## I. DAVIS.

No. 193,855.

Patented Aug. 7, 1877.

Fig. 1

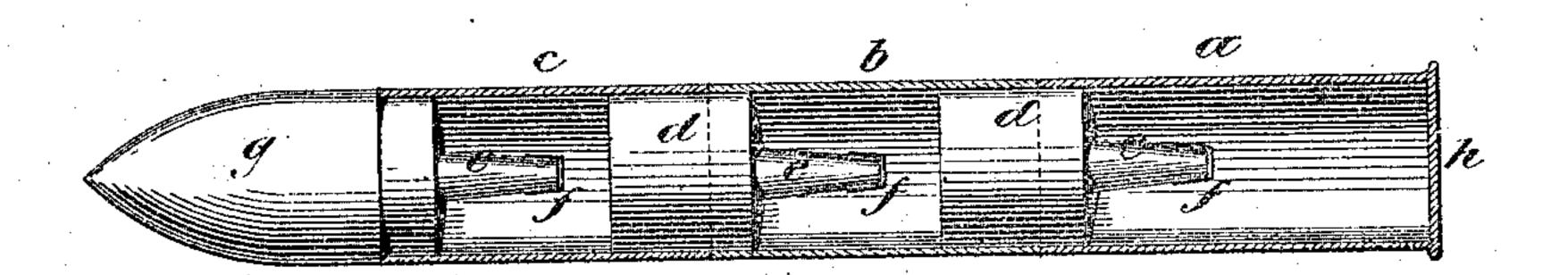
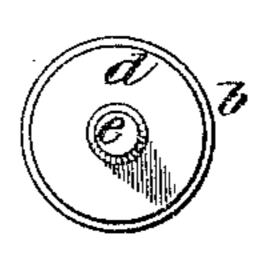


Fig. 2.



Sustave Rueterich for Sustave Recording for

INVENTOR:

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## UNITED STATES PATENT OFFICE.

ISAAC DAVIS, OF FITZWILLIAM, NEW HAMPSHIRE.

## IMPROVEMENT IN CARTRIDGES.

Specification forming part of Letters Patent No. 193,855, dated August 7, 1877; application filed July 23, 1877.

To all whom it may concern:

Be it known that I, ISAAC DAVIS, of Fitz-william, county of Cheshire and State of New Hampshire, have invented a new and Improved Cartridge, of which the following is a specification:

Figure 1 is a longitudinal section of my improved cartridge. Fig. 2 is an end view of the sections.

Similar letters of reference indicate corre-

sponding parts.

The object of my invention is to accelerate the motion of projectiles by dividing the charge of explosive, so that each successive portion of the charge increases the velocity of the projectile in arithmetical proportion.

In the drawing, a b c are sections of the cartridge-shell, which are connected by the plugs d, which are provided with nipples e, upon which percussion-caps f are placed. A ball, g, also having a nipple, e, and provided with a cap, f, is fitted to the last of the series of cartridge-shell sections.

The section a is provided with the ordinary percussion head h, and when the cartridge is charged with powder and discharged in the usual way, the charge in the section a moves the plug between the sections a b forward, so

that it strikes the percussion-cap f on the nipple of the second plug, which explodes the charge contained by the second section, b, and moves the second plug forward until it strikes the cap f on the nipple projecting from the ball g, and causes the third charge to explode.

The second plug moves with double the velocity of the first, and the ball moves with double the velocity of the second plug, or four times that of the first.

There are various ways of exploding the several charges, and the form of the cartridge may be varied from that shown and described; therefore I do not confine myself to the exact construction herein set forth.

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

A cartridge having a shell made in two or more sections, connected by plugs, and each containing separate charges of explosive, the plugs and bullets being provided with nipples for receiving percussion-caps, substantially as shown and described.

ISAAC DAVIS.

Witnesses:

AMOS J. BLAKE, A. R. GLEASON.