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DEVICE FOR CONVERTING PROJECTILES, BOMBS, OR THE LIKE INTO MINES

Filed July 28, 1928

Fig. 1

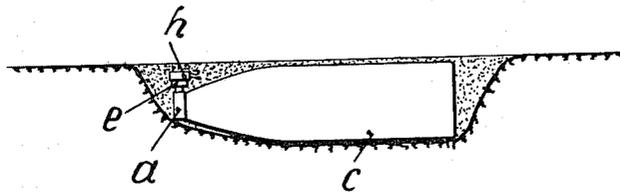
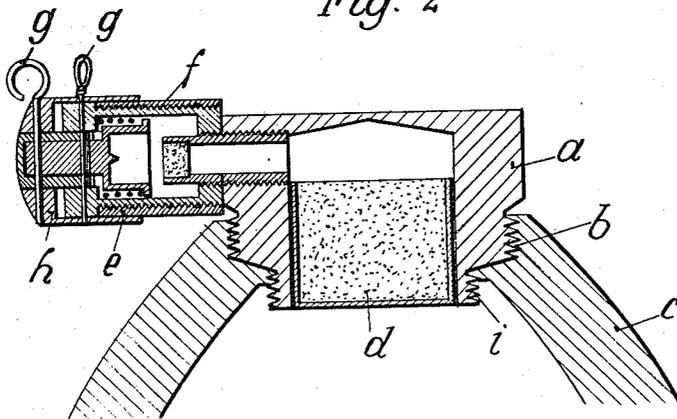


Fig. 2



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UNITED STATES PATENT OFFICE

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DEVICE FOR CONVERTING PROJECTILES, BOMBS, OR THE LIKE INTO MINES

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Hitherto when a body of troops gave way of their own accord to the enemy for tactical reasons or even when they were forced to evacuate their previous position, it was usually essential either to leave to the enemy any artillery projectiles or to explode the same to no effect since firing of the projectiles or use of any bombs or similar projectiles which may be available is no longer possible in such cases.

The present invention is intended to eliminate the defect referred to. This is achieved by screwing an intermediate member provided with a detonating charge to the artillery projectile, bomb, aerial projectile or the like in question after the removal of the fuse therefrom and by arranging a pull-off or shearing fuse on said intermediate member. Any projectile may in this manner be converted immediately into a mine, which is then preferably buried in the ground and may be detonated by the exertion of a tensional or compressional force. Consequently considerable losses may be inflicted upon the enemy with the aid of projectiles which could hitherto not be used where a body of troops had to retire.

One embodiment of the invention is illustrated by way of example in the accompanying drawing in which:

Fig. 1 illustrates a projectile arranged in position and provided with an intermediate member according to the invention, and

Fig. 2 is a sectional view to a larger scale of said intermediate member itself.

After the removal of the projectile fuse proper the intermediate member *a* is screwed with the aid of its thread *b* to the projectile *c*. The intermediate member *a* contains a charge of powder *d* which may be detonated when necessary by means of a shearing or pull-off fuse *e*, whereby the projectile is exploded. The fuse *e* which may be of any desired type is screwed into a threaded hole *f* disposed at a suitable point in the intermediate member *a*. The projectile *c* is then buried in the ground as illustrated in Fig. 1. Said projectile now serves as a mine and may be exploded by withdrawal of the stick pins *g* from a distance. If the fuse *e* takes the

form of a shearing fuse then a mine, prepared in the above described manner will be exploded immediately the fuse head *h* is loaded with, for example, the weight of a vehicle causing the stick pin to be sheared off. If desired a separate pressure plate may also be arranged over the fuse head.

As illustrated in Fig. 2 the intermediate member *a* has two different threads *b* and *i*. It may, however, have a larger number of threads in order that said intermediate member may be readily mounted on a projectile of any desired calibre.

Furthermore the intermediate member *a* may also be screwed together with the shearing fuse *e* on aerial bombs. The fuse *e* then gives satisfactory service both as a percussion fuse and also when the aerial bomb is employed as a mine.

What I claim is:—

1. For converting a projectile into a non-projectile explosive charge, a device comprising a detonating element, a part adapted to be screwed into the seating normally occupied by the projectile fuse proper and a part adapted to receive a fuse in operative position for acting on said detonating element.

2. For converting a projectile into a non-projectile explosive charge, a device comprising a detonating element, a screwed part provided with a plurality of threaded portions enabling it to engage with a variety of sizes of tappings in different projectiles and a part adapted to receive a fuse in operative position for acting on said detonating element.

In testimony whereof I have signed my name to this specification.

HANS GRUBER.