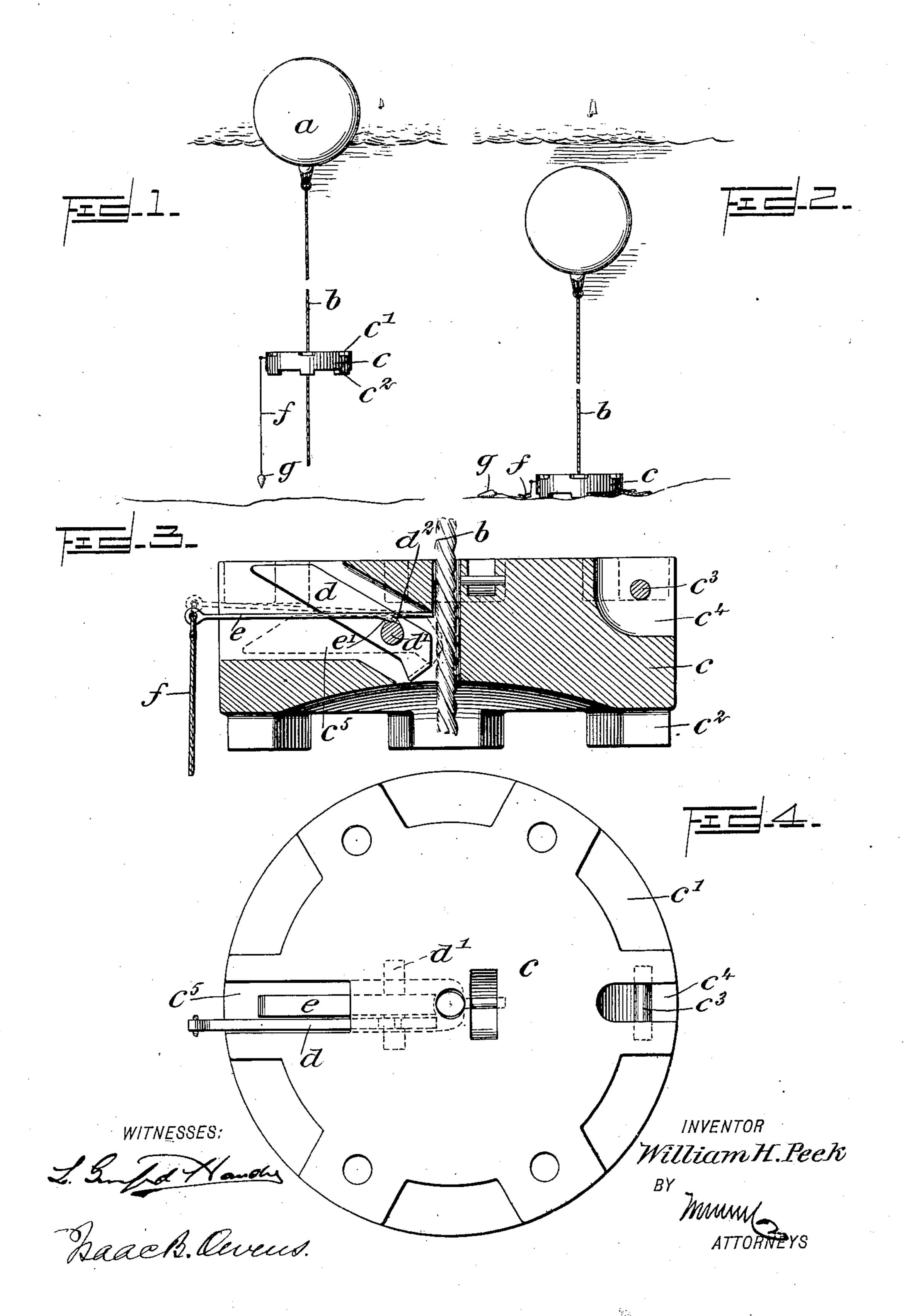
W. H. PEEK.

MOORING.

APPLICATION FILED SEPT. 19, 1905.



## UNITED STATES PATENT OFFICE.

## WILLIAM H. PEEK, OF THE UNITED STATES ARMY.

## MOORING.

No. 825,755.

Specification of Letters Patent.

Fatented July 10, 1906.

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To all whom it may concern:

Be it known that I, William H. Peek, of the United States Army, a citizen of the United States, have invented a new and Improved Mooring, of which the following is a full, clear, and exact description.

The invention relates to a mooring intended especially for use with submarine mines. Such mines are usually anchored to float a fixed distance below the surface of the water, and heretofore considerable difficulty has been experienced in mooring the mines at the proper or desired position.

The object of my invention is to overcome this disadvantage, and such end I attain by arranging the anchor to slide on the cable until the anchor reaches a point above the bottom equal to the distance below the surface that it is desired to float the mine. This distance is determined by a finder weight and line which automatically throws into action a clutch, causing the anchor to be fixed to the cable, whereupon the anchor in moving into the bottom draws down the mine to the desired depth.

My invention resides in certain special features of structure and arrangement which will be fully set forth hereinafter, and particularly pointed out in the claims.

• Reference is to be had to the accompanying drawings, which illustrate the preferred manner of putting my invention into practice, in which drawings—

Figure 1 is a view showing the mine and mooring just before the action of the fender. Fig. 2 is a view showing the mine moored. Fig. 3 is an enlarged section of the anchor, and Fig. 4 is a plan view of the same.

a indicates the mine, to which the steel or other cable b is attached in the usual manner. On this cable is arranged the anchor c, which has a central opening loosely receiving the cable. The anchor is preferably disk-shaped and has cavities c' in its top and lugs c² in its bottom to allow resting the anchor on the deck of a vessel or otherwise. c³ indicates a bail to which a tackle may be fastened for handling the anchor, which bail spans a cavity c⁴ in the top of the anchor.

5° In the anchor is formed a cavity  $c^5$ , which communicates with the opening receiving the cable b and which contains the dog d. The dog is mounted to swing with its shaft d' into either the position shown by full lines or that shown by broken lines in Fig. 3, in which former position it is clear of the cable

b and in which latter position it is engaged with the cable fixing the anchor to the same. The dog d is releasably held in the inactive position (shown by full lines in Fig. 3) by a 60 spring-tongue e, having a shoulder e' thereon engaging a projection on the shaft d'. To said tongue the finder-line f is joined, and to the end of this line is secured the finder-weight g, as shown.

In the use of the invention the finder-line f is made of a length equal to the distance below the surface of the water at which the mine is to float, and the cable b is made of ample length without necessitating any 70 special measure either of the cable or of the depth of the water into which the mine is to be anchored. The parts are then adjusted, as shown by full lines in Fig. 3, with the anchor at the upper part of the cable at or near 75 the surface of the water and the finder-weight depending on its line below the anchor. The anchor should then be let go, whereupon it will run down freely on the cable until the finder-weight strikes bottom. At this time 80 tension on the line f will be relaxed and the tongue e will then be free to spring upward to the position shown by dotted lines in Fig. 3. This releases the dog d and allows it to grip the cable, thus fastening the anchor 85 to the cable, at which time the cable and mine move down with the anchor until the parts come to rest in the position shown in Fig. 2.

The length of the line f may be adjusted 90 at will to regulate the depth at which the mine is to lie, and this, it will be seen, is the only adjustment required. The invention entirely avoids the necessity heretofore existing of sounding and cutting the cable b 95 to the exact length required and enables the mines to be accurately and easily placed in position.

Having thus described my invention, I claim as new and desire to secure by Letters .100 Patent—

1. A mooring having an anchor adapted to run on the cable, a dog on the anchor adapted to engage the cable, a device adapted to hold the dog out of action, and a finder 105 attached to said device to control the same and depending below the weight.

2. A mooring having an anchor adapted to run on the cable, a dog on the anchor adapted to engage the cable, a device adapted to hold the dog out of action, a finder attached to said device to control the same

and depending below the anchor, said finder comprising a weight, and a flexible connection between the weight and said device.

3. A mooring comprising an anchor adaptof ed to run on the cable, a dog attached to the anchor and adapted to engage the cable, a tongue capable of holding the dog in inactive position, a finder-weight, and a flexible connection between the weight and said tongue whereby the weight normally holds

the tongue in active position.

4. The combination of a submarine mine, a cable attached thereto, an anchor having an opening clear through it from top to bottom through which opening the cable passes loosely to allow the anchor to move freely on the cable, a means on the anchor to engage the cable and lock the anchor on the cable and a finder in connection with said means

and hanging below the anchor to control the 20 action of said means.

5. The combination of a submarine mine, a cable attached thereto and adapted to extend downward from the same, an anchor arranged to run on the upper part of the 25 cable, the lower end of the cable projecting below the anchor, a means on the anchor to attach the anchor to the cable, and a finder connected with said means to control the same.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

WILLIAM H. PEEK.

Witnesses:

Isaac B. Owens, Everard B. Marshall.