

T. BRIGGS.
Bomb Lance.

No. 30,869.

Patented Dec. 11, 1860.

Fig. 1.

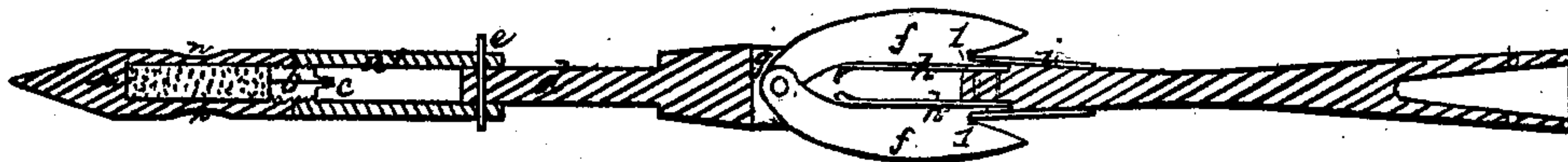


Fig. 2.

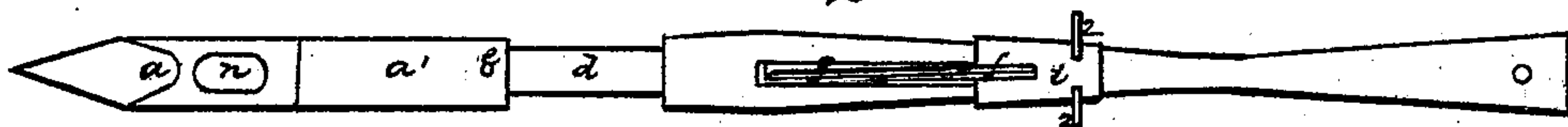
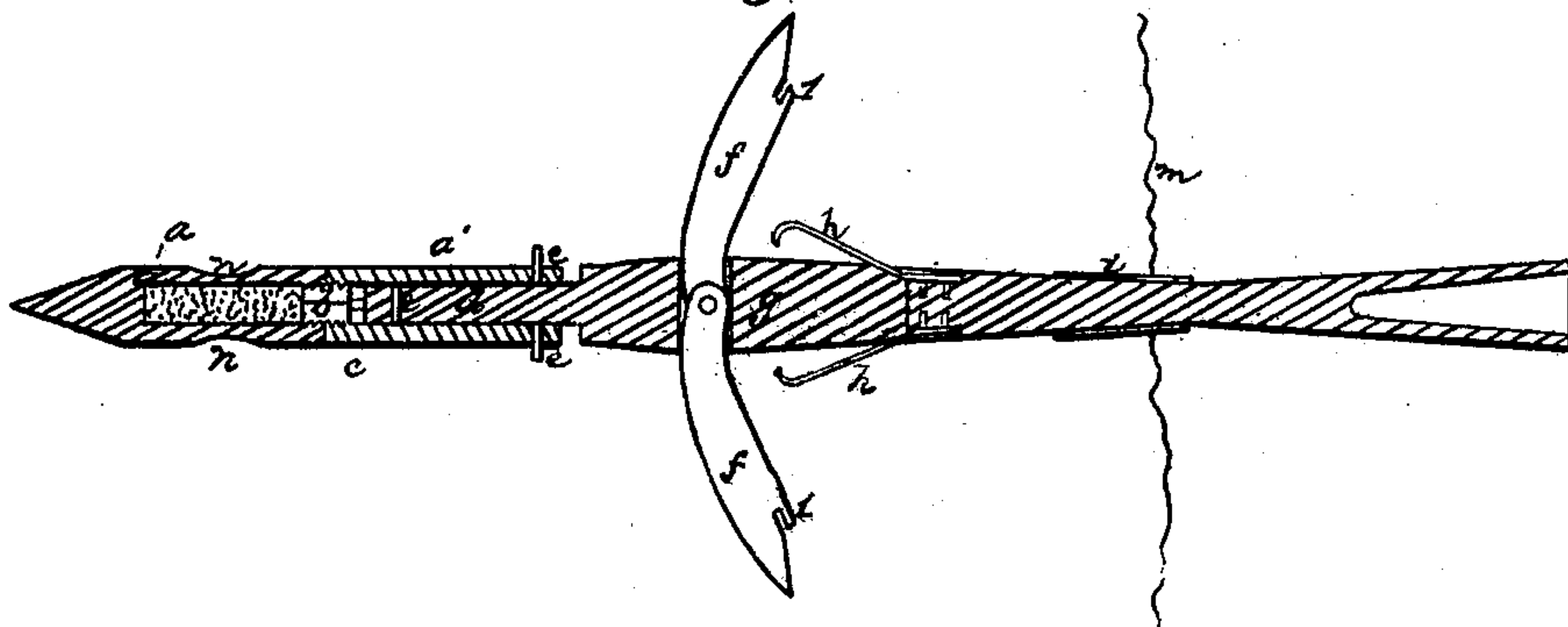


Fig. 3.



Witnesses.

Benjamin Morison

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THEODORE BRIGGS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN EXPLOSIVE HARPOONS.

Specification forming part of Letters Patent No. **30,869**, dated December 11, 1860.

To all whom it may concern:

Be it known that I, THEODORE BRIGGS, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Explosive Harpoon-Lances; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figures 1 and 3 are central longitudinal sections, and Fig. 2 a perspective view, of the said improvement applied, like letters indicating the same parts when in the different figures.

My invention has for its object the production of an explosive harpoon-lance to be thrown by hand; and it consists in the construction and combined arrangement, with the body of the implement, of the devices hereinafter described, whereby a convenient and more effective hand-lance is produced for the purpose of taking whales.

The drawings represent that part of a harpoon-lance which is made of iron the usual wooden balance-shaft not being shown. The pointed or forward end of this lance consists of two tubular pieces, *a* and *a'*, connected together by means of a screw-pin, *b*, which is fitted with a priming-tube and nipple, *c*, the latter projecting back into the rear tube, *a'*, as seen in Figs. 1 and 3. The rear tube, *a'*, is made to slide over the stem *d* of the body of the lance, so that the nipple *c* may be brought into contact with the end of the said stem. A slender wooden pin, *e*, passes through transverse holes in the ends of the said tube and stem, and thereby keeps them in the proper relative positions for use, as seen in Figs. 1 and 2.

The barbs *ff* are pivoted together at their inner ends within a mortise, *g*, made through the body of the lance, so that they can be shut together, as seen in Fig. 1, or opened outward, as seen in Fig. 3. Two springs, *h h*, are fixed so as to extend outward along over each side of the rear part of the mortise *g*, as seen in Fig. 3, while in their normal condition, and made of such strength as may admit of their being sufficiently compressed by hand into the slot *g* by closing the barbs *ff* into

the positions seen in Figs. 1 and 2, and to allow a slide, *i*, to be moved up, so that it shall inclose within it the projections 1 1, which are on the ends of the said barbs *ff*, and thus hold them down securely in the position seen in the same figures.

The slide *i* has two outside arms, 2 2, which project therefrom at right angles to the plane of motion of the barbs *ff*, as seen in Fig. 2.

Operation: The tube *a* is to be filled with gunpowder, the pin *b* then screwed in and a common percussion-cap placed on the nipple *c*, when the tube *a'* is then screwed on over the nipple and its open end slipped over the end of the stem *d*, where it is to be secured by the insertion of the wooden pin *e* into the holes in the ends of both, as seen in Figs. 1 and 2. The barbs *ff* are now pressed down against the pressure of the springs *h h* and the slide *i* pushed up so as to inclose within it the projections 1 1 on the ends of the said barbs. The implement is now ready for use.

It is thrown by hand in the usual manner, so as to cause it to penetrate the skin and thick mass of blubber of the whale, and the tubular end then coming in contact with bone is suddenly arrested, while the momentum of the body and balance-shaft of the implement causes the breaking of the wooden pin *e*, and the consequent driving up of the stem end *d* against the percussion-cap on the nipple *c*, as seen in Fig. 3, exploding it and the powder, together with the containing-tube *a*, thus destroying the life of the animal almost instantly; and during the deep penetration of the implement into the blubber the arms 2 2 of the slide *i* are held back by the tough skin of the whale, (indicated by the line in Fig. 3,) thus releasing the barbs *ff*, which, being forced apart to a certain extent by the action of the springs *h h*, and still farther by the after-pull on the rope, which is always attached to the end of the body of the lance, the whale is perfectly secured.

The two opposite sides of the powder-tube *a* are thinned a little at *n n*, in order to insure its bursting out sidewise.

Having thus fully described my improved explosive harpoon-lance and shown its utility, what I claim as new therein, of my invention, and desire to secure by Letters Patent, is—

Making an explosive harpoon-lance to be thrown by hand, with its forward end constructed and applied to be exploded by the breaking of the wooden pin *e*, as described, its barbs *ff* being pivoted together in the mortise *g*, and turning outward on being released by the backward motion of the armed slide *i*, as described, the whole being constructed and

arranged to operate together, in combination with the body of the implement, in the manner described, and for the purposes specified.

THEODORE BRIGGS.

Witnesses:

BENJ. MORISON,
WM. HADDEN.