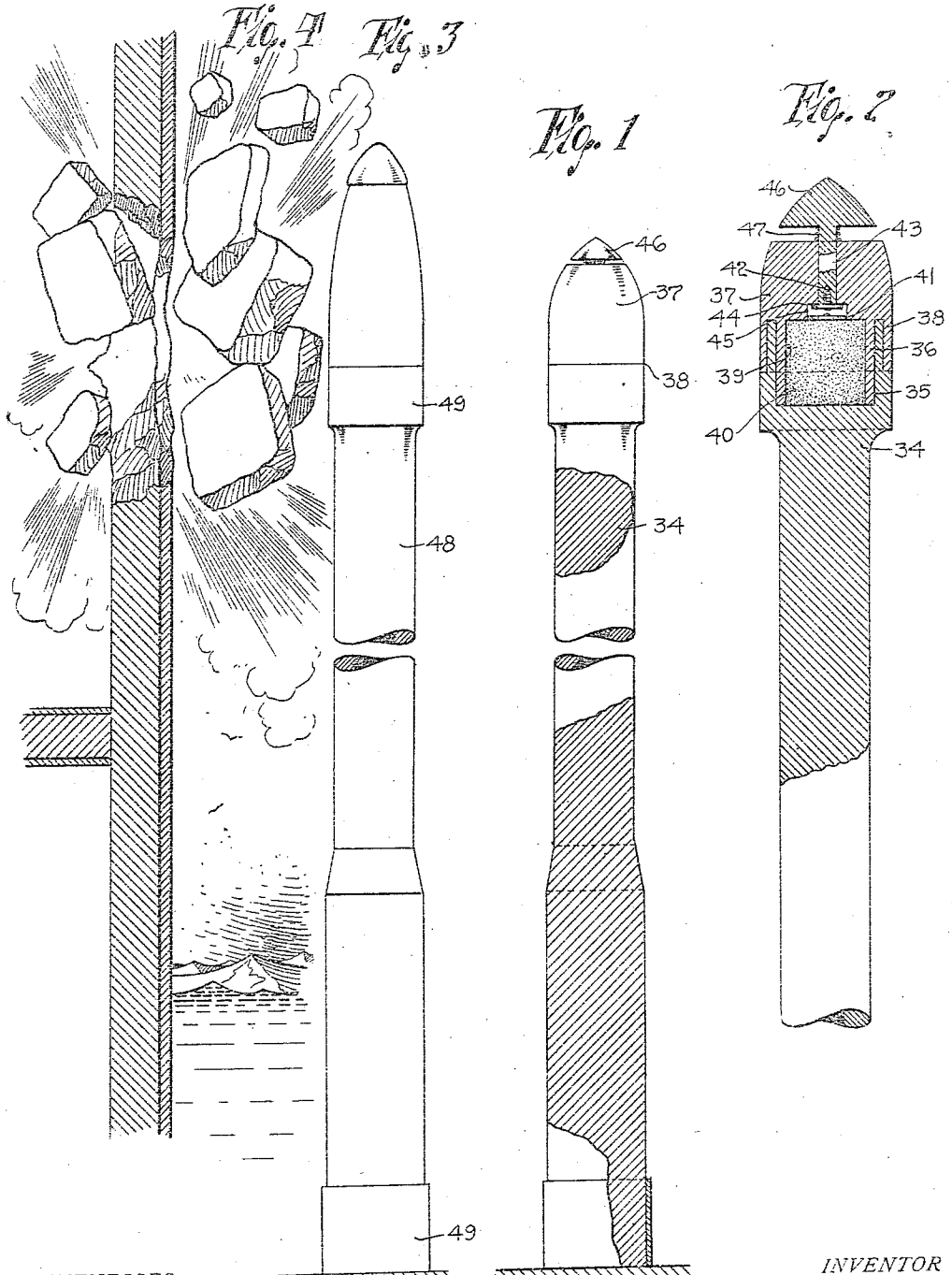


R. A. TUTE.
PROJECTILE.
APPLICATION FILED AUG. 22, 1911.

1,042,504.

Patented Oct. 29, 1912.



WITNESSES
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UNITED STATES PATENT OFFICE.

ROBERT ALEXANDER TUTE, OF ATLANTA, GEORGIA.

PROJECTILE.

1,042,504.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed August 22, 1911. Serial No. 645,452.

To all whom it may concern:

Be it known that I, ROBERT ALEXANDER TUTE, a subject of the King of Great Britain, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Projectiles, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to projectiles for use against troops, ships, and air ships and is adapted to be automatically exploded.

The invention consists of certain novel constructions, combinations and arrangement of parts as will be hereinafter fully described and claimed.

15 In the drawings, Figure 1 is a side elevation of the projectile being partly shown in section. Fig. 2 is a sectional view of the upper end of the projectile. Fig. 3 is a fragmentary side elevation of a modified form of the projectile used in connection with the present device. Fig. 4 is a sectional view showing the action of the projectile upon a metal plate after the projectile has entered the plate and then exploded.

20 In Fig. 1, I have disclosed a form of projectile which is provided with a reduced portion 34 intermediate its ends to limit the contact portion of the projectile which will engage the inner bore of the gun. The usual copper bands or bourrelet bands are carried by the projectile for assisting the same in the rotation thereof within the gun. The forward end of the body of the projectile is provided with a pocket 35 into which is placed the inner collar 36 of the head 37. The band or bourrelet 38 is integrally connected to the head 37 and fits within the reduced portion 39 upon the outside of the body of the projectile. The pocket formed between the inner walls of the collar 35 is filled with dynamite or any other suitable explosive material 40. A cap 41 is carried by the inner end of the head 37 and is discharged by means of the firing pin 42 which pin is carried by the plunger 43. A disk 44 is carried by the lower end of the plunger 43, and slides within the cylinder portion 45 so as to guide the firing pin 42 in its movement. The contact cap 46 is carried by the outer end of the plunger 43, and a coil spring 47 is interposed between the outer end of the head 37 and the cap 46 for nor-

mally holding the firing pin 42 out of engagement with the cap 41.

From the foregoing description, it will be obvious that as soon as the projectile strikes an object, the contact cap 46 will be depressed thereby firing the cap 41 and discharging the explosive material 40.

This structure, just described, is especially adaptable in use with flying machines and devices of like nature, whereby the material out of which the same is constructed does not have any appreciable resistance.

25 In Fig. 3 I have disclosed a modified form of the projectile which may be used in connection with the present invention, the body of which is provided with a reduced portion 48. The projectile is also provided with the usual copper bands 49 as previously described in connection with the structure disclosed in Fig. 3. By this method a much more effective explosion will be produced such as that illustrated in Fig. 4 of the drawing. The body portion of the projectile as illustrated in Fig. 1 is preferably formed of wood, whereas the body portion of the projectile as shown in Fig. 3 is formed of steel since the latter projectile must, of necessity, be constructed of material of very high resistance.

30 Having thus described my invention, what I claim is:

35 A projectile of the class described comprising a body, said body being provided with a reduced portion intermediate its ends, and extending nearly the entire length thereof, a head carried by said body being provided with a rearwardly extending collar, a socket carried by the forward end of said body, and being adapted to receive said collar, an auxiliary collar carried by said head and fitting upon the outside of said body, explosive material positioned between the inner walls of said collar and in said socket formed in the outer end of said body, and means for automatically discharging said explosive material as soon as said head comes in contact with an object.

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

ROBERT ALEXANDER TUTE.

Witnesses:

IRVING L. MCCATHERAN,
MARY C. BECKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."