

J. Edson,
Marine Drag.

No. 94,191.

Patented Aug. 31, 1869.

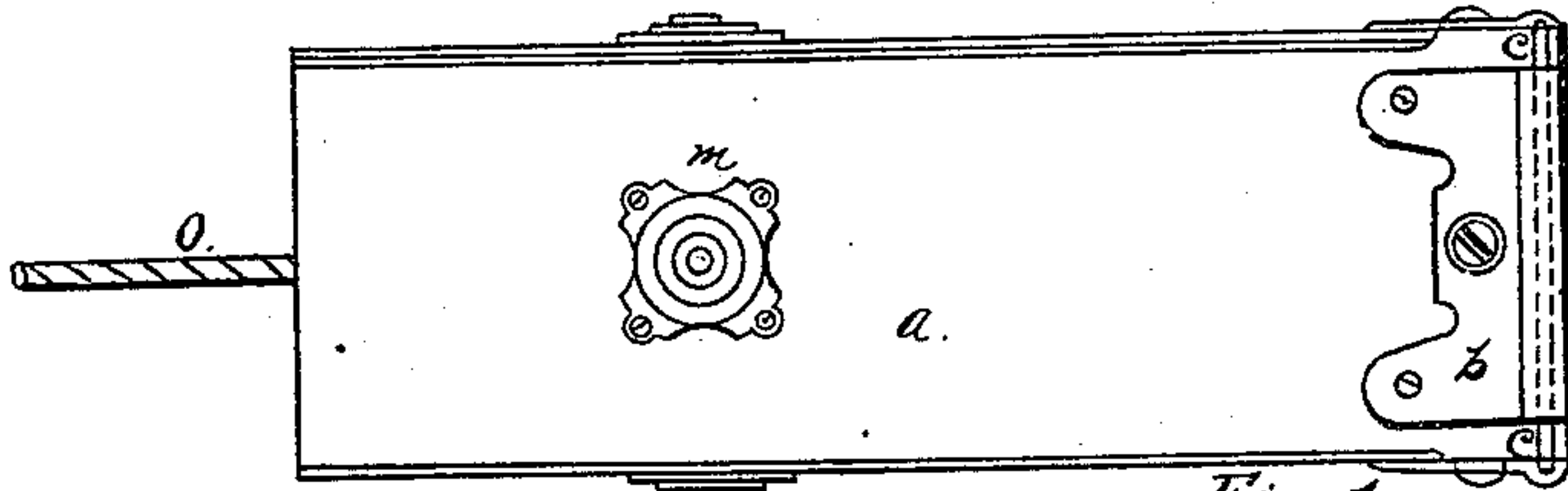


Fig. 1.

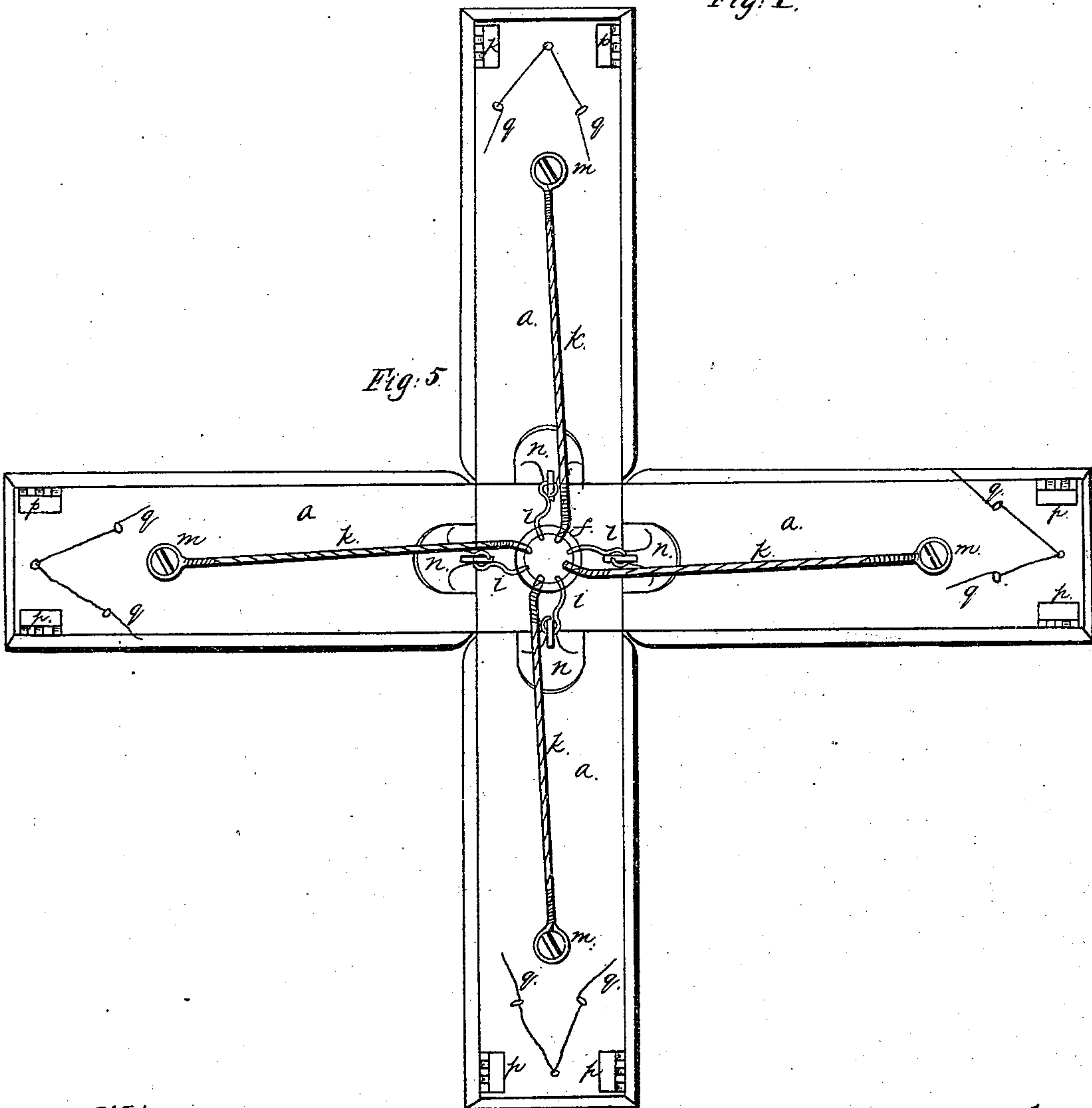


Fig. 5.

Witnesses:

Attau Andrieu.

A. L. B. Stevens.

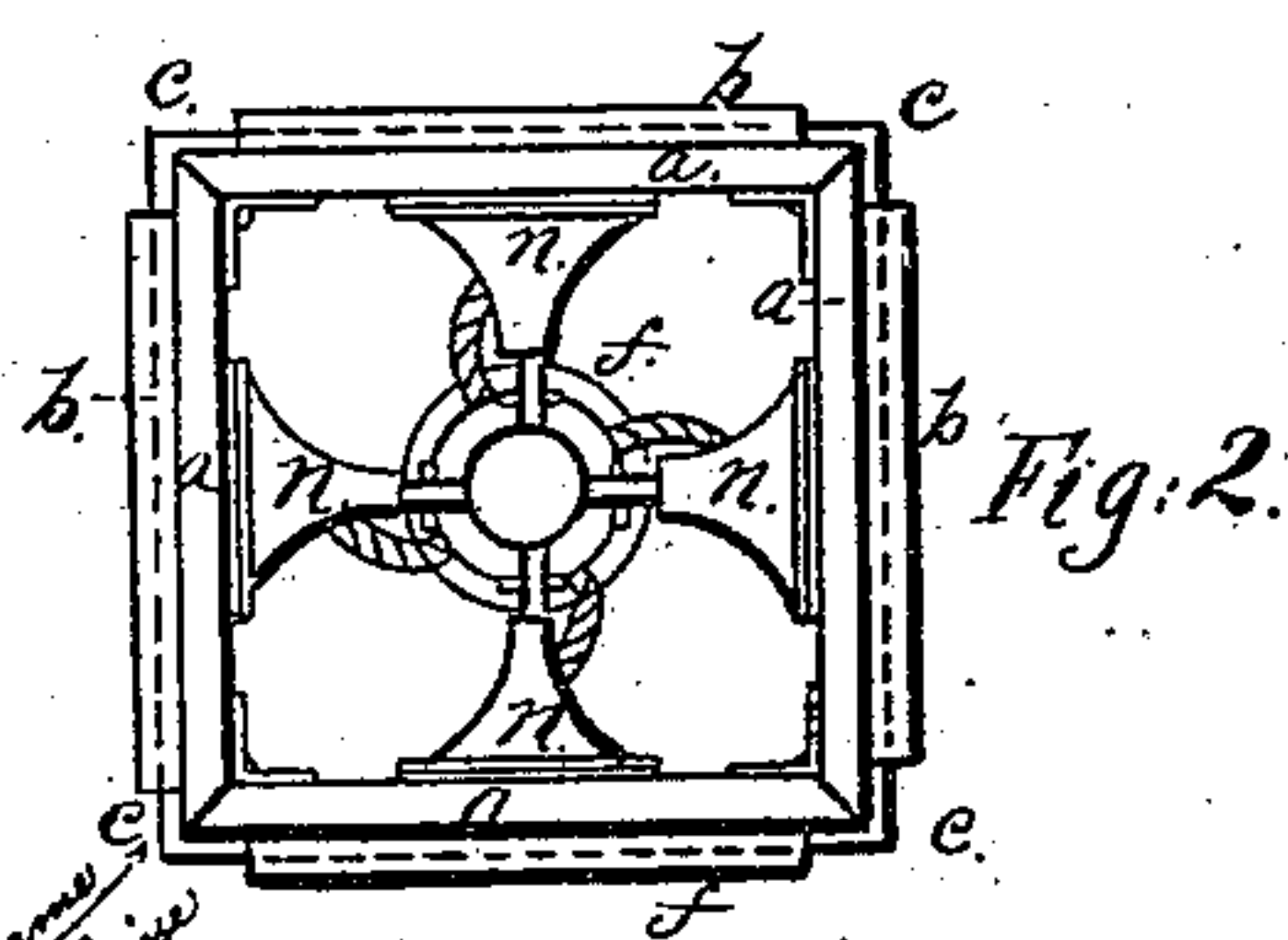
Inventor,

Jacob Edson

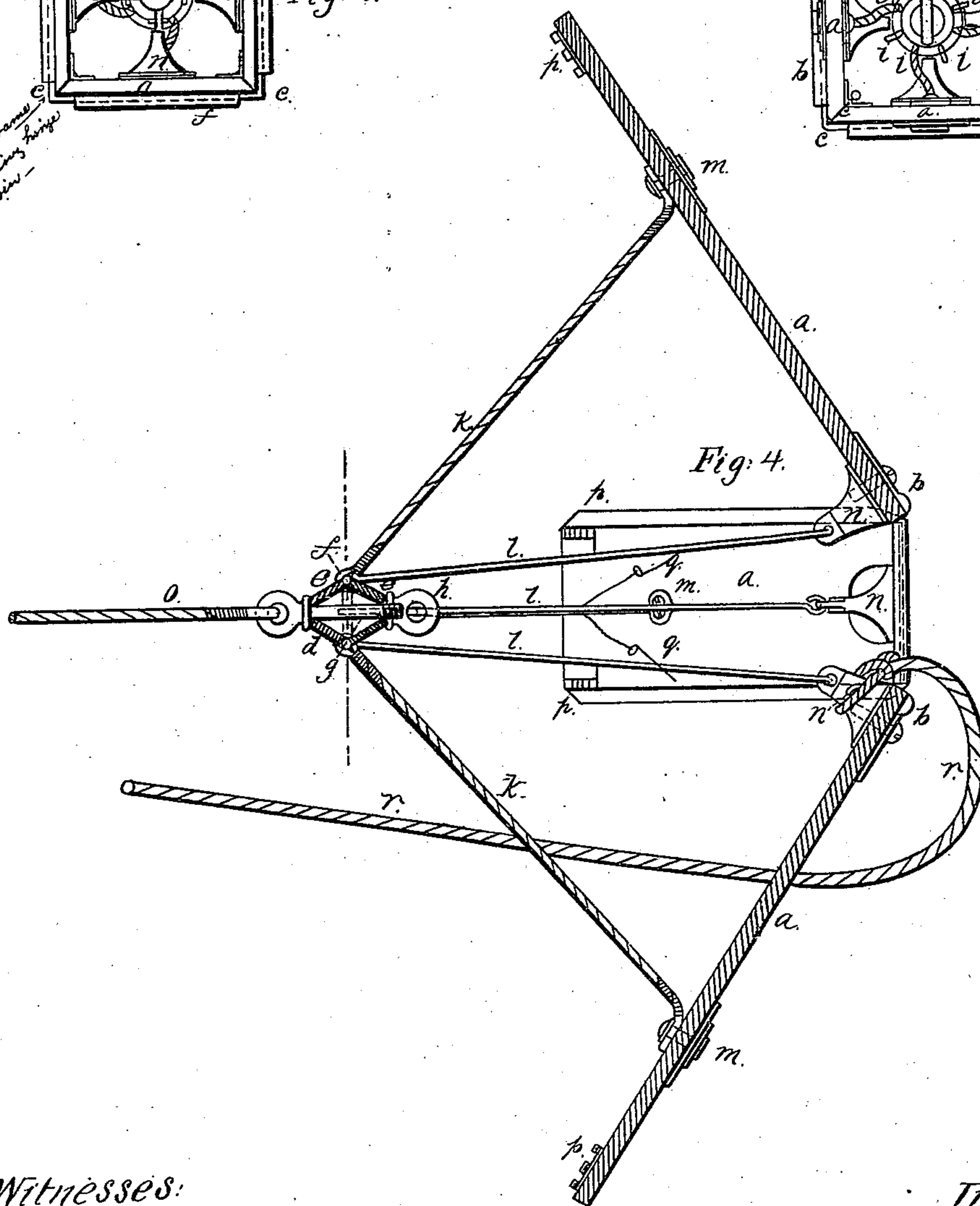
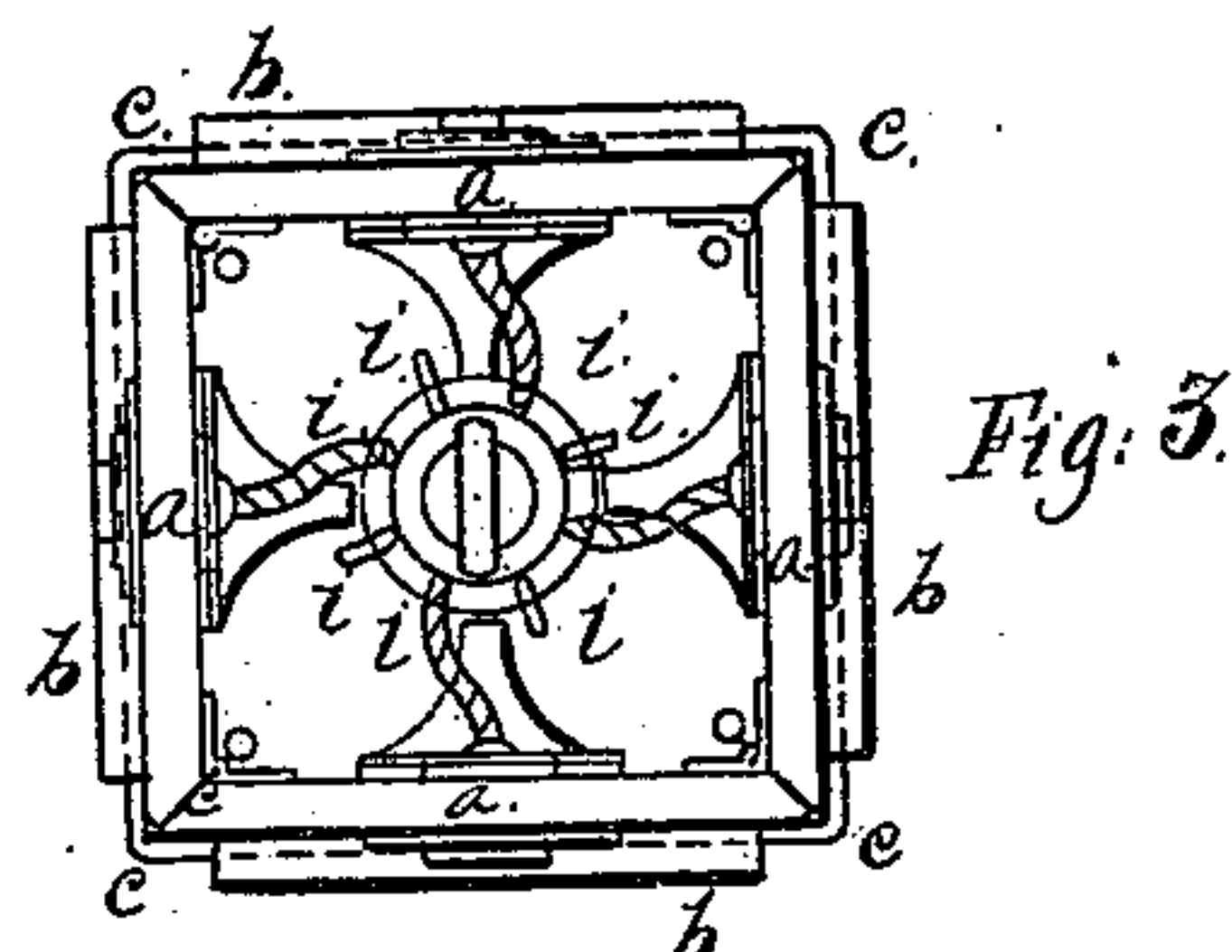
J. Edson,
Marine Druggist.

No. 94,191.

Patented Aug 31. 1869.



Square frame
making hinge
pin -



Witnesses:

Arthur Andersen.

A. L. B. Stevens.

Inventor

Jacob Edson

United States Patent Office.

JACOB EDSON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 94,191, dated August 31, 1869.

IMPROVEMENT IN SEA-DRAGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB EDSON, of 132 Commercial street, Boston, in the county of Suffolk, in the State of Massachusetts, have invented a new and useful Improvement on a Ship's Drag; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a side view of the drag, when closed for stowing away;

Figure 2 is an end view, seen from the lower end;

Figure 3, a similar end view, seen from the upper end;

Figure 4 is a longitudinal section of the drag, when open for use; and

Figure 5 is a ground plan of the same, also shown open for use.

The nature of my invention consists in providing a cheap, strong, reliable, and compact drag, for the governing of a vessel in a storm, and made in such a manner as to be closed and firmly held together, so as to be convenient in stowing away when not in use.

a a a a are the wings or arms, made of a suitable number and material, and connected together at their lower ends by means of strong metallic hinges *b b b b* over a frame, *c c c c*, constituting a continuous hinge-pin, figs. 2 and 3.

d is a head or hook, consisting of two conical rings *e e*, having their bases together, enclosing a round ring, *f*, by means of a semicircular recess in their bases.

An eye-bolt, *g*, screwed into a nut, *h*, holds the two cones *e e* and ring *f* firmly together, making the head *d* a cheap, firm, and compact device for uniting and holding the wings in their proper position.

The above-named conical rings *e e* have also, at their bases, eight recesses, *i i i i i i i i*, fig. 3, for the reception of stays *k k k k* and *l l l l*, giving the stays a free and easy play on the ring *f*, so as to adjust themselves.

The head *d* is connected to the arms or wings *a a a a* by means of ropes, chains, or stays *k k k k*, from suitable points *m m m m*, on the wings, thereby giving a limit to the spreading out of the same wings.

The head *d* is also connected with the lower part of the wings by means of rods *l l l l* and levers *n n n n*,

making a strong brace and support for the drag; the levers *n n n n* also serving for the immediate opening and spreading out of the wings as soon as thrown in the water, as in this case the ropes *k k k k* are slack, which gives at first all the strain on the stays *l l l l* and levers *n n n n*, tending, by their combined action, to spread the wings apart as far as the ropes *k k k k* admit.

The head *d* has also an eye, which, by means of a rope or chain, *o*, is connected to the vessel in the usual manner.

The wings *a a a a* have in their upper ends hinges or suitable projections *p p p p p p p p*, and pins *q q q q q q q q*, by which means the drag is securely closed together, forming a box, as shown in figs. 1, 2, and 3, when not in use.

A rope, *r*, is also fastened to some suitable place at the lower end of the drag, so as to facilitate the hauling in of the drag.

As will thus be seen from the above, the drag may be closed together, making a box, when not in use, and as soon as thrown into the water, it will always open automatically, by means of the rods *l* and levers *n*, combined with the action of the water on the wings *a*. When not required in use, it can easily be fetched into the vessel by hauling on the rope *r*, when the wings immediately close together, thereby giving but little resistance for the safe hauling in of the drag back again to the vessel.

Any number of wings or arms can be used, but the advantage derived in using four arms, (which makes a square box when closed,) is that the largest holding-surface when spread, combined with the smallest and most convenient package for storage when closed, is thereby obtained.

Having thus described the working and details of my invention of an "improved ship's drag," I wish to secure by Letters Patent, and

I claim a ship's drag, with four wings, in combination with the levers *l* and *n*, the hook, with its cones and apertures, combined with hinges at the lower end, and bolts and staples at the upper end, as fully set forth and described.

JACOB EDSON.

Witnesses:

ALBAN ANDRÉN,
GORDON H. NOTT.