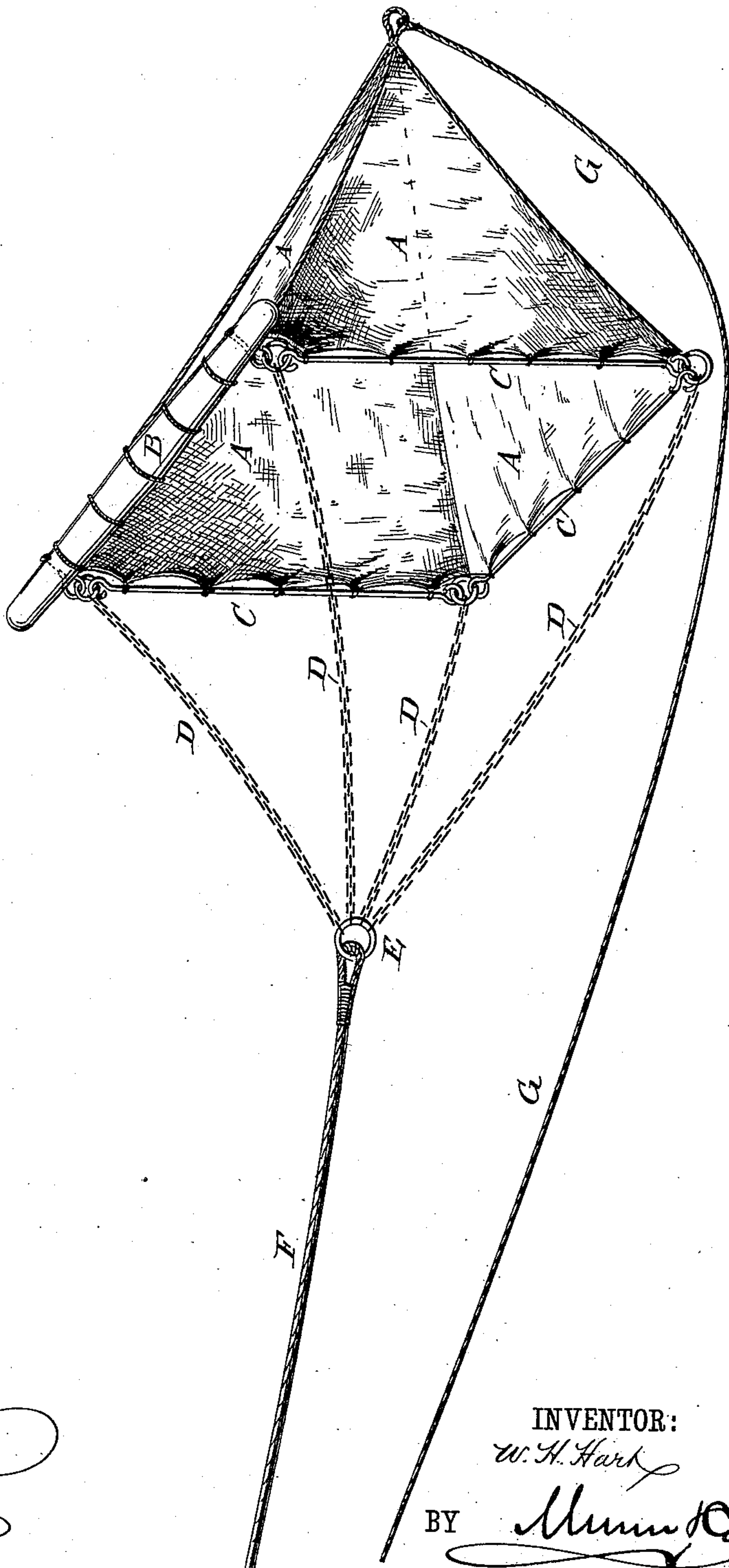


(No Model.)

W. H. HART.
MARINE DRAG.

No. 332,898.

Patented Dec. 22, 1885.



WITNESSES:

Chas. Nida
L. Sedgwick

INVENTOR:

W. H. Hart

BY

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM H. HART, OF NEW YORK, N. Y.

MARINE DRAG.

SPECIFICATION forming part of Letters Patent No. 332,898, dated December 22, 1885.

Application filed April 17, 1883. Renewed May 21, 1885. Serial No. 166,278. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HART, of the city, county, and State of New York, have invented a new and useful Improvement in Marine Drags, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawing, forming a part of this specification, and which is a perspective view of my improvement.

The object of this invention is to provide convenient and reliable means for holding a vessel to the wind when lying to.

The invention relates to a marine drag constructed with a pyramidal body having a spar attached to one side of its mouth and jointed metal rods attached to the other sides of its mouth. To the corners of the mouth of the drag are attached ropes or chains, to which is attached the hawser for connecting the drag with the vessel. To the apex of the drag is attached a trip-line extending along the hawser to the vessel for convenience in taking in the drag, as will be hereinafter fully described.

A represents the body of the drag, which is made of strong canvas or other suitable material, and in the form of a hollow pyramid. The drag A is strengthened at its corner seams by ropes, and to one side of its mouth is lashed a spar, B, of sufficient buoyancy to keep that side of the drag upward. To the side and lower edges of the mouth of the drag are secured iron rods C, which are jointed to each other and to the spar B at the corners of the drag by eyes and rings or other suitable means. To the corners of the drag A, or to the joints of the rods C, are attached the ends of four short ropes or chains, D, the other ends of which are attached to a ring, E, attached to the end of a hawser, F. To the apex of the drag

A, and either outside or inside of the said drag, is attached the end of a line, G, which extends along the hawser F to the vessel.

When the drag is to be used, it is thrown overboard, and the hawser is paid out to a sufficient length and made fast to the vessel. As the drag strikes the water the buoyancy of the spar B and the weight of the bars C cause it to open, and the strain upon the hawser F causes the said drag to take the proper position, and keeps it in such position.

When the drag is to be taken in, the line G is hauled in, which turns the apex of the drag A toward the vessel, and allows the said drag to be readily drawn through the water.

With this construction, when the drag is not in use it can be folded into triangular form, bringing the bars C parallel with and close to the spar B, and the canvas can then be rolled around the said spar and bars, bringing the drag into a compact form for convenient storage.

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

1. A marine drag constructed substantially as herein shown and described, and consisting of the pyramidal body A, the spar B, the jointed metal bars C, the ropes or chains D, the hawser F, and the trip-line G, as set forth.

2. A marine drag having the pyramidal canvas body A, the buoyant spar B, lashed to one side of the mouth, and the weight-rods C, made fast to the other three sides of said mouth, the rods being jointed together and to the spar, as shown and described.

WILLIAM H. HART.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.