

1,297,873.

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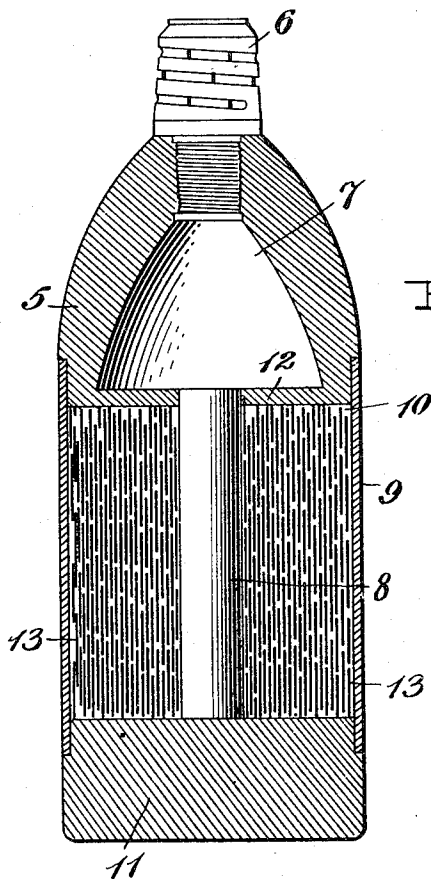
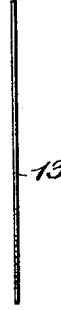


FIG. 2.

FIG. 3.



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PROJECTILE.

1,297,873.

Specification of Letters Patent.

Patented Mar. 18, 1919.

Application filed October 15, 1918. Serial No. 258,156.

To all whom it may concern:

Be it known that I, JOHN S. LAURIE, a citizen of the United States, residing at Fort Totten, in the county of Queens and State of New York, have invented new and useful Improvements in Projectiles, of which the following is a specification.

This invention relates to projectiles.

It has been discovered that light objects such as small birds or other bodies when accidentally brought in contact with the revolving propeller of a flying machine while the latter is in flight operate, through sudden thrust or impact therewith to splinter and rend the propeller, and cases are known where machines have been entirely disabled through such occurrences and the occupants injured and sometimes killed. With this in mind, I have devised a projectile containing many closely nested or arranged light or relatively buoyant and preferably easily separable elements, adapted to be drawn in contact with the propeller by induced suction or otherwise thrown there-against when the projectile is exploded within range of the machine and thus shatter the propeller and disable the machine.

A still further object of the invention is to provide an explosive shell containing many relatively buoyant elements which are relatively separable and adapted to be distributed over a large area when the shell is exploded and thereby require less accuracy when aiming the projectile at its target, the elements being sufficiently light so as to offer considerable resistance to the air to be thereby retained in the line of flight of the machine.

With the above and other objects in view which will appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement of parts which will hereinafter be fully described and particularly pointed out in the claim.

In the accompanying drawing has been illustrated, a single and preferred form of the invention, it being, however, understood that no limitations are necessarily made to the precise structural details therein exhibited, but that changes, alterations, and mod-

ifications within the scope of the claim may be resorted to when desired.

Figure 1 is a vertical section through a conventional form of projectile showing the application of the invention thereto, parts being illustrated in full lines. Fig. 2 is a side view of one of the relatively buoyant elements.

Fig. 3 is an edge view thereof.

In carrying the invention into practice, use can be made of any well known form of projectile shell which, through its entire instrumentalities will be capable of exploding effectively in a manner which will warrant a distribution over a broad area of the shell contents. The shell herein shown is provided, with a suitable fuse 6, which leads to a powder chamber 7, the latter communicating with a longitudinal powder tube 8. Between the powder tube and the jacket wall 9 of the shell is formed a relatively large circular chamber 10 which extends between the butt 11 of the shell and the crown 12 of the powder chamber. Within the chamber are elements 13 which are preferably formed of light or relatively buoyant material such as thin strips of tin or suitable metal. These strips may approximately measure two and one-half inches long, one-quarter or three eighths of an inch wide and about one-thirty-second of an inch in thickness. The shell herein illustrated is substantially of a shrapnel type but in this connection I do not desire to be limited as previously stated. What I do desire to emphasize is the provision of a shell provided with a time fuse or other suitable igniting mechanism which will explode the charge when desired and cause the nested strips 13 to be properly scattered over a relatively wide area.

What is claimed as new is:—

A projectile containing an explosive charge, a fuse, and a plurality of rectangular strips nested in close relation with their longitudinal axis in alinement with the longitudinal axis of the projectile.

In testimony whereof I have affixed my signature.

JOHN STAFFORD LAURIE.