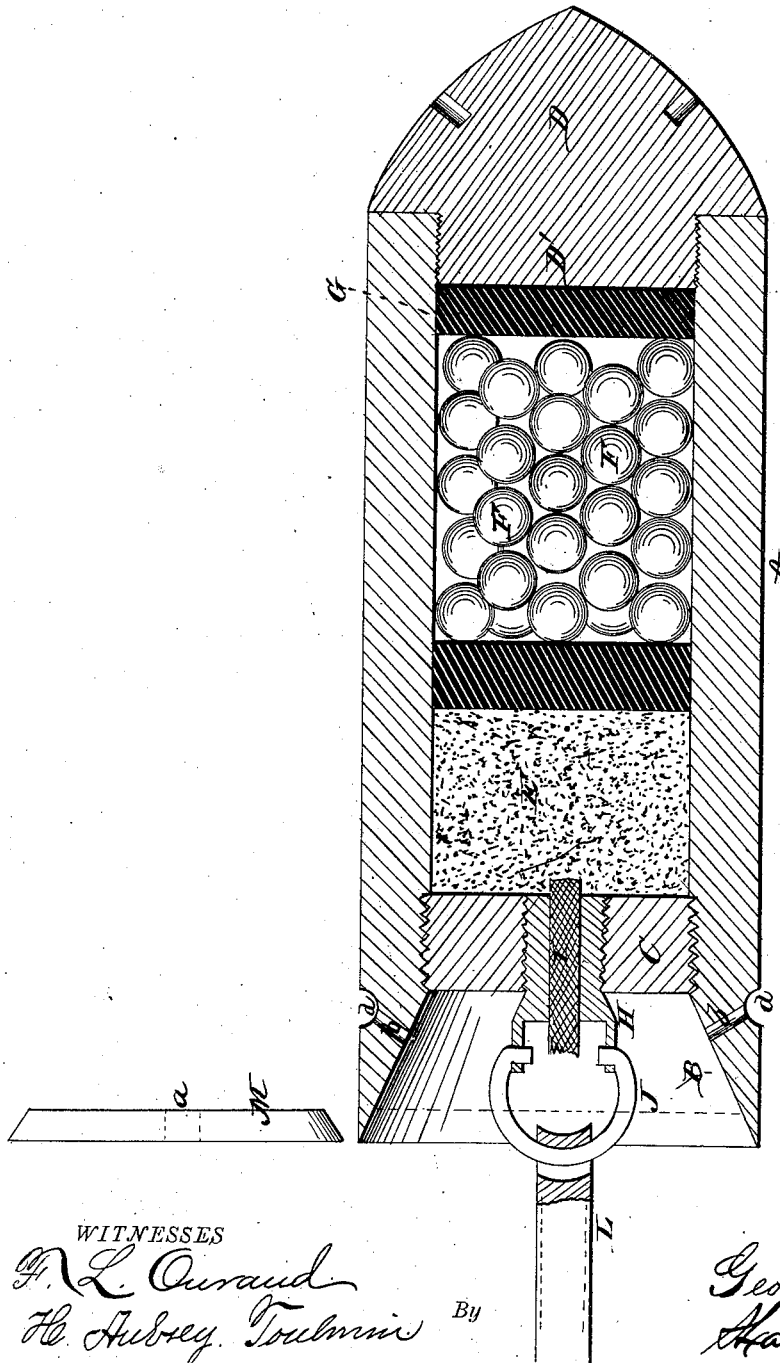


G. W. TURNER.
Explosive-Shell.

No. 206,153.

Patented July 16, 1878.



WITNESSES
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UNITED STATES PATENT OFFICE.

GEORGE W. TURNER, OF TUPELO, MISSISSIPPI.

IMPROVEMENT IN EXPLOSIVE SHELLS.

Specification forming part of Letters Patent No. **206,153**, dated July 16, 1878; application filed May 15, 1878.

To all whom it may concern:

Be it known that I, GEORGE W. TURNER, of Tupelo, in the county of Lee, and in the State of Mississippi, have invented certain new and useful Improvements in Bomb-Shells; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

My invention consists in the construction of a bomb-shell, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a longitudinal section of my improved bomb-shell.

A represents the cylindrical body of the shell, which may be made of a piece of hollow pipe or tube, of the best malleable steel or iron, of the desired size and thickness, and cut to any required length.

The inside of the pipe A, at the rear end, is made beveled, as shown at B, and immediately in front thereof is inserted the breech or breech-pin C, fitting the size of the shell, with heavy screw-threads to prevent explosion in the rear.

In the front end of the shell is inserted the cap D, made in the usual form for elongated shells, and having a neck, D', which fits the muzzle of the shell, with small screw-threads.

The interior of the shell forms a powder-chamber at E, and another chamber for the missiles F, which latter should accord in size with the caliber of the gun and the purposes for which they are intended.

The cap of the shell presses on a thick felt wad, G, on top of the balls, and, by means of the small screw-threads uniting the cap to the shell, it holds the force of the explosion until it reaches its maximum strength, when the cap is blown out and the balls F scattered.

The breech or breech-pin C is provided with a central opening, in which is screwed a metallic tube, H, incasing the fuse I, the fuses to be fixed and marked as ordinary fuses for other shells.

The end of the tube H is provided with a staple or ring, J, to which is attached a caudal appendage, L, made either of a flattened rope, strap, or chain of any suitable length. This caudal appendage is coiled in the chamber B, around the staple or ring J, and a sabot, M, is inserted in the end of the shell and rests on the coil, said sabot having a central opening, a, to admit the fire from the explosion of the gun to ignite the fuse.

When the gun is fired off and the shell leaves the muzzle, the sabot M drops out, and the appendage L uncoils and acts like the feather to an arrow, to prevent the shell from turning in the air—or, in other words, to keep the point of the shell directly in front.

The uncoiling of the caudal appendage is caused by means of the air passing into the chamber B directly in rear of the breech-pin, through inclined holes or passages *b b*, which open in a groove, *d*, formed circumferentially around the base of the shell.

Instead of one cord, strap, or chain forming the caudal appendage for the shell, I may use two, three, or more, if deemed advisable.

It will be readily perceived that after the explosion of the shell it will be empty from the breech-pin to the muzzle, and the atmosphere coming in at the muzzle and passing out through the fuse-opening in the breech-pin will make a noise as hideous as a steam-whistle in the air, and will have a very demoralizing effect on troops.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A bomb-shell composed of the body A, with breech-pin C, having hollow screw-tube H, for forming a passage for the fuse, and forming a rear chamber, B, the screw cap or point D, and a caudal appendage, L, confined within the chamber B, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of April, 1878.

GEORGE W. TURNER.

Witnesses:

R. D. PORTER,
J. M. PEELER.