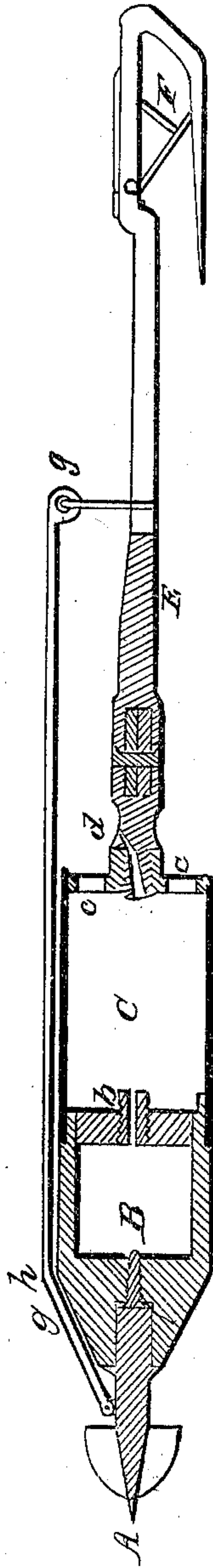
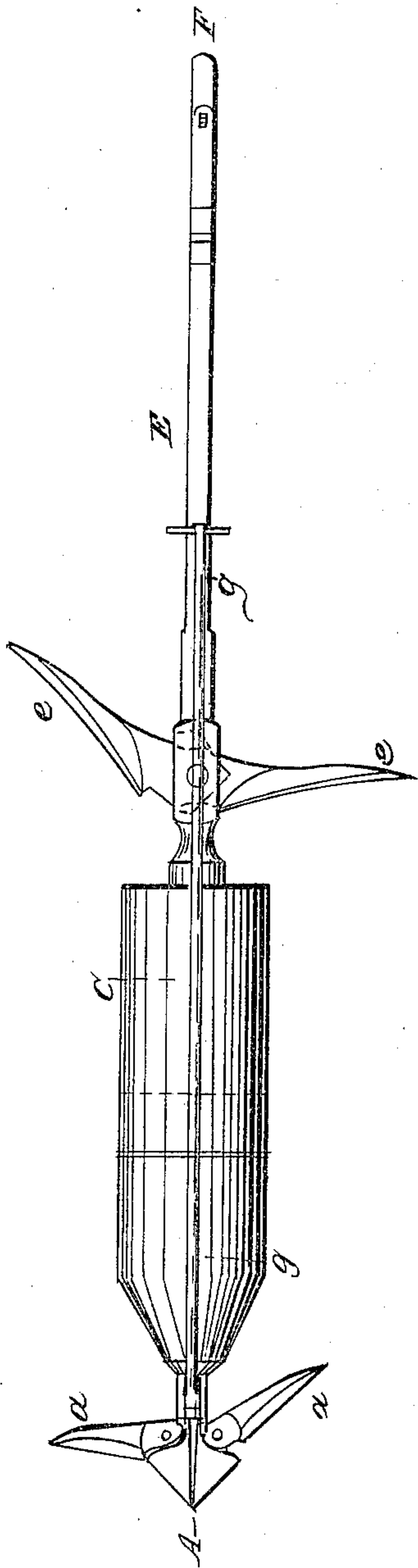


T. W. ROYS.
Bomb Lance.

No. 35,474.

Patented June 3, 1862.



Witnesses:

Clarence Delapfield
My Remble Hall

Inventor:

Thomas W. Roys
By his Atty.
Amos Browning

UNITED STATES PATENT OFFICE.

THOMAS W. ROYS, OF SOUTHAMPTON, NEW YORK.

IMPROVED ROCKET-HARPOON.

Specification forming part of Letters Patent No. **35,474**, dated June 3, 1862.

To all whom it may concern:

Be it known that I, THOMAS W. ROYS, of Southampton, in the county of Suffolk, in the State of New York, have invented a new and useful Improvement in Rocket-Harpoons; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in providing a rocket-harpoon with a cavity loaded or filled with an explosive compound, which will be fired as a bomb by the burning of the rocket, and greatly increase the destructive action of the weapon.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The annexed drawing represents, externally and in section, a rocket-harpoon combined with a bomb according to my invention, and arranged to be used with the shoulder-gun of my invention patented January 22, 1861; but it is obvious that the bomb and rocket may be combined with a harpoon constructed in the ordinary manner without altering the character of my invention.

A is the point of the harpoon, made with double barbs to cut a cruciform opening or wound, and furnished with jointed wings *a a*, which close when the harpoon is thrust into a whale and open to resist the removal of the instrument.

B is the cavity of the bomb, filled with explosive material that may be fired by a fuse inserted in the hole *b*.

C is the chamber of the rocket. *cc* are holes at the bottom of the rocket-chamber, through which issues the gas that propels the rocket.

d is the touch-hole by which the rocket material is lighted.

E is the shank of the harpoon, into which are jointed wings *ee* behind the rocket-cham-

ber, constructed like those on the point of the harpoon to resist its withdrawal.

F is a hook on the shank of the harpoon, with a spring-guard that readily admits the attachment or disengagement of the harpoon-line.

An iron bar, *g g*, is connected to the head of the harpoon with a pin-joint and to the shank by a ring, which is too small to slip over the jointed wings or barbs *ee*.

The bomb may be loaded through the hole *h* on removing the barb of the harpoon and the screw-plug.

When the combustible material in the rocket-chamber C is fired through the touch-hole *d* the violent issue of the gas through the openings *cc* propels the harpoon to its destination with sufficient force to bury in the body of the whale beyond the jointed wings or barbs *ee*, which will be opened by any effort to escape.

The cruciform opening cut by the point A admits the bomb and rocket more readily than a single slit.

When the rocket material has burned nearly out it will ignite the fuse in the hole *b*, and the bomb will be exploded.

If the jointed wings *ee* should fail to perform their office, the instrument will be retained securely in its place, notwithstanding the explosion, by the bar *g g* connecting the shank E with the point A and its barbs *aa*.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a harpoon and rocket with a bomb, substantially as described, for the purpose of killing whales.

2. The bar *g g*, connecting the barb of the harpoon with the shank of the rocket and its barbs or wings *ee*.

THOMAS W. ROYS.

Witnesses:

WILLIAM SANFORD,
ISAAC J. SIGLER.