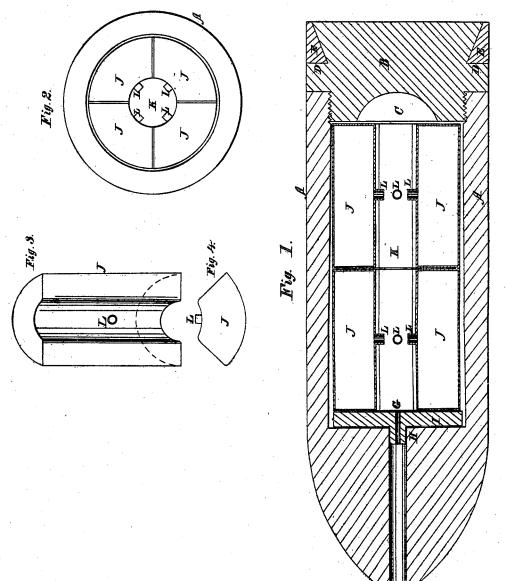
## HBarton. Shell:

N<sup>4</sup>48642.

Patented Jul. 11. 1865



Witness.

A Franklin Hingark

Inventor, Henry Barton

## UNITED STATES PATENT OFFICE.

HENRY BARTON, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN COMPOUND EXPLOSIVE SHELLS.

Specification forming part of Letters Patent No. 48,642, dated July 11, 1865.

To all whom it may concern:

Be it known that I, HENRY BARTON, of the city of Baltimore and State of Maryland, have invented new and useful Improvements in Elongated Sectional Shells; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of separate magazines in sections, each section having a fuse-

pipe.

The object of my invention is to produce a bursting force from the center of the shell, so as to scatter the outside shell in every direction, while the sectional magazines are thrown in every direction and explode separately after the first explosion.

Figure 1 represents a sectional view of the shell; Fig. 2, an end view, showing the center magazine and the sectional magazines; Fig. 3, a view of a sectional magazine, and Fig. 4

an end view of the same.

A represents the outside shell, pointed in front, and having a screw-butt, B, with a cavity, C, and an offset, D, in which the leaden ring E fits to prevent the ring sliding off, to fill the bore of the gun, give force to the shell, and form a flange to give accuracy to its direction by rotary motion. The front of the shell has a tubular way, G, through its center, in which a hammer-rod is inserted to operate on a cap on the nipple H of the circular plate I.

The cavity C is an air-chamber that is intended to assist the scattering of the fragments

of the outside shell.

The sectional magazines J are formed of eight (more or less) movable quarter-sections, that are separate metal chests or shells, made of brass or any kind of metal, of sufficient thickness and strength to sustain the first explosion from the center magazine, K, and each section J is filled with powder, is a separate magazine, and is ignited by a fuse extending through each fuse-pipe L to the center magazine, K. These sections J fit closely at their sides, surround the center magazine, K, and fill the main shell A, and when the main or center magazine, K, explodes and the bursting charge communicates its fire to the fuses of the pipes L the main shell A is burst in every direction, and afterward each sectional magazine J bursts, explodes, and scatters its shell in all directions.

I am aware that spherical and elongated shells have been made with separate chambers, but when tested each and every chamber has been burst at the same instant of time with the explosion of center magazines; but such permanent chambers I do not claim. There-

fore
What I claim as my invention, and desire
to secure by Letters Patent, is—

The construction and arrangement of the independent chambers J within an external shell, A, so as to form a central chamber or magazine, K, communicating with each fusepipe L, as herein described, and for the purposes set forth.

HENRY BARTON.

Witnesses:

J. Franklin Reigart, John S. Hollingshead.