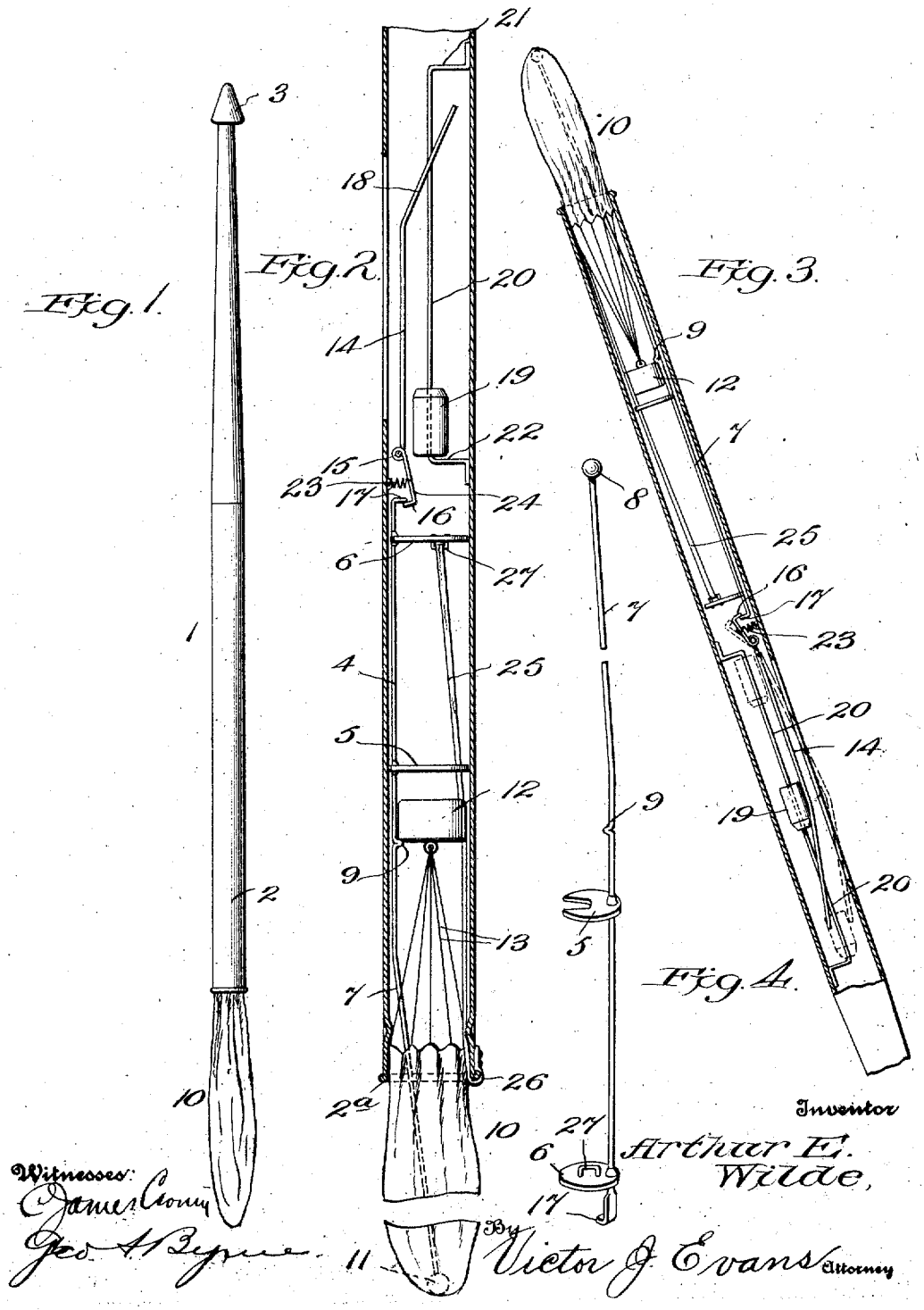
A. E. WILDE.

TOY.

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1,079,200. Patented Nov. 18, 1913.



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UNITED STATES PATENT OFFICE.

ARTHUR E. WILDE, OF NEW YORK, N. Y.

TOY.

1,079,200. Specification of Letters Patent. Patented Nov. 18, 1913.

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To all whom it may concern:

Be it known that I, ARTHUR E. WILDE, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented new and useful Improvements in Toys, of which the following is a specification.

This invention relates to toys and particularly to aerial toys, and has for an object to provide a toy of this character which will embody the use of such missile or object as an arrow, which may be projected into the air for a considerable distance and which will be designed to have accompany therewith in its flight, a parachute which may be automatically released from the arrow after the latter proceeds on its journey back to its point of ejection.

Another object of the invention is to provide a toy of this character which will permit the parachute to be carried by the arrow without offering resistance thereto when in flight.

Other objects will appear and be better understood from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawings forming part hereof, in which:—

Figure 1 is a side view of the toy. Fig. 2 is a vertical section therethrough showing the same on an enlarged scale. Fig. 3 is a view similar to Fig. 2 showing the arrow inverted and indicating the manner of releasing the parachute. Fig. 4 is a perspective view of the parachute ejector.

The toy comprises an arrow 1 which includes a barrel 2, open at one end as at 2^a and closed at its opposite end as at 3 by the usual form of tip or head. An ejecting rod 4 is mounted to slide longitudinally in the barrel 2 and as illustrated, said rod has secured thereto spaced guide disks 5 and 6 which are freely slidable against the inner walls of the barrel at points remote from the head. This rod is provided with a short section 7 which is terminally formed with a spherical head 8 axially of the barrel and extended beyond the open end 2 of said barrel for a distance equal to the length of the parachute canopy or gliding surface. Adjacent to said portion 7, the rod 4 is provided with a shoulder or weight rest 9.

The parachute 10 includes a folding canopy or gliding surface of fabric material or the like, which may be partly extended into the barrel 2 when folded and arranged so that the head 8 of the ejector rod 4 will lie within the folds of the canopy and in direct contact with the portion 11 for a purpose to be hereinafter explained. A weight 12 of the parachute is connected with the marginal edges of the canopy by means of strings 13 so that the parachute may be properly righted when released from the barrel.

A latch 14 is pivoted at 15 to the barrel and provided with a retaining lip 16 at one end to engage with the keeper 17 of the ejecting rod 4. The opposite end of the latch carries a tail 18 which is located directly in the path of the actuating or releasing weight 19, the latter being mounted to slide longitudinally in the barrel and on a guide rod 20 which is fixedly secured therein and provided at its opposite ends with shoulders or stops 21 and 22. A spring 23 of the barrel 2 has connection with the portion 24 of the latch, whereby to hold said lip 16 in the locking path of the keeper 17. A spring 25 is secured at 26 to the open end of the barrel, while at 27, said spring is secured to the guide head 6 of the ejecting rod 4.

The arrow, upon being projected, travels upwardly as shown in Fig. 1 and upon reaching its zenith begins its return by reve sing, as shown in Fig. 4. This is due to the lighter member 10 being uppermost. As it starts downwardly the weight 19 gravitationally slides down the guide rod 20; in its travel, it cams the tail 18 of the latch 14 out of its path. The latch functions as a lever and swings the portion 24, moving the retaining lip 16 out of contact with the keeper 17 of the rod 4. This rod 4 is tensioned by the spring 25, and upon being released from the lip 16, projects outwardly the canopy 10, by means of the head 8. Obviously as the canopy is projected it carries with it the weight 12. When the parachute is freed, the weight 12 causes it to drop; the air resistance opens the canopy and it glides to earth. To reset the device, the arrow 1 is positioned so as the head 3 is uppermost, as shown in Fig. 1. The mechanism then positions itself as in Fig. 2, when the rod 4 is forced inwardly until the lip 16 engages the keeper 17. The shoulder 9 as will be noted prevents the weight 12, from coming out of the barrel when the parachute is set.

What is claimed as new is:

A toy comprising a tube having an open end, a parachute provided with a weighted portion, the said weighted portion inserted in the tube, a rod within the tube having a head projecting beyond the open end of the tube and lying within the folds of the parachute, spring means adapted to project the rod farther beyond the open end of the tube, means for retaining the rod in its in-position, and gravitational means for disengaging the said retaining means and releasing the rod, substantially as described.

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

ARTHUR E. WILDE.

Witnesses:
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