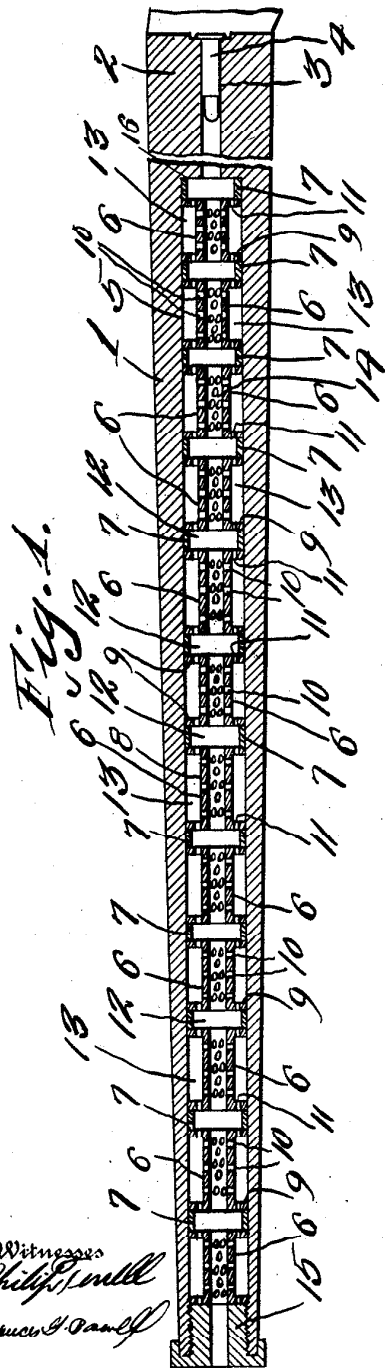


E. W. THOMPSON.  
FIREARM.  
APPLICATION FILED JUNE 15, 1915.

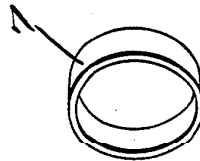
1,173,687.

Patented Feb. 29, 1916.

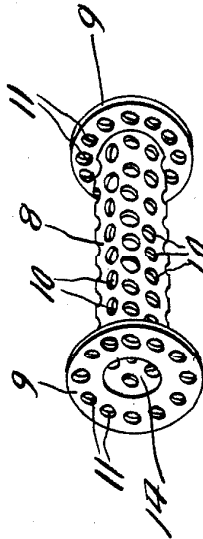


*Fig. 1.*

Witnesses  
*Philip L. Miller*  
*Francis G. Dancy*



*Fig. 3.*



*Fig. 4.*

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# UNITED STATES PATENT OFFICE.

EUGENE W. THOMPSON, OF NEW LONDON, CONNECTICUT.

## FIREARM.

1,173,687.

Specification of Letters Patent. Patented Feb. 29, 1916.

Application filed June 15, 1915. Serial No. 34,188.

*To all whom it may concern:*

Be it known that I, EUGENE W. THOMPSON, a citizen of the United States, residing at New London, in the county of New London, and State of Connecticut, have invented a new and useful Firearm; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the art of fire arms and particularly to a structure for lessening or overcoming the noise of the discharge of such devices.

A number of attempts have been made heretofore to eliminate and reduce the noise of the discharge of firearms. As a result of these attempts various devices have been attached at the end of the gun barrel, and in registration therewith, so as to distribute the gases of explosion in various manners, or to dissipate the energy of the gases, by imparting a rotary movement to them, in order to overcome the noise. As a further result of these attempts, independent chambers have been attached to the under side of the gun barrel, into which the gases are allowed to enter, in such a manner as to break up the discharge of the gases, thereby reducing the noise. These and other devices of the same character have been found more or less inefficient.

Therefore it is the object of the invention to overcome such inefficient constructions, and produce a device of this kind, in which novel features of construction are involved.

It has been found that a projectile receives its greatest force instantly subsequently to the explosion, therefore a gun barrel has been produced having a short smooth bore surrounding the projectile at the breech of the gun, thereby avoiding a smooth bore of the full length of the barrel, and in which barrel beyond the short smooth bore the various parts of the silencer are arranged.

In the drawings:—Figure 1 is a longitudinal sectional view through the entire length of a gun barrel, showing a portion of the breech with the perforated spools and rings arranged alternately therein. Fig. 2 is a perspective view of one of the perforated spools. Fig. 3 is a detail perspective view of one of the rings.

Referring more particularly to the draw-

ings 1 designates the gun barrel while 2 denotes the breech portion thereof, in the bore 3 of which the cartridge 4 is arranged for explosion.

It has been found that, it is only necessary to construct the bore 3 substantially twice the length of the cartridge, for the projectile receives its greatest force instantly after or substantially at the time of the explosion. The wall of the barrel of the gun beyond the breech 2 is much thinner than the walls surrounding the bore of the breech and is tapering to the outer end of the gun barrel. Arranged in the bore 5 beyond the breech is a plurality of spool shaped members 6 arranged axially, and each disposed alternately with relation to rings 7. These rings are in the form of annular bands. The spool shaped members comprise the bodies 8 having the annular flanges 9 at their ends. The bodies 8 and the flanges 9 are perforated, as shown at 10 and 11. By placing the rings between the spool shaped members chambers 12 are provided the diameter of which are less than the chambers 13 surrounding the bodies 8 of the spool shaped members. The gases following the projectile through the bore 14 of the spool shaped members pass through the perforations, and in and out of the chambers 12 and 13, thereby scattering the gases, which lessens and overcomes the noise incident to the discharge. Threaded or otherwise secured in the outer end of the gun barrel is a cap or plug 15, between which and the shoulder 16 at the breech end of the gun barrel, the various spool shaped members 6 and the rings 7 are clamped.

From the foregoing it will be observed, there has been devised a novel silencer for fire arms, and one which has been found to effectively and efficiently overcome the noise incident to the discharge, and in a practical manner.

The invention having been set forth what is claimed as new and useful is:—

1. In combination with a gun barrel having a bore therein with a shoulder at one end and a plug secured therein at the other end, a plurality of spool shaped members and rings arranged in the gun barrel, each alternately with the other between the shoulder and the plug.

2. In combination with a fire arm barrel having a bore therein, a plurality of spool shaped members and rings, each disposed

alternately with the other and clamped in the bore, thereby forming chambers a part of the length of the barrel.

3. In combination with a fire arm barrel  
5 having a bore therein, a plurality of spool shaped members and rings, each disposed alternately with the other and clamped in the bore, thereby forming chambers a part of the length of the barrel, the spool shaped  
10 members having annular perforated flanges at each end, thereby permitting the gases to pass in and out of the chambers.

4. In combination with a fire arm barrel  
15 having a bore therein, a plurality of spool shaped members and rings, each disposed alternately with the other and clamped in the bore, thereby forming chambers a part of the length of the barrel, the spool shaped

members being entirely perforated and having annular flanges at each end, thereby permitting the gases to pass in and out of the chambers. 20

5. A fire arm barrel, a plurality of spool shaped cylindrical members and rings disposed therein alternately with each other 25 substantially the full length of the bore of the barrel, and being clamped at each end of said bore.

In testimony whereof I have signed my name to this specification in the presence 30 of two subscribing witnesses.

EUGENE W. THOMPSON.

Witnesses:

EDWARD S. NEILAN,  
ARTHUR T. KEEFE.