A. KUBECZKO.

BOMB.

APPLICATION FILED NOV. 30, 1917.

1,280,245. Patented Oct. 1, 1918.

FIG. 1.

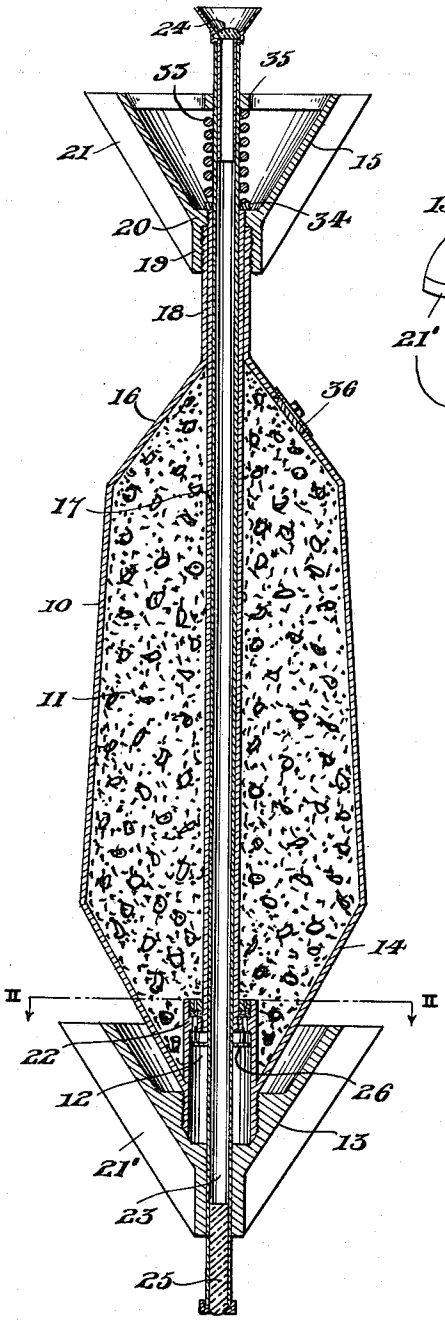


FIG. 2.

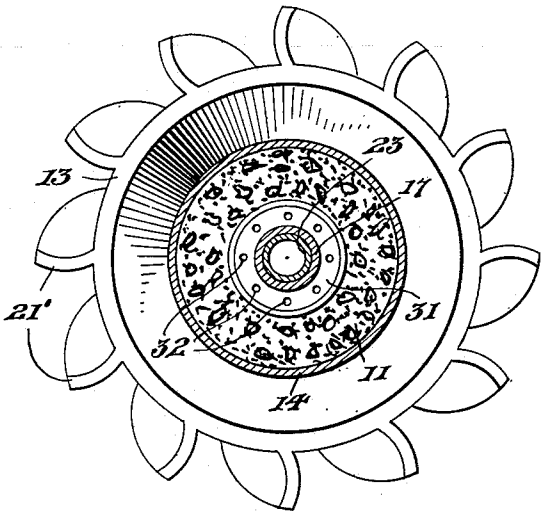


FIG. 3.

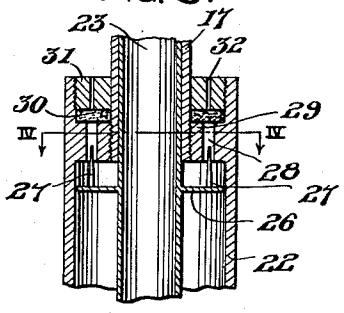
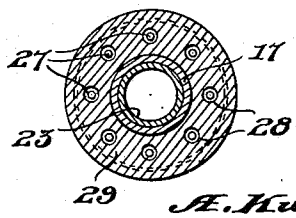


FIG. 4.



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UNITED STATES PATENT OFFICE.

ANDRZEJ KUBECZKO, OF CHICAGO, ILLINOIS.

BOMB.

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Application filed November 30, 1917. Serial No. 204,624.

To all whom it may concern:

Be it known that I, ANDRZEJ KUBECZKO, a citizen of Russia, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bombs, of which the following is a specification.

The primary object of this invention is the provision of an explosive bomb especially adapted to be dropped from an aeroplane and which will rotate during its descent, and explode upon striking an object.

A further object of the invention is the provision of a bomb having a sighting device whereby the bomb may be directed in its movement when dropped upon the enemy, provision being made for rotating the bomb during its travel through the air.

A still further object of the invention is to provide a bomb that is easy and inexpensive to manufacture having means for aiming the bomb at the enemy and for exploding the bomb when contacting an object forwardly thereof.

In the drawing forming a part of this application and in which like designating characters refer to corresponding parts throughout the several views,

Figure 1 is a central longitudinal sectional view taken through the device.

Fig. 2 is a transverse sectional view taken upon line II—II of Fig. 1.

Fig. 3 is an enlarged detail view of the exploding means illustrated in Fig. 1, and

Fig. 4 is a transverse sectional view taken upon line IV—IV of Fig. 3.

This bomb is especially adapted to be dropped from an elevation upon the enemy in such cases as aerial attacks, and the same broadly consists of a slightly tapered container 10 for an explosive 11 with a firing device 12 and a rotor 13 at its lower enlarged tapered end 14 and with a similar smaller size rotor 15 at its upper tapered end 16 of lesser dimensions than the lower end thereof.

A tube 17 extends axially through the casing 10 having one end extending through the neck 18 of the casing at the upper end thereof, while the smaller rotor 15 has a flange 19 threaded upon the free end of the neck 18 and an adjacently positioned flange 20 threaded upon the upper end of the tube 17 which projects outwardly from the said neck.

The rotor 15 is frusto-conical in form having its sides provided with curved blades 21, which, owing to the downward taper of the rotor 15, imparts rotary movement to the bomb during its downward passage through the air.

The tube 17 is provided with a firing cylinder 22 secured to its lower end, the said cylinder being secured within the lower end of the casing 10 and projecting outwardly thereof in the form of a neck with the rotor 13 screw-threaded thereon. The rotor 13 is downwardly tapered and is provided with ribs 21′ whereby the upper rotor 15 is assisted in revolving the bomb.

A hollow sighting member or stem 23 is slidably arranged through the tube 17 and through the rotors 13 and 15, the same having an eye-piece 24 at its upper end for looking downwardly through the stem 23 when desiring to drop the bomb upon a desired point therebeneath. The lower end of the stem 23 may be provided with a piece of glass 25 for preventing particles from entering the stem. A disk 26 is secured upon the stem 23 within the cylinder 22 and is provided with firing pins 27 projecting within passages 28 in an inner flange 29 of the cylinder 22, which flange fastens the cylinder to the tube 17.

A firing cap 30 is placed above the openings 28 maintained in position by a washer 31 having a plurality of perforations 32 for permitting the fire from the cap 30 to pass through the perforations 32 into the casing 10 for igniting the explosive 11 when the stem 23 is longitudinally moved upwardly through the bomb as the lower end of the stem 23 comes in contact with an object at which the bomb is projected. A spring 33 is tensioned between a shoulder 34 carried by the stem 23 at a point within the rotor 15 and a spider 35 arranged at the upper open end of the said rotor 15, the function of the spring 23 being to normally depress the stem 23 with the pins 27 spaced from the cap 30.

It will be seen that a bomb is provided that may be filled with the explosive 11 upon removing a cap or plug 36 in the casing end 16 when desired and that the structure is not liable to be exploded accidentally on account of the action of the spring 33, although the same readily explodes when striking an object at the forward or lower end of the stem 23. The rotors 13 and 15 give the bomb a rotary movement through the air keeping

the same in a straight course while the object aimed at is sighted through the stem 23 upon launching the bomb.

What I claim as new is:—

1. A bomb comprising a casing adapted for receiving an explosive, a firing cylinder at one end thereof, means carried adjacent the opposite ends of the casing adapted for imparting rotation thereto during the movement of the bomb through the air, a hollow stem slidably arranged axially through the casing, cylinder and the rotation imparting means adapted for sighting purposes, an ignition cap arranged within the casing at the inner end of the cylinder, firing pins carried by the stem adjacent said cap and means adapted for normally maintaining said pins spaced from the cap.

2. A bomb comprising an explosive container, a firing cylinder at one end of the container, an explosive ignition cap within the container carried by the cylinder, a hollow aiming stem longitudinally shiftable through the container and cylinder, firing pins for the cap carried by said stem adapted for operation upon striking the lower end of the stem, and means adjacent the opposite end of the stem adapted for normally maintaining the latter for positioning the pins spaced from the cap.

3. In combination with a casing adapted for receiving an explosive, a neck at one end of the casing and a firing cylinder at its opposite end, a tube axially secured through the casing with one end terminating in said cylinder and the other end terminating outwardly of said neck, a rotation imparting member threaded to said neck and the projecting end of the tube, a similar rotating means secured to said cylinder, a hollow sighting stem longitudinally slidable through the said tube and rotation imparting members, an eye-piece at the upper end of the stem, an ignition cap within the casing carried by the cylinder, firing pins carried by said stem within the cylinder, and resilient means arranged adjacent the opposite end of the stem adapted for maintaining said pins normally in their inoperative positions spaced from the said cap.

In testimony whereof I affix my signature.

ANDRZEJ KUBECZKO.