

(No Model.)

B. B. D'ALESSANDRO.

APPARATUS FOR CALMING THE WAVES OF THE SEA.

No. 499,319.

Patented June 13, 1893.

Fig. 1.

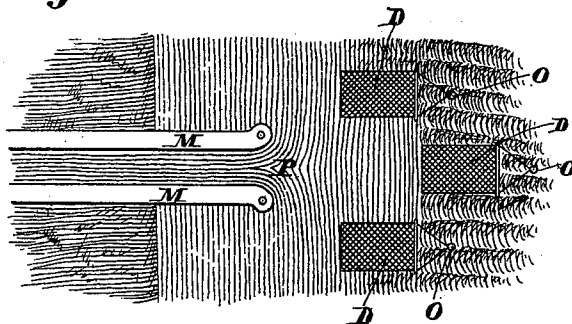


Fig. 2.

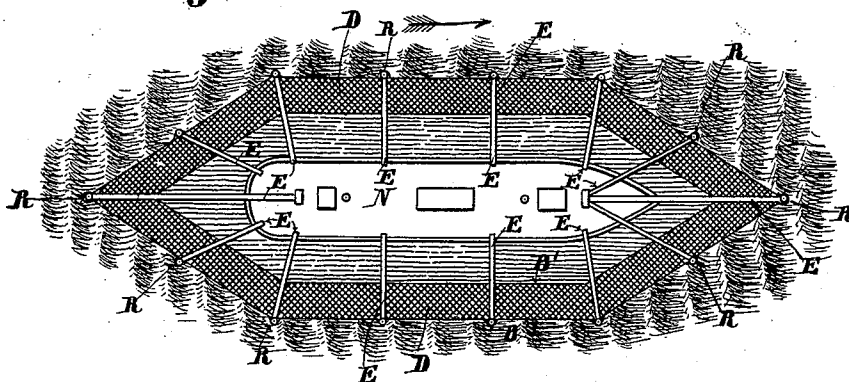
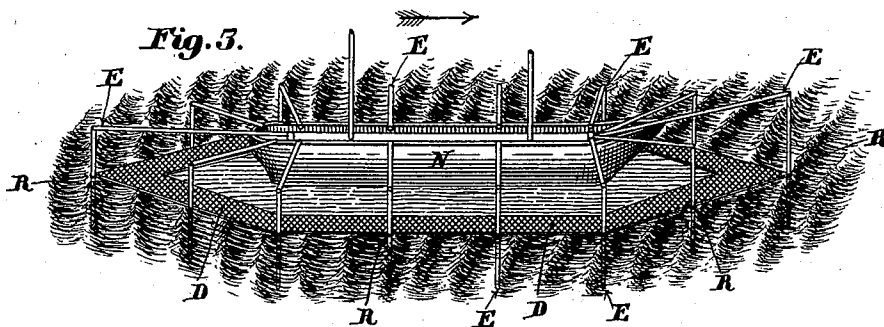


Fig. 3.



Witnesses:

Jean Chevalier
Pierre Verdy

Inventor:

Benedetto Benedetto D'Alessandro

UNITED STATES PATENT OFFICE.

BENVENUTO BENEDETTO D'ALESSANDRO, OF PARIS, FRANCE.

APPARATUS FOR CALMING THE WAVES OF THE SEA.

SPECIFICATION forming part of Letters Patent No. 499,319, dated June 13, 1893.

Application filed November 7, 1891. Serial No. 411,228. (No model.) Patented in Belgium May 12, 1891, No. 94,867; in France May 14, 1891, No. 213,474, and in England June 24, 1891, No. 10,742.

To all whom it may concern:

Be it known that I, BENVENUTO BENEDETTO D'ALESSANDRO, a subject of the King of Italy, residing at 5 Rue Picot, Paris, France, have invented an Improved Apparatus for Calming the Waves of the Sea, (for which I have obtained a patent in Belgium, No. 94,867, dated May 12, 1891; in France, No. 213,474, dated May 14, 1891, and in England, No. 10,742, dated June 24, 1891,) of which the following is a specification.

My invention relates to the means for calming the waves of the sea covering a certain extent of sea water with a thin yet strong floating body. I obtain this object by spreading out on the surface of the water a floating body composed of strips or bands varying in size and texture according to requirements.

The materials for forming this apparatus are various but however made the application and the effect are the same, and the description thereof of one will suffice. This is composed of a net-work illustrated in the accompanying drawings in which—

Figure 1 represents the invention used in connection with the land, to break the sea, disposed to facilitate the entry of a ship in port. Fig. 2 represents a plan view of a vessel surrounded by the sea-calming device. Fig. 3 represents a perspective view of a vessel, surrounded by the calming apparatus.

Similar letters refer to similar parts throughout the several views.

The net-work D Fig. 1 is of twisted hemp thread, the size and meshes of which vary according to the use for which it may be applied. The texture of the said net-work is strengthened and rendered buoyant, by a composition of india rubber liquid mixed with finely ground cork-dust.

When the apparatus D, is used to preserve a ship N Figs. 2 and 3, battling with contrary winds it should be of sufficient length with a proportional width to surround the same, the strength and size of which should vary according to the kind of ship. Figs. 2 and 3,

show the apparatus, D, as it should always be adjusted in such a case, that is stretched out in its full width on the surface of the water and in a position which will render it impossible for it to double on itself or be cut by the screw or be taken by the rudder. The means of attaching the apparatus to the ship N, Figs. 2 and 3, is effected by fixing thick wooden or iron rods E. E. E. at equal distances all round the same. Each rod being bent at a right angle, the part placed horizontally is joined to the shipboard. The part falling vertically runs through an immovable ring R tied on the apparatus or net work's border, B B. Consequently the apparatus is not disturbed by the movement of the ship.

If this apparatus D. Fig. 1 be used to facilitate the entry of a ship in port or its disembarkment on land or the execution of hydraulic or other necessary works of a difficult construction it should be anchored adjacent to, or around the portion of the water desired to be calmed and so be fitted to impede the formation of breakers. For this purpose it should be fixed with anchors, O. O. O, strong ropes and blocks. Signals are added to give notice to the ships when they are in the vicinity of the sea calmer. Whether for coast work or on the open sea the apparatus should be kept in readiness, so that it may be immediately applied in case of emergency.

What I claim, and desire to secure by Letters Patent of the United States, is—

A device for calming waves, consisting of strip, band or net-work of buoyant material adapted to float upon or near the surface of the water and adjacent to the object to be protected and means for securing and holding said strip, band or net-work in position, substantially as described.

B. B. D'ALESSANDRO.

Witnesses:

JEAN CHEVALIER,
Rue Picot, 5.

PIERRE VERDIE,
Rue Picot, No. 6.