

(No Model.)

F. C. KNIGHT & H. DOCKER.

CARTRIDGE SHELL.

No. 322,730.

Patented July 21, 1885.

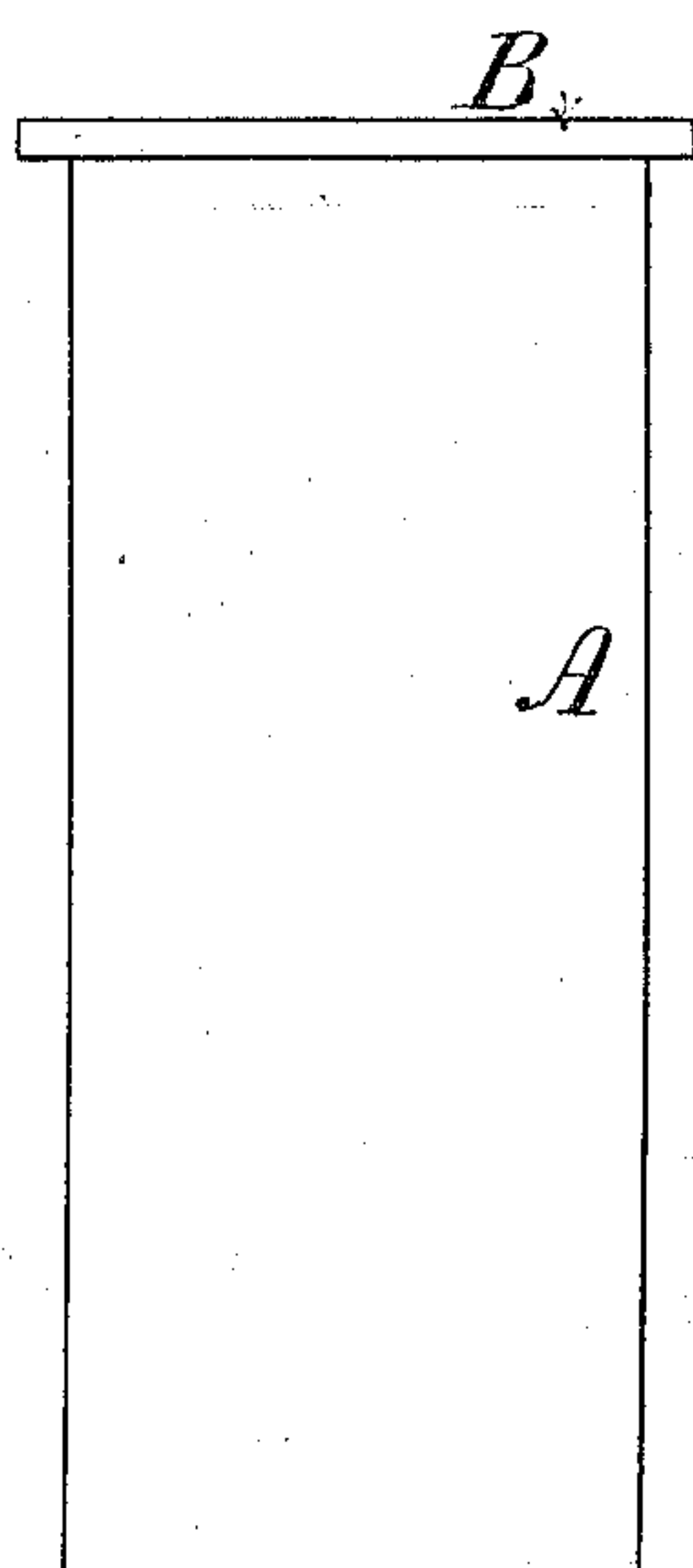


Fig. 1

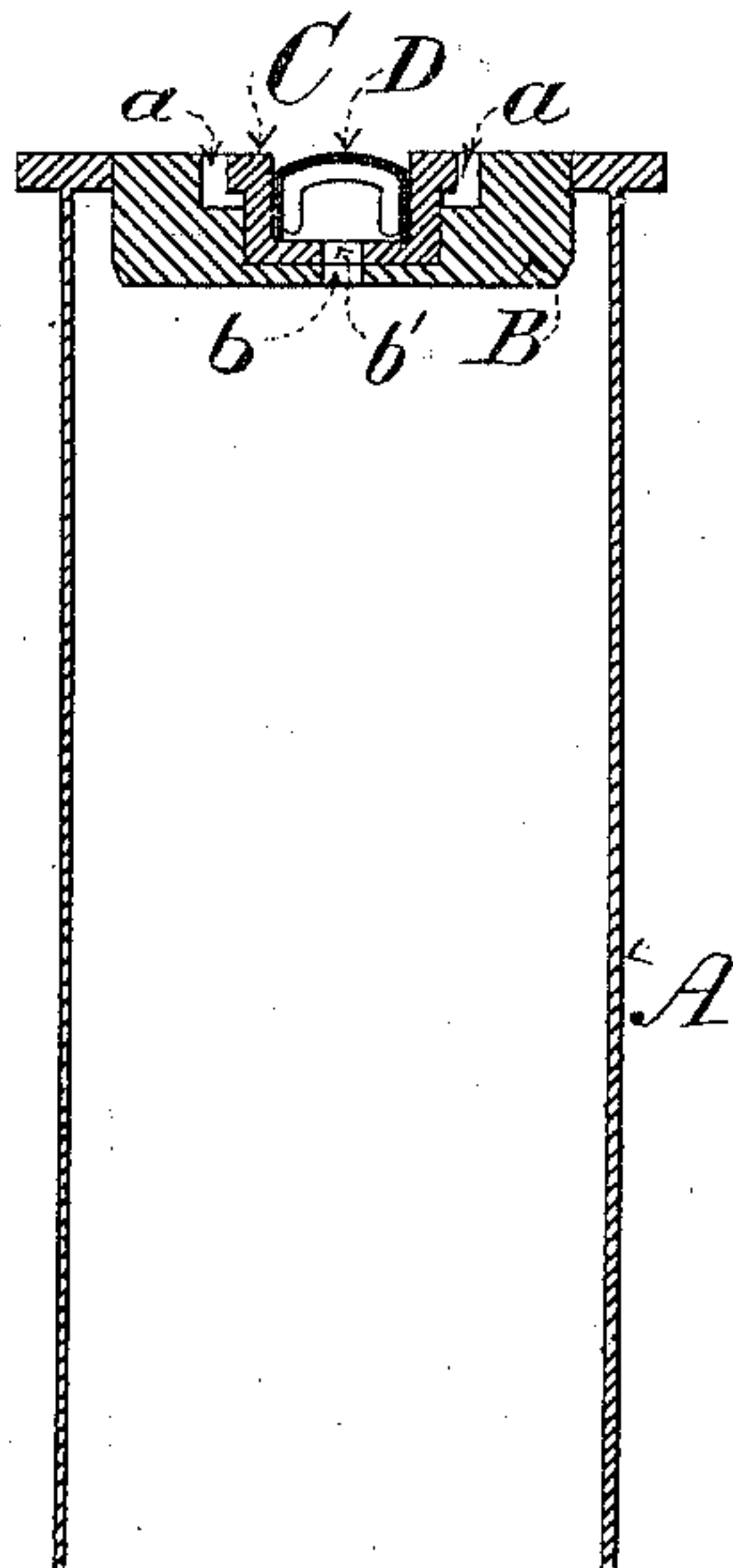


Fig. 2

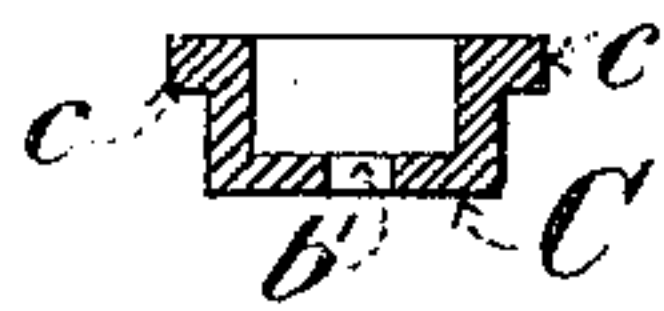


Fig. 4



Fig. 5

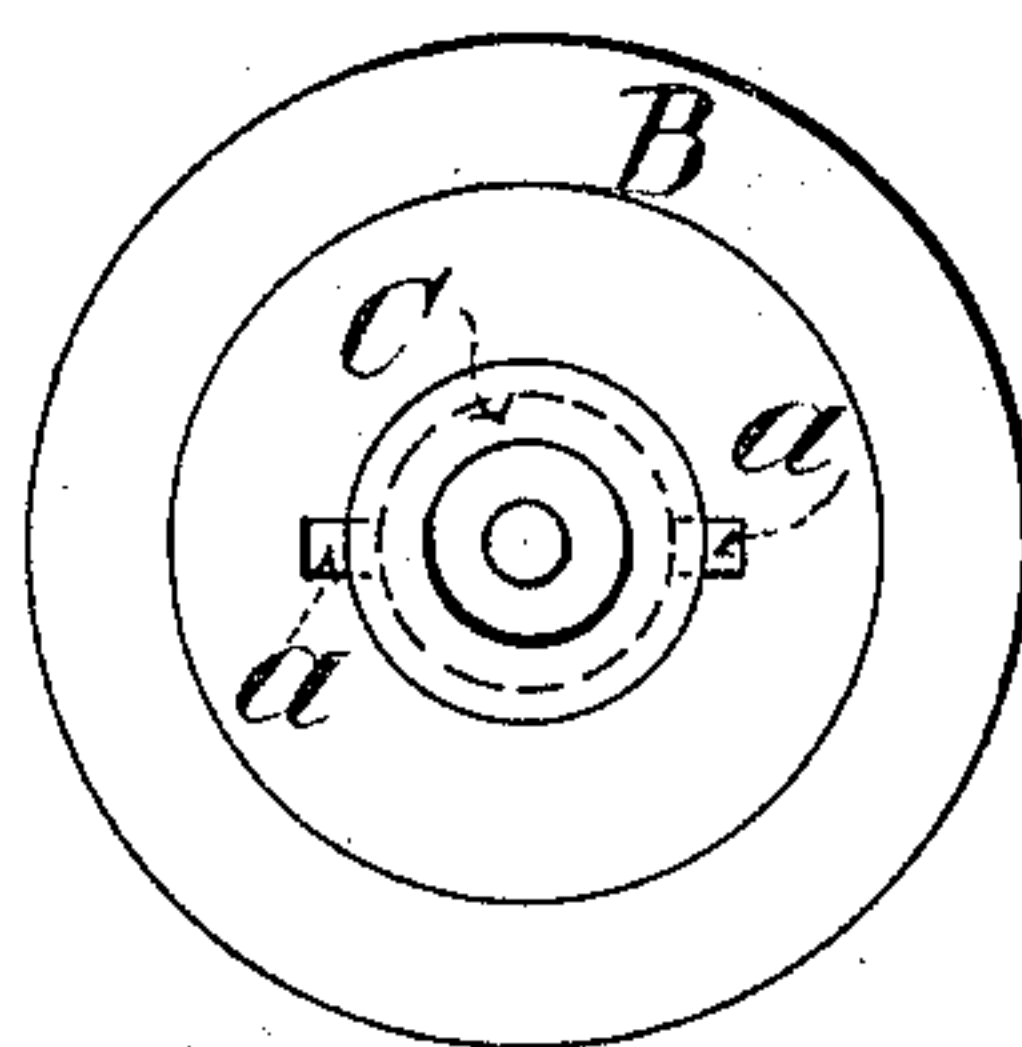


Fig. 3

WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK C. KNIGHT AND HARRY DOCKER, OF PHILADELPHIA, PA.

CARTRIDGE-SHELL.

SPECIFICATION forming part of Letters Patent No. 322,730, dated July 21, 1885.

Application filed February 2, 1885. (No model.)

To all whom it may concern:

Be it known that we, FRANK C. KNIGHT and HARRY DOCKER, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Cartridge-Shells; and we do hereby 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.

Our invention relates to cartridge-shells for breech-loading guns, and has for its object the provision of a simple and efficient device for holding the cap in such manner as to be readily and safely removed without danger of exploding it, and so that the cartridge can be readily and safely shipped.

The invention will be understood as herein-after set forth and claimed.

In the accompanying drawings, Figure 1 is an elevation of my improved shell. Fig. 2 is a cross-section thereof. Fig. 3 is a plan. Figs. 4 and 5 are respectively a plan and a cross-section of the removable part holding the cap.

A is a metallic cylinder of the kind ordinarily used in making cartridge-shells.

B is the base of the shell.

b is a small central opening in the base B through which the powder is ignited.

C is a removable cup-shaped receptacle fitting snugly into a corresponding cavity in the base B.

c is a circular flange extending around the top of the cup C.

a a are two small openings on opposite sides of the base B for the purpose of allowing the plyers, of any suitable form of construction to be inserted in order to take out the cup C.

b' is a small central opening in the bottom of the cup C. This opening registers with the one in the base B, as shown in Fig. 2.

D is an ordinary percussion-cap of the kind commonly used on shells.

The aperture b in the base of the shell being only large enough to admit a single grain of powder, it will be readily seen that the shells

can be carried without having caps adjusted thereon, thus assuring absolute safety from the danger of accidental explosions.

The cup holding the cap being quite small it may have the cap adjusted therein and be carried in a separate receptacle and fitted to the cartridge at any time before it is placed in the gun.

In the old form of cartridge-shells the cap is made to fit snugly, and after being once adjusted and the cartridge loaded it is impossible to remove it without withdrawing the charge. Consequently, should the cap miss fire and fail to ignite the powder, this very dangerous and tedious process of withdrawing the charge from the shell becomes necessary. With our improved shell this perilous task is completely avoided, as, should the cap fail to explode the charge, it is only necessary to remove the cup C, which is done by inserting the plyers into the apertures a a and separating the two parts of the base, after which the cap can be readily removed; or, if desired, another cup having a fresh cap may be inserted in the shell and the old cap removed at leisure or whenever convenient.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

A cartridge-shell provided with an inwardly-extending circular depression in the base and a small central opening in the bottom thereof, a removable circular cap-receptacle having solid walls and a small central opening registering with the opening in the base of the shell, said cap-receptacle fitting snugly into the base of the shell with its bottom resting thereon and held in position by frictional contact with the walls of the base, substantially as shown.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK C. KNIGHT.
HARRY DOCKER.

Witnesses:

THOS. D. MOWLDS,
OTIS EGAN.