

(No Model.)

W. P. SHAW.
PROJECTILE FOR CARRYING LIFE LINES.

No. 576,625.

Patented Feb. 9, 1897.

Fig. 1.

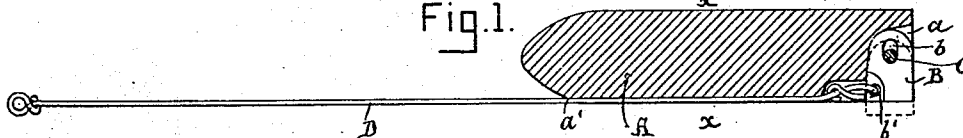


Fig. 2.

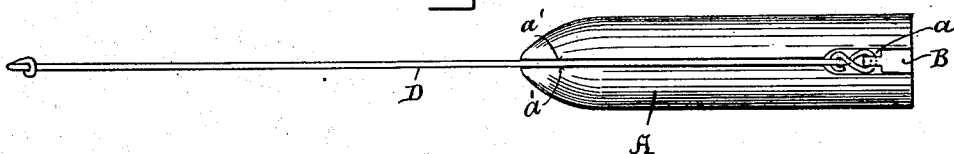


Fig. 3.

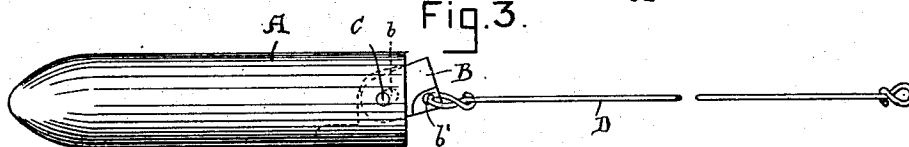


Fig. 4.

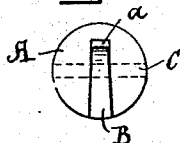
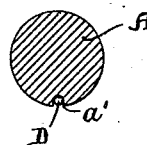


Fig. 5.



Witnesses.
Jewell Ottwood
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UNITED STATES PATENT OFFICE.

WILLIAM P. SHAW, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
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PROJECTILE FOR CARRYING LIFE-LINES.

SPECIFICATION forming part of Letters Patent No. 576,625, dated February 9, 1897.

Application filed June 3, 1896. Serial No. 594,159. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. SHAW, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Projectiles for Carrying Life-Lines, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to improvements in projectiles for carrying life-lines used in life-saving apparatus.

The invention consists of a solid projectile having at its breech end a slot into which is loosely fitted a block or hinge held in place by a pin passing through the projectile and through an elongated hole in the hinged or pivoted breech-block, said hinged or pivoted breech-block having attached to its lower end a rod that when inserted into the gun lies in a longitudinal groove formed in the projectile, so that its end extends some distance from the mouth of the gun, and to which rod the life-line is attached, as hereinafter set forth, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a longitudinal vertical section of a projectile embodying my invention ready to be inserted into a gun. Fig. 2 is a view of the under side of same. Fig. 3 is a side view of same as it would appear after being fired from a gun. Fig. 4 is a view of the breech end of the projectile. Fig. 5 is a cross-section taken on line *xx* of Fig. 1.

A represents the body of the projectile, which may be of any desired shape, the rear of which is formed with a recess *a*, that extends from the bottom to near the top, as shown. In this recess is loosely fitted a hinged or pivoted breech-block B, curved transversely on its base to conform to the curvature of the projectile and round at its upper end and is provided with an elongated hole *b*.

C is a pin that passes through the central portion of the projectile and through the elongated hole *b*, retaining the hinged or pivoted breech-block B in place when inserted into a gun and forming a fulcrum for it to turn upon as soon as it is out of the mouth of the gun.

The lower front corner of the hinged or pivoted breech-block B is formed with a hole *b'*, through which a rod D is passed and there secured. This rod (when the projectile is inserted into the gun) lies in a longitudinal groove *a'*, formed in the projectile, and said rod extends some distance beyond the mouth of the gun, and its outer end is formed with a loop to which the end of the life-line is secured. When the projectile is to be placed into a gun, the hinged or pivoted breech-block B is pushed upward, so that its lower end completes the circle of the breech end of the projectile. Thus the full force of the explosion is imparted to the breech of the projectile, the rod D lying in its groove in no way interfering with the efficiency of the discharge. As soon as the gun has been fired and the breech of the projectile leaves the mouth of the gun the hinged or pivoted breech-block B will instantly fall the distance allowed by the elongated hole *b*, as shown in dotted lines in Fig. 1, thus releasing the rod D, which then falls, and when the shot has passed sufficiently far from the mouth of the gun so that there is a tension on the line, then the said rod D, and with it the hinged or pivoted breech-block B, is turned into the position shown in Fig. 3, and carries the line to its destination.

Instead of employing the hinged or pivoted breech-block B, the rod D might be bent up at its inner end and secured to the pin C, but this arrangement, although cheaper, would not be so efficient as where the hinged or pivoted breech-block B is employed, and instead of the breech end of the shot being made square it might be made rounding, in order that if a shot has been fired and it is desired to draw same back it will not catch on rocks or crevices.

What I claim is—

1. A projectile for carrying life-lines, consisting of a body having a recess at its rear end, a hinged or pivoted breech-block fitted in said recess and a rod attached to said hinged or pivoted breech-block, substantially as set forth.

2. A projectile for carrying life-lines, consisting of a body having a longitudinal groove and a rod fulcrumed to the rear end of the

body and fitting into said groove and extending beyond the mouth of the gun, substantially as set forth.

3. In a projectile for carrying life-lines, a
5 body having a hinged or pivoted breech-block fitted in its rear end, said block being formed with an elongated hole, and secured to the body by a pin, in combination with a rod attached thereto, substantially as and for the
10 purposes set forth.

4. In a projectile for carrying life-lines, a body A, having a recess *a* at its rear end, and a longitudinal groove extending from said recess to its front end, in combination with a

hinged or pivoted breech-block B, having an
15 elongated hole *b*, at its upper end, and a hole *b'* at its lower front end, said block being held to the body by a pin C, and a rod D attached to its lower front end, substantially as and
20 for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 1st day of June, A. D. 1896.

WILLIAM P. SHAW.

Witnesses:

CALEB H. SWAN,
EDWIN PLANTA.