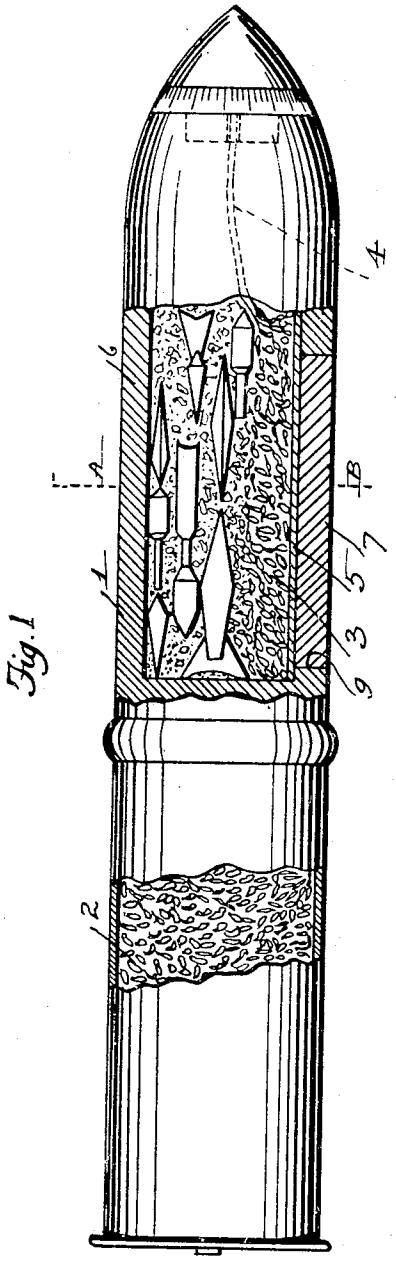
W. C. INGRAM.

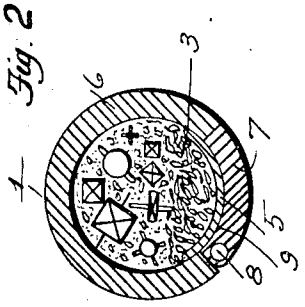
SHRAPNEL SHELL.

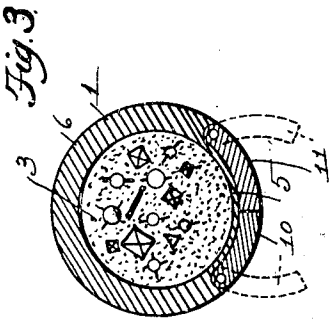
APPLICATION FILED MAR. 7, 1917.

1,240,217.

Patented Sept. 18, 1917.







Inventor

Witness
D. W. Bradford

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UNITED STATES PATENT OFFICE.

WILLIAM C. INGRAM, OF GRAND RAPIDS, MICHIGAN.

SHRAPNEL-SHELL.

1,240,217. Specification of Letters Patent. Patented Sept. 18, 1917.

Application filed March 7, 1917. Serial No. 152,993.

To all whom it may concern:

Be it known that I, WILLIAM C. INGRAM, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Shrapnel-Shells, of which the following is a specification.

The present invention relates to shrapnel shells; and its object is to provide such a shell in which when bursting the missiles shall be projected downward.

This object is attained by, and the invention finds preferable embodiment in, the structures hereinafter described and illustrated by the drawings, in which:—

Figure 1 is a side view, partly in central longitudinal section, of a shrapnel;

Fig. 2 is a transverse section of the same taken on a plane corresponding to line A—B of Fig. 1;

Fig. 3 is a like view, but showing a modified construction.

The oblong shrapnel shell 1 is of the usual cylindroconoidal form, and is provided with the projecting charge 2, bursting charge 3 and time fuse 4, as indicated in Fig. 1.

A portion 5 of the wall 6 of the shell is more frangible than other parts of said wall, which effect is preferably attained by forming said portion thinner than said other parts, as shown. A swinging weight 7 is pivotally mounted on the shell at 8 and is adapted to lie in a suitable recess 9 in the outer surface of the shell when the shell is in the gun. When the gun is discharged, this weight swings outwardly from the shell, and as the shell's rifled rotary movement ceases, the weight turns the shell and maintains the frangible portion of the wall downwardly, the weight being so mounted on the shell relatively to said portion as to accomplish this end. The swinging of the weight and its attachment to the shell for this purpose may, of course, be accomplished in various ways: in the drawings, the axis of the weight's pivotal mounting is in the direction of the shell's axis, and in Fig. 3, two weights 10, 11, are shown mounted on opposite sides of the frangible portion.

The fuse is timed to fire the bursting charge when the weight has turned the frangible portion downward, so that the missiles will be directed downwardly on the target instead of scattering in all directions, the stronger parts of the shell's wall effecting this result when the frangible portion is burst open.

I claim:

1. A shrapnel shell containing a bursting charge and missiles and having a portion of its wall more frangible than other parts thereof, and a weight attached to the shell and adapted to swing outwardly therefrom to turn said portion downward in the shell's trajectory.

2. An oblong shrapnel shell adapted to be projected in the direction of its length and containing a bursting charge and missiles and having a portion of its wall more frangible than other parts thereof, and a weight pivotally mounted on the shell on an axis extending in the direction of its length and adapted to swing outwardly from the shell to turn said portion downward in the shell's trajectory.

3. An oblong shrapnel shell containing a bursting charge and missiles and having a portion of its wall more frangible than other parts thereof, and having a recess in the outer surface of its wall, and a swinging weight attached to the shell and adapted to lie in said recess and to swing outwardly therefrom to turn said portion downward in the shell's trajectory.

In testimony whereof I have hereunto set my hand.

WILLIAM C. INGRAM.