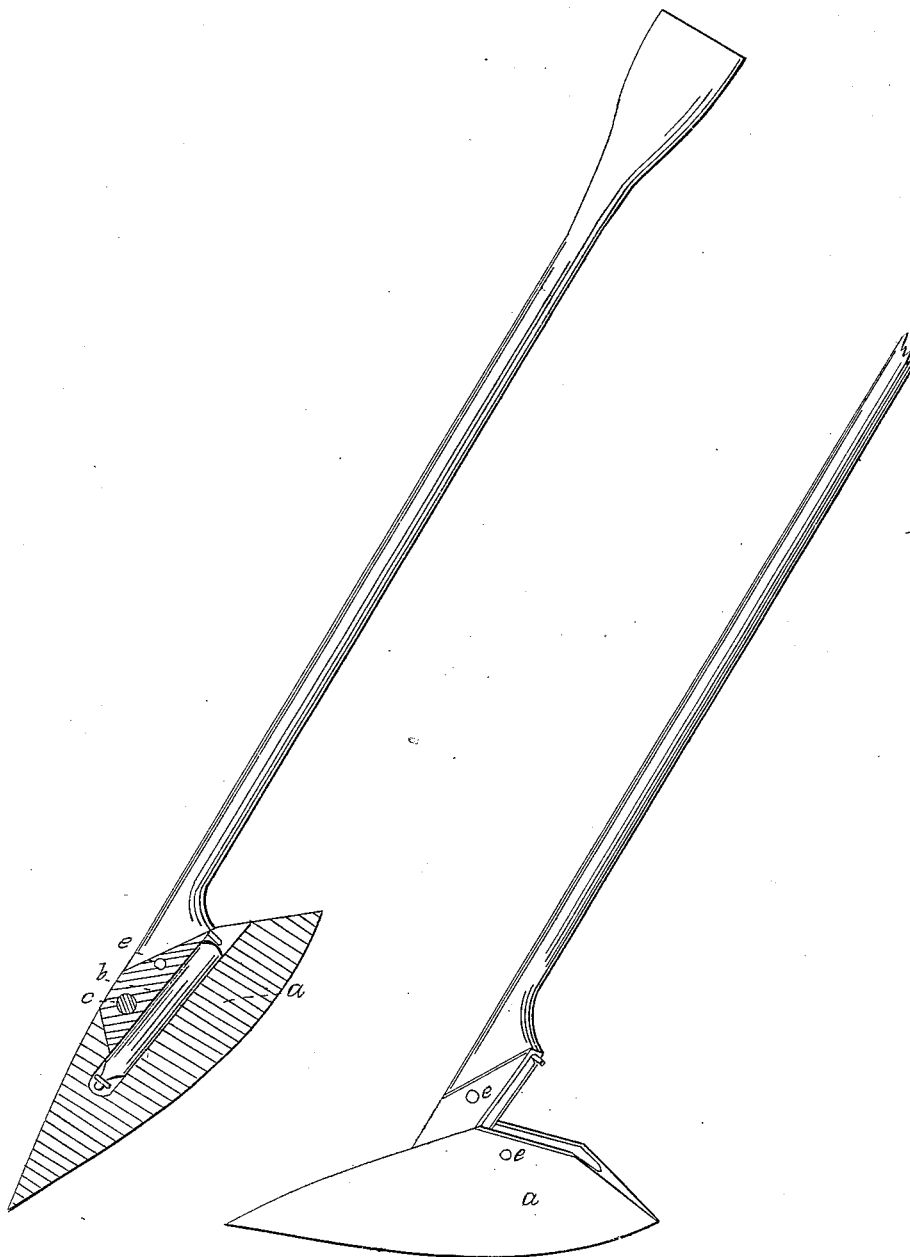


A. MOORE.  
Bomb Lance.

No. 3,490.

Patented Mar. 16, 1844



# UNITED STATES PATENT OFFICE.

ALBERT MOOR, OF HAMPDEN, MAINE.

## IMPROVEMENT IN HARPOONS.

Specification forming part of Letters Patent No. **3,490**, dated March 16, 1844.

*To all whom it may concern:*

Be it known that I, ALBERT MOOR, of Hampden, in the county of Penobscot and State of Maine, have invented a new and Improved Harpoon for the Destruction and Taking of Whales; and the following is a description of said harpoon.

The nature of the invention consists in placing in the fluke and under the shank of the harpoon a small vial, *b*, containing a small quantity of explosive powder. The fluke of the harpoon is joined to the shank by an iron rivet or hinge *c*, upon which it turns or opens.

The vial of explosive powder is confined in the fluke and under the shank by means of a wooden pin at *e*, all of which is represented by the drawings annexed, and to which reference is hereby made.

The fluke, after the harpoon is closed, is confined and kept in its place by a wooden pin, as also appears by said drawing.

As soon as the harpoon is thrown into the whale and fastened to it the wooden pin is broken by the power of the whale pulling upon the tow-line attached to the harpoon, and the fluke of said harpoon will open or turn upon the iron rivet, and in opening or turning upon said rivet will come in contact with the vial and break it, will produce friction, and cause the powder to explode, which will destroy the whale.

The fluke *a* of said harpoon is cast or made separate from the shank.

The explosive powder contained in said vial is composed of the following materials or ingredients, viz: by weight, one part silver, eight parts nitric acid, and sixteen parts alcohol, calling the whole twenty-five. I prepare the explosive powder as follows, viz: I dissolve the silver in nitric acid by heat in a glass flask. As soon as the silver is dissolved and cooled a little below boiling heat I add the alcohol. I again boil the mixture till it becomes thick, or until a powder settles at the bottom of the flask, when I strain the whole through paper, first making in it fine needle-holes. The powder is then ready for use.

What the subscriber claims as his invention, and desires to secure by Letters Patent, is—

In placing in the fluke of said harpoon a vial of explosive mixture, of whatever materials or ingredients it may be composed, for the purpose and in the manner heretofore described.

ALBERT MOOR.

In presence of—

JOSHUA HILL,  
SETH HARDING.