S. T. JONES.

MUFFLER FOR SHOTGUNS.

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1,130,609.

Patented Mar. 2, 1915.

Fig-1.

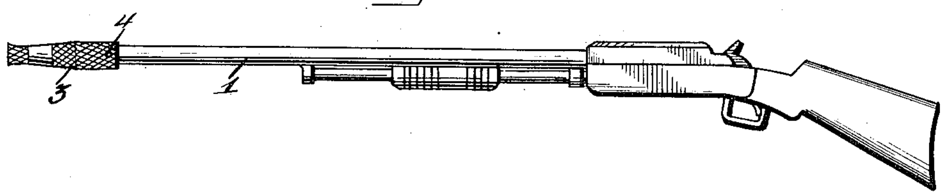


Fig-2.

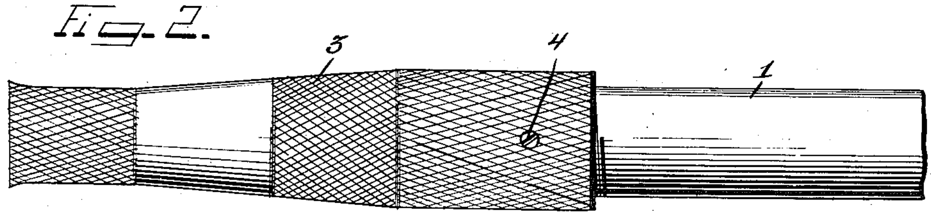


Fig-3.

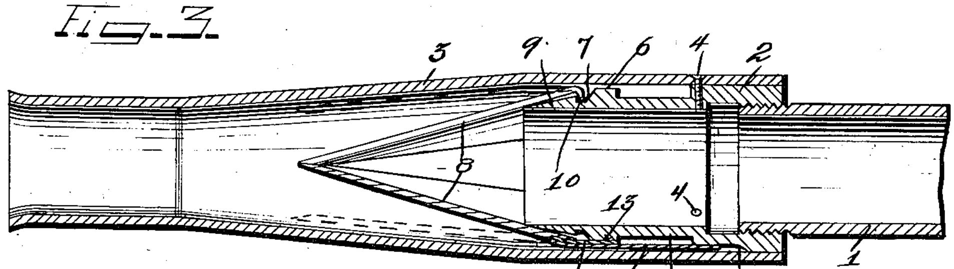


Fig-5.

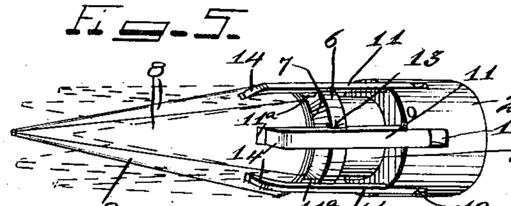
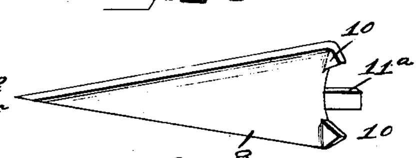


Fig-6.



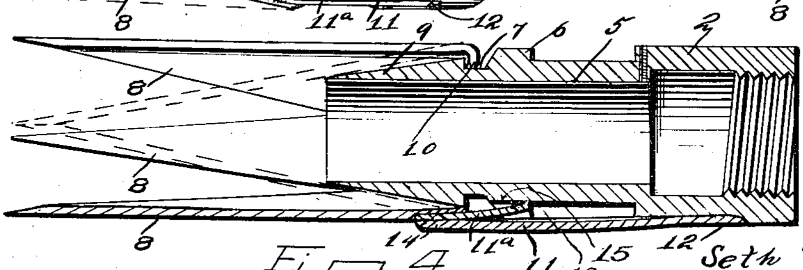


Fig-4.

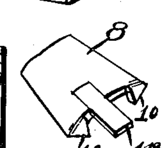


Fig-7.

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UNITED STATES PATENT OFFICE.

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MUFFLER FOR SHOTGUNS.

1,130,609. Specification of Letters Patent. Patented Mar. 2, 1915.

Application filed December 15, 1913. Serial No. 806,884.

To all whom it may concern:

Be it known that I, SETH T. JONES, a citizen of the United States of America, residing at Clinton, in the county of Dewitt and State of Illinois, have invented certain new and useful Improvements in Mufflers for Shotguns, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to mufflers especially adapted for shot guns, rifles and the like and has for its object the production of an efficient and simple muffler whereby the sound of explosion will be eliminated.

Another object of the invention is the production of a simple and efficient muffler which consists of a minimum number of parts which will readily yield to allow the shot or bullet to readily pass from the muzzle of the gun.

With the above and other objects in view this invention consists of certain novel combinations, constructions, and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawing:—Figure 1 is a side elevation of the gun showing the muffler attached thereto. Fig. 2 is an enlarged side elevation of the muffler showing the muffler attached to a portion of the barrel of a gun. Fig. 3 is a central longitudinal section through the muffler and a portion of the barrel of a gun. Fig. 4 is an enlarged longitudinal sectional view through the muffler which is attached direct to the barrel of the gun. Fig. 5 is a detail perspective of the body portion of the muffler. Fig. 6 is a detail perspective of one of the closure lips used in connection with the muffler.

By referring to the drawings it will be seen that 1 designates the barrel of the gun upon which is mounted the body 2 of the muffler. This body 2 is preferably attached to the gun by threading the same upon the outer end of the muzzle and upon this body portion of the muffler is placed a casing 3 as is clearly illustrated in Fig. 3. The casing 3 is milled upon its outer face for a portion of its length to facilitate the threading of the muffler body upon the muzzle 1 of the gun. The casing 3 is secured to the body 2 by means of screws 4 as illustrated in Fig. 3. The body portion of the muffler is provided with a reduced neck 5 which neck terminates in an annular rim 6 at its outer end and adjacent this rim is formed a circumferential groove 7 which groove constitutes a pocket for the rear ends of the closure lips 8 used in connection with the present muffler. The outer end of the body tapers as indicated at 9 so as to allow the lips 8 to be brought closely together near their outer ends when in a closed position as shown in dotted lines in Fig. 4 and in full lines in Fig. 3. Each of the closure lips 8 comprises a substantially V-shape body portion having inwardly bent ears or lugs 10, which lugs fit within the channel portion 7. A flat spring 11 is secured to each of the lips 8, and this flat spring extends back from the lips 8 and is securely positioned within a notch or groove 12 formed in the body portion 2 of the muffler. These springs 11 are adapted to normally hold the lips 8 close together near their outer ends so as to normally close the outer end of the barrel, and as soon as shot is discharged through the muffler the springs will force the lips to a closed position to confine the sound of the explosion within the barrel of the gun.

As is clearly illustrated in Fig. 5 it will be seen that the lips 8 when in a closed position will assume the form of a cone and owing to their peculiar construction the lips 8 will readily yield to allow the passage of shot through the same. The rim 6 is provided with a plurality of transversely extending notches through which the springs 11 pass, and it will be seen that these notches will prevent the lips 8 from having circumferential movement around the body 2 of the muffler. The outer end of the springs 11 are reduced in thickness as indicated at 14 for the purpose of adding additional spring movement upon the lips 8. Each of the lips 8 is provided with a rearwardly extending tongue 11^a which is welded or otherwise secured thereto, and this lip is adapted to engage or fit within the notches 13 to assist in holding the lips 8 in their correct position. The springs 11 fit over the tongues 11^a as is clearly illustrated in Fig. 4.

It should be understood that the tongues 11^a are normally bent so as to normally hold the lips 8 in a closed position. This structure is clearly illustrated in Fig. 3. By having the tongues 11^a bent as set forth the lips 8 may, of course, expand to allow the shot to be discharged through the muffler and at the same time hold the lips 8 in a closed position.

Having thus described the invention what is claimed as new, is:—

1. A muffler comprising a tubular body, said body provided with longitudinally extending notches near one end thereof, a circumferential flange formed near the outer end thereof and provided with a plurality of notches, a plurality of tapering lips secured to said body, longitudinally extending springs secured within said first mentioned notches and positioned within said last mentioned notches and engaging said lips for normally holding the outer ends of said lips together, and means for securing the same to a gun.

2. A muffler comprising a tubular body, said body provided with a circumferential rim near its outer end, said body provided with a circumferential groove adjacent said rim, a plurality of closure lips provided with laterally extending tongues, said tongues working in said circumferential groove, said body tapering toward its forward end, and longitudinally extending springs engaging said lips and secured to said body for normally holding said lips in a closed position over the outer end of said body.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

SETH T. JONES.

Witnesses:

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HENRY JACKSON.