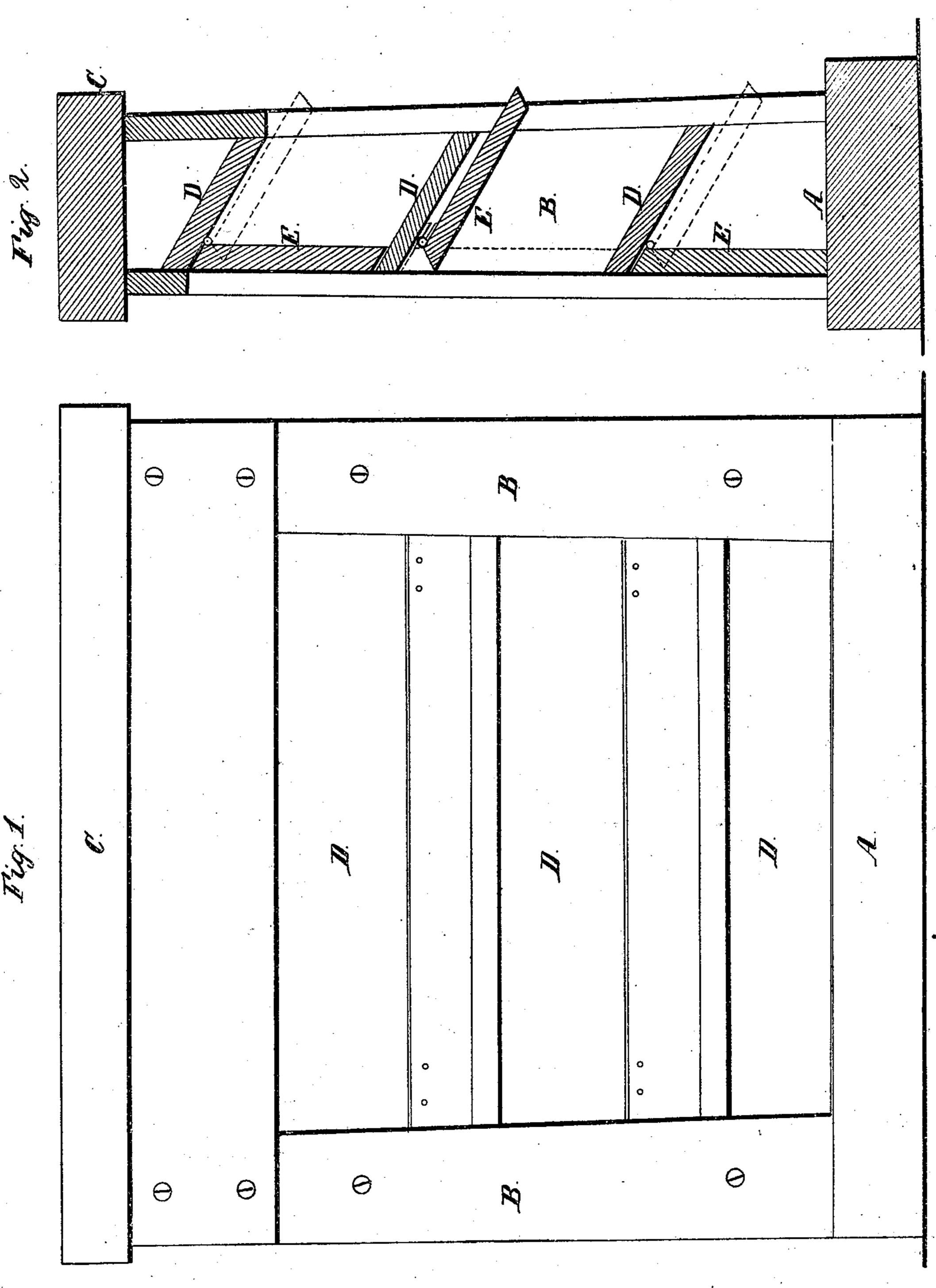
R.L.P.Manning, Scupperfor Vessels. Nº 142,096. Patented Mar. 29,1864.



Witnesses: Brunered MARSundge

Robert Lang Paige Manning

United States Patent Office.

ROBERT LANG PAIGE MANNING, OF CLEVELAND, OHIO.

IMPROVED SCUPPERS FOR VESSELS.

Specification forming part of Letters Patent No. 42,096, dated March 29, 1864.

Io ali whom it may concern:

Be it known that I, Robert Lang Paige Manning, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Scuppers for Vessels; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, referencebeing had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an inside view, and Fig. 2 is a

transverse vertical section.

Like letters refer to like parts.

The nature of my invention relates to such a construction of scuppers that a free exit for the water from the deck is provided, while at the same time none is permitted to enter upon the deck through the scuppers.

It often happens that when a vessel "ships a sea" the bulwarks have to be cut away before the vessel will right itself, for every succeeding wave will keep the deck submerged. By the use of my invention the deck is readily freed from water, while at the same time the bulwarks remain intact and suffer no injury.

In the accompanying drawings, A represents the plank-sheer of the vessel, and B represents the stanchions of the bulwarks and C represents the rail. Between every third or fourth pair of stanchions I introduce about three planks, D, (more or less may be used,) inclining from within downward and outward, as shown in Fig. 2. These plank are wide enough to fill the space occupied by the bulwarks. To the under side of the planks D, and at their inner edge, I attach by means of strong hinges the scupper-boards E, their edges being so beveled as to fit accurately the openings between the planks D. The scupper-boards are so hung that they swing outward, and will so rise from pressure from within by the outward flow of water from the deck that their upper

side, as they rise, will come in contact with the under side of the inclined plank D. The space occupied by the scupper-boards is some two or three inches greater than the width of the plank D, consequently when the scupper is raised to its utmost limit the outer edge projects beyond the outer and lower edge of the plank D. All the scupper-boards being thus hung, and there being a series of them upon each side of the deck of the vessel, a most capacious means is thereby provided for the escape of water from the deck; but these all become instantly closed by their own gravity or by the action of the succeeding wave, in consequence of their constantly-inclined position when open, and their projection beyond the outer edge of the plank D. These scuppers may be arranged along the entire length of the deck by placing a series between each stanchion; or, if desired, but a single scupper may be placed close to the deck between each stanchion, or they may be arranged as convenience or fancy may suggest.

When in port, the scupper-boards may be protected from injury by means of a wide leaf, made of plank and secured upon the outside of the bulwarks, or by means of iron rods or

netting secured upon the outside.

What I claim as my improvement, and de-

sire to secure by Letters Patent, is—

Forming a series of scuppers along the bulwarks, and closing and opening the same by means of hinged scupper-boards arranged in a single row along the deck or in a series, one above another, the same being constructed, arranged, and operating as and for the purpose herein set forth.

ROBERT LANG PAIGE MANNING.

Witnesses:

J. BRAINERD, W. H. BURRIDGE.