Johnston & Dow,

Cartridge.

No 42666. Patented May 10 1864.

Fig 1.



Fig 2.

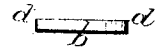


Fig 3.

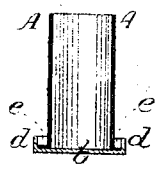


Fig 4.

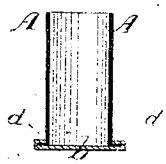
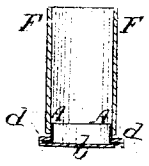


Fig 5



Fig 6.



Witnesses

Julius K. Pomeroy

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UNITED STATES PATENT OFFICE.

ALGERNON K. JOHNSTON AND LORENZO DOW, OF NEW YORK, N. Y.

IMPROVEMENT IN APPLYING PERCUSSION PRIMING TO CARTRIDGE-CASES.

Specification forming part of Letters Patent No. 42,666, dated May 10, 1864.

To all whom it may concern:

Be it known that we, ALGERNON K. JOHNSTON and LORENZO DOW, of the city, county, and State of New York, have invented a new and improved method of attaching fulminating-powder, protected by a cap, to cartridge-cases, by which the cartridge and percussion-cap can be united in one article of manufacture, in a better and more economical manner than has ever before been done; and we do hereby declare that the following is a full, clear, and exact description of the said method, showing the union aforesaid, reference being had to the annexed drawings, making a part of this specification.

The figures represent sectional views.

Whenever the cylindrical portion of a cartridge-case is formed of metal, or of any substance the edge of which can be drawn so as to be turned outward, making a narrow flange around the bottom of the cylinder, as represented in Figure 1, let this be first done. In the figure the sides of the cylinder are shown at A A, and the flange formed by turning the edge or rim of the cylinder outward is represented at E E. This flange should be about one-twelfth of an inch in width. The under side of this flange is the place where we apply the fulminate. We moisten the flange on the under side, and lightly place it down on some fulminating-powder, which will adhere to it in sufficient quantity. We then place the cylinder, with the flange so covered with fulminate, into a cup or cap of metal or other hard substance, of the form represented in Fig. 2. The sides of this cup or cap are about one-tenth of an inch in height—just sufficient to reach the side of the cartridge-case when pressed down over the flange—and the diameter of the base of the cup or cap is such that the flange above named shall readily be admitted into it. After placing the cylinder, with the flange so covered with fulminating-powder, into such cup or cap, we carefully, but firmly, press down the edge of the cup or cap over the flange of the cylinder. The cartridge-case and percussion-cap, which, in this case, may be called a percussion-base, are thus united in one article of manufacture, the fulminate being between the cap and the flange and the cap forming the base of the cartridge-case. The case may then be filled with gunpowder and a bullet attached in the usual manner. Upon striking such cartridge at its base, anywhere upon its circumference, the fulminate is exploded and the flame instantly communicates with the charge.

Fig. 3 represents the cylinder and flange resting within the cup or cap. The flange is seen at E E, the sides of the cap at *d d*, and the base of the cap at *b*.

Fig. 4 represents the cartridge-case with the sides of the cup *d d* pressed down upon the flange, the base of the cap *b* forming the base of the completed cartridge-case.

If the sides of the cartridge-case or cylinder are made of such material that the flange above named cannot be made from it, then a cap or base should be made for such cylinder, precisely in the manner above described, from metal or other proper substance, and attached to the cylinder, which forms the greater part of the cartridge-case. Take Fig. 4, for instance, and cut it off a little above the flange, and you will have such base or cap represented, as in Fig. 5. This, when attached to the cylindrical portion of the cartridge-case, forms its base or cap, as represented in Fig. 6, in which F F represent the sides of the cylinder united to the cap or base containing the fulminating-powder at A A.

What we claim as our invention, and desire to secure by Letters Patent, is—

The application of a cup or cap to the flange of a cylinder with fulminating-powder between, substantially as above described, the whole forming a percussion-cap or base for a cartridge.

ALGERNON K. JOHNSTON.
LORENZO DOW.

Witnesses:
JULIUS R. POMEROY,
WILLIAM H. BOUGHTON.