

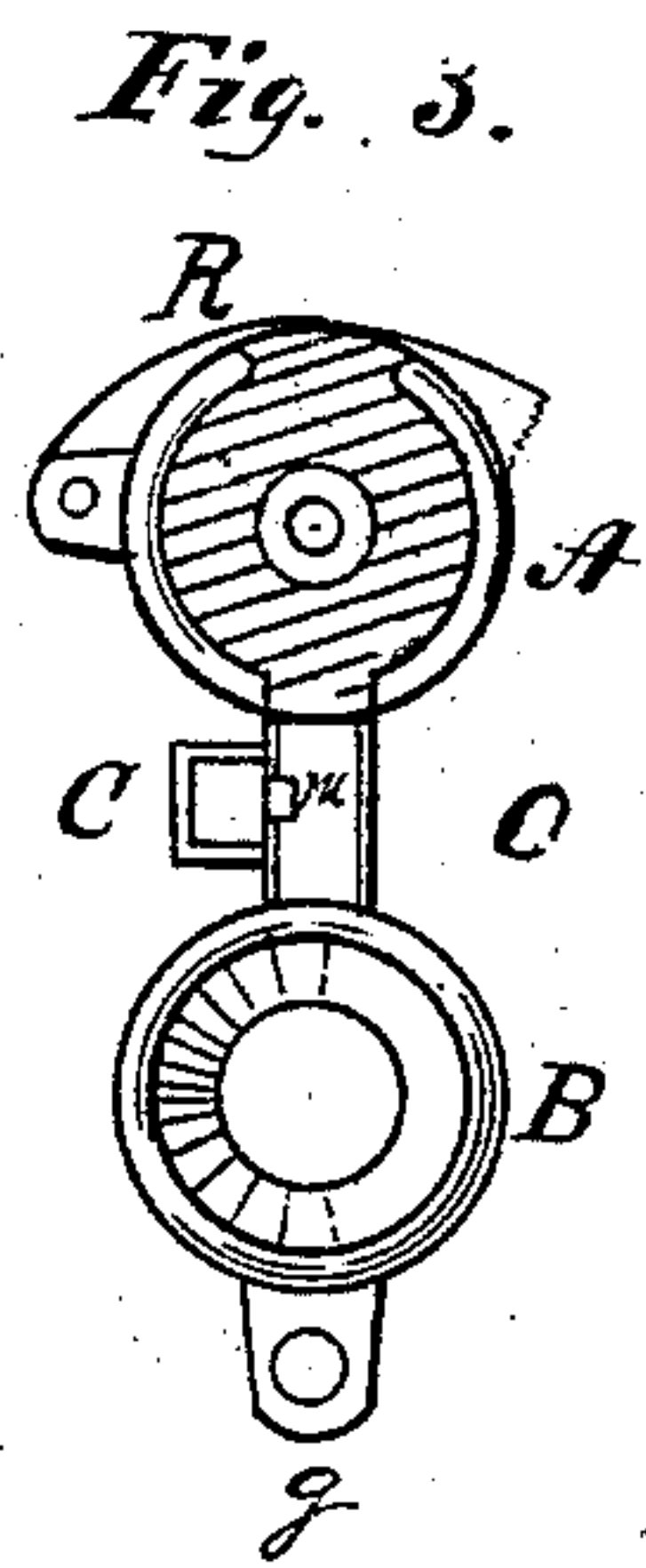
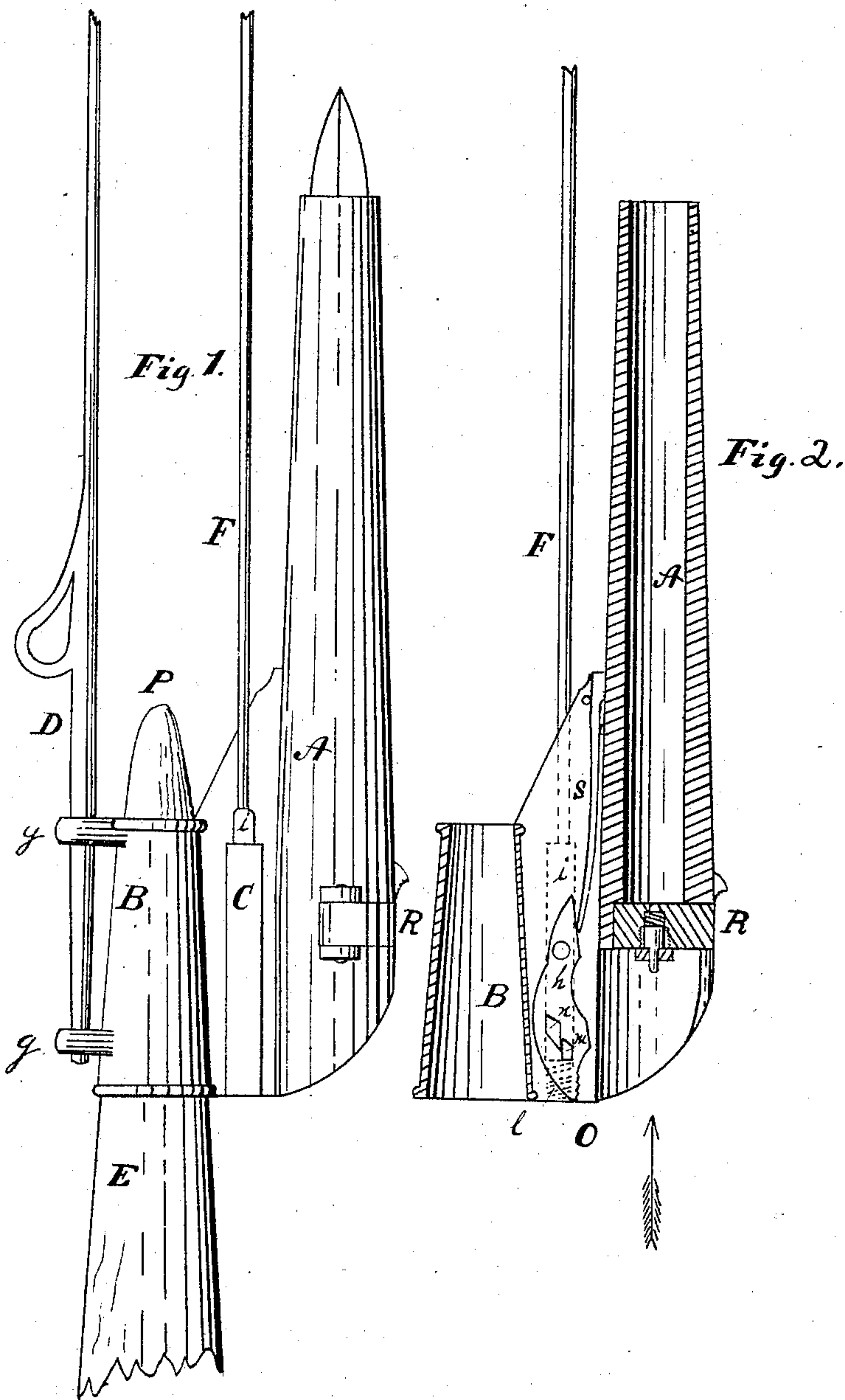
(No Model.)

P. CUNNINGHAM.

BOMB GUN.

No. 294,017.

Patented Feb. 26, 1884.



Witnesses
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UNITED STATES PATENT OFFICE.

PATRICK CUNNINGHAM, OF NEW BEDFORD, MASSACHUSETTS.

BOMB-GUN.

SPECIFICATION forming part of Letters Patent No. 294,017, dated February 26, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, PATRICK CUNNINGHAM, a citizen of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Combined Bomb-Gun and Harpoon, of which the following is a specification.

This invention relates to that class of bomb-guns which are designed to be darted at a whale, discharging a bomb at the same time that the harpoon enters the whale; and it has for its object to provide a combined bomb-gun and harpoon which is perfectly safe to handle, and also one in which can be used my bomb-lance and cartridge combined patented to me December 28, 1875, which bomb-lance requires a breech-loading gun in which to be fired.

To this end my invention consists in the combination, with a gun-barrel having a suitable breech-block hinged to one side, so that when the breech-block is thrown open the bore of the gun is fully exposed from the rear, so that a bomb-lance can be inserted from the breech, of a suitable pole-socket arranged alongside of said barrel and having on its side opposite said barrel suitable lugs for the support of a harpoon.

In the drawings, Figure 1 is a side elevation of my combined bomb-gun and harpoon supported by its socket on a pole in the position it has when being used. Fig. 2 is a longitudinal sectional view of the gun, showing the arrangement and operation of the parts, with the exception of the lugs which support the harpoon. Fig. 3 is a rear view of the gun with the pole and harpoon removed.

In Fig. 1, A is a gun-barrel, having a breech-block, R, hinged so that when turned on its hinge the bore of the gun will be exposed from the breech. C is a socket or guide, in which slides the bar *i*, which bar has securely attached to its end the rod F. B is a pole-socket arranged alongside of the barrel A and securely attached thereto, said socket B having on the side opposite the barrel A the lugs *g g*, for the support of the harpoon D. E is the pole or staff on which the gun is supported when darted at the whale. The pole E may project through the socket B to P, or

farther, in order that a common socket-harpoon may be supported thereon, if at any time it should be desirable.

In Fig. 2 the sliding bar *i* and a part of the rod F are represented in dotted lines, as is also the spiral spring *l*. S is the spring which actuates the hammer *h* and causes it to strike the firing-pin, which explodes the cartridge. On the side of the hammer *h* is a projection, *n*. The bar *i* also has a projection, *m*, which extends through a slot in the side of the case O a sufficient distance to engage at the proper time with the projection *m* on the hammer. Between the rear end of the bar *i* and the bottom of the socket C is interposed the spring *l*. When the hammer is thrown down, as in Fig. 2, the diagonal side of the projection *n* on the hammer comes in contact with the diagonal side of the projection *m* on the bar *i*, and as the hammer *h* is forced down the bar *i* is shifted to the rear until the projection *n* passes the projection *m*, when the spiral spring *l* operates to throw the bar *i* to the front, and the projection *m* catches over the projection *n*, and thus the hammer is held in a cocked position. To load the gun, the hammer is placed in the position as shown in Fig. 2 by means of the thumb or finger, the breech-block R is turned on its hinge, which action exposes the bore of the gun from the breech, and the bomb-lance is inserted in the barrel in the direction of the arrow.

Fig. 1 represents the gun as ready to be darted at a whale, with the exception of having a line made fast in the loop of the harpoon. When the gun is darted, the harpoon first enters. The end of the rod F brings up on the skin of the whale, which action shifts the bar *i* to the rear and releases the hammer *h*, which, by means of the firing-pin in the breech-block R, explodes the cartridge and fires the bomb-lance into the whale.

By placing the lugs for the support of the harpoon on the side of the pole-socket opposite from the gun-barrel, the bomb-lance is made to enter the whale at the farthest possible distance from the point where the harpoon enters. This is desirable, as when the harpoon is supported in lugs on the breech or barrel of the gun, as is now done, the explosion of the bomb-lance sometimes blows the harpoon

entirely out of the whale. It is also preferable that the lock-case, with the socket for the sliding rod thereon, be placed between the gun-barrel and the pole-socket, as shown, as in that case the rod F is between the gun-barrel and harpoon, and is thus more perfectly protected from liability to be shifted to the rear by coming in contact with anything.

A hinged barrel has been used in combination with a sliding rod and harpoon, as in my Patent No. 256,548, of April 18, 1882; but there are various objections to a hinged barrel in a darting-gun, among which are: it is unhandy to use and heavy and bungling on account of the hinge, and as the catch, which holds the barrel in position wears by use the joint becomes loose and the gun has to be repaired. To obviate these objections, a barrel having a breech-block hinged so as to move to one side is employed; and with a gun-barrel of this description it is obvious that the pole-socket must of necessity be placed in a position other than directly in rear of the bore of the gun, else my bomb-lance patented to me December 28, 1875, could not be inserted in the gun. The pole-socket is therefore placed alongside of the barrel, and this arrangement admits of the harpoon-supporting lugs being placed in the most advantageous position—i. e., the farthest possible from the gun-barrel—in order that the bomb-lance may enter the whale at the farthest possible point from where the harpoon enters, for the reasons above stated. This arrangement is also of advantage, in that it greatly increases

the chances of taking whales, and in that it is safer and more handy to use.

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

1. In a breech-loading bomb-gun, the combination of a gun-barrel having a lock-case containing firing devices arranged along its side, and having a suitable breech-block adapted to turn on a hinge, with a suitable pole-socket arranged alongside of said barrel, as and for the purpose shown and described.

2. In a breech-loading bomb-gun, the combination of a gun-barrel having a lock-case containing firing devices arranged along its side, and having a suitable breech-block adapted to turn on a hinge, with a pole-socket having suitable lugs on its side for the support of a harpoon, arranged alongside of said gun-barrel, as and for the purpose shown and described.

3. In a breech-loading bomb-gun, the combination of a gun-barrel having a suitable breech-block adapted to turn on a hinge, a lock-case containing firing devices arranged alongside of said barrel, and having a socket in which a rod is adapted to slide and actuate the firing devices, and a suitable pole-socket having on its side suitable lugs for the support of a harpoon, arranged alongside of the lock-case or gun-barrel, all as shown and described.

PATRICK CUNNINGHAM.

Witnesses:

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