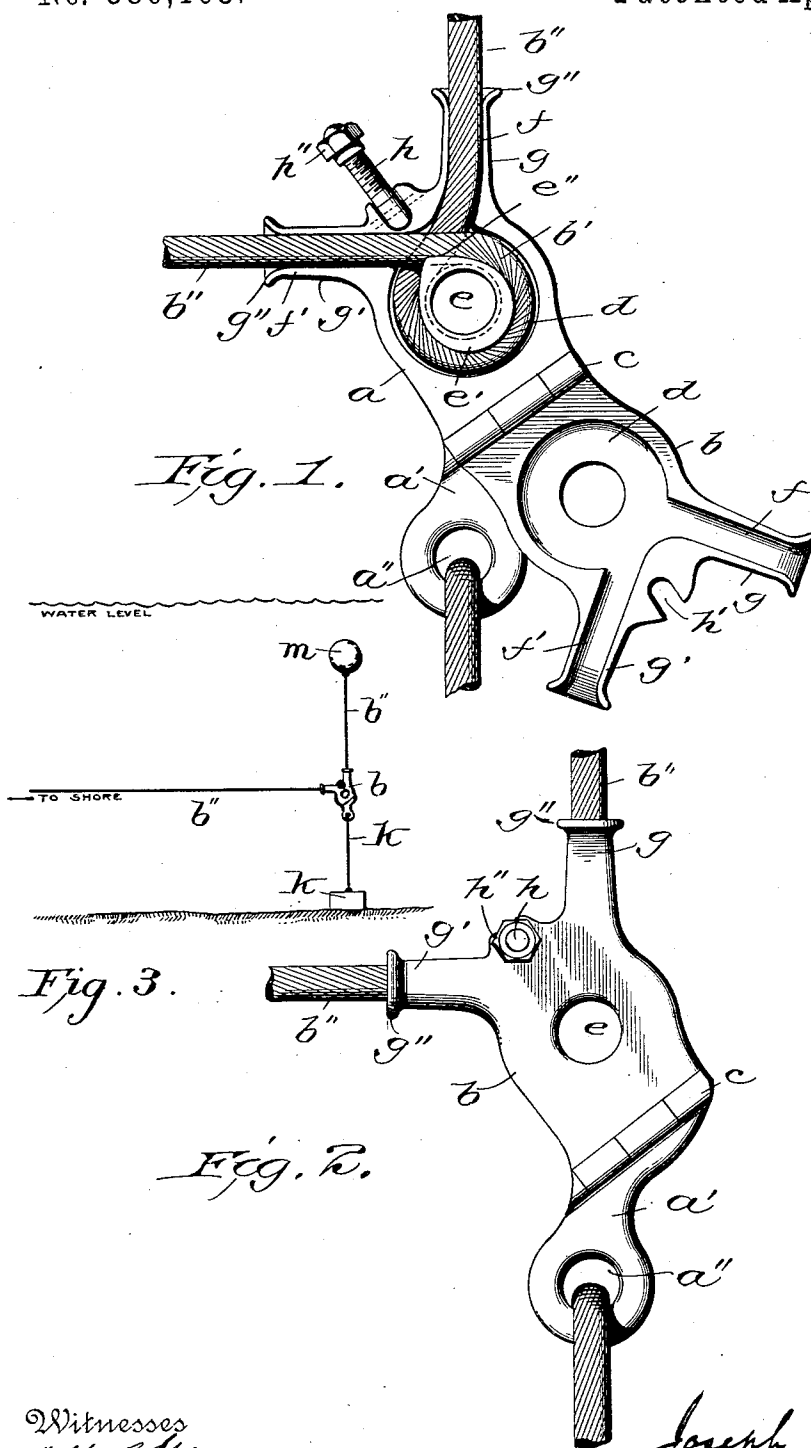


(No Model.)

J. STEPHENS.
CABLE ATTACHING DEVICE.

No. 580,165.

Patented Apr. 6, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH STEPHENS, OF FOREST CITY, PENNSYLVANIA.

CABLE-ATTACHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 580,165, dated April 6, 1897.

Application filed November 13, 1896. Serial No. 612,017. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH STEPHENS, a citizen of the United States, residing at Forest City, in the county of Susquehanna and State of Pennsylvania, have invented certain new and useful Improvements in Cable-Attaching Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

15 This invention relates to an attaching device for submerged electric cables; and my object is to apply it to the cable of a torpedo or mine in such a manner that it will not slip thereon at the point of anchorage nor injure the cable when applied to the latter.

With this end in view my invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claims.

25 In the accompanying drawings, Figure 1 represents a side view of my complete device as when thrown open in position for attaching or detaching the cable. In the present instance the cable is shown attached. Fig. 2 is a similar view showing the device closed, and Fig. 3 a diagrammatic view showing how my device is used.

35 The device is composed principally of two substantially flat members *a* and *b*, hinged at *c* to open and close. Each member is, by preference, made of an integral piece of metal, preferably brass or galvanized iron, so that they will not corrode when immersed in water. On the inside of each member is 40 formed a concaved circular groove *d* of sufficient width and depth to hold a coil *b* of an electric cable *b'* when the hinged members are closed, as in Fig. 2. This groove encircles a round opening *e*, from the inner edges 45 of which projects a flange *e'*, adapted to overlap the sides of the loop of the cable when the former is coiled within the groove. The flange is widened into a point at *e''* to overlap the cable where it crosses itself in order to better hold it in place when the opposite member of the holder is thrown open. The cable extends away from the looped portion in di-

rections at right angles to each other through concaved grooves *f* and *f'*, through radial arms *g* and *g'*, the longitudinal axes of which 55 intersect each other at the circular groove. The outer ends *g''* of the arms are made flaring to prevent cutting or injury to the cable. One end of the cable extends to the shore and the other end is attached to a buoy and 60 torpedo *m*, adapted to lie below the surface of the water.

The members are locked together by means of a threaded bolt *h*, hinged to the edge of the member *a* between the arms *g* and *g'*. 65 This bolt swings into an open slot *h'* in the opposite section *b*, in which it is locked by means of a nut *h''*. The member *a* is provided with an integral extension *a'*, having a rope-hole *a''* disposed opposite and in line 70 with the arm *f*.

k represents an anchor-rope attached by passing through the rope-hole *a''* in the extension *a'*. At the lower end of this rope is the anchor *k'*. 75

Thus constructed it will be seen that when it is desired to extend one portion of the cable in a direction at right angles to the other and anchor it at the turning-point all that need be done is to form a single coil or loop 80 and place it in the groove *d*, as in Fig. 1, then close the hinged members *a* and *b*, and lock them together with the hinged bolt *h*. By this means the torpedo can be anchored at any desired depth and the holder will not slip 85 out of adjustment on the cable from the motion of the water.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— 90

1. In a cable-holder, a pair of members arranged to open and close, and grooved or hollowed out inside to receive and hold a coiled portion of the cable, in combination with means for locking the sections together, substantially as described. 95

2. In a cable-holder, a pair of internally-grooved members hinged to open and close, in combination with a threaded locking-bolt provided with a nut and hinged to the free 100 end of one member, and adapted to drop into an open slot in the opposite member, substantially as described.

3. In a cable-holder, the combination with

a pair of members provided with registering circular grooves adapted to receive a coil of the cable, arms in which the grooves are extended, and through which the cable is adapted to pass, and a locking device for securing the sections in closed adjustment, substantially as described.

In witness whereof I affix my signature in presence of two witnesses.

JOSEPH STEPHENS.

Witnesses:

EVAN O. EVANS,
J. G. WESCOTT.