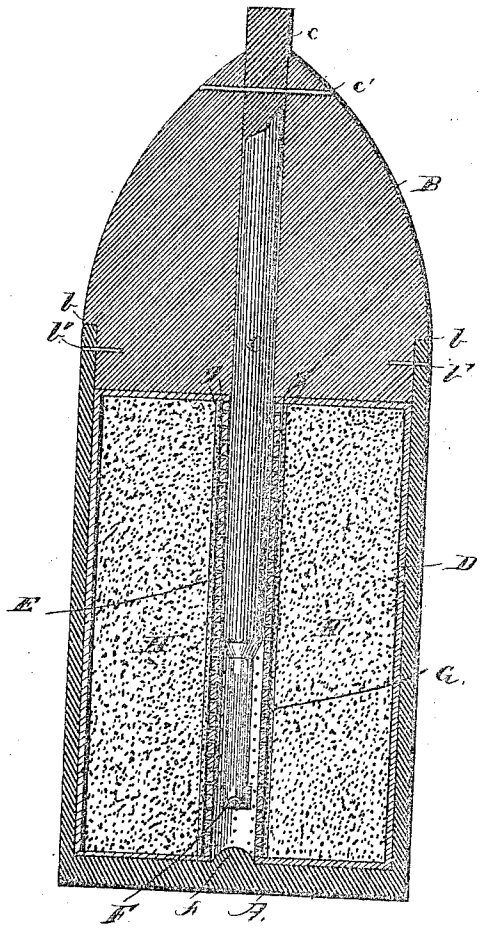
(No Model.)

J. McCREARY.

PROJECTILE.

No. 369,459. Patented Sept. 6, 1887.



Witnesses
Geo. Hoyt
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Inventor
John McCreary
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UNITED STATES PATENT OFFICE.

JOHN McCREARY, OF WEBBERVILLE, MICHIGAN.

PROJECTILE.

SPECIFICATION forming part of Letters Patent No. 369,459, dated September 6, 1887.

Application filed April 18, 1887. Serial No. 235,267. (No model.)

To all whom it may concern:

Be it known that I, JOHN MCCREARY, a citizen of the United States, residing at Webberville, in the county of Ingham and State of Michigan, have invented a new and useful Improvement in Projectiles, of which the following is a specification.

The invention relates to improvements in projectiles for fire-arms, the object being to so arrange dynamite within the same in relation to the gunpowder and percussion-fuse therein that the projectile can be handled without more than the necessary danger, an accidental explosion will be avoided, and the dynamite will be exploded, not directly by the percussion-fuse, but from the firing of the gunpowder thereby.

The invention consists in the construction and novel arrangement of parts, hereinafter described, embraced in the appended claims, and illustrated in the accompanying drawing, in which the figure represents a central longitudinal section of the improved projectile, fully showing the construction and arrangement of the interior.

Referring to the drawing, A designates the shell or cylinder of the projectile, made of steel plate, and having the base of the conical ball or missile B fitting on its open end down to the circumferential shoulder *b b* of said missile, and secured in place thereon by the series of steel pins *b' b'*, as shown. The ball or missile is provided with an axial opening, in which rests the outer part of the firing-pin C, with its front end, *c*, extended outward and prevented from sliding inward by the transverse pin *c'*, which passes through suitable openings in the missile and firing-pin.

D is a cylindrical case, of pasteboard, occupying the interior of the shell below the missile, and having an axial opening through it for the accommodation of the inner part, *d*, of the firing-pin C, which part is surrounded within the casing by the finely-perforated tube E, made of the finest quality of pasteboard. The inner end of the firing-pin is somewhat reduced in size, and has fitted upon its extremity the percussion-cap F a short distance above the central boss, *f*, on the interior of the base of the shell A.

G is a layer of coarse gunpowder inclosed in sheets of tissue-paper, *g g*, both on its inner and outer sides, and surrounding the perforated tube E for its entire length.

The interior of the cylindrical case D is filled with dynamite, (designated by H,) which is kept from immediate contact with the gunpowder by the tissue-paper, and also from contact with the firing-pin.

The described projectile may be made of suitable size to be fired from guns of any caliber, and is necessarily very destructive, as the explosion of the dynamite takes place at the point at which the shell strikes, so that it would shatter at said point the heaviest armor that the largest vessels could bear, and in field service would make any protection except earth more dangerous than the open field.

When the shell strikes after firing, the projecting point of the firing-pin is driven in, the impact breaking the pin *c'*, and the cap F is exploded on the boss *f*, firing the gunpowder, which explodes the dynamite.

The explosion is the more effective from being directed forward, the percussion-fuse being fired at the rear of the shell.

Having thus described my invention, I claim—

1. In a projectile for fire-arms, the combination of the cylindrical shell, the ball or missile secured in the front end thereof, the dynamite in rear of said missile, the tube of finely-perforated pasteboard running axially through the shell in rear of the ball or missile, the layer of gunpowder wrapped on each side with tissue-paper surrounding the perforated tube, and the percussion-fuse, substantially as described, acting through said tube and firing in the rear part of the shell, substantially as specified.

2. The herein-described projectile, consisting of the cylindrical steel shell A, provided with the central firing-boss, *f*, on the interior of its base, the ball or missile B, secured to the shell by the steel pins *b'*, the firing-pin C, se-

cured with its front end, *c*, projecting outward by the pin *c'*, and carrying the percussion-cap F on its inner end, the cylindrical pasteboard case D, containing dynamite, the finely-perforated tube of pasteboard, E, the layer of coarse gunpowder, G, and the sheets of tissue-paper, *g g*, on each side of said layer, all arranged substantially as and for the purpose specified.

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

JOHN McCREARY.

Witnesses:
O. C. WILLIAMS,
WM. L. BROWN.