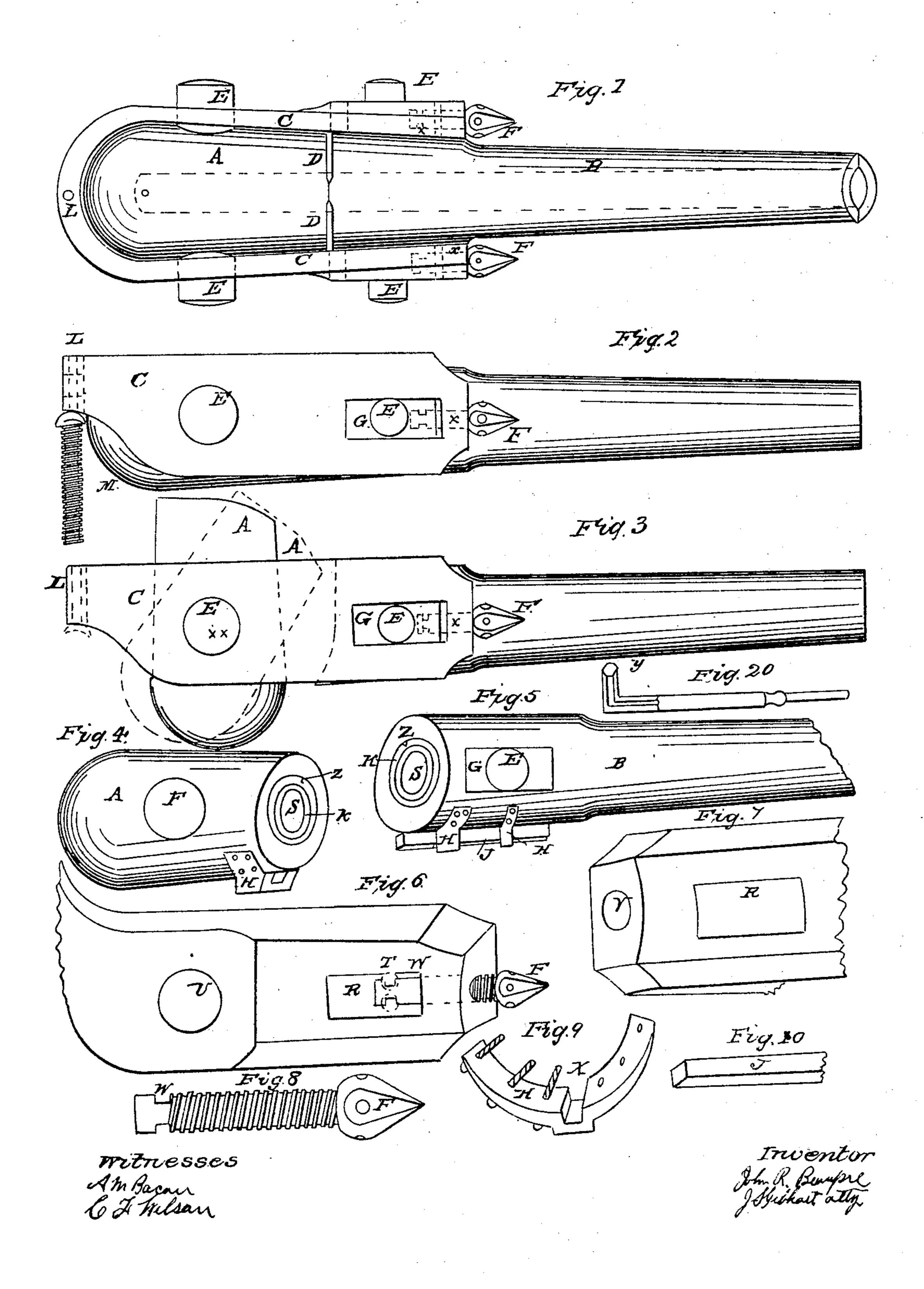
### P. R. BEAUPRE.

Breech Loading Ordnance.

No. 76,586.

Patented April 14, 1868.

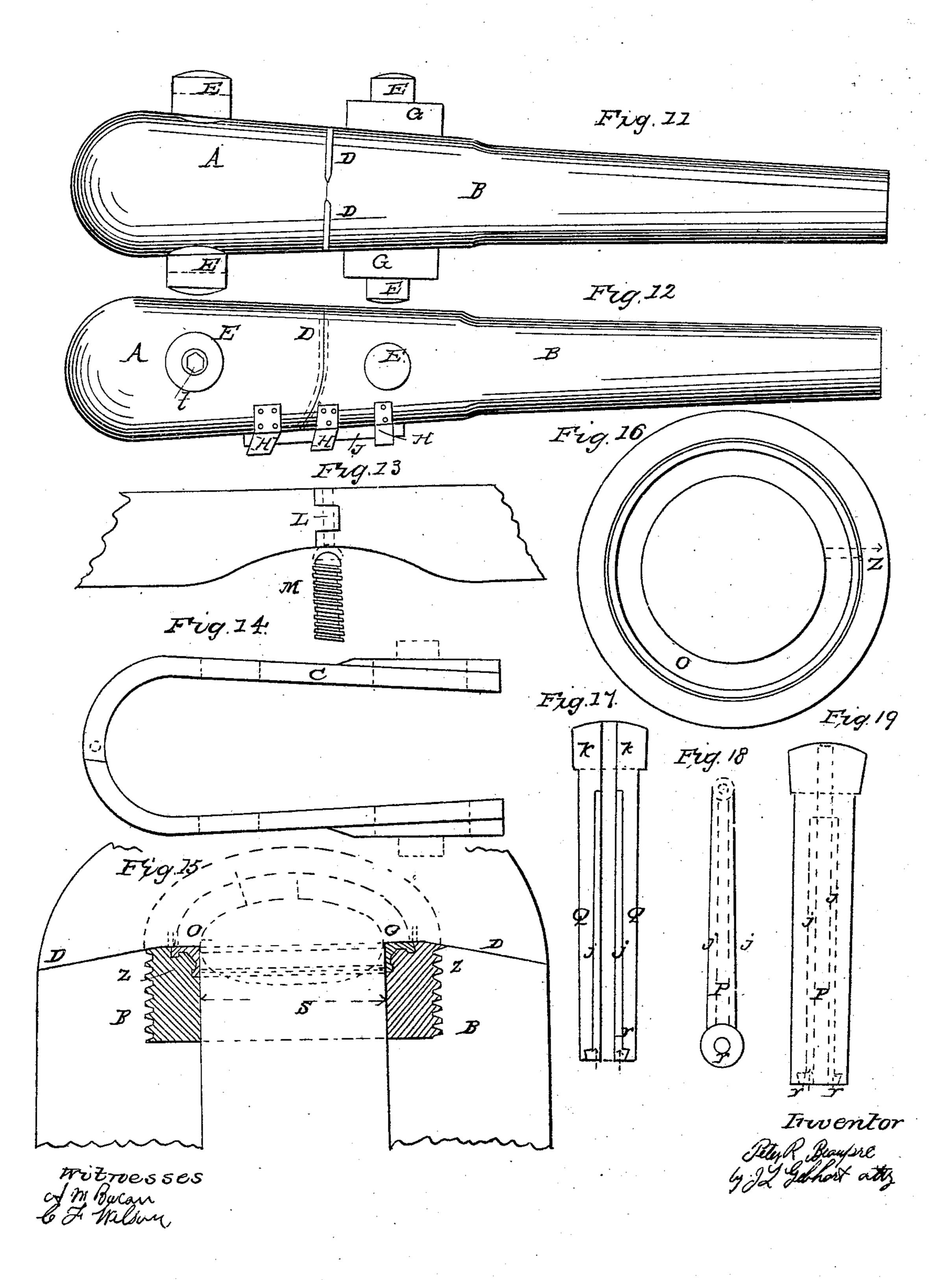


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## Breech Loading Ordnance.

No. 76,586.

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# Anited States Patent Pffice.

# PETER R. BEAUPRE, OF METROPOLIS, ILLINOIS.

Letters Patent No. 76,586, dated April 14, 1868.

#### IMPROVEMENT IN BREECH-LOADING ORDNANCE.

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

TO WHOM IT MAY CONCERN:

Be it known that I, Peter R. Beaupre, of Metropolis, county of Massac, and State of Illinois, have made new and useful Improvements in Breech-Loading Cannon; and I hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications.

The object of my invention is to provide a breech-loading cannon which shall not only facilitate the loading and discharging, but also prevent the corrosion of the metal, and provide means for the escape of the gas,

of thereby relieving the gun from that extra pressure.

The form of the joint between the breech-piece and barrel is a cycloid from the centre of the bore to the lower part of the breech-piece and barrel downward, and a straight line from the centre of the bore to the top of the gun, as shown in plate 2, Figure 12, at D. The edge, from within one half inch of the bore outward, is so cut away as to allow the free escape of gas, thereby relieving the breech-trunnion from the pressure of said escaping gas, as shown in plate 2, Figure 11.

The breech-strap consists of two parts, extending around the breech-piece, and connected by a hinge joint,

and secured by a screw-bolt marked L, plate 2, Figure 13.

To provide for the expansion of the gun when heated, I place a screw, F, in each end of the breech-strap, in front of the trunnion. In this screw is a slot or groove, W, in which are placed clutch-pins T, as shown in Figure 6, and by this means I control expansion and contraction.

In order to prevent corrosion of the metal from the heat or acids contained in the gas, I apply platinum as a bushing to such points as are usually affected by them, as shown in plate 1, Figures 4 and 5, at K, and

in plate 2, Figures 15 and 16, at 0, also Figures 17, 18, and 19, at j and r.

I also apply a steel or copper ring, as may be desired, in a recess of the joint end of the breech-piece and the barrel, inserted by a screw, as shown in fig. 15, plate 2, at z; and to this ring I apply the platinum bushing,

as shown, plate 2, fig. 15, at O. To secure the breech-piece in position when closed, I place a large bolt on the under side of the gun, and this is operated by a lever, attached to the under side of the strap C. This bolt or lock is shown in figs. 4 and

5, H representing the lock-clasp, and J the bolt.

I do not claim broadly the breech-piece of itself, as those have been used, but by my arrangement I obviate some of the difficulties heretofore attending breech-loading cannon. I place the trunnions of the breech-piece above the centre of the bore, so that the aggregate of the recoil force is downward, and counteracts the tendency of the muzzle to be thrown upward when discharged. Thus it will be seen that the force on the breechpiece serves to keep it in contact with the barrel.

What I claim, and desire to secure by Letters Patent, is-

1. The construction of breech-loading cannon, with the joint between the breech and barrel formed as described, with the centre of the trunnions of the breech-piece placed above the centre of the bore, for the purposes specified.

2. The breech-strap C, in combination with the expansion-screws F, provided with the clutch-pin T, sub-

stantially as and for the purposes set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses. PETER R. BEAUPRE.

Witnesses:

R. W. McCartney, M. M. WICKERSHAM.