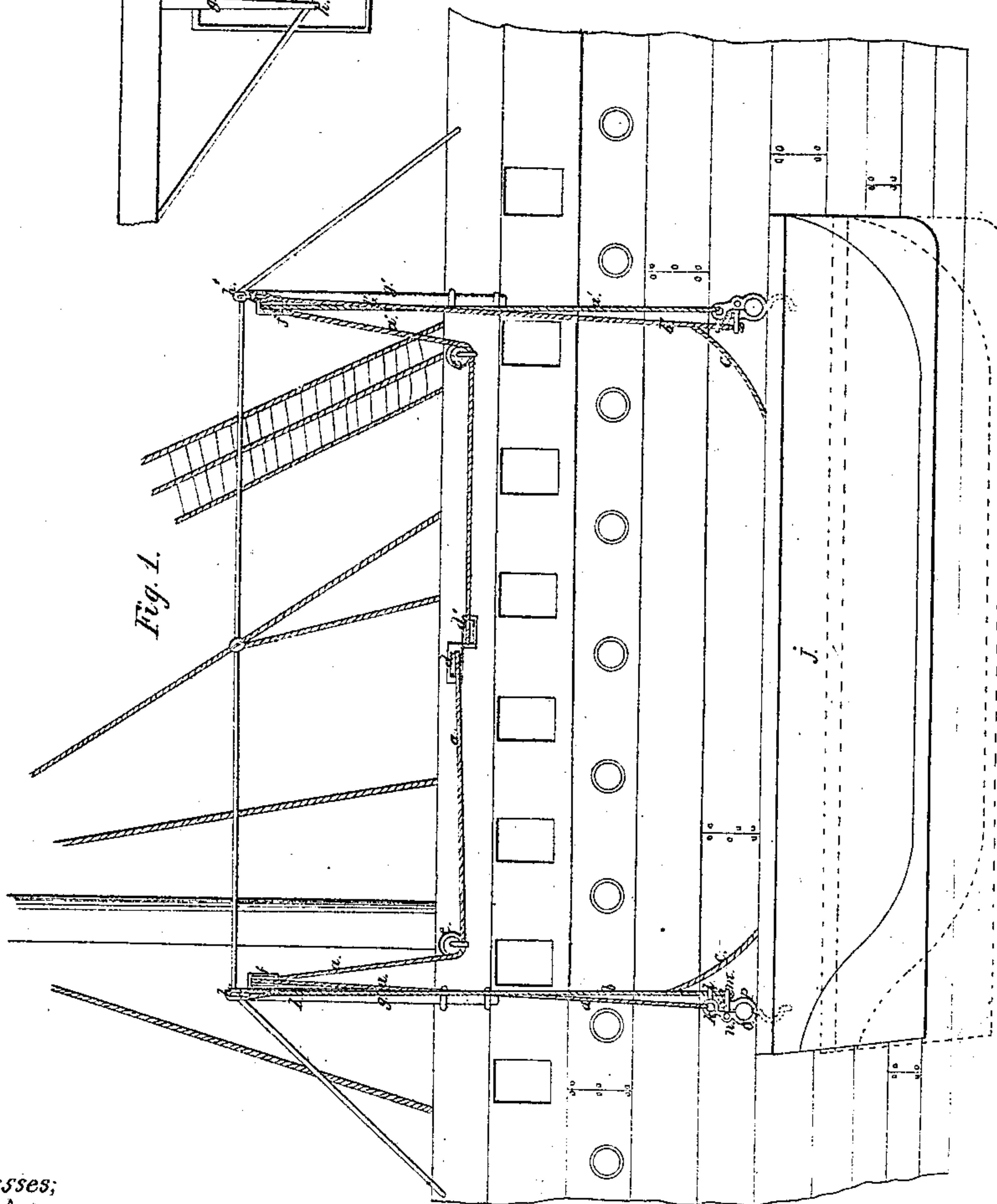
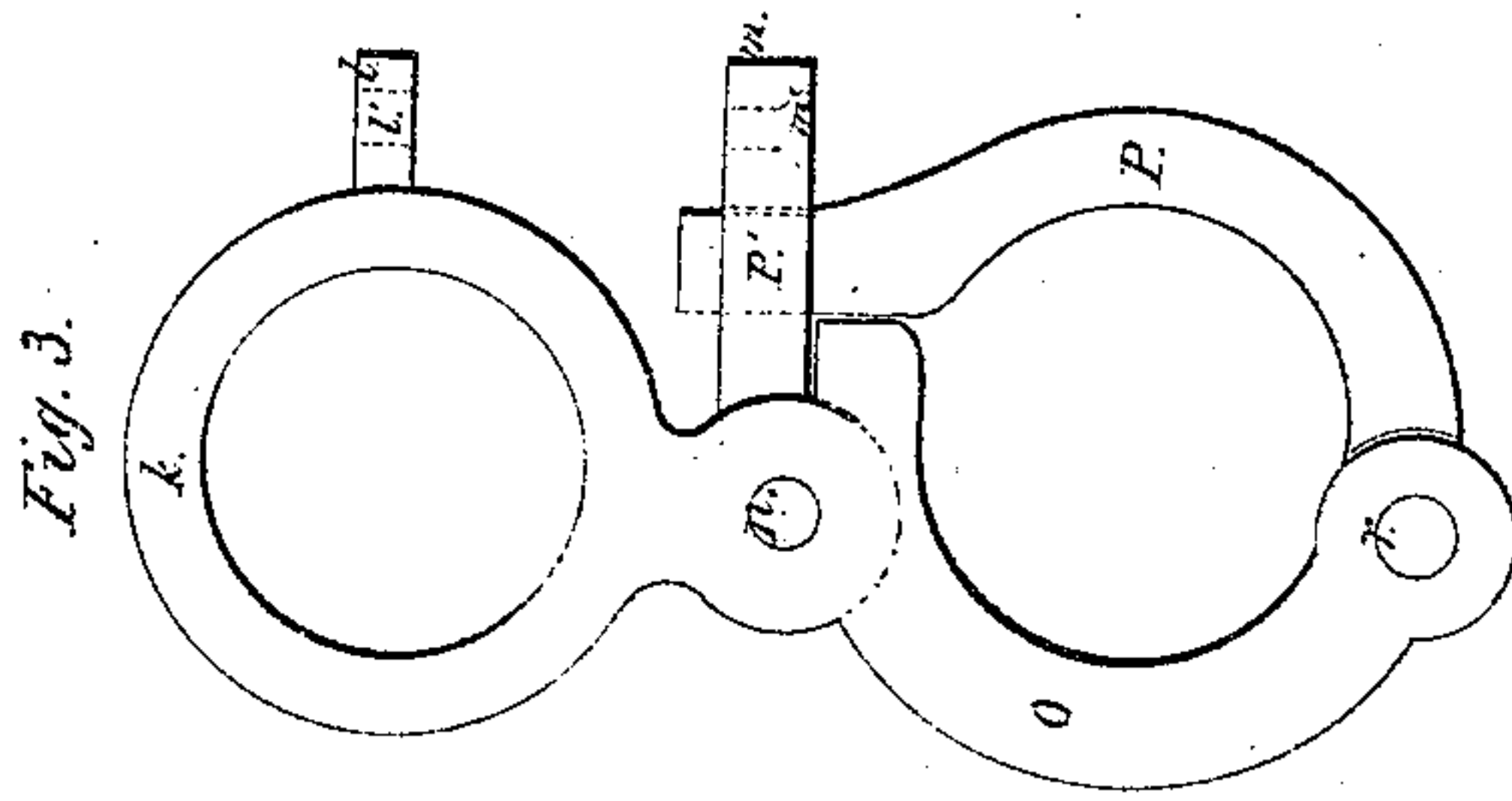
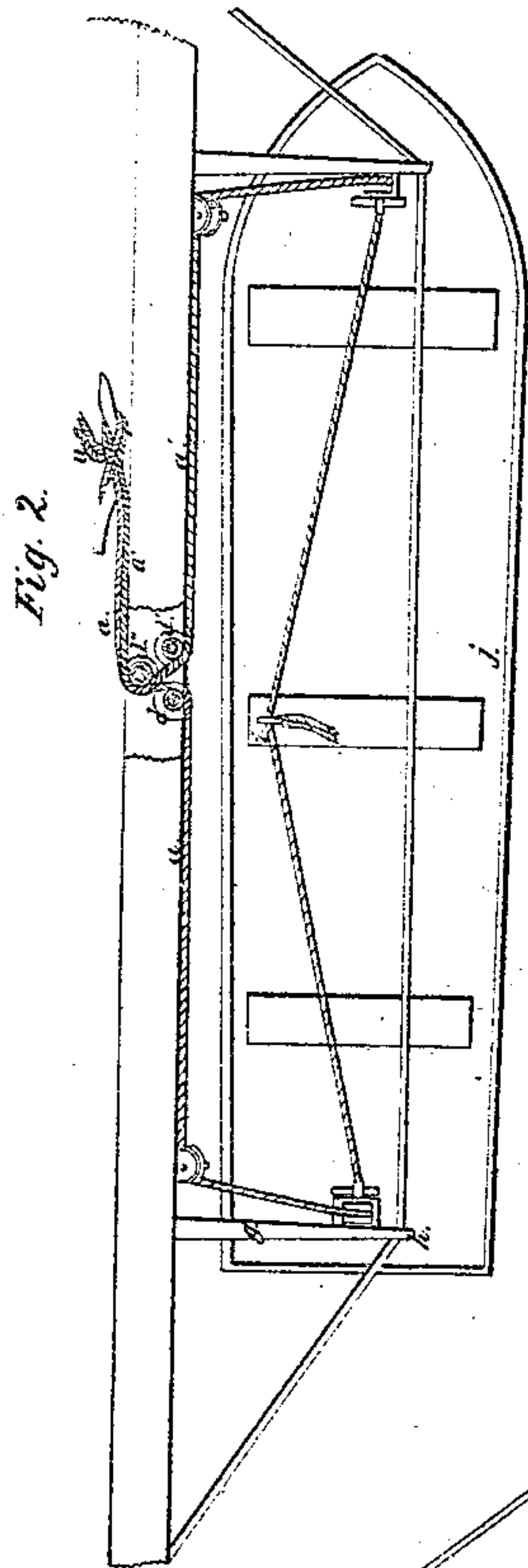


*J.A. Davis.
Boat Detaching.*

Nº 29,064.

Patented July 10, 1860.



*Witnesses;
Benjamin S. Allen
J. F. Outen*

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UNITED STATES PATENT OFFICE.

JAMES A. DAVIS, OF PORTSMOUTH, VIRGINIA.

LOWERING AND DETACHING SHIPS' BOATS.

Specification of Letters Patent No. 29,064, dated July 10, 1860.

To all whom it may concern:

Be it known that I, JAMES A. DAVIS, of Portsmouth, in the county of Norfolk and State of Virginia, have invented a new and useful device for Lowering and Detaching Boats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents a side view, and Fig. 2, a plan of the apparatus. Fig. 3, is a detached view of one of the hooks forming part of the apparatus.

Similar letters of reference, in each of the several figures indicate corresponding parts.

The nature of my invention consists, 1st, in constructing a trip hook for attaching boats to, of three parts, to wit, a hinge, a catch and a ring, when the said parts are combined and arranged in relation to each other in the manner hereinafter described.

It consists, 2nd, in the relative arrangement of suspension ropes, trip ropes, pulleys and trip hooks.

The object of this invention is to suspend a boat in such a manner that on being lowered and striking the water, it may either detach itself automatically or be detached by hand if such should be preferable.

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

The boat *j*, is provided with two rings (one at the stern and the other at the bow) with which it is hung to two trip hooks at the outer ends of two suspension ropes *a, a'*.

The construction of the two trip hooks being exactly alike, it will be sufficient to describe one of them. The upper part of the trip hook is formed into a ring *k*, with a bent shank *o*. The hinge *p*, is pivoted to the lower end of the shank, at *r*.

The upper end of the hinge *p*, is held in the hole *p'*, of a catch *m*, which is pivoted to the shank *o*, at *n*. On lifting the catch *m*, above the upper end of hinge *p*, the hinge is free to swing around its pivot *r*, so as to allow the boat rings to slip off. A little bracket *l*, extends from the ring *k*, with a hole *l'*, through it. A similar hole *m'*, is made through the outer end of catch *m*.

The hooks being constructed as described,

the weight of the boat is prevented from resting on the catches, as is the case in the ring bolt patented by Bigelow & Camp Oct. 7, 1856. The catches have only to sustain the lateral pressure of the hinged portions *p*, of the trip hooks.

The outer ends of the suspension ropes *a, a'*, are attached to the rings *k*, of the trip hooks. Said ropes *a, a'*, pass over the pulleys *f, f'*, near the outer ends of the davits *g, g*, over guide pulleys *e, d, e', d'*, and over another guide pulley *d''*. By employing this additional pulley *d''* (of sufficient height to allow the two ropes to pass one above the other) the ends of the ropes can be fastened to one pin *u*, and be worked simultaneously without interfering with each other.

Trip ropes *b, b'*, are hung to the outer ends *h, h'*, of the davits, by means of loops at the upper ends of said trip ropes. The lower end of each of these ropes passes through the hole *l*, in the bracket *l*, and is fastened in the hole *m'*, of catch *m*. The length of these ropes is somewhat less than the vertical distance between the ends of the davits and the boat when the latter is in the water at the full depth of its draft. By this means, the boat when lowered far enough to right itself in the water, will detach itself from the trip hooks in the following manner.

When the boat has been lowered far enough to run out the whole length of the trip ropes, the trip ropes will keep the outer ends of the catches *m*, suspended while the boat descends still a little farther. The catch will thus be lifted above the upper end of hinge *p*, when the latter will become detached from the hole *p'*, and the boat rings will slip from the hooks. During rough weather, however, it will often be desirable to detach the boat when at the top of a wave and not yet at such a depth below the points of suspension, that the trip ropes could operate the catches. To effect this object, ropes *c, c'*, are fastened to the trip ropes near their lower ends, as seen in Fig. 1. The ends of these ropes are passed through a ring *i*, (see Figs. 1 2) so that a person in the boat may take hold of both ends and pull them at any time, by which means, the catches *m*, will be lifted and the boat be detached from the hooks.

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

1. Constructing a trip hook for attaching boats to, of three parts, to wit; a hinge, a catch and a ring, when the said parts are
5 combined and arranged in relation to each other in the manner and for the purposes herein described.

2. The relative arrangement of suspension ropes *a, a'*, trip-ropes *b, b'*, and *c, c'*, pulleys 10 *d, d', d''*, and trip hooks *k, l, m, o, p*, substantially as and for the purposes set forth.

JAS. A. DAVIS.

Witnesses:

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