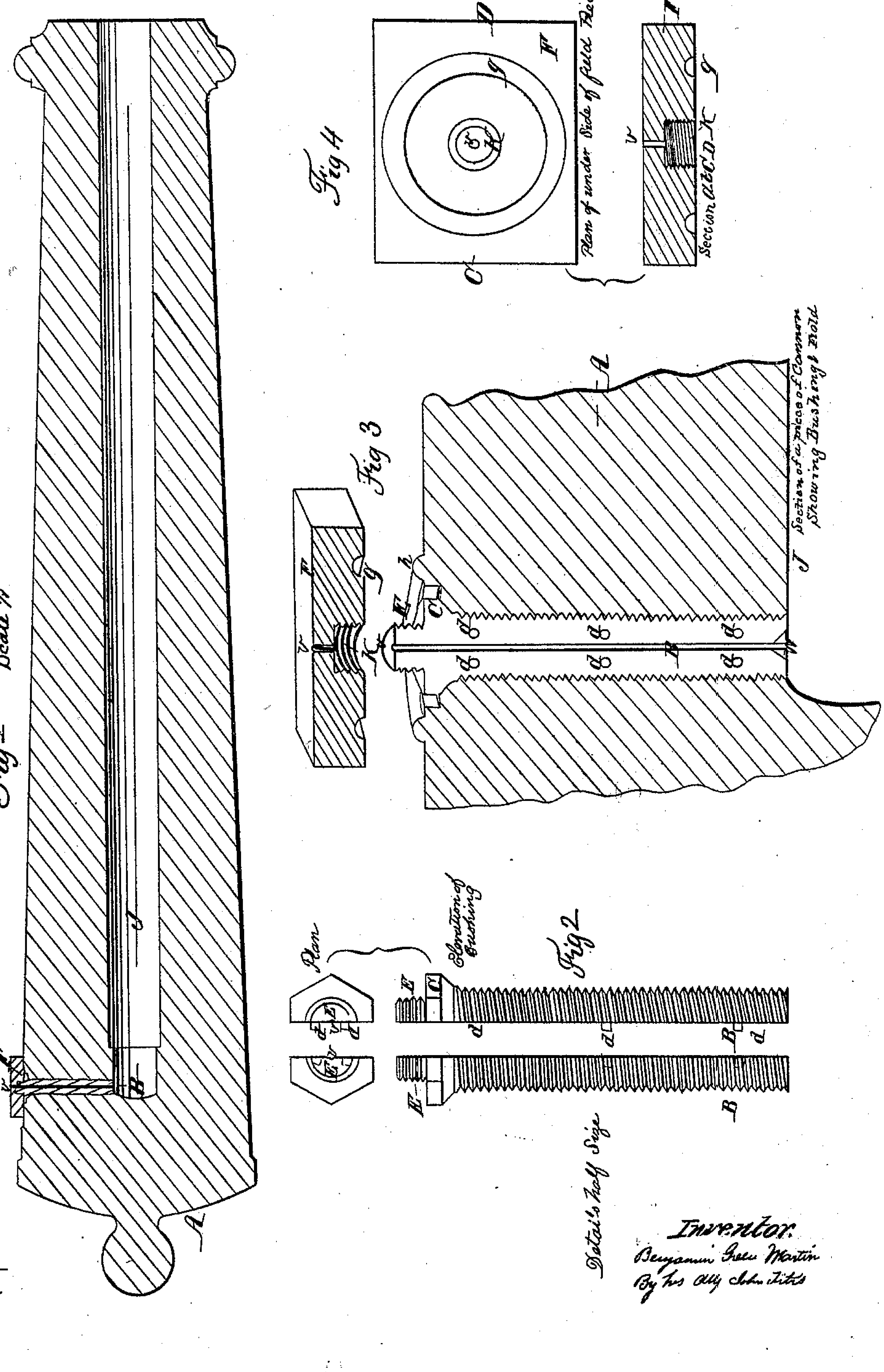
B. G. MARTIN.

Muzzle-Loading Ordnance.

No. 37,257. Patented Dec. 23, 1862.



Witnesses.
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Inventor.
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UNITED STATES PATENT OFFICE.

BENJAMIN GREEN MARTIN, OF NEW YORK, N. Y., ASSIGNOR TO JEROME BUCK, OF SAME PLACE.

IMPROVEMENT IN DIVIDED VENT-BUSHING FOR ORDNANCE TO FACILITATE UNSPIKING.

Specification forming part of Letters Patent No. **37,257**, dated December 23, 1862.

To all whom it may concern:

Be it known that I, BENJAMIN GREEN MARTIN, of the city, county, and State of New York, have invented in the cylindrical tube, which may be made of any proper dimensions, of copper or any other metal suitable to the intended purpose, certain novel and original modifications, which modifications consist in dividing the cylindrical tube into two equal parts by a plane longitudinal section through the center, and so fitting and doweling the equal half parts of the said bisected cylinder to each other as to work perfectly well together. The said modifications are useful for many valuable purposes, and the said bisected cylinder, perforated by a circular aperture through the center of the proper diameter, and having a right-hand male screw-thread of suitable size and inclination cut over all its outer diameter, excepting a small part of the upper end, which has a left-hand screw-thread of sufficient size and inclination for the purpose intended, I apply to the purposes and in the modes hereinafter described—that is to say, to one novel, original, and useful combination of the said bisected cylinder with the vent-field for bushing the vent-holes of fire-arms—especially of cannon, whether old or new—made or to be made in any of the ordinary forms, the said cylinder being screwed into the corresponding female screw cut in the vent-hole of the cannon or other fire-arms; and also one other novel, original, and useful combination of the said bisected cylinder with a wrench or lever, which, as well as the said vent-field, works upon the left-hand screw at the upper end, for the purpose of extracting the said bisected cylinder or bushing from the vent-hole of the cannon or other fire-arm, and with it any spike or obstruction which may be contained therein. This combination is especially intended to enable the gunner to unspike cannon and to observe the state of the vent-hole after firing.

The nature of my invention consists in providing any fire-arm, especially cannon, with the said bisected bushing or cylinder and vent-field, both detachable from the fire-arm or cannon and from each other, the vent-field detachable in order to enable the wrench or lever to operate in drawing the said bisected cylinder, whose two equal parts, when drawn, may be separated by the fingers in order to reject any spike or other obstacle and show the condition of the vent-hole.

To enable others skilled in the art to make use of my invention, I will proceed to describe its construction and operation.

I construct my cannon in any of the known forms; but in order to admit of the easy and complete removal of spikes or any other obstructions and make the gun available for action in a few minutes after spiking, I substitute for the stationary bushing a detachable vent or bushing and vent-field, being divided in halves. (Shown at Fig. 2.)

Figure 1 is a sectional view of the cannon A, the bushing B, and the vent-field F. Fig. 2 is an elevation of the bushing. Fig. 3 is a perspective section of the bushing and vent-field; Fig. 4, a plan and section of the vent-field.

E, Figs. 1, 2, 3, is the bushing, consisting of two semi-cylinders doweled together, and having a thread cut upon their circumference not finer than eight to the inch. The upper portion of this bushing E, Figs. 2 and 3, consists of an octagonal head, C, with a beveled shoulder, and provided above the octagonal head with a projection to receive the vent-field F, upon which is a left-hand thread.

h, Fig. 3, is a projection upon the cannon fitted to a circular slot, *g*, in the vent-field F, in order to prevent the entrance of water to the bushing. K, Figs. 3 and 4, is the hole tapped to receive the projection upon the bushing B. Fig. 3 at W likewise shows the wear of the vent in the chamber likely to take place after one hundred rounds have been fired, the amount of wear depending upon the character of the metal, which is easily learned, and easily remedied by my method of bushing.

What I claim is—

The divided and doweled cylinder, the combination of the said bisected and perforated cylinder and vent-field, detachable from the cannon or other fire-arm and from each other for the purpose of bushing any vent-hole whenever needed, and the combination of the bisected and perforated cylinder and wrench, detachable from each other as well as from the vent-hole, for the purpose of unspiking cannon or other fire-arm and showing the vent-hole, all operating as above described.

BENJAMIN GREEN MARTIN.

Witnesses:
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