Nov. 15, 1927. 1,649,374

LA VON ZUNDEL ET AL

TOY PARACHUTE

Filed Oct. 21, 1926

Fig. 1.

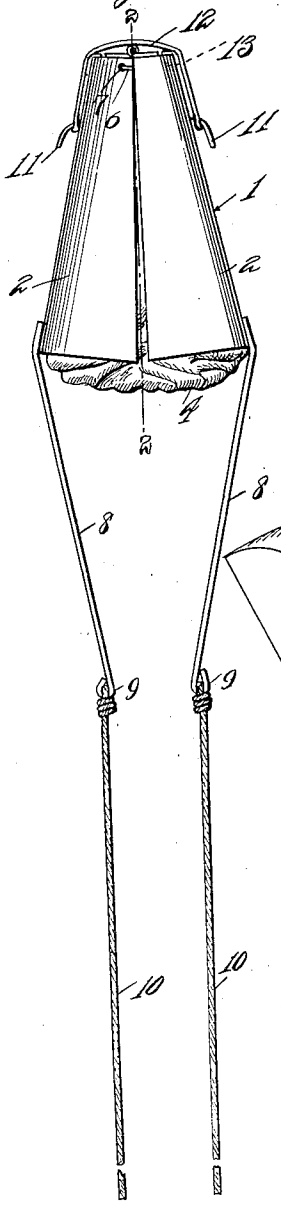


Fig. 2.

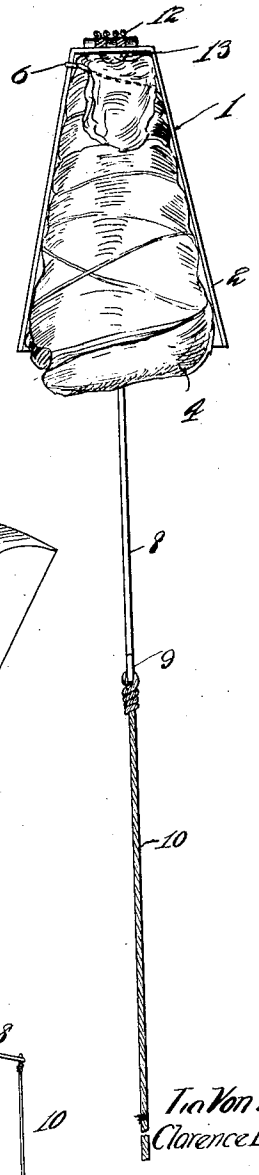
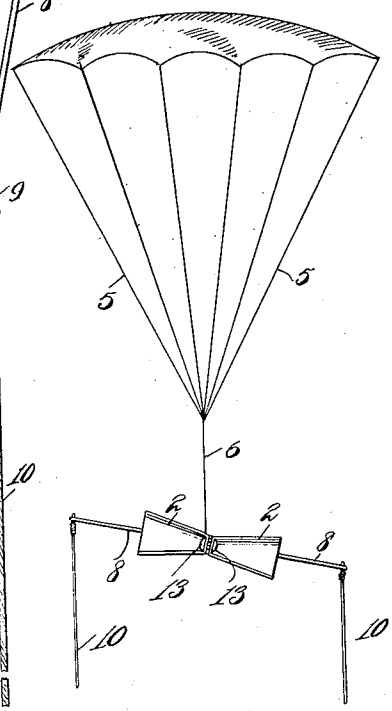


Fig. 3.



Inventors
La Von Zundel
Clarence E. Whiteman

By Lacey & Lacey, Attorneys

Patented Nov. 15, 1927. 1,649,374

UNITED STATES PATENT OFFICE.

LA VON ZUNDEL AND CLARENCE E. WHITEMAN, OF MEDFORD, OREGON.

TOY PARACHUTE.

Application filed October 21, 1926. Serial No. 143,250.

This invention is directed to improvements in toy parachutes.

The primary object of the invention is to provide a toy of this nature including a casing for confining a parachute, the casing opening to release the parachute only after it has passed the limit of its upward flight.

Another object of the invention is to provide a toy parachute capable of being compactly rolled and when in this condition, confined in a casing designed to be thrown into the air and capable of automatically opening to release the parachute in order that the same will fill with air and gradually descend.

Another object of the invention is to provide a casing in which the parachute is impelled, having novel means to assure opening of the casing to release the parachute therefrom at the proper time.

In the accompanying drawing:

Figure 1 is a side elevation of the device, showing the same in the position assumed in its upward flight.

Figure 2 is a sectional view on line 2—2 of Figure 1.

Figure 3 is a view showing the parachute in its descending position.

Referring to the drawing, 1 designates a casing consisting of complementary sections 2, said sections, when in a parachute holding position, take a truncated-cone-shape. These sections are united at their minor ends by a hinge 3 in order that they may swing to release the parachute 4.

The cords 5 have one of their ends secured to the margin of the fabric forming the parachute, the other ends of said cords being connected to a single cord 6 which is secured to one of the sections 2 by passing the end through the perforation 7.

The major ends of the sections 2 have secured thereto arms 8 having terminal eyes 9 in which are secured sling cords 10, the purpose of which will later appear.

Upon the outer sides of the sections 2 and adjacent the minor ends thereof are secured hooks 11 which serve to hold the yieldable element 12, in this instance an elastic band, under tension, as more clearly shown in Figure 1 of the drawing. In lieu of the band 12 a coil spring, or spring hinge, may be used if desired.

In order that the casing 1, after reaching the limit of its upward flight, will turn and descend arrowlike, small weights 13, in this instance being drops of solder, are located in the minor ends of the respective sections 2.

The casing 1 is preferably formed of light metal, but, it will be of course understood, that other materials suitable for the purpose may be used.

In order to retain the sections 2 in their closed position when the toy is not in use, the cords 10 may be wrapped around the arms 8.

It will be obvious when the toy is not in use, that the band 12 will hold the sections in their opened positions. When it is desired to operates the toy, the parachute 4 is rolled into cylindrical form and the cords 5 wrapped therearound to hold the same compactly folded, in order that it can be conveniently received between the sections 2 and the sections closed.

In this manner, the parachute in its rolled condition, will be confined within the casing 1 and ready for flight.

The casing is held in the left hand and the cords 10 grasped and through the medium thereof the casing is whirled around a number of times and will be impelled into the air upon release of the sling cords. Owing to the tapered formation of the casing the resistance of air thereon in its upward flight, will hold the sections against the tension of the band 12. However, as soon as the casing reaches the limit of its upward flight and the air pressure is relieved, the band 12 will cause the sections 2 to spread open, whereupon the parachute will be released and the device will gradually descend. The fact that the casing is secured to the parachute obviously stabilizes it in its descent.

The arms 8 are exceedingly important since they provide leverage between the casing and sling cords 10 to overcome the tension of the band 12. These cords trailing behind the casing in its upward flight serve to maintain the casing in proper position.

Having thus described the invention, we claim:

1. A toy of the class described comprising a casing consisting of a pair of hingedly connected sections, a parachute capable of being confined in the casing, and releasable therefrom when the sections open, arms carried by the sections and cords secured to the arms to whirl the casing and hold the sec-

tions closed, and releasable to impel the casing.

2. A toy of the class described comprising a casing consisting of a pair of hingedly connected sections, means tending to constantly move the sections to open position, arms fixed to the sections and cords secured to the arms for whirling the casing.

3. A toy of the class described comprising a casing consisting of a pair of hingedly connected sections, a parachute capable of being confined in the casing, means tending to constantly move said sections to open position, arms fixed to the sections, sling cords secured to the arms and means for flexibly connecting the parachute to the casing.

4. A device of the class described comprising a casing consisting of a pair of tapered sections hingedly connected at their minor ends, resilient means connecting the sections and tending to constantly hold said sections in open position, weights mounted in the minor ends of the sections, arms extending from the major ends of the sections and cords secured to the arms.

5. A device of the class described, comprising a tapered casing, said casing consisting of a pair of hingedly connected sections, a parachute capable of being rolled and confined between the sections, an elastic band extending across the minor end of the casing and having its ends secured to the respective sections, said band tending to constantly open said sections, arms extending from the major end of the casing and cords secured to the arms to maintain the arms in position to overcome the opening influence of the band.

6. A toy of the character described comprising a casing consisting of hingedly connected sections, said sections being tapered in the same plane from end to end and having their minor ends pivotally and yieldably connected and providing a casing frustoconical in shape when the sections are closed for confining a parachute, as and for the purpose set forth.

In testimony whereof we affix our signatures.

CLARENCE E. WHITEMAN. [L. S.]
LA VON ZUNDEL. [L. S.]