

Wesson & Blaze.

Making Double-Barrelled Guns.

N<sup>o</sup> 72949

Patented Dec. 31, 1867.

Fig. 1.

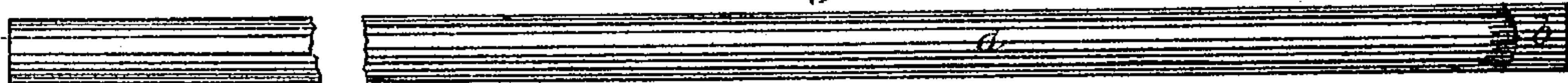


Fig. 2.

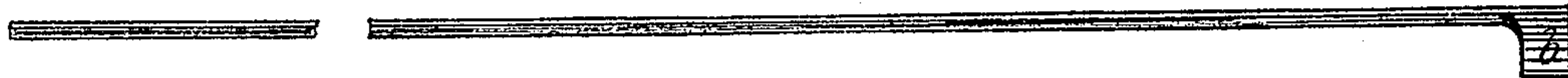


Fig. 4.

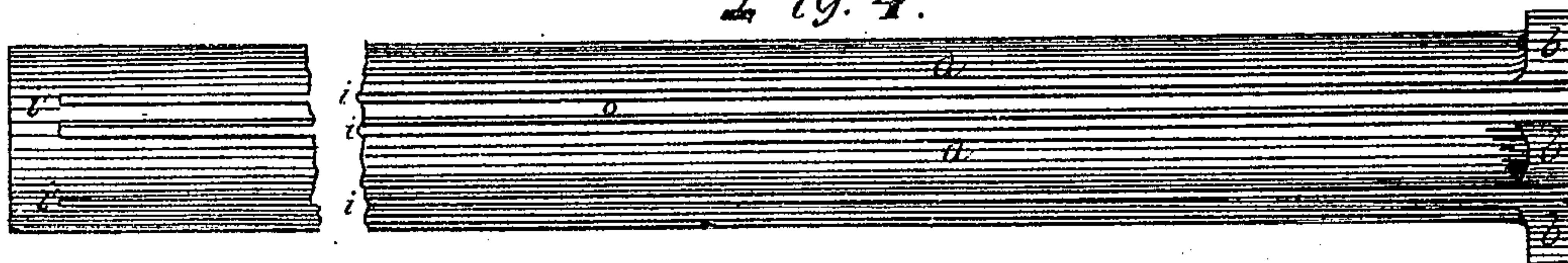


Fig. 3.

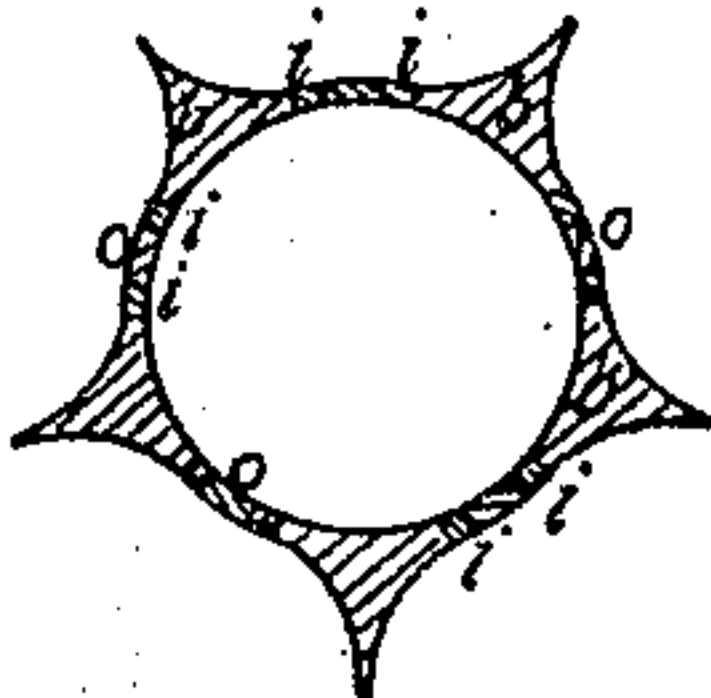


Fig. 5.

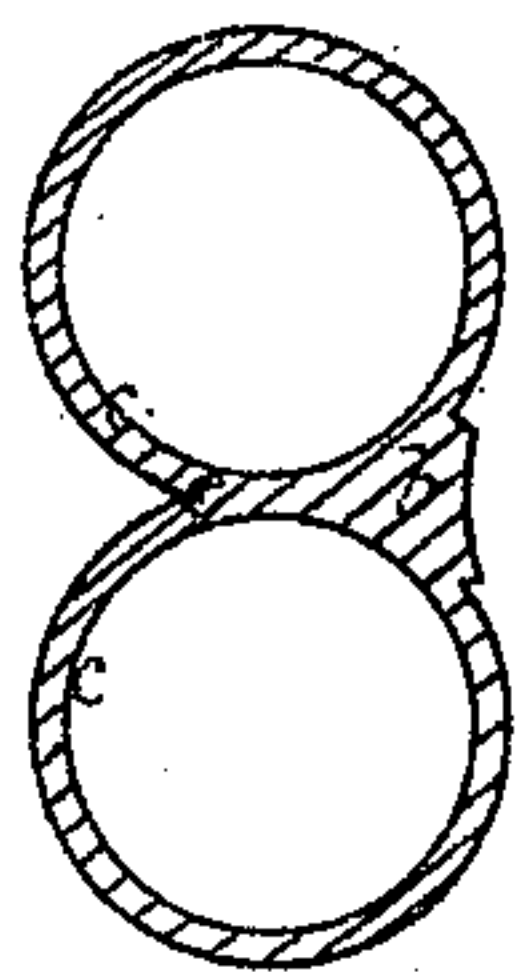


Fig. 6.

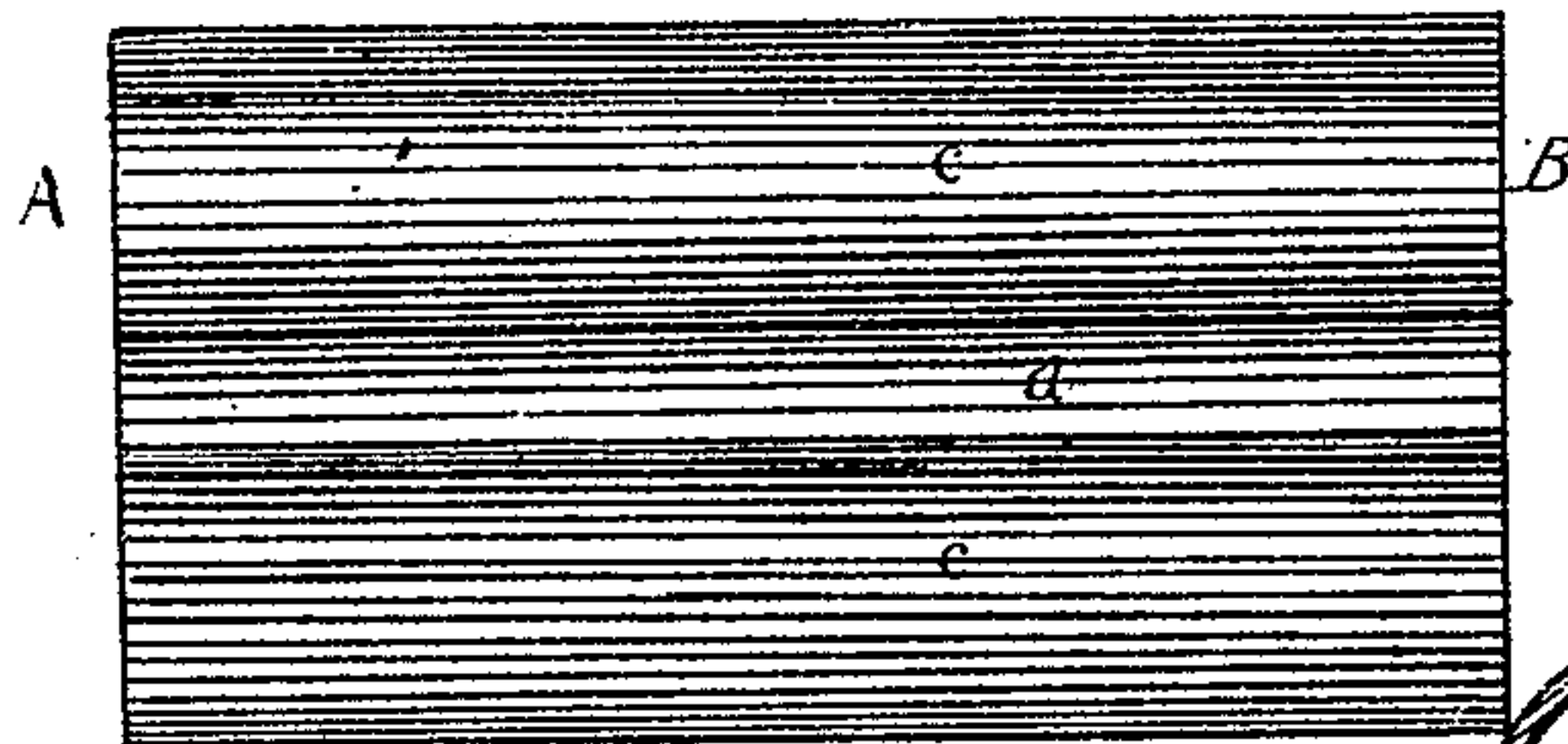


Fig. 7.

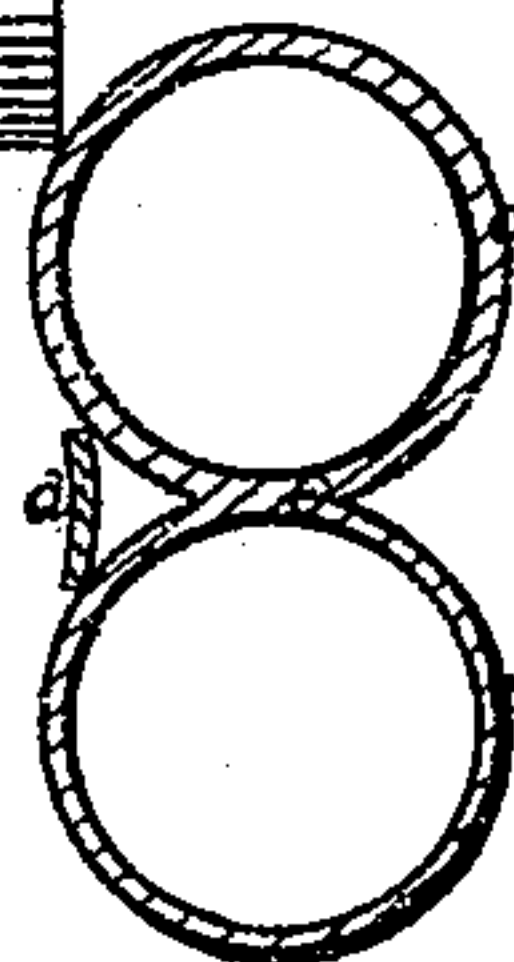


Fig. 8.

Witnesses:

L. B. Wesson  
John H. Blaze

Inventors.

L. B. Wesson  
John H. Blaze



# UNITED STATES PATENT OFFICE.

D. B. WESSON AND JOHN H. BLAZE, OF SPRINGFIELD, MASSACHUSETTS,  
ASSIGNORS TO WESSON FIRE-ARMS COMPANY, OF SAME PLACE.

## IMPROVED METHOD OF MANUFACTURING RIBS AND BOLSTERS FOR DOUBLE-BARRELED GUNS.

Specification forming part of Letters Patent No. 72,949, dated December 31, 1867.

### *To all whom it may concern:*

Be it known that we, D. B. WESSON and JOHN H. BLAZE, both of Springfield, in the county of Hampden and Commonwealth of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Ribs and Bolsters for Double-Barreled Guns; and we 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 specification, and to the letters of reference marked thereon.

In the construction of double-barreled guns, the angular space formed by the upper and inner sides of the two barrels is generally covered by a strip of iron or other metal, denominated a "rib," extending from a point at or near the breech to the muzzle end of the barrels. The upper surface of this strip may be plain or curved in the direction of its width. When this strip is soldered in place upon the barrels, a small opening in the shape of a triangle, having either two or three curved sides, will be left at the muzzle end of the barrels, between the under face of the rib and the sides of the barrels. This opening is closed by a small piece of iron called a "bolster" or "keel," which is accurately fitted to fill the triangular space. These ribs have heretofore been forged or otherwise shaped out of detached strips of metal, and fitted for subtending the angle between the barrels by filing and other hand-labor, and a projection is usually forged upon the rib, from which the bolster is shaped and fitted in the same manner as the rib. This process of constructing ribs and bolsters and fitting them to their respective places is attended with much labor and expense, and the articles so produced are not uniform in shape, size, or quality.

The object of our invention is to diminish the cost of constructing ribs and bolsters, and also to improve the quality, and to reduplicate any required size or shape of these parts to any extent desired.

The nature of our invention consists in the construction of ribs of any width, curve, length, and thickness from a tube of iron or other metal, and also in the construction upon every one of such ribs, and during the manufacture thereof, of a bolster of any desired conforma-

tion, the latter being formed from a collar, which is welded or otherwise firmly attached to the tube or made as a part of it. By reference to the drawings aforesaid it will be seen that—

Figure 1 is a plan view of a rib with bolster attached. Fig. 2 is a side elevation of the same. Fig. 3 is an end elevation of the same. Fig. 4 is a side elevation of a tube slotted longitudinally, and the encircling collar as milled out in the form of bolsters, a portion of the length of said tube being shown as broken out. Fig. 5 is an end elevation of the same. Fig. 7 is a plan view of a portion of the muzzle end of two united gun-barrels, showing the position of the rib and bolster as applied in double-barreled guns. Figs. 6 and 8 are end elevations of the same.

To enable others to use and apply our said invention, we will describe the method of constructing ribs and bolsters thereby.

In forming ribs to be applied to barrels of any given caliber, a tube of iron or other metal is used, of proper length to make a continuous rib along the whole length of the barrels to be bridged, this tube being made by the ordinary machinery used for constructing gun-barrels or other tubes, and finished, both as to its interior and exterior, in any manner desired. If the exterior diameter of the two barrels to which the rib is to be applied is the same from end to end, the tube from which the rib is to be formed should be a cylinder, and the ribs formed from it will be of uniform width throughout their length; but if, as is generally the case, the barrels increase regularly in size toward the breech, the angular space to be covered by the rib will be wider near the breech than at the muzzle, and the tube must be made slightly conical, or of larger diameter at one end than at the other, whereby the ribs may be made to increase in width from the muzzle end. This tube, constructed as described, may be divided longitudinally into ribs; but we prefer to form a bolster upon each rib before dividing the tube, in the following manner: An iron collar, of width and thickness equal to or exceeding the length and height of the bolsters to be formed, is soldered, brazed, or welded upon one end of the tube, or may be made as a part of the tube, during the process of its manufacture. By means of a milling-



machine or other suitable tool portions of this collar are then cut away, leaving the projections *b b*, Figs. 4 and 5, which are to serve as bolsters, and can be made of any conformation required to fit the angular space between the barrels. The bolsters *b b* being formed upon the tube, the latter is then divided longitudinally by cutting or sawing the slots *i i* from end to end of the tube, a small portion, *i'*, being left uncut to retain the parts in tube form. The ribs *a a*, with attached bolsters *b b*, Figs. 1, 2, and 3, are then ready for use upon the gun, Figs. 6, 7, and 8, requiring only a slight finish of the edges of the ribs after they fall from the cutting-machine. The number of ribs formed from a tube will, of course, vary with the width of rib required and the diameter of the tube employed; but the entire tube is converted into perfect and interchangeable ribs, with bolsters attached, with only the slight waste of the narrow intermediate strips *o* between the slots *i i*, and also the space occupied by the cut or kerf of the sawing or cutting implement. Both the interior and exterior surfaces of the tube and the sides of the bolster can be rapidly and completely finished by the machine in common use in all gun-manufactories; and by determining the proper size and diameter of the tube, and the width and thickness of the ring from which the bolsters are to

be formed, ribs can be rapidly and cheaply constructed for use upon any style or size of double-barreled guns at great saving of labor, time, and material over the method of construction now in common use, and hereinbefore described.

Having described our invention, what we claim as new therein, and desire to secure by Letters Patent, is—

1. Constructing "ribs" for double-barreled guns from a metallic tube, substantially as set forth.

2. Constructing a "bolster" or keel, to be used in combination with a rib upon a double-barreled gun, from a collar fastened to or made a part of the metallic tube out of which such rib is to be formed, substantially as described.

3. As an article of manufacture, a rib for use upon a double-barreled gun, when formed from a metallic tube, substantially in the manner specified.

Witness our hands this 24th day of August, 1867.

D. B. WESSON.  
JOHN H. BLAZE.

Witnesses:

J. N. STORRS,  
H. W. HALLETT.