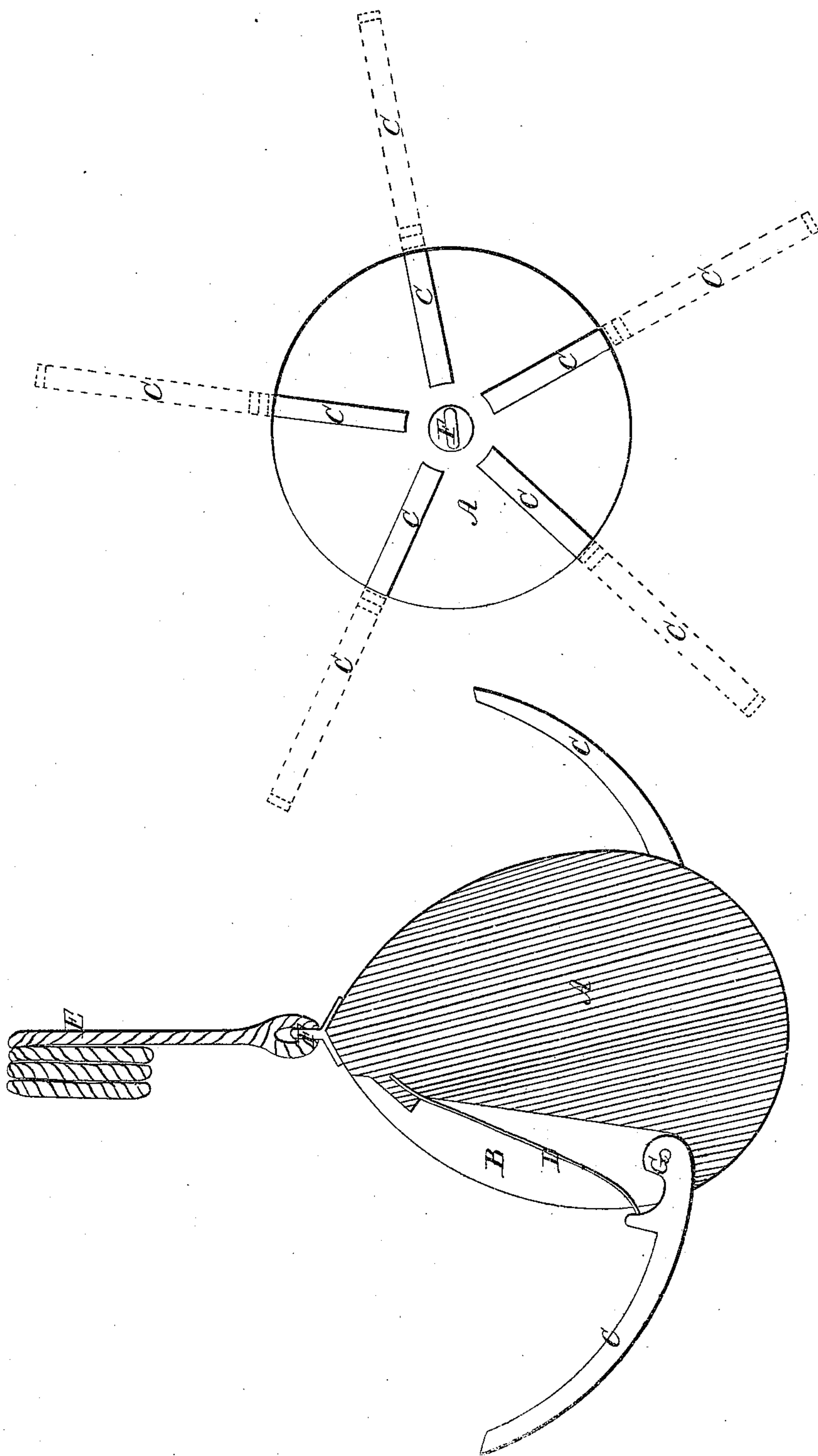


H. W. Harkness.

Anchor.

No. 21, 248.

Patented Aug. 24, 1858.



UNITED STATES PATENT OFFICE.

H. W. HARKNESS, OF BRISTOL, CONNECTICUT, ASSIGNOR TO HIMSELF, AND J. W. BLISS,
OF HARTFORD, CONNECTICUT.

ANCHOR-BALL.

Specification of Letters Patent No. 21,298, dated August 24, 1858.

To all whom it may concern:

Be it known that I, H. W. HARKNESS, of Bristol, county of Hartford, and State of Connecticut, have invented certain new and
5 useful Improvements in Anchor-Balls; and I do hereby declare that the same is described and represented in the following specification and drawings, and to enable others skilled in the art to make and use my inven-
10 tion I will proceed to describe the construction and operation of the same, referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this improvement consists
15 in constructing a ball with flukes and having a line attached to a staple in one end in such a manner, that as it is placed into the muzzle of gun the flukes will be compressed into the grooves—flush with the outer sur-
20 face of the ball, and be thrown from a wreck and afford means of escape to persons on board.

In the accompanying drawings A is the ball; B, the groove; C, the flukes; D, the
25 springs; E, the cord or line.

F is the staple to which the cord or line is attached.

The balls may be made of any desirable
30 size. The flukes are secured into the grooves at the base of the ball by means of bolts or rivets G and having a projection on the inside for the spring D, to bear against. The

staple is secured at the outer end of the ball. One end of the spring D is secured in the upper end of the groove by screws or rivets and
35 the opposite end bears against the projection on the flukes. The cord or line E attached to the staple F is designed to be something more than of sufficient length to reach the
40 distance it is to be thrown.

The mode of using this instrument must be at once apparent.

The advantage derived from this improvement over any other device now in use will readily suggest itself to the mind. Un-
45 questionably had this been known and used in many instances great numbers of lives would have been saved, and greater security afforded to life and property, and what-
50 ever conduces to the security of life and property to those who follow maritime pursuits can but be regarded as useful and of great importance.

What I claim therefore and desire to se-
55 cure by Letters Patent is—

A new article of manufacture, an anchor ball A with flukes C, springs D, grooves B, staple F, substantially in the manner and for the purpose as described.

H. W. HARKNESS. [L. s.]

Witnesses:

S. I. WILDER,
ROSETTA BLISS.