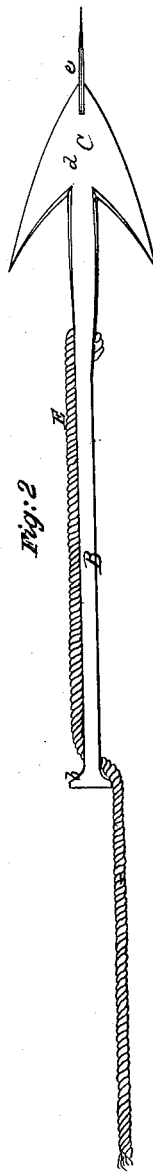
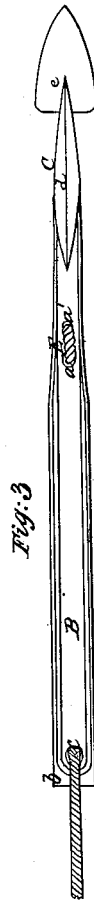
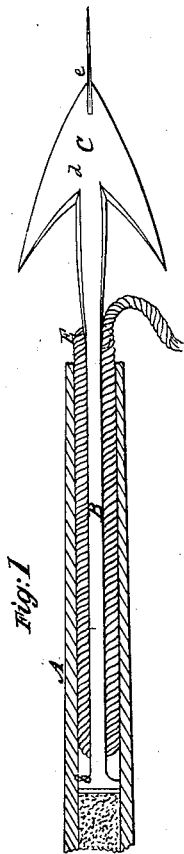


R. BROWN.  
HARPOON.

No. 7,410.

Patented June 4, 1850.



# UNITED STATES PATENT OFFICE.

ROBERT BROWN, OF NEW LONDON, CONNECTICUT.

## IMPROVED GUN-HARPOON.

Specification forming part of Letters Patent No. 7,410, dated June 4, 1850.

*To all whom it may concern:*

Be it known that I, ROBERT BROWN, of the city and county of New London, and State of Connecticut, have invented a new and useful Improvement in Gun Harpoons and Lances, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification, and in which—

Figure 1 represents an elevation of my harpoon inserted in a gun-barrel, portions of which are removed to show more clearly the structure of the harpoon. Fig. 2 is a view of the same discharged from the gun. Fig. 3 is a side elevation of the same in a position at right angles to that in which it is represented at Fig. 2. Fig. 4 is a transverse section of the shank, and Fig. 5 is a similar section of a shank of different form.

My harpoons and lances are adapted for firing from a gun. Each is attached to a line in such manner that, while the latter does not cause the harpoon in its flight to vary materially from the direction in which it is aimed, yet at the same time retains its hold upon the barbed head, even though the shank should be broken, the shank having a recess in its side to receive and protect the extremity of the line, which is loaded with the shank into the gun-barrel.

My harpoon is composed of a barbed head, C, secured to the front extremity of a fluted shank, B, whose hinder extremity terminates in a circular button or boss, b, which closely fits the gun-barrel A, and serves as the piston against which the projectile force of the gun-powder acts. The barbed head is composed of two triangular blades, d e, the outer one of which is placed at right angles to the inner. The shank, near its junction with the head, is pierced with two holes, a a'. It is also pierced with a third hole, c, immediately in front of the circular button. The whale-line is first passed through the last-mentioned hole. It is then drawn along the fluted side of the shank and inserted through one of the holes a' near the barbed head, being then returned through the other hole, a. Its end is securely spliced to the adjoining part, thus forming an eye by which the line is attached to the harpoon.

When this harpoon is to be used the gun is loaded with powder in the usual manner and

the shank of the harpoon is inserted upon the wad, the extremity of the line attached to the head of the harpoon passing down into the barrel, along the recess or fluting of the shank, through the hole in its butt-end, and returning upward along the fluting on the opposite side of the shank to the muzzle of the gun, as represented in Fig. 1, and thence to the tub or the reel on which the main body of the line is coiled. When the gun is fired the harpoon is projected as seen in Fig. 2, the line trailing backward from the butt of the shank.

I construct my harpoons of either cast or wrought iron, with the exception of the smaller blade of the head, which I prefer to construct of steel, and to secure it to the rest of the harpoon by inserting it in a slot and brazing the joint. When the body of the harpoon is of cast metal I prefer to give the shank the form shown in section at Fig. 5, and to cast a part or the whole of it in chills. It may also be made of any other shape than that represented in the drawing, as the constructor may deem expedient.

In gun-harpoons as ordinarily constructed the line is attached to a ring which runs freely upon the shank and is not loaded into the gun-barrel. The ring does not enter the barrel of the gun, and the weight of the line retains it at the muzzle until the butt-end of the shank leaves the barrel and carries the ring with it. If in harpoons thus constructed the shank should break after the whale is struck by the transverse strain caused by his struggles, the line slips off the broken shank and the whale is lost.

With my harpoon, on the contrary, the line is attached close to the head where the shank is strongest and least liable to break off; hence, even if the shank should break between the butt and the head, the line would still retain its hold upon the latter, while at the same time, as the line is inserted through the hole at the butt and trails directly after the harpoon, it will not cause the latter to deviate more widely from its true direction than those previously used.

I do not confine my invention to harpoons alone, but apply it to lances or other weapons which can be projected from a gun for the purpose of capturing animals.

Having thus described my improved gun-

harpoon, what I claim therein as new, and desire to secure by Letters Patent, is—

Attaching the line to both the shank and the head of the harpoon in such manner that the extremity of the line is loaded, with the harpoon, into the gun and lies in recesses made in the shank, and when the gun is fired the line will trail from the butt of the shank,

and will not tend to depress the head during its flight.

In testimony whereof I have hereunto subscribed my name.

ROBERT BROWN.

Witnesses:

P. H. WATSON,

E. S. RENWICK.