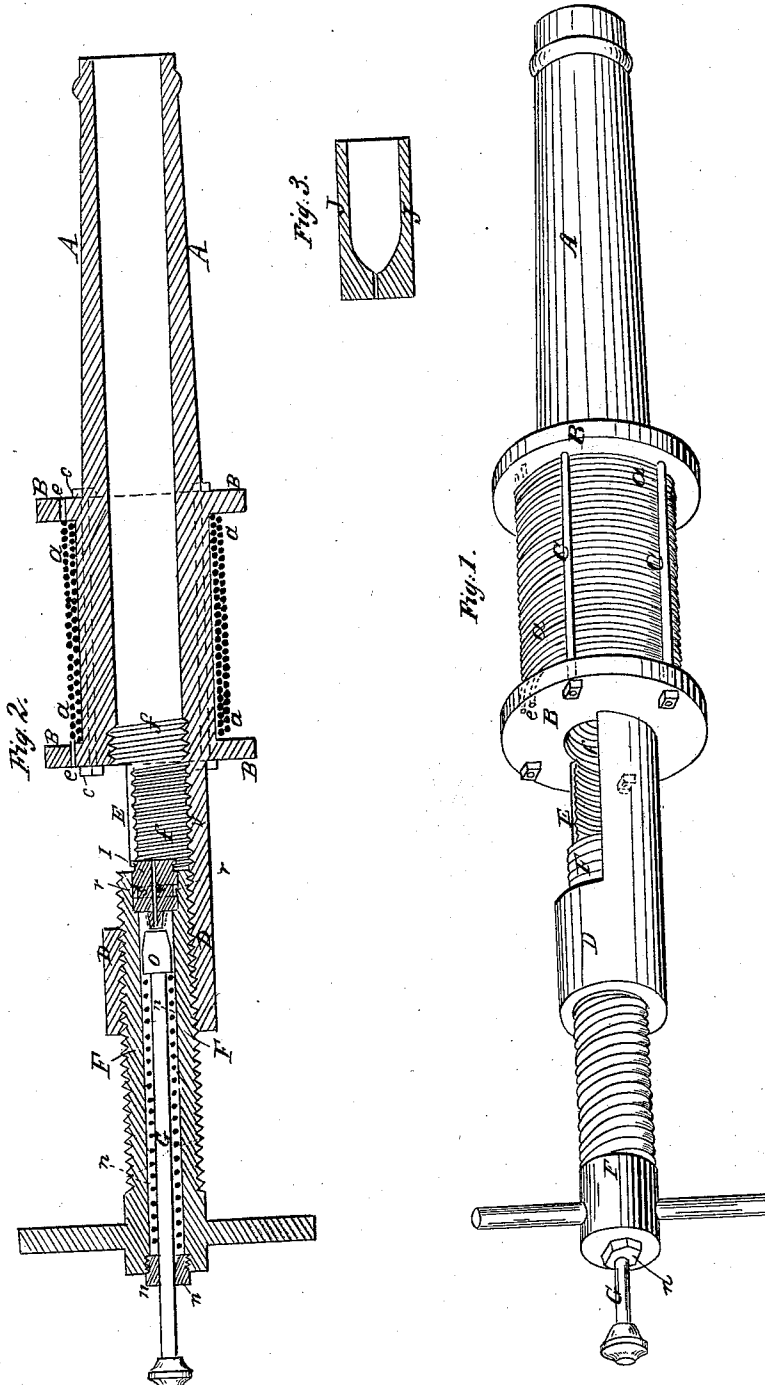


E. D. BAKER.  
Breech-loading Ordnance.

No. 34,287

Patented Feb. 4, 1862.



Witnesses  
Henry H. Price.  
John Mathis.

Inventor.  
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# UNITED STATES PATENT OFFICE.

EDWARD D. BAKER, OF CLAREMONT, NEW HAMPSHIRE.

## IMPROVEMENT IN THE CONSTRUCTION OF ORDNANCE.

Specification forming part of Letters Patent No. 34,287, dated February 4, 1862.

*To all whom it may concern:*

Be it known that I, EDWARD D. BAKER, of Claremont, in the county of Sullivan and State of New Hampshire, have invented certain new and useful Improvements in Cannon; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of a cannon, and Fig. 2 a longitudinal vertical section through the same, showing the application of my proposed improvements thereto. Fig. 3 represents a section through a wooden cartridge-case which I propose to use in connection with my improved cannon.

My invention relates to a particular plan for strengthening the gun at and near the point of discharge.

A represents the barrel of a cannon, having upon it near its rear end two flanges, B B, either wrought, shrunk, or slipped on against shoulders. From one to the other of these flanges are passed a series of strengthening-rods, C C C, &c., tightly strained up by nuts and screws, or otherwise. The barrel of the gun between the flanges B B is wrapped with wire *a* in one, two, or more layers, as follows: The end of the wire, as at *c*, having been passed through a hole in the flange and there riveted or otherwise securely fastened, the wrapping may be continued until the desired number of layers is placed, and then the end of the wire may be drawn through another hole in the same, or in the opposite flange, where it is properly secured, as at *e*. In this manner the barrel is strengthened both radially and longitudinally against the strain of the discharge.

In rear of the barrel A there is a cylinder, D, which is cut away at E for the purpose of forming a trough or receptacle for the cartridge to be placed in previous to its being run up into the bore or chamber of the gun. In the interior of the cylinder D there is cut a screw-thread, *f*, which extends into the bore of the gun, and in this thread a screw-follower, F, is run to carry the cartridge into the bore of the gun, and then close said bore, and acting as a breech-piece to the gun. The follower F is hollow, and contains a hammer-rod, G, around which there is a helical spring, *m*, that forces it toward the bore of the gun. This spring is kept in place by a nut, *n*, at one end of the follower, and by the

hammer-head *o* at the forward end of the hammer-rod G. At that end of the follower F next the bore of the gun there is a nipple-block, I, which is readily removed and replaced by means of studs *r r* in the interior of the follower, and slots *s* in said nipple-block. Upon the interior end of this nipple-block there is a nipple, *u*, for carrying a cap, as shown in red, for exploding the charge through the intervention of the spring hammer-rod G. Although I have shown a common percussion-cap as the means of igniting the charge, any other well-known priming can be used as well. The follower F, I propose to make slightly tapering, so that as it wears by use it may be run up farther, and thus effectually close up the joint between itself and the body or barrel of the gun against the escape of gases, or of the force of the charge.

J, Fig. 3, represents a wooden cartridge-case which I propose to use in connection with my gun. It is to be loaded with powder and ball, and dropped into or through the opening E; and to prevent the screw-threads from bruising or holding the cartridge against the action of the follower, I cut off the crown of the screw-thread, as seen at *v*, Fig. 2, underneath the opening E, so that the cartridge may move easily over it, as it is advanced into the bore of the gun.

When the gun is ready to be fired, the hammer-rod G is drawn back sufficiently far and then let go, which explodes the cap and ignites the charge in the gun.

I am aware that screw-rods have been used in sectional guns to hold the sections together, and that the body or barrels of cannon have been wrapped with wire. These things I do not claim independent of my special manner of using them; but

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

1. The flanges projecting from the body of the gun near the breech, in combination with the external screw or straining rods, substantially as and for the purpose herein described.

2. In combination with the flanges, the wire wrappings, said flanges furnishing both a support for and the means of securing the ends of the wires, substantially as herein described.

EDWARD D. BAKER.

Witnesses:

JONAS WHITE,  
MERCY A. BRANAGAN.