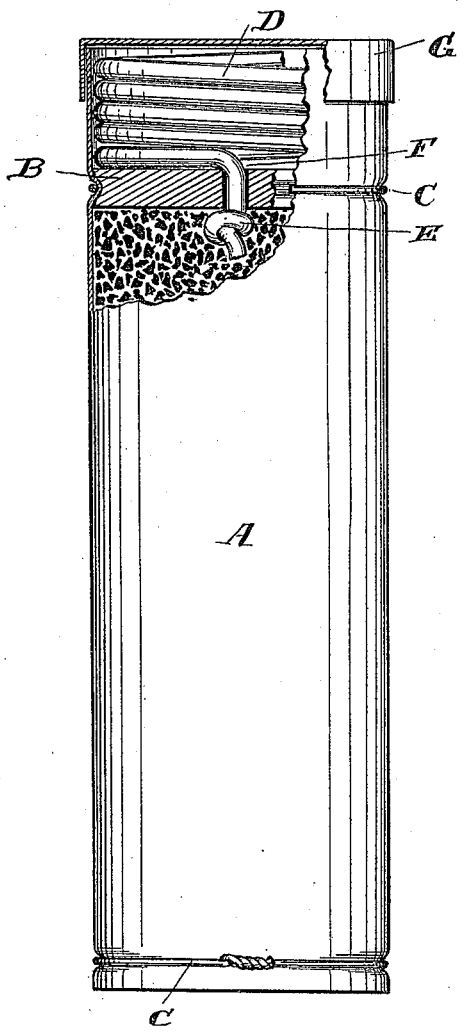
(No Model.)

G. M. PETERS.

CARTRIDGE.

No. 422,442. Patented Mar. 4, 1890.



Attest
C. C. Peters
F. C. Tuttle

Inventor
G. Moore Peters
by D. F. MacDonald Atty.

UNITED STATES PATENT OFFICE.

GERSHOM MOORE PETERS, OF CINCINNATI, OHIO.

CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 422,442, dated March 4, 1890.

Application filed October 7, 1889. Serial No. 326,173. (No model.)

To all whom it may concern:

Be it known that I, GERSHOM MOORE PETERS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Blasting-Cartridges; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to blasting-cartridges similar in construction to the ones heretofore filed by me.

The object of the device here presented is to afford a blasting-cartridge with fuse attached, and thus obviate the necessity of buying separate fuse, as well as the trouble of placing the fuse within the cartridge-case.

The construction of the device is illustrated in the accompanying drawing.

The case A is made of paper, tin, or other suitable material. The lower end of the case is closed by a sealing-cap held in place by a wire C, as in my former applications, or in any other suitable manner.

The upper cap or disk is perforated, as shown in the drawing, and through this opening is inserted the fuse D. The fuse is drawn through just far enough to afford a knot E being made to prevent its being drawn out. It may be held in place in any other suitable way. After the shell is filled with the required amount of powder the cap B, having the fuse attached, is pressed firmly down upon the powder and then secured in place by the wire C, as before explained. Tar or other water-proof material may be filled in around the fuse, as at F, thus closing up the hole through the disk, making the cartridge both water and air tight. The powder is filled into the tube to within about an inch or two of the top, so that the extending walls of the shell will afford a receptacle for the fuse. The extending fuse is then coiled around and placed inside the tube, projecting above the disk. The fuse is held in this position until it is to be used by means of a paper cap G, pasted or otherwise properly secured over the load in the shell. When the cartridge is to be used, the paper cap may be broken or cut and the fuse drawn out.

It will thus be seen that the fuse is always protected from dampness or from being cut or injured and from accidental firing. Moreover, instead of requiring separate fuses or handling, the cartridge and fuse are ready to be used as soon as the drill-hole is completed. Oftentimes farmers desire to blast out stumps or stones, and, not being skilled in placing fuses, waste and accident are the result. This device obviates all these objections. Again, powder can be packed in this way for transportation and storage without increase of freight rates or insurance.

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

1. In a blasting-cartridge, the combination, with the shell having suitable sealing-caps, of an attached fuse coiled within and below the mouth of shell.

2. In a blasting-cartridge, the combination, with the shell, of a sealing-cap provided with a fuse, said fuse being located within and below the mouth of the shell and protected by a suitable cap at the top of the shell.

In testimony whereof I affix my signature in presence of two witnesses.

G. MOORE PETERS.

Witnesses:
F. C. TUTTLE,
A. M. BEEKLEY.