

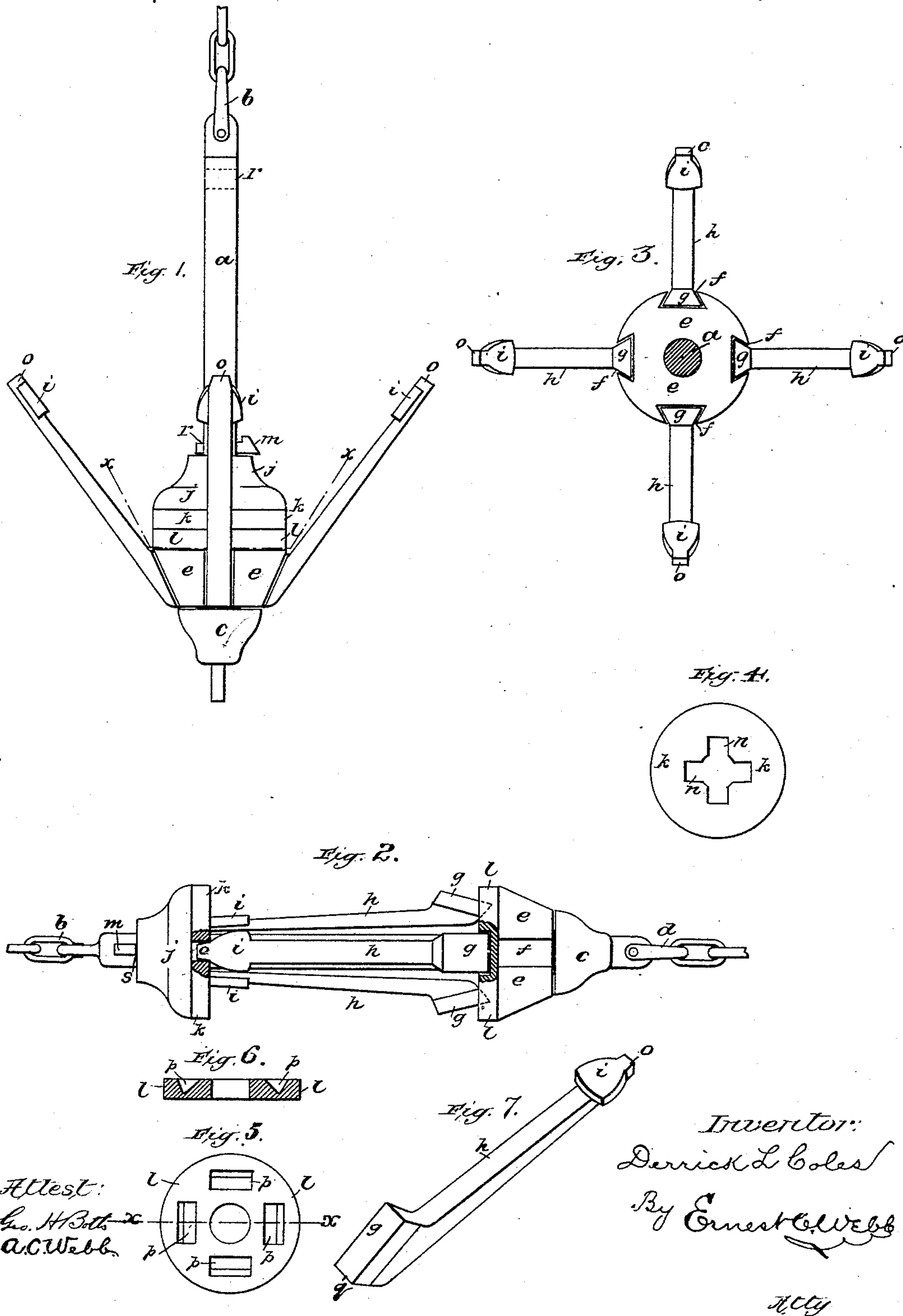
(No Model.)

D. L. COLES.

ANCHOR.

No. 327,767.

Patented Oct. 6, 1885.



UNITED STATES PATENT OFFICE.

DERRICK L. COLES, OF BROOKLYN, NEW YORK.

ANCHOR.

SPECIFICATION forming part of Letters Patent No. 327,767, dated October 6, 1885.

Application filed June 27, 1885. Serial No. 169 943. (No model.)

To all whom it may concern:

Be it known that I, DERRICK L. COLES, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Anchors, of which the following is a full, clear, and exact description.

The object of this invention is to produce an anchor in which the flukes and their arms can be locked in lines parallel with the shank, thus insuring the easy handling and stowing of the anchor when not in use, and its convenient transportation from place to place. A further object is to render the anchor capable of use as a ballast-box, adapted to be readily shifted from one part of a vessel to another, thus utilizing it where otherwise it would be a useless and inconvenient article.

To this end my invention consists in an anchor or comprising a shank, a series of adjustable arms and their flukes, and a series of cylinders or barrels movable on said shank, and so combined and arranged that the arms can be fixed and rigidly held at the proper angle to the shank to answer the purpose of an anchor, or may be removed from this position and fixed and rigidly held in lines parallel to the shank, all as hereinafter fully set forth and claimed.

In the accompanying drawings, in the several figures of which like parts are designated by similar letters of reference, Figure 1 is a side elevation of my invention ready for use as an anchor. Fig. 2 is a side view of the same ready to be packed or stowed away or used as a ballast-box. Fig. 3 is a top plan view of Fig. 1, the parts above the dotted line being omitted. Fig. 4 is a plan view of one of the cylindrical plates or barrels; Fig. 5, a similar view of another, and Fig. 6 a cross-section taken on the line *xx*, Fig. 5. Fig. 7 is a detail of one of the adjustable arms.

a designates the shank, and *b* the ring, which may be of the usual construction. This shank terminates at its lower end in a crown-piece, *c*, solid with the shank, and a ring, *d*, fast to a tongue or projection of said crown-piece.

e designates a cylinder or barrel having a central perforation to admit the shank and a series of grooves, *f*, to receive the enlargements *g* of the arms *h*. This cylinder *e* tapers from end to end, and the grooves *f* slant inwardly from the upper edge of the cylinder, thus serving,

when the ends *g* of the arms *h* are inserted in the grooves, to cant said arms so that the flukes *i* are at the requisite angle to the shank.

j, *k*, and *l*, respectively, designate adjustable cylinders, each having a central perforation to admit the shank, and *m* designates a key for locking the cylinders, as hereinafter described.

The cylinder *j* forms a cap-piece, and is preferably of about the same shape as the crown-piece *c*, to enhance the symmetrical appearance of the device. It also answers the useful purpose of a cap to prevent the dislodgment of the arms when in the position shown in Fig. 2, and of a weight to assist in holding the arms against displacement when in the position shown in Fig. 1.

The cylinder *k* is provided with a series of slots, *n*, to receive the points *o* of the arms *h*, and the cylinder *l* is provided with a series of slots, *p*, to receive the other ends, *q*, of said arms.

When the device is to be used as an anchor, the ends *q* of the arms *h* are inserted in the grooves *f* of the cylinder *e*, the enlargements *g* fitting tightly in said grooves. The cylinders *l*, *k* and cap-piece *j* are slid along the shank until they bear snugly one upon the other on top of the cylinder, and are held in this position by a key, *m*, driven tightly into a slot, *r*, in said shank.

When the device is to be used as a ballast-box, the key *m* is withdrawn, the cap-piece and cylinders *k*, *l* moved to the other end of the shank, and the arms *h* are withdrawn from the grooves *f*. The cylinder *l* is then slid back again along the shank until it bears against the cylinder *e*. The arms *h* are taken up one by one and placed in the position shown in Fig. 2, the points *o* fitting in the slots *n* and the ends *q* in the slots *p*, the parts being held in this position by the key *m*, which is now driven into the slot *s*.

This combination of anchor and ballast-box will be a great convenience to vessels of all kinds. When used as a ballast, the smooth cylindrical shape permits it to be shifted readily and quickly, as it can be rolled to the desired place without damaging the deck of the vessel.

As an anchor for yachts, small boats, canoes, decoy ducks, and similar purposes, my device will be very useful, as it will answer every

purpose of an anchor or grapnel, with the additional advantage that it can be packed closely for transportation or storage.

5 In the drawings I have shown my device provided with four arms and flukes; but it is obvious that a less or greater number may be employed, if desired.

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

10 1. An anchor comprising a shank, *a*, and a cylinder, *e*, provided with grooves, and the notched cylinders *k l*, combined with the arms *h*, having the enlarged portions *g* to fit in the grooves in the cylinder *e*, so as to project out-
15 wardly in position for use, and adapted to be withdrawn from said grooves and secured between the cylinders *k l* in position for disuse, substantially as described.

2. An anchor comprising a shank, *a*, crown-

piece *c*, and cylinder *e*, having grooves *f*, com- 20
bined with arms *h*, having enlarged portions *g*, and flukes *i*, and a cap-piece, *j*, and means for holding said cap-piece rigidly against said cylinder, as herein shown and described.

3. The combination, in an anchor, of a shank, 25
a, crown-piece *c*, grooved cylinder *e*, and arms *h*, having enlarged portions *g*, and flukes *i*, with the cap-piece *j*, and slotted cylinders *k l*, movable on said shank, and means for locking
said cap-piece and cylinders in position, sub- 30
stantially as specified, for the purposes described.

In testimony whereof I have hereunto set my hand this 4th day of May, A. D. 1885.

DERRICK L. COLES.

Witnesses:

JULIUS E. REIMANN,
ARTHUR C. WEBB.