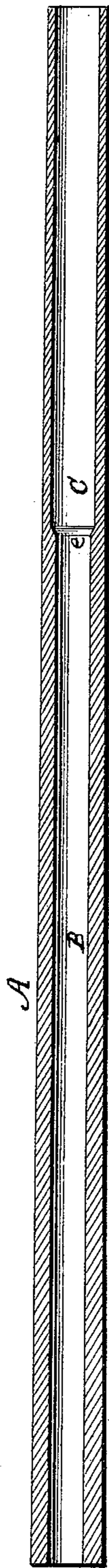


J. L. KERR.
Gun-Barrels.

No. 157,008.

Patented Nov. 17, 1874.



Witnesses:
Wm. W. S. Dyre.
Geo. D. Patton

Inventor:
John L. Kerr
By Johnston & Grindlay

UNITED STATES PATENT OFFICE.

JOHN L. KERR, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
HIS RIGHT TO WILLIAM D. SQUIRES, OF SIOUX CITY, IOWA.

IMPROVEMENT IN GUN-BARRELS.

Specification forming part of Letters Patent No. **157,008**, dated November 17, 1874; application filed
March 3, 1874.

To all whom it may concern:

Be it known that I, JOHN L. KERR, of the city and county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Guns; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in enlarging the bore of the gun for about one-fourth ($\frac{1}{4}$) or one-third ($\frac{1}{3}$) of its length, commencing at the muzzle end, the larger bore being on parallel lines with the smaller bore.

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

In the accompanying drawing, which forms part of my specification, A represents an ordinary gun-barrel. B represents the smaller bore, and C represents the enlarged bore, commencing at the muzzle end of the gun, and ending with an abrupt shoulder or offset at *e*.

I have demonstrated, after a large number of experiments and tests, that the diameter and length of the enlargement must be varied in accordance with the caliber of the gun, and within certain limits, to suit the size of the shot—that is to say, in a twelve-caliber bore, thirty-two inches in length, I enlarge the diameter of the part C from about three one-hundredths (.03) to about twelve one-hundredths

(.12) of an inch, the length of the enlargement being from about eight (8) to ten and one-half ($10\frac{1}{2}$) inches. The necessity of varying from about three one-hundredths (.03) to twelve one-hundredths (.12) of an inch in the diameter of the enlargement, and from eight to ten and one-half inches in length, is probably due to the character of the material used in the construction of the gun-barrel, some having more elasticity than others.

The object of my improvement in guns is to obviate the bunching, welding, and undue scattering, and to secure the desired concentration, of the shot in their discharge from the gun.

I wish it clearly understood that I do not confine my invention to any single class of guns, but propose using it for all kinds of guns in which a variety and multiplicity of shot are used regardless of their character and construction.

Having thus described my improvement in guns, what I claim as of my invention is—

A gun the caliber-bore of which is enlarged for about one-fourth ($\frac{1}{4}$) or one-third ($\frac{1}{3}$) of its length, commencing at the muzzle end, the larger bore being on parallel lines with the smaller bore, substantially as hereinbefore described, and for the purpose set forth.

JOHN L. KERR.

Witnesses:

JAMES J. JOHNSTON,
WM. W. S. DYRE.