

J. B. TUBBS.  
Barrel for Shot-Guns.

No. 161,300.

Patented March 23, 1875.

FIG. 1.

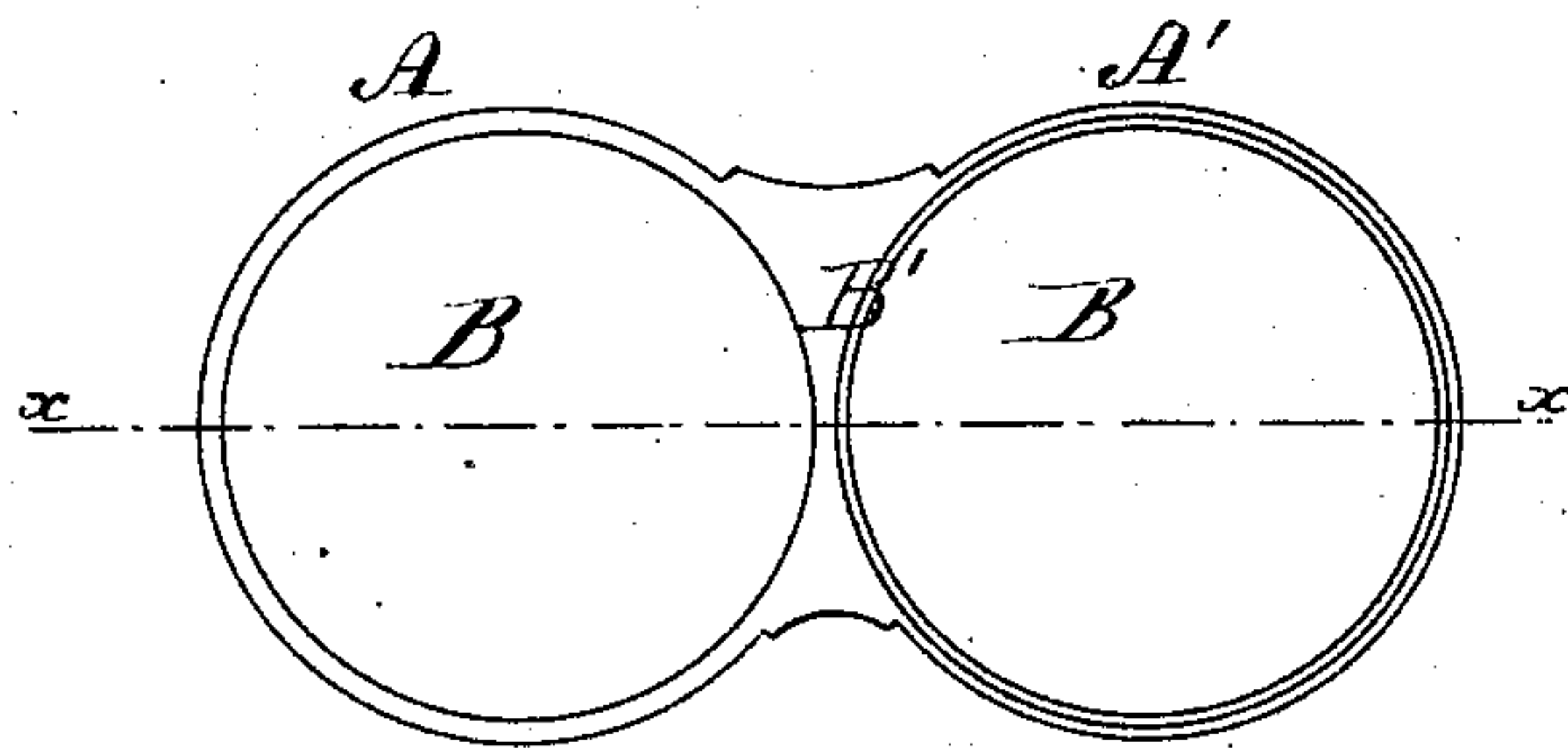
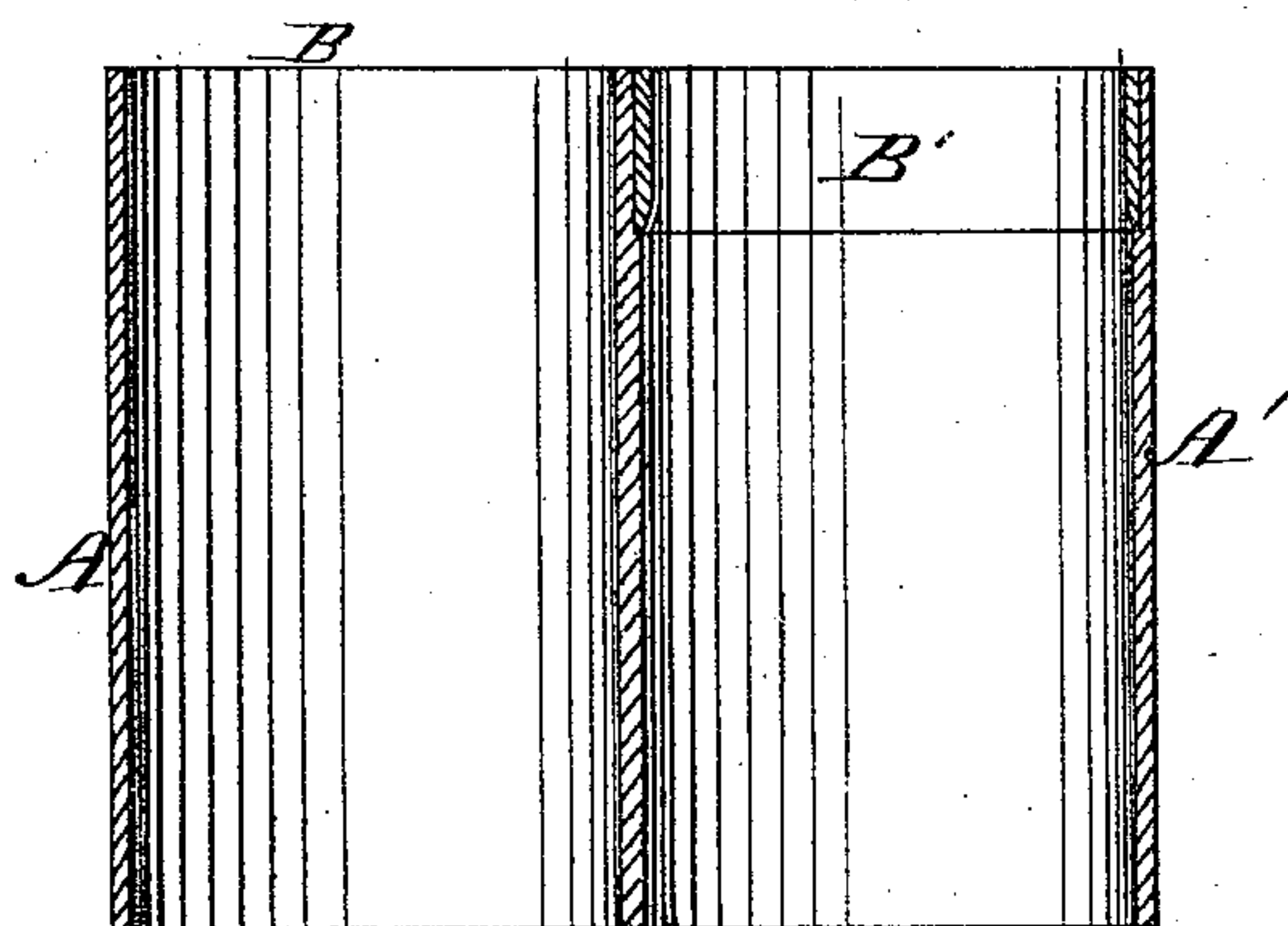


FIG. II.



WITNESSES:

John Tyler  
Arthur McIntire

INVENTOR:

Joel B. Tubbs.  
By atty.  
Amos McIntire

# UNITED STATES PATENT OFFICE.

JOEL B. TUBBS, OF WATERLOO, NEW YORK.

## IMPROVEMENT IN BARRELS FOR SHOT-GUNS.

Specification forming part of Letters Patent No. 161,300, dated March 23, 1875; application filed February 23, 1875.

*To all whom it may concern:*

Be it known that I, JOEL B. TUBBS, of Waterloo, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Method of Producing Concentration in Shot-Guns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings making a part of this application.

My invention has for its object to decrease the muzzle, and thereby produce concentration of the shot fired from, a sporting-gun; and it consists in providing the muzzle with an interiorly-arranged concentrating-ring, as will be hereinafter more fully set forth.

Previous to my invention the result sought has been accomplished in but two ways, so far as I am aware; one mode being to counterbore the barrels from the breech end up to within a short distance of the muzzle, thus increasing the gage, except at the muzzle, the other mode, which is applied to single-barrel guns only, consisting in the application to the exterior of the muzzle of a split-ring compress, adapted to be closed or tightened by a suitable screw, whereby the muzzle is slightly contracted. Obvious objections exist in both these described methods, which are entirely overcome by my invention, which accomplishes the object aimed at in a simple and economic manner.

In order that those skilled in the art may fully understand my invention, I will proceed to describe it more fully, referring by letters to the accompanying drawings, in which—

Figure 1 represents an end or muzzle view of a section of a pair of barrels, and Fig. 2 a horizontal section at the line *x x* of Fig. 1.

Similar letters designate like parts in the two figures.

A A' represent a pair of barrels, and B the bore or muzzle, the barrel A' being shown as counterbored a short distance from the muzzle end, and fitted with a ring or re-enforce, B', interiorly, which ring, as is clearly seen at Fig. 2, is of a smaller diameter or gage than the original bore. The lower edge of this ring B' is chamfered off, so as to induce to the converging of the shot without forming an abrupt impediment. This ring, being placed within the muzzle, counterbored, as described, is brazed or otherwise permanently secured in position, and the operation is completed.

Of course the extent of the concentrating-ring, in length and diameter, may be varied according to judgment and circumstances, though I have found by experiment that, in the ordinary sporting-gun, a ring of from three-eighths to one-quarter of an inch in length, and of such thickness as to decrease the original bore one gage, is calculated to produce good results.

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

A shot-gun provided at its muzzle end with a concentrating-ring, arranged within the bore, and secured against displacement, substantially as and for the purposes hereinbefore set forth.

In testimony whereof I have hereunto set my hand and seal this 17th day of February, A. D. 1875.

JOEL B. TUBBS. [L. S.]

In presence of—

S. G. HADLEY,  
GEO. H. HULBUT.