(No Model.)

J. WILLIAMS.

LINE THROWING GUN.

No. 305,873. Patented Sept. 30, 1884.

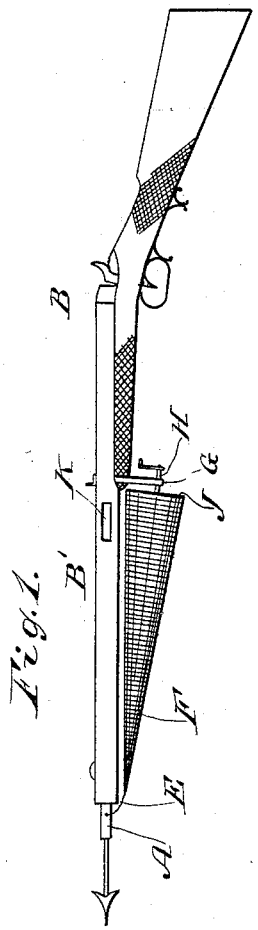

Fig. 1.

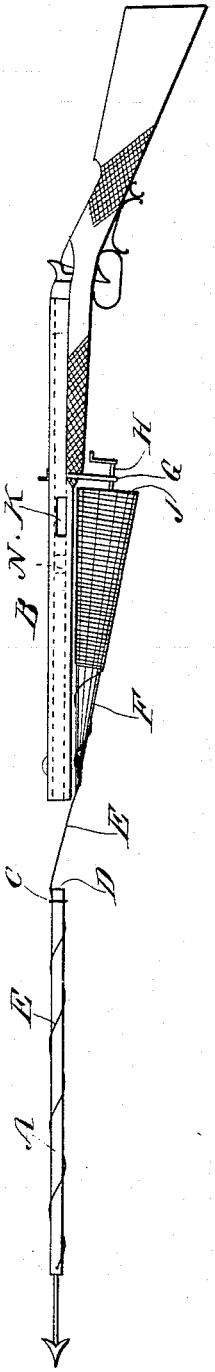

Fig. 2.

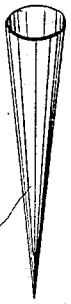

Fig. 4.

Fig. 5.

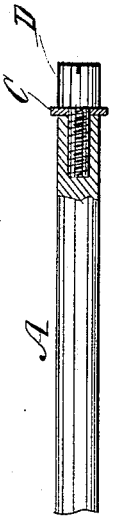

Fig. 3.

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JEREMIAH WILLIAMS, OF HARTFORD, KENTUCKY.

LINE-THROWING GUN.

SPECIFICATION forming part of Letters Patent No. 305,873, dated September 30, 1884.

Application filed January 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, JEREMIAH WILLIAMS, of Hartford, in the county of Ohio and State of Kentucky, have invented a new and Improved Gun for Casting Ropes for Fire-Escapes and for other Purposes, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved gun for casting ropes for fire-escapes, for rescuing persons from stranded vessels, &c., which gun can also be used for shooting fishes.

The invention consists in a gun having side openings in its barrel about at the middle of the length of the same.

The invention further consists in the combination, with a gun, of a cone held to turn on the same, on which cone the line secured to the dart is wound.

The invention further consists in a dart having a wad held on its butt-end by a screw.

The invention also consists in parts and details and combination of the same, as will be set forth hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal elevation of my improved gun for casting ropes for fire-escapes and for other purposes. Fig. 2 is a like view of the same, showing the dart after leaving the gun. Fig. 3 is an enlarged longitudinal elevation of the dart, parts being broken out and others shown in section. Fig. 4 is a perspective view of the cone-shaped cap on which the line is wound. Fig. 5 is a longitudinal view of the cartridge, part being shown in section.

The dart A, consisting of a rod of wood or metal, is to be fired by a carbine, B. The dart A is provided at its front end with an arrow-head point, and on its rear end a wad, C, is held by a screw, D, passed through the wad and screwed into the butt-end of the dart. The wad is made of rubber, leather, pasteboard, felt, or other suitable material of slightly greater diameter than the dart, and fits closely in the barrel B′ of the carbine. A cord, rope, wire, or cable E, is secured to the front end of the dart A, and the other end of the cord is secured to a cone-shaped paper or other cap F at the base end, the said cord being wound around the said cap. An arm, G, projects downward from the stock of the carbine, and in the said arm a short crank-shaft, H, is journaled, on the front end of which a cone, J, is fastened, which extends under the barrel, and on which the cap F fits. At about the middle of its length the barrel B′ is provided with two side apertures, K. The carbine is loaded with a cartridge, M, on the front end of which a felt or other wad is secured, and then the dart is passed into the barrel. If the carbine is fired the explosion forces the dart outward and the rifle-ridges in the barrel revolve the dart on its longitudinal axis and cause the rope or cable G to wind on the dart, as shown in Fig. 2. As the dart leaves the barrel it unwinds the rope, cable, or wire G from the conical cap F. The cord is never passed into the barrel. The force of the explosion forces the dart outward and also forces the wad N of felt or other suitable material on the cartridge outward beyond the side apertures or slots, K, in the barrel, thus permitting the gases and the fire produced by the explosion to escape through the side apertures. As the said apertures permit the gases to escape, the force of the explosion cannot force the wad out of the barrel. The fire of the explosion is thus prevented from burning the cord, which it would do if the fire escaped at the muzzle of the barrel. As the wad is not forced out of the barrel it cannot affect the course of the dart, which always hits the object aimed at. If desired, the cord can be fastened directly to the base end of the cone J, on which cone it can be wound by turning the crank-shaft H; or the cap F can be passed on the cone J, and the cord wound on the cap by turning the crank-handle H.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a gun, of a cone held to the same in such a manner that it can be revolved on its longitudinal axis, substantially as herein shown and described.

2. The combination, in a gun for throwing lines, of the barrel B′, provided with trans-

verse slots near its center, with a detached wad constructed to be placed in rear of the line-dart, whereby on the explosion of the charge the wad first impels forward the dart, and when beyond the slots stops and cuts off access of the flame to the line, substantially as set forth.

3. The combination, with a gun, of the arm G, the crank-shaft H, and the cone J, secured on one end of the said crank-shaft, substantially as herein shown and described.

4. The combination, with a gun, of the dart A, the conical cap F, the cord or wire E, having its ends secured to the front end of the dart and to the base end of the cap F, and of the cone J, held to turn on the gun, substantially as herein shown and described.

JEREMIAH WILLIAMS.

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