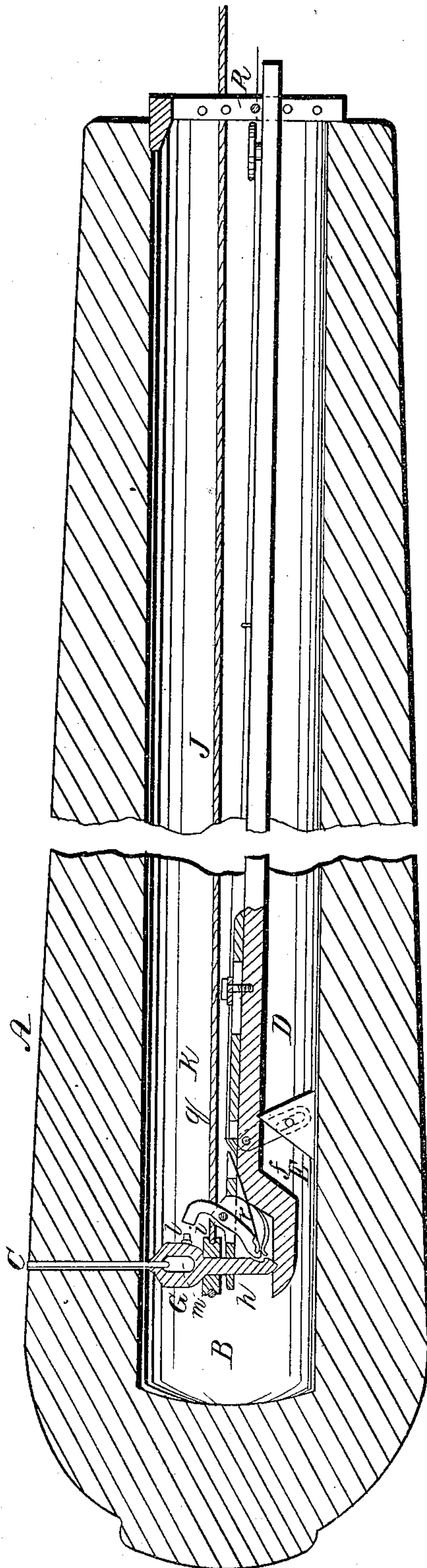


T. J. DOBBS.
Unspiking Cannon.

No. 88,615.

Patented April 6, 1869.



Witnesses
Gustave Dietrich
Wm A. Morgan

Inventor
T. J. DOBBS
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United States Patent Office.

THOMAS J. DOBBS, OF WEEHAWKEN, NEW JERSEY

Letters Patent No. 88,615, dated April 6, 1869.

IMPROVEMENT IN APPARATUS FOR UNSPIKING GUNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS J. DOBBS, of Weehawken, in the county of Hudson, and State of New Jersey, have invented a new and improved Apparatus for Clearing Spiked Cannon; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful device for clearing the touch-hole of a cannon when the cannon has been spiked; and

The invention consists in blowing the spike from the gun from the inside, or bore of the gun, by means of powder, or other explosive material, introduced into the gun, and applied as hereinafter described.

The drawing represents a longitudinal section of a cannon, with my apparatus introduced, and arranged for operating on the spike.

A is the cannon.

B represents the bore.

C is the touch-hole.

My apparatus is attached to a lever, D, which is introduced into the gun.

This lever is made of steel, or other rigid and unyielding metal, and has its fulcrum on the triangular block E, which block is adjustable and reversible.

It is attached to the lever by the slotted arms *f*.

The sides of the fulcrum-block E, are not equal, so that, by turning it, the lever is raised or lowered, as may be required.

G is the powder-chamber, with a shank, *h*, which is stepped into the lever, as seen in the drawing, so that it may be revolved.

i is a cord-pulley on the shank *h*.

J represents a cord, which passes round the pulley, and extends beyond the muzzle.

The chamber G is supported in an upright position by the bar K, which is made adjustable on the lever D, so that the chamber may be inclined either way from an upright position, to correspond with the inclination of the touch-hole, should the same be inclined either way from a perpendicular.

l is a percussion-cap nipple, which communicates with the powder in the chamber.

m represents the powder.

n is the hammer, which is attached to the bar K by a pin-joint.

o is a small spring, attached to the lever D at one end.

The other end bears against the lower end of the hammer with a constant pressure.

p is the lanyard, which is attached to near the lower end of the hammer.

It passes up over a bearing, *q*, on the lever, and extends through the bore of the gun, as seen in the drawing.

The top of the chamber G is serrated, or fluted sufficiently to form cutting-edges, so that when it is revolved, by drawing the cord alternately back and forth, it acts as a "mill," and cuts a countersink around the lower end of the touch-hole, and forms for itself a good bearing.

While the chamber is being revolved, the lower end of the hammer is drawn back and held by the lanyard.

The upper end of the chamber is open, and where the spike extends through the touch-hole, and into the bore of the gun, the chamber is placed so that the spike enters the orifice.

When the spike does not extend through, I place a small pin loosely in the chamber-orifice, which pin extends from the chamber sufficiently far to enable me to find the hole.

The chamber is guided by either the end of the spike, or the loose pin, so that when the chamber is revolved, as before mentioned, the metal around the hole is countersunk, and a fair bearing is thus made for the upper end of the chamber.

When this is done the chamber is pressed upward firmly to the hole, by depressing the outer end of the lever.

The end of the lever is held firmly down by a pin through the rack R, at the muzzle of the gun, as seen in the drawing.

It will be seen, in the drawing, that the toe of the hammer enters a notch in the shank *h* of the chamber.

This is for keeping the chamber and percussion-cap in the right position for firing.

When thus placed, the charge of powder in the chamber is exploded by a sudden fall upon the lanyard *p*.

As the chamber is rigidly held by the lever, which is made sufficiently stiff and strong to prevent springing, the force of the powder must find vent through the touch-hole by blowing out the spike.

This device has been tested so often that it is no longer an experiment, but effectual and sure in its operation.

I claim as new, and desire to secure by Letters Patent—

1. The use of a chamber charged with powder, or other explosive compound, introduced into the bore of cannon, and discharged therein, substantially as described, for the purpose specified.

2. The combination of the powder-chamber G, pulley *i*, adjustable bar K, hammer *n*, adjustable and reversible fulcrum-block E, with each other, and with the lever D, substantially as described, for the purpose specified.

THOMAS J. DOBBS.

Witnesses:

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