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W. W. WALLACE

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TOY AIRPLANE

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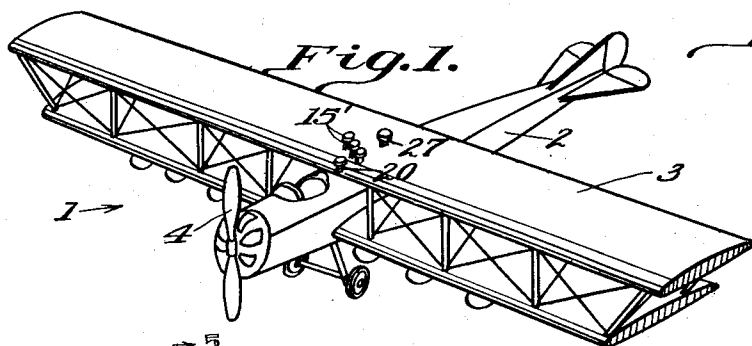


Fig. 6.

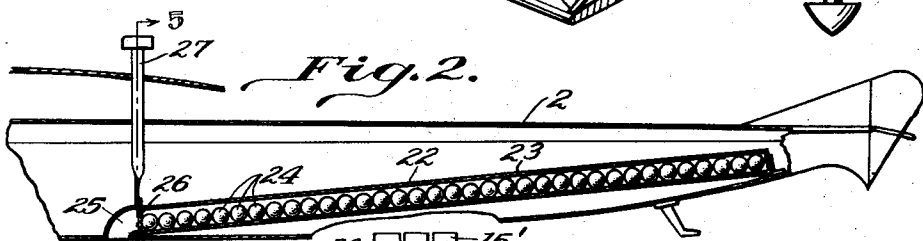
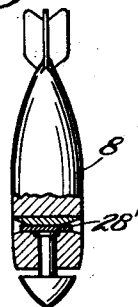


Fig. 2.

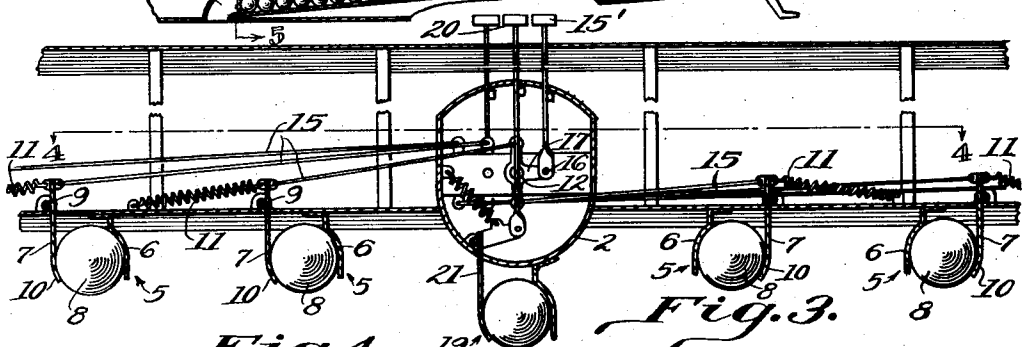


Fig. 4.

Fig. 3.

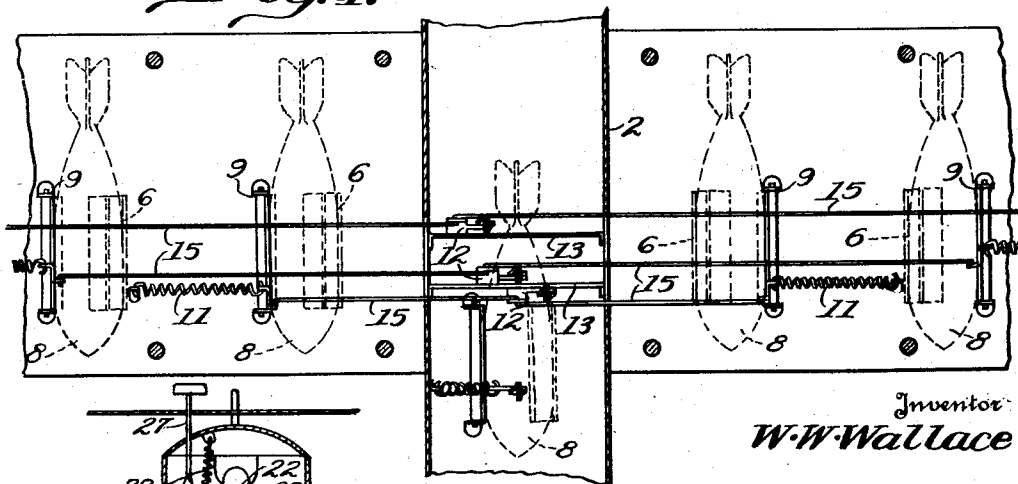


Fig. 5.

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TOY AIRPLANE

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This invention relates to toy airplanes and the principal object thereof is to provide a toy of this character with a novel arrangement for holding one or a plurality of objects simulating bombs or aerial torpedoes which may be dropped or released from the body of the plane by a child carrying the toy to thereby provide for greater enjoyment and interest in the same.

The novel feature of the device is the mechanism for holding and releasing the bomb simulating objects which mechanism includes conveniently located finger trips that may be manipulated by the fingers of the hand supporting the toy to effect the dropping of one or a selected number of such objects.

It is also an object of the invention to provide a mechanism wherein the construction is such as to be readily manufactured and the parts easily assembled.

With the foregoing general objects in view, the invention resides in the construction and combination of parts to be hereinafter fully described and claimed, the descriptive matter being supplemented by the accompanying drawing which constitutes a part of this application and in which:

Fig. 1 is a perspective view of the toy comprising the present invention;

Fig. 2 is a longitudinal vertical sectional view taken through the rear portion of the fuselage of the toy airplane;

Fig. 3 is a transverse vertical sectional view taken through the fuselage and the wing structure of the plane and disclosing more particularly the bomb holding and releasing mechanism;

Fig. 4 is a horizontal sectional view taken on the line 4—4 of Fig. 3; and

Fig. 5 is a vertical sectional view taken on the line 5—5 of Fig. 2.

Fig. 6 is a detail view of a missile having provisions for the insertion and exploding of a detonating cap.

Referring more particularly to the drawing, the numeral 1 designates the toy airplane in its entirety. The toy which is built to resemble an actual bombing plane includes the usual fuselage 2, the wing structure 3 and the motor mechanism which includes a ro-

tatable propeller 4. Carried by the under surface of the lower of the wings 3 are a plurality of projectile holders designated generally by the numeral 5 which are formed to include elongated arcuate plates 6 having their upper edges attached in any suitable manner to the under surface of the wing. Cooperating with the plates 6 are movable plates 7 which are so spaced from the rigid plates 6 as to hold objects 8 therebetween which may be of such shape or outline as to simulate bombs or aerial projectiles. The plates 7 which are pivoted as at 9 have their lower edges slightly curved as at 10 to conform to the contour of the projectile 8 and to provide feet for the support of the projectile. Connected to the upper edge of each of the plates 7 are springs 11 which serve to rock the plates 7 into engagement with the projectiles 8 to hold the latter in place within the holders 5.

To effect the release of the projectiles or missiles 8, there is arranged within the fuselage 2 of the plane a plurality of T-shaped levers 12 pivotally mounted upon transversely arranged braces 13 connecting the side walls of the fuselage. Attached to the upper and lower arms of the levers 12 are rods 15 which have their outer ends connected to the upper edges of the plates 7 so that upon the rocking of the levers 12 against the action of the springs 11, similar movement will be imparted to the plates 7 which will thus effect the release of the objects 8. The rocking of the levers 12 may be effected by the provision of finger keys 15' which have their upper ends extending above the wing structure 3 and their lower ends pivotally connected as at 16 to the horizontally directed arms 17 of the levers 12. It will be noticed that due to the double arm construction of the levers 12, each thereof may be connected as to trip two of the bombs or missiles 8, one on each side of the fuselage, thus reducing the number of operating keys to a minimum. Any number of holders may be provided in connection with the wing structure, depending of course upon the size of the toy. A projectile holder may also be carried by the under side of the fuselage which is indicat-

ed by the numeral 19 and which may be operated by a key 20 pivoted for operation directly to the pivoted projectile retaining plate 21.

- 5 If desired, a holder 22 may also be provided within the rear portion of the fuselage 2, which holder comprises an elongated tube 23 for holding a plurality of smaller projectiles 24. This tube which is of suitable length has its forward open end curved as at 25 to facilitate the dropping of the projectiles 24 in a straight downward direction. This end of the tube is also arranged lower than its opposite end so that the projectiles 15 24 would be sent by gravity toward the opposite or releasing end of the tube. For releasing the circular objects or projectiles 24, there is arranged adjacent the outer open end of the tube a pivoted gate member 26 20 which has one end connected to a finger manipulating key 27 held normally in its released position by a coil spring 28. By depressing the key 27, the gate 26 will be rocked to a position clearing the tube 23, thereby 25 releasing the objects 24 as will be readily understood. By the provision of this elongated holder, any number of the projectiles may be released according to the desire of the operator.
- 30 From the foregoing, it will be seen that a toy has been provided which has all the resemblance of an actual bombing plane and wherein mechanism is provided whereby one or more bombs or projectiles may be released 35 as the toy is being carried by the playing child. The operating keys for effecting the release of the projectiles are so located as to be conveniently manipulated by the fingers of the hand carrying the plane.
- 40 The projectiles used may be made of wood or other suitable material so as not to injure the surface upon which they fall. These missiles or projectiles may receive detonating caps or the like 28' as shown in Fig. 6, 45 which will explode to produce a noise or report when they contact with the ground or floor surface.

What is claimed is:

1. A toy of the character described including a fuselage and a wing structure, a plurality of projectile holders carried by the under surface of said wing structure, each of said holders including a pivoted projectile retaining member, operating members positioned within the fuselage of said plane, and connections between said operating members and said projectile retaining members, whereby upon the operation of said operating members, the projectiles may be released from 60 their respective holders.

2. In a toy of the character described, including a fuselage and a wing structure, a plurality of holders carried by said wing structure for receiving a plurality of projectiles, each of said holders comprising a sta-

tionary plate and a movable plate, the latter of which is spring pressed to hold the projectiles in a clamped position between said plates, operating keys carried by said fuselage and having their manipulating ends extending above said wing structure, and operating connections between said movable plate and said keys, whereby upon the operation of the latter, said plates will be rocked to a position releasing said projectiles. 75

3. In a toy of the character described, including a fuselage and a wing structure, a plurality of projectile holders carried by said wing structure, each of said holders comprising a stationary member and a movable member, releasing keys carried by said fuselage and having their operating ends extending thereabove, and operating connections between said keys and the movable members of said holders so that upon the depression 85 of one of said keys, the movable members will be rocked to a position releasing the projectiles within said holder.

4. In a toy of the character described including the usual fuselage and wing structure, a plurality of projectile holders carried by the under surface of said wing structure, projectile releasing keys carried by said fuselage and having their operating ends extending thereabove, and means connecting 95 said keys with said holders for effecting the release of the projectiles from said holders.

5. An airplane toy of a size and weight adapted to be supported by the hand of the operator, missile retaining means provided in the toy, and releasing mechanism with members situated on top of the toy, said members being actuated by the fingers of the hand used in supporting the toy to effect the independent and selected release of the missiles. 105
6. An airplane toy of a size and weight adapted to be supported by the hand of the operator, missile retaining means provided in the toy, and releasing mechanism including a key extending above the toy and capable of being actuated by the fingers of the hand used in supporting the toy to effect the release of a missile. 110

In testimony whereof I affix my signature.

WAYNE W. WALLACE. 115

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