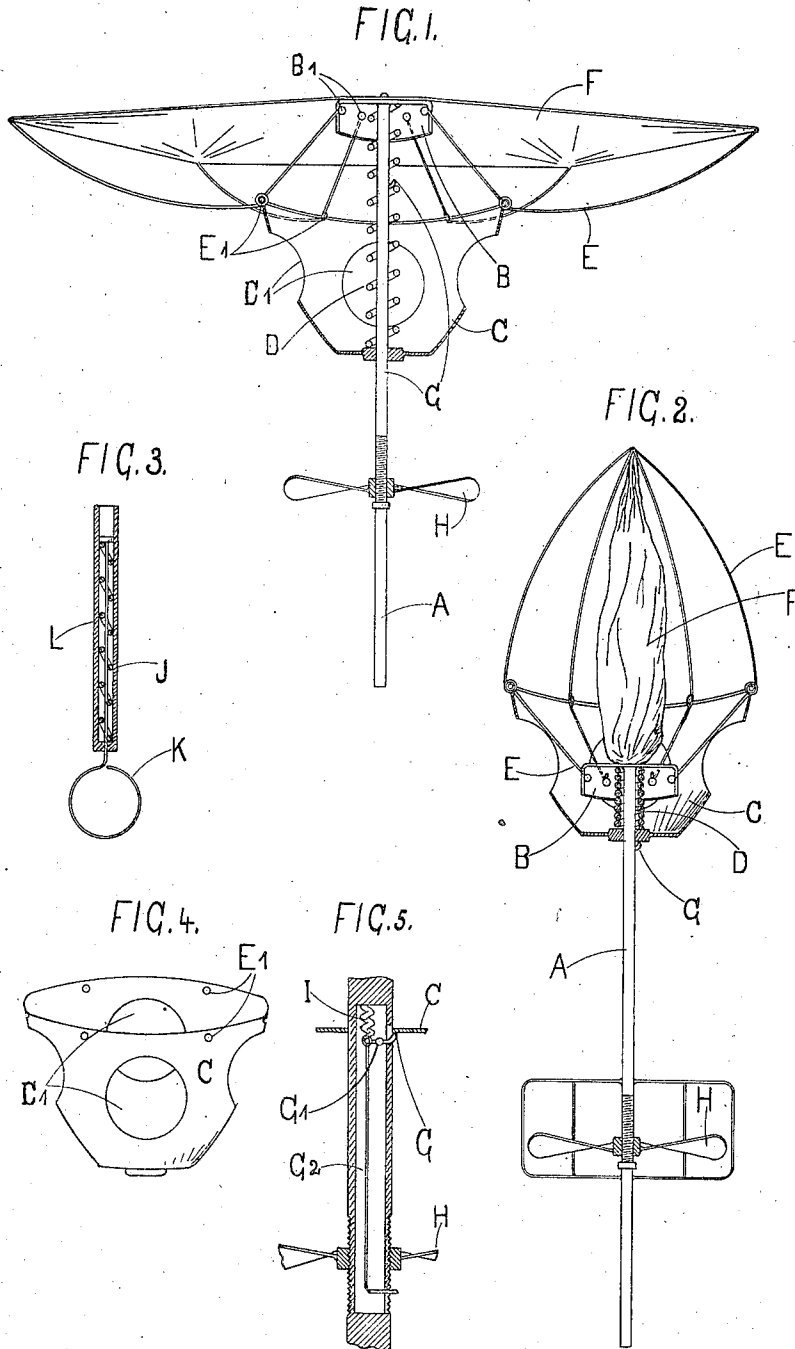


M. E. WRIGHT.
TOY PARACHUTE.
APPLICATION FILED NOV. 6, 1908.

974,733.

Patented Nov. 1, 1910



WITNESSES:

J. H. Mason
Rudolf Haselbauer

INVENTOR

Maurice E. Wright

UNITED STATES PATENT OFFICE.

MAURICE E. WRIGHT, OF SAN DIEGO, CALIFORNIA.

TOY PARACHUTE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MAURICE E. WRIGHT, citizen of the United States, residing at San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Toy Parachutes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to toy parachutes and has for its objects the provision of a toy of simple design that is adapted to be hurled upward by a spring gun or the like, when collapsed and so constructed as to open after having ascended for a predetermined distance in the air. It is more particularly a parachute normally held closed against the tension of a spring by a trigger-catch, and adapted to be released by a propeller which revolves by the atmospheric resistance to ascension.

To attain these objects and advantages, the invention consists in certain details of construction and combination of parts, substantially as herein illustrated, described and claimed.

Other objects and advantages of the particular embodiment of this invention herein described, will become apparent from the detailed description which now follows.

Referring to the accompanying drawings in which similar characters of reference designate corresponding parts, Figure 1 is a vertical section of the parachute with the sail-portion distended. Fig. 2 is a partially sectional view of the parachute in a collapsed condition. Fig. 3 is a sectional view showing a device for hurling said parachute into the air. Fig. 4 is a detail view of the sleeve that slides on the shaft and engages the trigger. Fig. 5 is a detail view of the trigger-catch mechanism.

Referring more particularly to the drawings, A designates a shaft having a crown thimble B rigidly attached thereto, the crown thimble being provided with perforations B¹ radially arranged. A flaring cup shaped member C constitutes a sleeve, slidably mounted upon shaft A, the said member C being provided with cut-out portions C¹ to render it as light as possible. A coiled spring D is interposed between

thimble B and sliding cup C, and tends to force them apart when the sliding cup C is released by the trigger.

Slidably mounted in perforations B¹, and extending radially therefrom, are curved ribs E having a hooked end that prevents disengagement with thimble B, and which are fulcrumed at E¹ on the member C, and fastened at their outer ends to fabric F, which constitutes the sail of the parachute. The said ribs E open outwardly and spread sail portion F, when sliding cup C is released by the trigger, and is forced downward and away from thimble B by the interposed spring D.

Situated within a cavity formed in the shaft A, is a trigger G, mounted on a pivot joint G¹ and having hinged to one end a rod G² which is provided at its lower end with an angular extension projecting through a slot in shaft A. Trigger G is normally held in operative position by spring I which is attached to one end of the trigger and to shaft A. Shaft A is externally threaded over and above the portion containing the trigger mechanism, and mounted on said threaded portion is a propeller H revoluble thereon, whereby it is caused to move longitudinally on the shaft. A skeleton frame, attached to shaft A, as shown in Fig. 2, forms a protection to the propeller.

As shown in Fig. 3, a projecting device L is utilized, having a piston K adapted to operate under tension of spring J.

In operation, the parachute is closed by turning the propeller H upward and away from the angular projection of rod G² until trigger G is drawn by the tension of spring I into an operative position. Cup shaped sleeve C is then pushed upward until engaged by trigger G, as shown in Figs. 2 and 5. The parachute, being closed, is then projected into the atmosphere by the apparatus shown in Fig. 3. During its travel through the air, the propeller is revolved, and thereby moved longitudinally on the shaft to operate rod G². This rod releases the trigger and permits the parachute to open under tension of spring D. The weight of the propeller maintains the sail portion uppermost.

From the foregoing description it will be seen that simple and efficient means are herein provided for accomplishing the objects of the invention, but while the elements

shown and described are well adapted to serve the purpose for which they are intended, it is to be understood that the invention is not limited to the precise construction as set forth, but includes within its purview such changes and combinations of material as may be necessary or desirable to embody the inventive idea herein described.

I claim:

10 1. A device of the character described, comprising a sail carrying portion normally in operative position, means for locking said sail carrying portion in inoperative position, mechanism for releasing said means, 15 and means for protecting said mechanism from injury, substantially as shown.

2. A device of the character described, comprising a threaded shaft, a propeller mounted revoluble thereon, a trigger holding a sail carrying portion in a closed position, and means in the path of the propeller for releasing the trigger after the propeller has made a predetermined number of revolutions, substantially as shown.

25 3. A device of the character described, comprising a shaft, a flaring cup shaped sleeve slidably mounted on said shaft, a member rigidly attached to the upper end of the shaft, a spring bearing between said 30 member and said sleeve, and normally tending to force said sleeve away from said member, and a trigger adapted to hold said

sleeve against the tension of said spring, substantially as shown.

4. A device of the character described, 35 comprising a shaft, a cavity in said shaft, a trigger carried in said cavity, a spring in said cavity normally holding said trigger in operative position, a rod attached to the trigger, a bent portion of said rod extending 40 through an opening, a threaded portion on said shaft, and a propeller traveling longitudinally when revolved on the threaded portion of said shaft, and engaging the bent portion of said rod, substantially as shown. 45

5. A device of the character described, comprising a shaft, a cup shaped sleeve slidably mounted upon said shaft, a member carried by the top of said shaft, ribs pivotally connected to the upper edge of the cup 50 shaped sleeve, and having sliding engagement with said member, a fabric connected to said ribs, a spring interposed between said member and said sleeve, a trigger adapted to hold said sleeve against the tension 55 of said spring, and means for releasing said trigger, substantially as shown.

In testimony whereof, I affix my signature in presence of two witnesses.

MAURICE E. WRIGHT.

Witnesses:

J. A. MAESTER,
RUDOLF HASELBAUR.