

A. J. AUBREY.  
 RIFLE BARREL CONSTRUCTION.  
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918,491.

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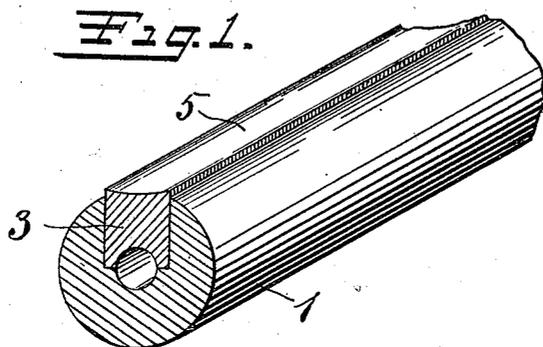


Fig. 2.

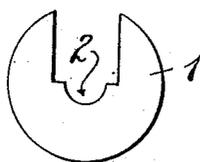


Fig. 3.

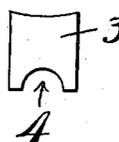


Fig. 4.

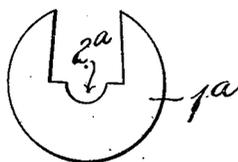


Fig. 5.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## RIFLE-BARREL CONSTRUCTION.

No. 918,491.

Specification of Letters Patent.

Patented April 20, 1909.

Application filed January 8, 1909. Serial No. 471,247.

*To all whom it may concern:*

Be it known that I, ALBERT J. AUBREY, a citizen of the United States, residing at Meriden, county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Rifle-Barrel Construction, of which the following is a full, clear, and exact description.

My invention relates to improvements in rifle barrel construction, the object being to substantially reduce the cost and increase the speed of production.

In the manufacture of rifles, a solid steel billet or barrel has heretofore been bored, which boring process is exceedingly difficult, slow and costly.

My invention aims at producing a rifle barrel which may be made without boring.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a rifle barrel, the end being shown in section and illustrating my improved construction. Fig. 2 is an end view of one of the parts. Fig. 3 is an end view of the companion part. Figs. 4 and 5 are views corresponding to Figs. 2 and 3 respectively, and illustrating a slight modification.

1 represents the main body of the barrel, which is channeled throughout its length. The bottom of the channel is indicated at 2 and is shaped to conform to one half of the bore of the barrel when finished. On each side of the channel 2 is a supporting ledge.

3 is a filler piece shaped to fit the groove or channel in the part 1. This filler piece is grooved, as indicated at 4, at its under side to form the second half of the bore of the barrel when the parts 1 and 3 are assembled. The part 3 accurately fits between the walls of the channel in the main body 1, and may be secured in place in any desired manner, for example, by the so-called "sweating" process, the area of surface contact being so great that an effective permanent connection between the parts 1 and 3 may be very easily accomplished.

In the modification shown in Figs. 3 and 4, the side walls of the channel in the body 1<sup>a</sup> are slightly undercut, and the side walls of the filler piece 3<sup>a</sup> may be shaped to cor-

respond accurately thereto, whereby a positive mechanical interlocking effect (corresponding to a dove-tail connection) may be resorted to to hold the filler piece 3<sup>a</sup> in place. In addition to this, of course, the usual "sweating" process may also be resorted to. The filler piece 3 not only serves to complete the barrel, but its upper face may be caused to stand slightly above the surface of the main body 1 so as to form a so-called "top-rib" as indicated at 5 in Fig. 1. This top-rib may be slightly grooved or concaved longitudinally, if desired.

The above described parts may be formed by inexpensive mechanical processes and machines, and may be rapidly produced at small cost as compared with the production of the conventional well known rifle barrel, wherein the bore is formed by slow working and expensive boring machines.

What I claim is:

1. A rifle barrel comprising a main body portion channeled longitudinally, the bottom of said channel being grooved to form substantially one half of the bore, and a filler fitted to and secured in said channel, the lower side of said filler being grooved to form the balance of said bore.

2. A rifle barrel comprising a main body portion channeled longitudinally, the bottom of said channel being grooved to form substantially one half of the bore, and a filler fitted to and secured in said channel, the lower side of said filler being grooved to form the balance of said bore, a ledge at one side of the groove in the main body to support said filler piece.

3. A rifle barrel comprising a main body portion channeled longitudinally, the bottom of said channel being grooved to form substantially one half of the bore, and a filler fitted to and secured in said channel, the lower side of said filler being grooved to form the balance of said bore, a ledge at both sides of the groove in the main body to support said filler piece.

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Witnesses:

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