Dec. 13, 1932. A. H. VOGT 1,890,759

AERIAL TOY

Filed Jan. 26, 1932

Fig. 1

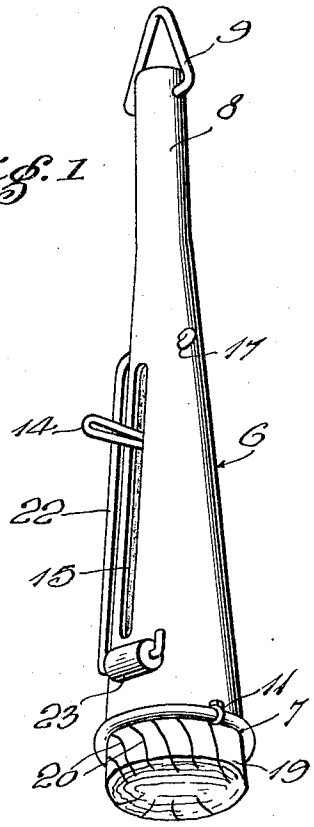


Fig. 2.

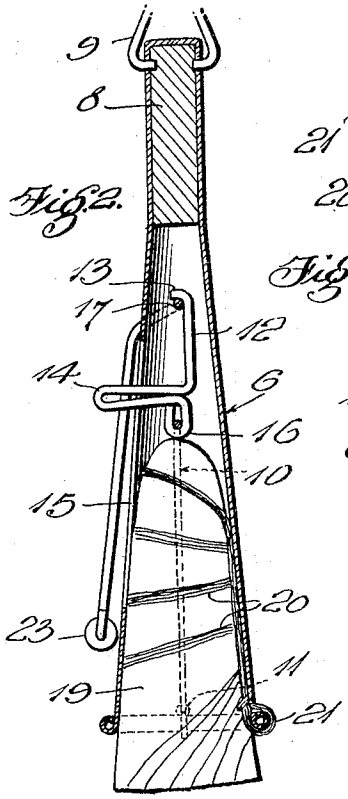


Fig. 3.

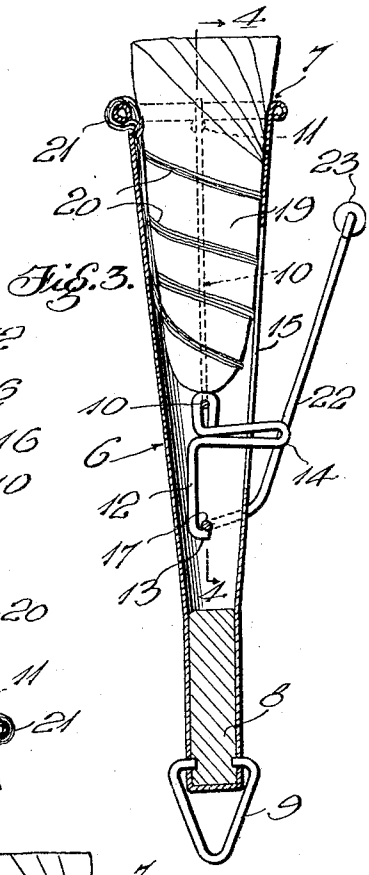


Fig. 5.

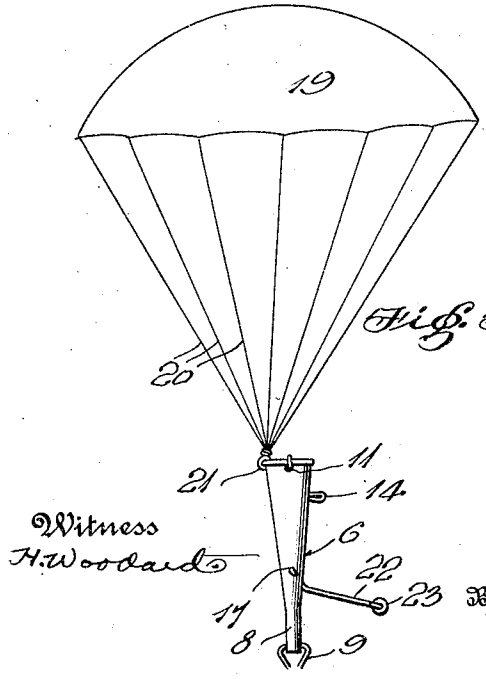
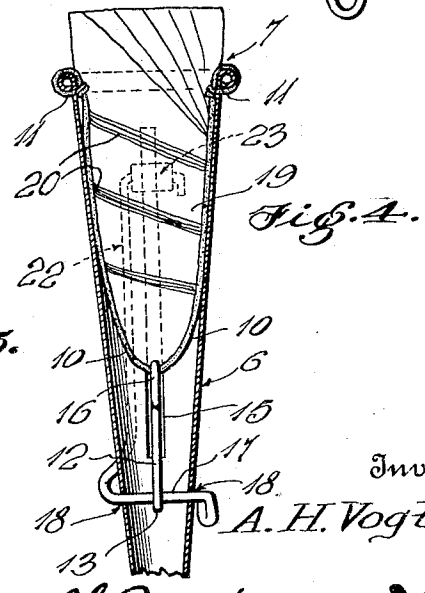


Fig. 4.



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UNITED STATES PATENT OFFICE

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AERIAL TOY

Application filed January 26, 1932. Serial No. 588,992.

The invention relates to an aerial toy of the general type in which a collapsed parachute is removably held in a tube and is released from said tube upon inversion of the latter after shooting or otherwise impelling the tube into the air.

The object of the invention is to provide a simple and inexpensive toy of the class set forth, yet one which will be highly entertaining and may be easily manufactured and sold at small cost.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Fig. 1 is a perspective view showing the parts in the relation which they assume when the toy is being impelled into the air.

Fig. 2 is a vertical sectional view with the parts related as in Fig. 1.

Fig. 3 is a sectional view showing the relation of parts when the toy has inverted and started its descent.

Fig. 4 is a fragmentary vertical sectional view on line 4—4 of Fig. 3.

Fig. 5 is a side elevation showing the toy after opening of the parachute.

A preferred construction has been illustrated and will be specifically described, with the understanding however that minor variations may be made within the scope of the invention as claimed.

The numeral 6 denotes an elongated tube preferably formed from thin sheet metal, said tube having a relatively large open end 7, and a comparatively small weighted end 8, the weight of the latter causing it to lead when the tube is being impelled into the air and when said tube inverts and descends. In the construction shown, this weighted end is provided with a loop 9 of wire or the like to be engaged with any appropriate device which may be used for impelling the toy into the air.

An elastic sling 10 is disposed within the tube 6 and at its ends, is anchored to the tube end 7 at diametrically opposed points 11. Connected with the central portion of the sling 10, is a hook shank 12 having a straight lateral hook bill 13 on its free end, said shank 12 being provided also with a lateral handle 14 which is slidably received in a longitudinal slot 15 formed in the tube 6. Preferably, the shank 12, bill 13, handle 14, and an eye 16 for connecting said shank with the sling 10, are all formed from a single piece of wire, as shown.

A short shaft 17 extends across the interior of the tube 6 near the smaller end of the latter and is rotatably received in openings 18 formed in the tube wall. When the handle 14 is moved toward the smaller end of the tube, stretching of the sling 10 is effected and said sling may be held in stretched condition, by engaging the bill 13 with the shaft 17, as shown in Figs. 2 and 3. With the toy thus set, a snugly collapsed parachute 19 is receivable in the open end of the tube 6, said parachute then resting on the stretched sling 10. The cords 20 of the parachute are suitably anchored at 21 to the tube 6 and these cords may be loosely wrapped around the collapsed parachute, as seen in Figs. 2 and 3.

An arm 22 at the exterior of the tube 6, is secured to one end of the shaft 17, being preferably integral therewith, so that arm and shaft may be formed from a single piece of wire. The free end of the arm 22 is provided with a weight 23, and when the toy is set, said arm lies longitudinally at the exterior of the tube 6, with said weight 23 toward the tube end 7.

With the parts so related, the toy is impelled into the air, the weighted tube end 8 leading during such travel of the tube. When the momentum of the toy is exhausted, it inverts due to the weighted tube end 8, and as there is less resistance to descent of the weighted arm 22—23, than to the descent of the tube 6, said weighted arm will swing downwardly by gravity. This effects turning of the shaft 17, the rolling contact of said shaft with the hook bill 13, then serving to move said bill in the direction of its length to disengage it from the shaft. As soon as this disengagement takes place, the elastic sling 10 contracts, thus projecting the parachute 19 from the tube. While rapid descent of the toy takes place until the para-

chute opens, such descent is then perceptibly checked and the toy then descends in a manner effectively simulating the descent of a human being with a parachute.

It will be seen from the foregoing that novel provision has been made for carrying out the object of the invention, and attention is again invited to the fact that minor variations may be made.

I claim:—

1. An aerial toy comprising a tube having a relatively large open end and a comparatively small weighted end, the latter being adapted to lead when the tube is impelled upwardly and descends, an elastic sling in said tube secured to the latter at opposite sides of its larger end, a hook shank connected at one end with said sling and at its other end having a straight lateral hook bill, a shaft extending across the interior of said tube near the smaller end of the latter and adapted to be engaged by said hook bill to hold the sling stretched, a parachute receivable in collapsed form in the larger end of the tube and adapted to rest on said sling, said parachute having cords secured to said tube, and means operable upon inversion of the tube for turning said shaft in a direction to move the hook bill therefrom.

2. An aerial toy comprising a tube having a relatively large open end and a comparatively small weighted end, the latter being adapted to lead when the tube is impelled upwardly and descends, an elastic sling in said tube secured to the latter at opposite sides of its larger end, a hook shank connected at one end with said sling and at its other end having a straight lateral hook bill, a shaft extending across the interior of said tube near the smaller end of the latter and adapted to be engaged by said hook bill to hold the sling stretched, a parachute receivable in collapsed form in the larger end of the tube and adapted to rest on said sling, said parachute having cords secured to said tube, and a weighted arm secured to said shaft and operable upon inversion of the tube to turn said shaft in a direction to move the hook bill therefrom.

3. A structure as specified in claim 1; said tube having a longitudinal slot, said hook shank being provided with a lateral handle extending slidably through said slot.

In testimony whereof I affix my signature.

ARTHUR H. VOGT.