T. C. BACKUS.

ROPE OR LINE-CARRYING PROJECTILE.

No. 192,670. Patented July 3, 1877.

*Fig. 1.*

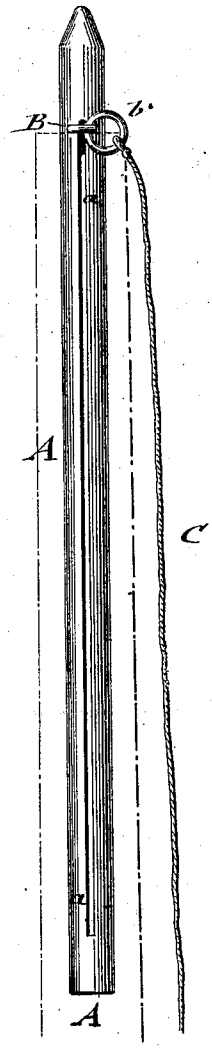
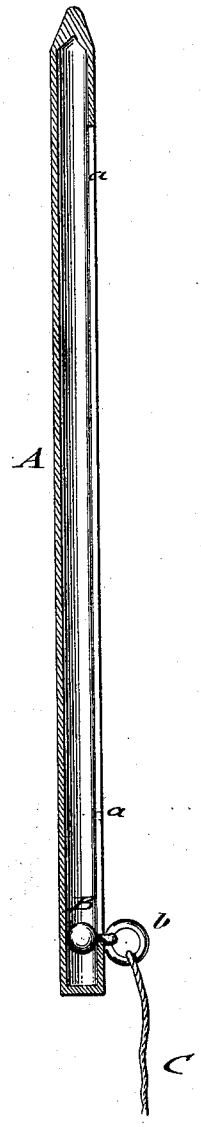



*Fig. 2.*




WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS C. BACKUS, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN ROPE OR LINE CARRYING PROJECTILES.

Specification forming part of Letters Patent No. **192,670**, dated July 3, 1877; application filed May 28, 1877.

*To all whom it may concern:*

Be it known that I, THOMAS C. BACKUS, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Line or Rope Carrying Projectile, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view, and Fig. 2 a vertical central section, of my improved line-carrying projectile.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish, for the purpose of establishing connection with the upper stories of burning buildings, an improved line or rope projectile or conveying device, that is shot, in the nature of the line-carrying balls or rockets in coast-wrecking apparatus, from a gun or other implement, to carry a line to the endangered persons, and admit the hoisting of a hose, rope-ladder, or other fire-escape. The device may also be employed as a safety device on board of vessels to convey the line ashore.

The invention consists of a hollow dart or projectile, with closed ends and a longitudinal slot for guiding the interior slide-piece, to which the life-saving string is attached.

In the drawing, A represents the arrow or projectile, that is made of a hollow tube of the size of the bore of the gun or other device from which the arrow is to be thrown. The tube A is closed at the ends, and made of a diameter to fit tightly into the barrel of the gun, so as to give accuracy in aiming and shooting. A longitudinal slot, *a*, runs nearly through the entire length of the tube A, and serves to guide a slide-piece, B, along the interior of the tube, to an eye of which, by a ring, *b*, or otherwise, a string, C, is applied.

When the arrow A is placed into the gun, the slide-piece is at the upper end of the slot, and outside of the muzzle of the gun, the string being coiled in any suitable manner on the ground. On firing the gun the slide-piece is carried back to the bottom end of the arrow, so that the weight and strain of the string does not throw the same out of its direction and cause it to miss its aim. The string unwinds and follows the dart or arrow to the place into which the same is thrown, the string forming there a means of connection for hoisting a hose or any suitable fire-escape available at the moment.

The slide-piece and string are arranged outside of the gun when the same is fixed, so as to prevent any possibility of injuring the string by the discharge of the gun.

By this means the upper stories of burning buildings may be brought, in an instant, in connection with the ground, the device forming, in the hands of the fireman or others, a very simple and effective device for putting a fire-escape within the reach of persons in parts of buildings that cannot be reached in any other manner.

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

A line or rope projectile, consisting of a slotted tubular dart or missile, to be shot out of a gun or other device, and provided with closed ends, and with an interior slide-piece and string attached thereto, the whole arranged and operated substantially in the manner set forth.

T. C. BACKUS.

Witnesses:
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