

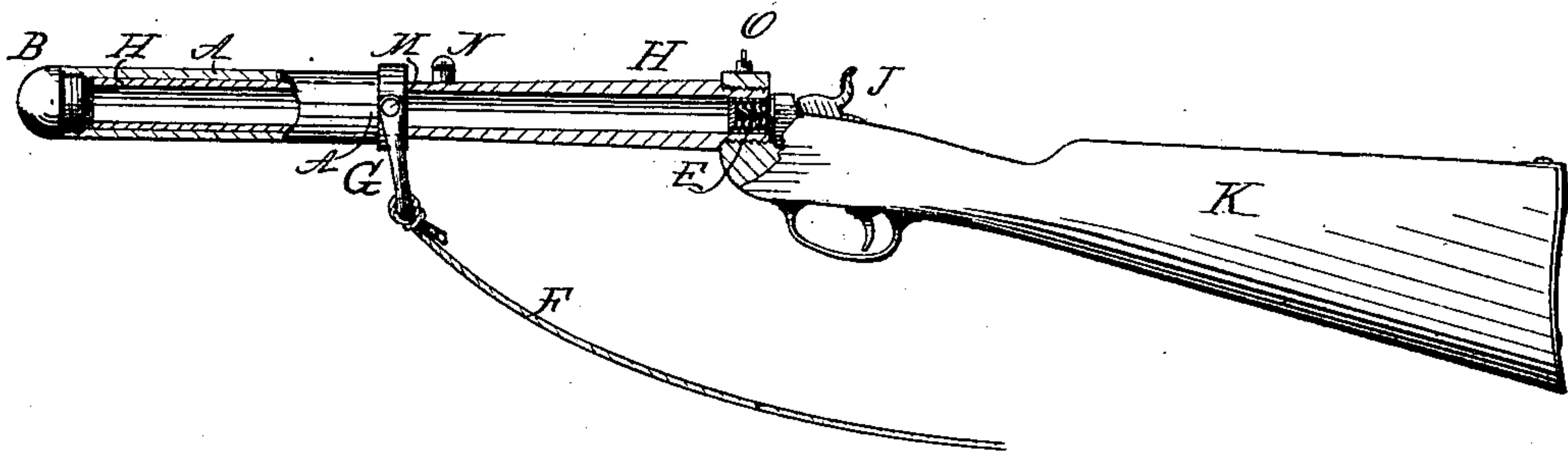
(No Model.)

S. INGERSOLL.

GUN AND PROJECTILE FOR THROWING LIFE LINES.

No. 348,849.

Patented Sept. 7, 1886.



Witnesses

*S. E. Stevens*

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Inventor

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By his Attorney *W. R. Stevens*

# UNITED STATES PATENT OFFICE.

SIMON INGERSOLL, OF STAMFORD, CONN., ASSIGNOR TO NATHAN C. POND,  
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## GUN AND PROJECTILE FOR THROWING LIFE-LINES.

SPECIFICATION forming part of Letters Patent No. 348,849, dated September 7, 1886.

Application filed July 12, 1886. Serial No. 207,820. (No model.)

*To all whom it may concern:*

Be it known that I, SIMON INGERSOLL, a citizen of the United States, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Guns and Projectiles for Throwing Life-Lines; 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 improvements in the guns and projectiles for throwing life-lines on which I obtained Letters Patent No. 331,792, dated December 8, 1885.

The object of this invention is to provide a large volume of air confined ahead of the charge and behind the projectile, to serve as a cushion to the explosion of the charge in starting the projectile.

To this end my invention consists in the construction and combination of parts forming a gun and projectile for throwing life-lines, hereinafter described and claimed, reference being had to the accompanying drawing, which is a side elevation, part in section, of my gun and projectile.

A represents a tube provided with a head, B, which may be permanent, or it may be screwed into or onto the tube to become a secure part of the body of the projectile.

G is a bail pivoted to the tube A at two points, M, to swing freely past the rear end of the tube, whereby the life-line F may be attached so as to trail centrally behind the tube in the wake thereof when in service. This tube A, head B, and pivoted bail G, constitute the projectile.

K represents the stock of the gun, J the lock for firing it, and H its barrel. The peculiarity of this gun consists in the forward portion of the barrel being externally cylindrical and straight, and of a size to fit within the tube A of the projectile the whole length of the latter, and without any projection for a sight on this forward portion of the barrel.

E represents a cartridge of the form commonly used in breech-loading guns; but any style of cartridge or loose ammunition may be used. The lock J is to be operated as usual in the firing apparatus for common guns.

O represents the back sight of the gun, which may be of any approved pattern.

N represents the forward sight, which is fixed upon the gun-barrel to the rear of the said cylindrical portion of the latter, thus permitting my tubular projectile to be placed upon the barrel forward of the sights without interfering with the line of vision, whereby accurate aim may be taken to throw the projectile and life-line into any high window or over an accessible point of stranded ship.

In service the line F is to be attached to the bail G, the gun is to be loaded with a cartridge suitable to the distance to which the projectile is to be sent, the projectile is to be slipped upon the gun, all as shown, and the gun is to be directed and fired. The forward portion of a gun-barrel is usually made externally tapering toward the muzzle, and would not fit my projectile, and it could not be practically used for throwing the same.

A gun having a many-sided straight barrel, fitted to the interior of a many-sided projectile would be a mechanical equivalent of my device, but not practicable, because such projectiles would be too expensive to make.

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

1. The combination of a cylindrical tubular projectile closed at its sides and forward end, forming an elongated air-chamber, and provided with a bail at its rear end, and a gun having a barrel externally cylindrical and fitted to the interior of the said projectile, and adapted to fire ammunition within the rear end of the said barrel, substantially as shown and described, whereby the said projectile is adapted to be thrown by the action of the air within the projectile resisting the expansion of gas within the gun-barrel at the time of firing.

2. The combination of a tubular projectile internally straight throughout its length and closed at its sides and forward end, forming an elongated air-chamber and provided with a bail at its rear end, and a gun having a barrel externally straight fitted to the interior of the projectile and adapted to fire ammunition within the rear end of the said gun-barrel, substantially as shown and described.

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

Witnesses: SIMON INGERSOLL,  
JOHN E. MARSHALL,  
CELLRO WEIR.