No. 876,148. PATENTED JAN. 7, 1908.

G. K. CLOUD.

NET CASTING APPARATUS.

APPLICATION FILED AUG. 5, 1907.

2 SHEETS—SHEET 1.

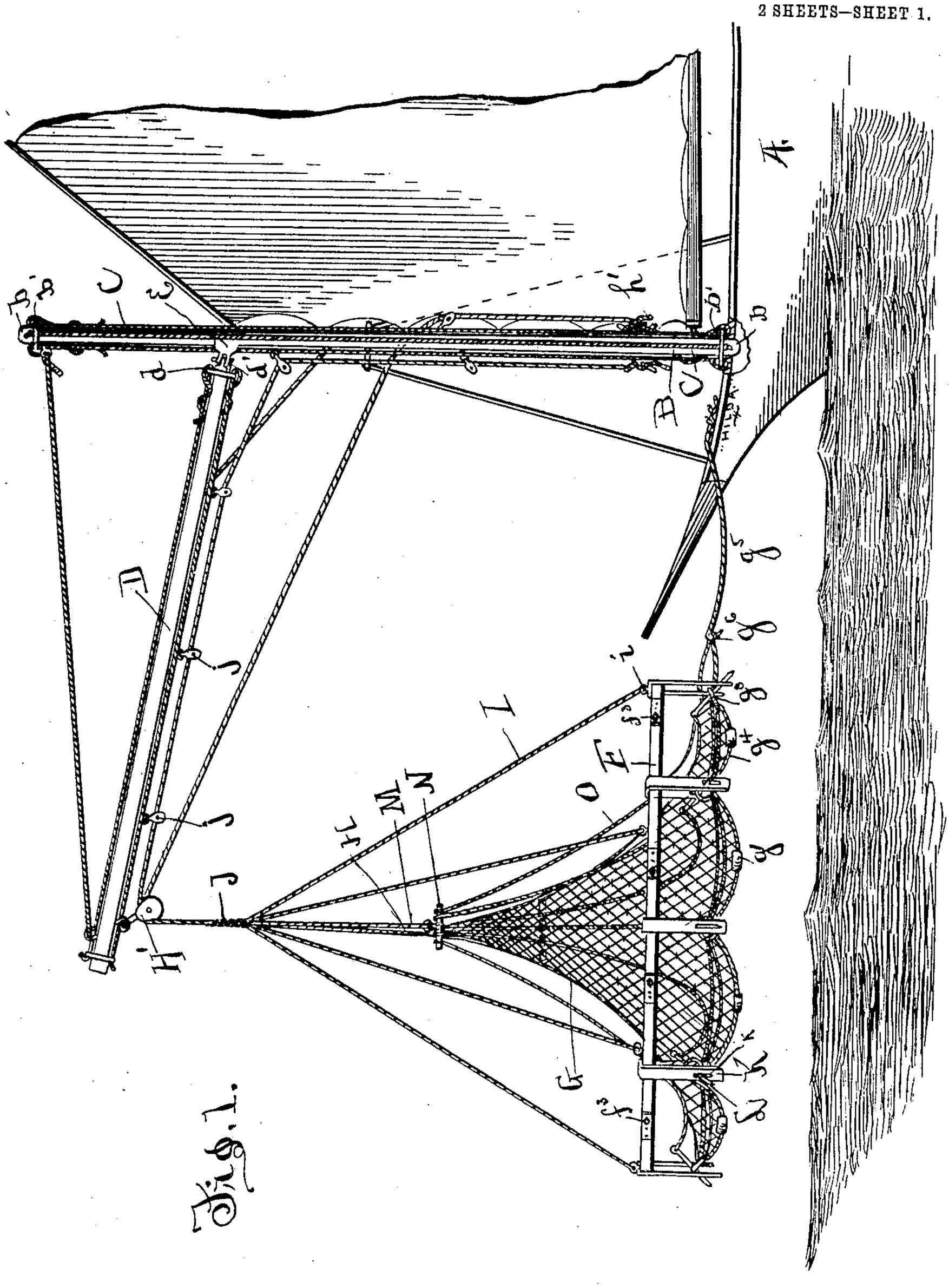

Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

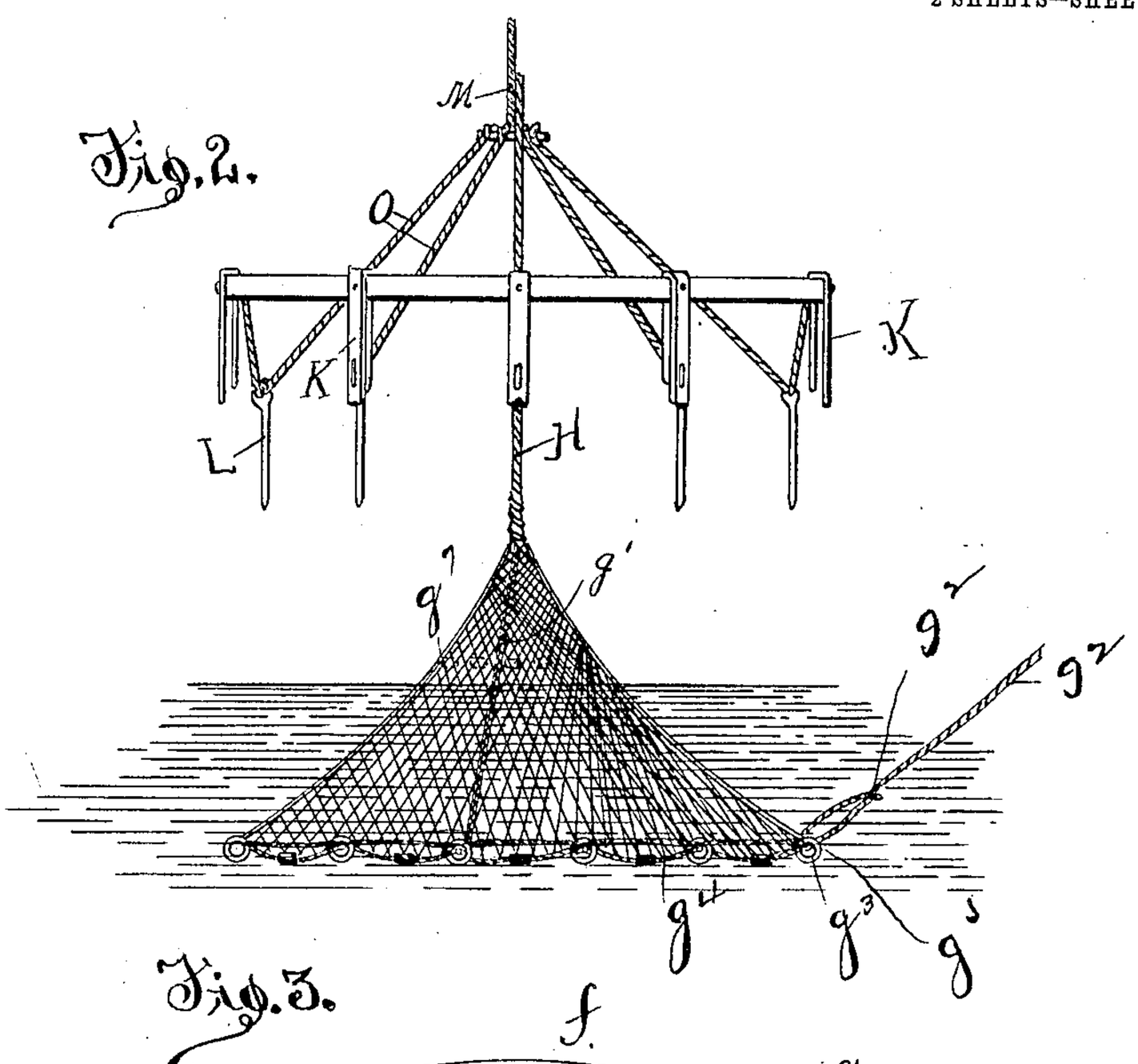


Fig. 3.

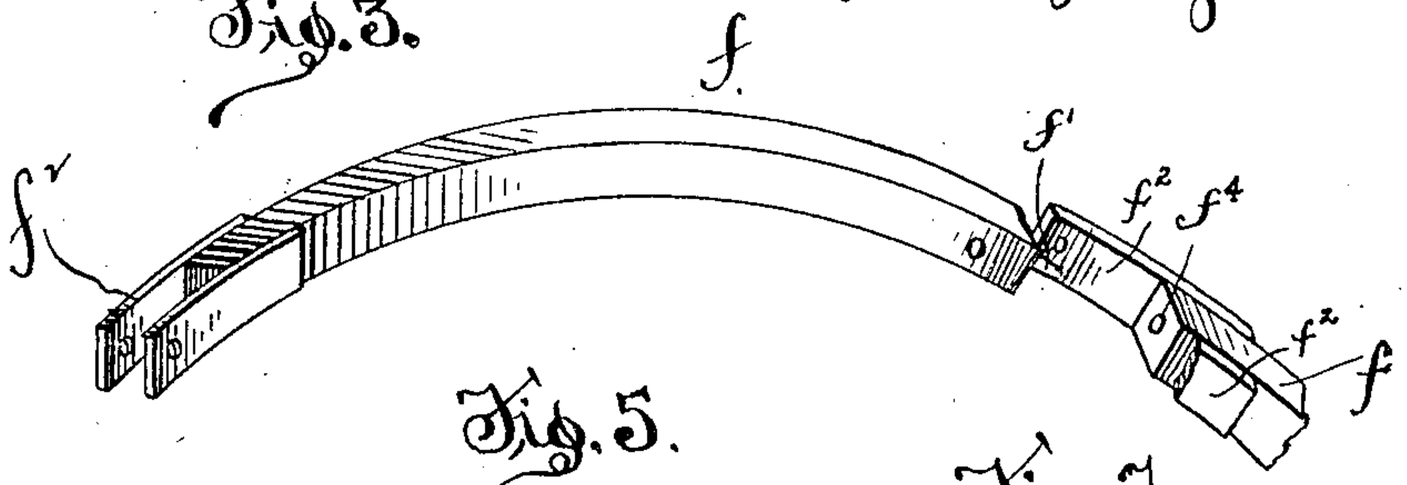


Fig. 4.

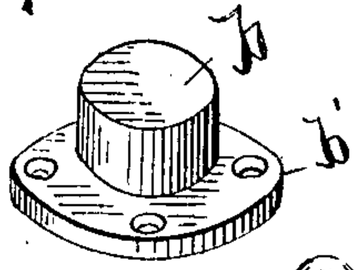


Fig. 5.

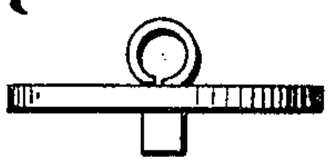


Fig. 6.

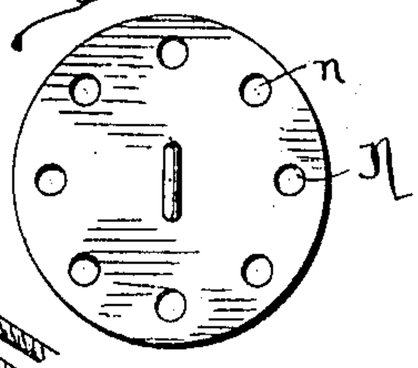


Fig. 7.

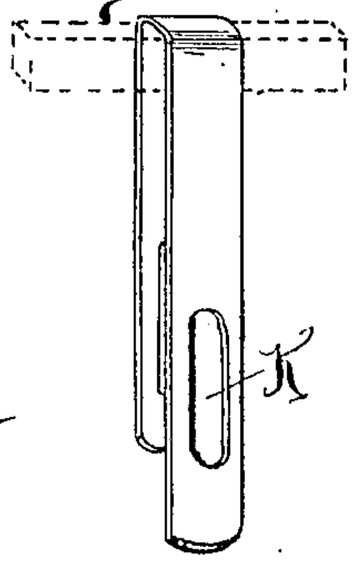
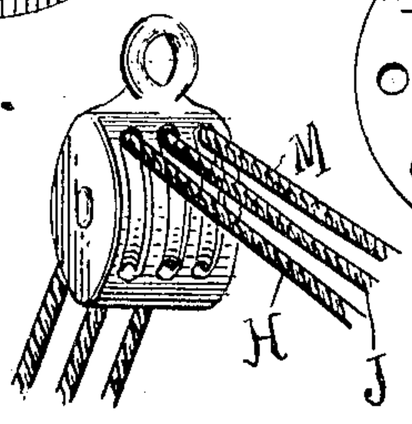


Fig. 8.



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UNITED STATES PATENT OFFICE.

GEORGE K. CLOUD, OF MOBILE, ALABAMA.

NET-CASTING APPARATUS.

No. 876,148. Specification of Letters Patent. Patented Jan. 7, 1908.

Application filed August 5, 1907. Serial No. 387,114.

To all whom it may concern:

Be it known that I, GEORGE K. CLOUD, citizen of the United States of America, residing at Mobile, in the county of Mobile and State of Alabama, have invented certain new and useful Improvements in Net-Casting Apparatus, of which the following is a specification.

This invention relates to fish nets and particularly to nets commonly known as cast nets designed to be dropped over the fish and carried to the bottom by suitable weights.

An object of this invention is to provide means for supporting the net in operative position, novel means being provided for releasing the net to permit it to drop independent of its supporting means, the said supporting means retaining its position suspended from any suitable arm or mast of the boat.

A further object of this invention is to provide a net which may be opened from the top in order that the catch may be removed by hand when the weight of the catch is so great as to preclude the elevation of the net to the deck of the boat.

A still further object of this invention is to provide novel means for adjusting the height of the net support with relation to the surface of the water to permit the said support to lie close to the surface of the water under ordinary conditions, but to permit its elevation when rough water is encountered and the boat has considerable movement.

Finally, an object of this invention is to provide a device of the character noted which will possess advantages in points of simplicity, efficiency and durability, proving at the same time comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1, is a view in elevation of a fragment of a boat with the rigging for operating the net shown in elevation. Fig. 2, is a detail view of the net support and net; the said net being released. Fig. 3, is a perspective view of a section of the net supporting frame. Fig. 4, is a perspective view of a cap to be used on the ends of the mast or arm. Figs. 5 and 6 are detail views of an apertured plate to which the tripping cords are connected. Fig. 7, is a perspective view of a portion of the net support. Fig. 8, is a view in perspective of a detail of the invention.

In these drawings A, denotes the boat which of course may be of any size or construction and B, a mast thereon having caps b, at the top and bottom, said caps having flanges b', apertured to receive the braces C, which may be in the form of rods, wire, or rope, though the metallic connection will be found preferable. The arm D, has a cap d, provided with an apertured ear d', which is pivoted to the collar E, on the mast B, the said collar being of any ordinary construction now commonly employed.

The net supporting frame F, is made in sections f, similar to the section shown in Fig. 3, one end of each section having a dowel f', adapted to fit in an aperture f^4 of the next succeeding section, and the opposite end of each section carries metal straps f^2, adapted to overlie a section applied to that end. Bolts f^3, enter apertures in the strap and the section of the frame which the straps engage. By reason of the provision of this adjustable frame, the said frame may be made to support nets of different sizes, running from six feet to two hundred feet in diameter at the open end and this variation in size has been found to fulfil the requirements ordinarily encountered for manipulating nets of this class.

The net G, has a series of weights g, at its open end, the said weights varying in size and number to suit the requirements. The said net is preferably conical and is formed of a long net having its ends secured by a lacing g', run through the meshes at the ends of the net for the purpose as stated of retaining the net as shown in Fig. 2. The mouth of the net has a draw rope g^2 run through rings g^3, which are secured on the binding cord g^4, to which the weights g, are secured. The draw rope is applied to the net and is looped therearound in opposite directions; sections thereof lying parallel nearly the entire circumference of the net and forming a circular loop which is drawn smaller as the ends g^5, g^6, which extend to the deck of the boat are pulled by an operator and such manipulation of the ends of the rope is continued until the

mouth of the net is closed and this action confines the catch in a bag-like net. The apex of the net is provided with a flexible support H, which runs over the triple block H′, supported by the arm D, which support H, may be adjusted to hold the net in the position shown in Fig. 1.

In order to provide for the descent of the central portion of the net as rapidly as the mouth thereof is carried through the water, I provide the said net with a series of weights g^7, near the top thereof and these weights may be varied to suit the size of the net and the mesh; it being desirable to cause the central portion to descend rather rapidly in order that there will be no tendency of the weights at the mouth of the net to approach one another. Such action might restrict the area of the mouth of the net and this would prove undesirable.

When the net is released from its support, it is necessary to provide for its free descent independent of the frame and to that end the support H, is released from its anchorage h', shown in the form of a cleat attached to the mast. When, therefore, the net is released from the supporting frame, the flexible support H, is free to run through the block until the net reaches the bottom. Then, by a pull on the draw rope, the mouth of the net is closed and is held closed until the net is recovered and placed on board the vessel.

The supporting frame F, is suspended by a series of ropes I, or like devices diverging from a main cable J, which is run over the block H′, and a series of blocks j, to the deck of the boat. The members I, are multiplied according to the number of sections forming the frame.

Hangers K, consisting of strips of metal looped about the sections of the frame have slots k, to receive pins L. The rings g^3, are inserted between the parallel sections of the hanger and the pins L, are inserted through the slots k, and through the ring g^3, applied to the hanger and it is desirable that one hanger be provided for each ring of the net, thus causing the suspension of the net in the manner shown in Fig. 1. All of the pins are simultaneously removed from the hangers by the manipulation of a cable M, extending to the deck of the boat, and said cable has a head N, on its end provided with a series of apertures n, to which the ropes O, are fastened, each of said ropes O, carrying one of the pins L, as shown in Fig. 2. With an upward movement of the head N, the ropes O, are drawn until the pins are removed from the hangers and the rings are released permitting the net to descend.

While I have employed the terms "rope" and "cable" in connection with several elements of this device, it is to be understood that any flexible strand or connection may be employed such as a wire or chains, in addition to ordinary rope or cable.

What I claim is:

1. In a net casting apparatus, a conical net, weights in the lower portion of the net, weights near the top of the net, rings connected to the net, a supporting device consisting of a suspended frame, and means thereon for engaging the rings, and means whereby the rings may be released.

2. In a net casting apparatus, a mast, an arm thereon, a block on the arm, cables run thereover, a net support suspended from one cable, a net suspended from a second cable, means for detachably connecting the net to the support, and means operated by a third cable for effecting a detachment of the net and its support.

3. In a net casting apparatus, a mast, an arm thereon, a block on the arm, cables run thereover, a net support suspended from one cable, a net suspended from the support, means for detachably connecting the net to the support, and a head having a series of connections with the means for connecting the net, and a second cable to which the head is connected.

4. In a net casting apparatus, a swinging arm, a block thereon, cables run on the block, a conical net secured to one of the cables, said net consisting of a length of netting having its ends secured by a lacing run through the meshes of the net, a net supporting frame on a second cable, hangers on the supporting frame, rings in the net applied to the hangers, pins extending through the rings and hangers, a head under the control of a third cable, means for connecting the head and pins, whereby movement of the head is communicated to the pins to withdraw the same from the hangers and rings.

5. In a net casting apparatus, a swinging arm, a block thereon, cables run on the block, a conical net secured to one of the cables, said net consisting of a length of netting having its ends secured by a lacing run through the meshes of the net, a net supporting frame formed in sections on a second cable, hangers on the supporting frame consisting of strips of metal embracing the sections of the frame, the depending portions of the hangers lying parallel and having conducting slots, and means for suspending the net from the hangers

6. In a net casting apparatus, a swinging arm, a block thereon, cables run on the block, a conical net secured to one of the cables, a net supporting frame on the second cable, hangers on the supporting frame, rings in the net applied to the hangers, pins extending through the rings and hangers, a head under the control of a short cable, means for connecting the head and pins

whereby movement of the head is communicated to the pins to withdraw the same from the hangers and rings.

7. In a net casting apparatus, a swinging arm, a block thereon, cables run on the block, a conical net secured to one of the cables, a net supporting frame formed in sections on a second cable, hangers on the supporting frame consisting of strips of metal embracing the sections of the frame, the depending portions of the hangers lying parallel and having conducting slots and means for suspending a net from the hangers.

8. In a net casting apparatus, an adjustable frame comprising a series of sections joined together, means for supporting the frame, hangers on the sections, net supporting devices engaging the hangers and means whereby the net supporting devices may be removed from the hanger.

In testimony whereof I affix my signature in the presence of two witnesses this 1st day of August, 1907.

GEORGE K. CLOUD.

Witnesses:
EDW. WORCESTER,
P. WILLIAMS.