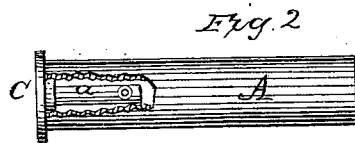
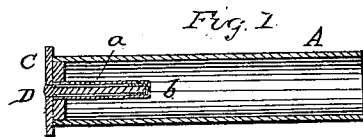


G. H. TODD.
Cartridge Shell.

No. 87,990.

Patented March 16, 1869.



witnesses

John A. Coe
J. H. Foster

Inventor

G. H. Todd

Per.

J. H. Alexander
Atty.

UNITED STATES PATENT OFFICE.

GEORGE H. TODD, OF MONTGOMERY, ALABAMA.

IMPROVEMENT IN CARTRIDGE-SHELLS.

Specification forming part of Letters Patent No. 87,990, dated March 16, 1869.

To all whom it may concern :

Be it known that I, GEORGE H. TODD, of Montgomery, in the county of Montgomery and State of Alabama, have invented certain new and useful Improvements in Cartridge-Shells; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 represents a longitudinal section of my cartridge-shell, and Fig. 2 a side elevation.

The nature of my invention consists in providing a cylinder with a cylindrical pin or tube, opened at one end, and provided with a perforated end, and into which is inserted a bar with percussion-cap at one end.

To enable others skilled in the art to which my invention appertains to make and use the same, I will proceed to describe its construction and operation.

In the accompanying drawing, A represents a metal cylinder, which is opened at one end, and the other end made with a cap, *c*, with an opening in its center, and which is provided on the inside of cylinder A with a cylindrical pin or tube, *a*, which is furnished

with three or more apertures at its inner end, as represented in the drawing. D is a metal bar, on the inner end of which is attached a percussion-cap, *b*. This bar enters the cylindrical pin or tube *a*, with its outer end projecting beyond the closed end of the cylinder, so as to receive the hammer of the gun, which forces it into the cylindrical tube *a*, against the end of the said tube, which causes the cap *b* to explode, thereby causing the flame from the explosion of the cap to enter the cartridge through the perforated end, which permits a flash of fire to pass through each aperture.

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

1. The sliding bar D, constructed, arranged, and operated substantially as described.
2. The combination of the slide-bar D, cylindrical tube *a*, and cap *b*, all constructed, arranged, and operated as and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

Witnesses:

J. Z. BURTON,
W. L. LEWIS.

GEO. H. TODD.